Developing an understanding of the role of gender in the consumption of mixed martial arts

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by

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AUTHOR’S DECLARATION OF ORIGINALITY

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ABSTRACT

The popularity of Mixed Martial Arts (MMA) has increased rapidly on a global scale (Kim, Andrew, & Greenwell, 2009). This study examined the consumption behaviours of men and women in order to contribute to a better understanding of gender as a factor in MMA’s popularity. A mixed methods approach was utilized with a 43-item survey \((n = 151)\) and five focus groups \((n = 4; 5; 6; 6; 6)\) consisting of different stages of fandom. A MANOVA test revealed males consume more MMA overall than females, while both sexes consume MMA primarily through passive forms (e.g., television and reading news articles). Results of the focus groups indicate that males consume MMA to (re)confirm their masculinity (Hanke, 1990; Theberge, 2000), while females will consume MMA to support the men in their lives (Halbert, 1997; Oates, 1987).
DEDICATION

For my Grandma Shirley, the true ultimate fighter.
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CHAPTER I
INTRODUCTION

Background

The sport of mixed martial arts (MMA) from the viewpoint of some researchers, has been identified as one of the rapidly growing participatory and spectator activities in Canada and around the world (Kim, Andrew, & Greenwell, 2009; Kim, Greenwell, Andrew, Lee & Mahony, 2008). With a rich and storied history whose origins date back to Ancient Greek society (Buse, 2006; Rainey, 2009; Young, 2004), MMA has emerged as an alternative to traditional sports such as baseball, basketball and hockey (Kim et al., 2009). As a result, more MMA instructional classes are being offered to individuals – some as young as three years of age – who may want to learn the technical skills and strategy associated with the sport (Shimo, 2008). Moreover, with the rise to prominence of MMA in contemporary North American society, the sport has paralleled the developmental trajectory of other sports and has experienced what Giulianotti (2002) refers to as “hyper commodification.” In addition to monthly pay-per-view (PPV) programs, fans of MMA are exposed to the sport through attending live fights, reality television shows, fan expositions, newspaper articles, merchandise sales, video game sales and the aforementioned instructional classes offered by fitness centres and fighting dojos. With female models and social media adding value to the overall entertainment package for consumers, MMA has emerged as a popular sport that is being consumed by both men and women in a contemporary setting.
Purpose of the Study

The purpose of this study was to examine differences and similarities in the consumption behaviours of men and women in order contribute to a better understanding of gender as a factor in the rapid growth and popularity of MMA. To investigate this purpose, a survey was administered to research participants to reveal consumption habits and behaviours. An analysis of the survey was followed by focus group sessions that explored the role gender plays in mixed martial arts consumption and the meanings behind these consumption behaviours. With this purpose, the intent of the study was to: (a) elaborate on the ways in which sport consumption occurs in MMA; and (b) compare male and female MMA consumption.

Significance of the Study

This study was designed to build upon previous research on consumer behaviour in MMA. Over the past decade, researchers have begun to uncover various aspects of the sport, including spectator motives. Andrew, Kim, O’Neal, Greenwell and James (2009), in particular, have examined the issue of MMA consumption by investigating spectator motives. However, Andrew et al. (2009) offer a limited definition of consumption and focus on spectator motivation. The intent of this thesis was to extend sport consumption in MMA beyond spectatorship to newer forms of media such as social media and video games, while also highlighting the similarities and differences between male and female consumption. The study results will serve as a useful resource to sport marketers looking to understand gendered behaviour in combative sport. Moreover, this research looks to build on the framework established by Andrew et al. (2009).
Operational Definitions of Key Terms

To ensure consistency and clarity throughout this research, it is necessary to provide operational definitions for key terms.

The terms “consumers,” “spectators,” and “fans” are used interchangeably depending on the context in which they are presented or used in the literature, but serve to represent users and buyers of sporting goods and services. While a “fan” can maintain his or her status without being a spectator or consumer of goods and services, for the purposes of this research, an individual’s fandom is associated with sport consumption.

This research also focused on differences of “gender,” not differences based on “sex.” As West and Zimmerman (1987) suggest, gender is performed and expressed through activity and ritual, while sex represents a biological designation. Some parts of this paper refer to sex, but do so insofar as to make the eventual linkage to one’s gendered behaviour.

This research was also concerned with present-day or current consumption habits. In some circumstances, the term “society” has been used contextually to refer to a specific place or time (i.e., Ancient Greek society). In other cases, the terms “contemporary setting,” “society,” “contemporary society,” “contemporary North American society,” “North American society,” “mainstream society,” “North America,” and “modern society” refer to the present-day circumstance in Canada and the United States.

Given that this research was predicated on the sport of mixed martial arts, it is imperative to define what mixed martial arts actually are. In its present-day form, MMA is a combat sport contest that pits two individuals against each other in a cage or ring that
combines boxing, wrestling, judo, Muay Thai and other martial arts disciplines. It is sometimes referred to as ultimate fighting and cage fighting.
CHAPTER II
REVIEW OF LITERATURE

Overview

In the academic literature that is relevant to this study, there are three primary aspects that contribute to an understanding of the issue and the research questions: the sport of MMA, sport consumption and gender. In the first part of the literature review, an overview of MMA will be conducted. This is important to note as it aids in the understanding of the ways in which MMA is being packaged and marketed for consumption. This leads into the second part of the literature review: sport consumption. There are a variety of means by which individuals can consume sport in contemporary North American society. Thus, it is imperative to define sport consumption for the purposes of this study and explore how it has developed over time. Lastly, literature describing masculinity and femininity will be identified to provide a better understanding of how both genders behave in a contemporary setting within a sport consumer context. The extensive base of literature of all three sections provided the context for this study and was used to draw links with the results generated through the data collection phase.

Mixed Martial Arts

Origins

The sport of MMA, despite its newness in mainstream society, has a storied history that can be traced back to ancient Greek civilization. Known to the ancient Greeks as pankration (Greek for “every power”), the sport emerged out of the hand-to-hand combat techniques that soldiers would employ in the battlefield (Buse, 2006). Initially unknown to the masses, fights seemed to incorporate a mixture of wrestling and boxing,
two fighting disciplines that were familiar to the Greeks. Once pankration was introduced to the populous, it was not well received; fights were seen as dangerous and undisciplined (Gardiner, 1906). In fact, the objective of pankration was to maim one’s opponent to the point where he would give up and withdraw. Combatants were prohibited from biting and eye-gouging, but used a variety of holds, grapples and throws (Young, 2004) to force their opponents into submission. Even with the poor reception by the Greek populous, pankration gained in popularity and became an event at the 33rd Greek Olympiad in 648 B.C. (Buse, 2006; Rainey, 2009). While the origins of MMA do lie in ancient Greece, the emergence of the sport in the Western hemisphere, specifically the Americas, provide the contextual basis for MMA as a popular sport in the 21st century.

In the early part of the 20th century, the pankration style of combat fighting emerged in the South American country of Brazil. Known as vale tudo (Portuguese for “anything goes”), combatants learned strategies and techniques from Japanese martial artists who migrated east during the World War era (Downey, 2007; Maeyama, 1979) and fused them with their domestic fighting capabilities. Vale tudo was more than just the ability to blend fighting styles together; rather, it was about demonstrating which fight style was more superior. One of those superior styles was Brazilian Ju-Jitsu (BJJ), developed by the Gracie brothers, Helio and Carlos (Peligro, 2003). Together, the brothers focused on countering opponent’s strikes and grappling with combatants on the ground (Downey, 2007). Fighters and observers of vale tudo were enamoured with this new fight style for its chaotic and unpredictable style to the point where fighters flocked to spar and train with the Gracie men. As the popularity of the ju-jitsu fighting system
grew, the Gracie men believed they had a superior fighting style that could be exported to North America and the rest of the world.

By the 1980s, BJJ made its way to North America via California. The son of Helio, Rorion, developed his own martial arts fighting academy in the state of California, attempting to popularize his family’s brand of combat. The popularity of BJJ continued to grow as Rorion began advising Hollywood actors in their fight scenes and was featured in an interview with Playboy magazine (Van Bottenburg & Heilbron, 2006). Stemming from that publicity, American investors Art Davie and Robert Meyrowitz worked with Rorion to develop a fighting tournament to display BJJ and pit it against other popular martial arts and combat disciplines. The tournament, named “the Ultimate Fighting Championship” (UFC), was held in Denver, Colorado in the late autumn of 1993 (Van Bottenburg & Heilbron, 2006). Royce Gracie, Rorion’s brother and master of the BJJ style, dominated wrestlers, boxers and other martial artists to win the tournament, generating more interest in the fighting discipline (Maher, 2010). For Meyrowitz and Davie, a tournament which pitted men from various disciplines could draw North American consumers away from wrestling and boxing and was perceived to be a marketable asset. By the end of 1993, BJJ, although still on the periphery for the average sport consumer, was present in the United States.

The UFC developed very slowly in the United States, boasting a small cult-like following that offered consumers a unique combat sport experience. Unlike rival organizations that were established in Japan, the UFC model was premised on offering a “no-holds-barred” experience with minimal rules, regulations and a fighting space that was never seen before: the octagon (Downey, 2007; Walton & Potvin, 2009). The
octagon, comprised of an eight sided chain link fence, which differed from the conventional squared ring and ropes design. The idea was to entice consumers by providing an experience that had high entertainment value (O’Hara, 2008) and that simulated a real fight (with the chain link fence representative of enclosures in urban areas). With a unique marketing model, the dilemma for this start-up was the response it received from U.S. state legislators. Many athletic commissions in the U.S. were reluctant to sanction UFC events in the absence of universal rules for fights of this nature because they differed so drastically from the boxing events that had previously been sanctioned (Reel, 2001). The UFC would stage competitions in any American jurisdiction that would host them. Despite the resistance from state athletic commissions, the UFC continued to gain in popularity and revenue, mostly generated from PPV, following a business model similar to that of other North American combat sport promotions (e.g., boxing and professional wrestling) (Reynolds & Baer, 2003).

By 1996, key political figures such as the Republican senator from Arizona, John McCain, voiced their opposition to the UFC. For McCain and many others, these fights represented a “human cockfight” (Bledsoe, Hsu, Grabowski, Brill & Li, 2006; Cheever, 2009; Walton & Potvin, 2009) that celebrated violence and offered little safety for the combatants. Extensive opposition for the sport led to 40 states banning the UFC from hosting events within their jurisdictions (Garcia & Malcolm, 2010) and a ban from cable television. Despite the gradual growth of the organization, the UFC failed to achieve legitimacy amongst the general populous. Amidst the bad publicity and political outcry, the UFC and the fighters who competed for the organization eventually received positive news. The New Jersey State Athletic Control Board in the autumn of 2000 developed a
universal code for mixed martial arts contests. The unified rules followed similar
guidelines to boxing events (State Athletic Control Board, 2002), but incorporated some
of the unique dynamics of MMA. Medical clearances, insurance provisions, weight
classifications and a host of additional criteria were required in order for a match to be
sanctioned by state officials. In 2001, the State of Nevada followed the precedent set by
New Jersey and began to sanction professional MMA events as well. Following the
sanctioning in both states, attendance numbers rose for the UFC. The organization’s 33rd
event in Las Vegas had a paid attendance of 7,000; a number that would double a year
later. Now that MMA had gained some legal recognition, the UFC asserted itself as the
premier MMA organization within North America. After a change in ownership resulted
in more capital for the organization, the UFC continued its expansion across North
America.

While the UFC has been the primary promotional firm for MMA, there have been
competing firms that have contributed to the sport’s development in Canada and the
United States. Other promotions such as Bellator and Strikeforce have more recently
joined the UFC in promoting the sport. While the contribution of these firms may not be
as great as that of the UFC, per se, they have had some influence on the sport’s
development.

Packaging MMA

In contemporary society, fans of MMA in North America have multiple ways by
which to consume the sport. While other promotional firms have tried to compete for fan
support, the UFC has developed partnerships and sponsorships with large multinational
corporations and has positioned itself to attract fans to its brand of MMA (MacIntosh &
Crow, 2011). By 2005, the UFC had developed new cable television programs with the U.S.-based Spike TV network to supplement its monthly PPV content (Kim et al., 2009; Walton & Potvin, 2009), which delivered more programming to consumers more often. *UFC Unleashed, UFC Fight Night* and *The Ultimate Fighter* provided the opportunity for fans to view the UFC brand on cable television with a behind-the-scenes look. *The Ultimate Fighter*, in particular, has been able to captivate audiences and keep fans tuning in week after week, which has been essential to building MMA fandom (Lim, Martin, & Kwak, 2010).

*The Ultimate Fighter* is a reality-television based program that features fighters competing for a chance to obtain a UFC contract. Veteran UFC fighters are tasked to train and mentor a group of these fighters and viewers are able to see fighters’ training regimens, their eating habits, and their personalities. From research conducted by Rose and Wood (2005), reality-television based programs offer viewers a degree of authenticity such that the value of entertainment is derived from comparing and contrasting with their own lives. In line with this sentiment, *The Ultimate Fighter* presents viewers with an opportunity to see the behaviour of fighters beyond the octagon and/or fitness dojo and relate to fighter’s personas, like that of Forrest Griffin. Selected for the premier season of *The Ultimate Fighter*, Griffin epitomized the qualities of hard work and dedication. Dana White, the current President of the UFC, has noted that Griffin’s fans idolize him because he represents the “American dream” and is relatable to the average viewer (Iole, 2008). While it would be possible for fans and consumers to still make connections with fighters through their in-ring activities, *The Ultimate Fighter*
provided a platform for viewers to follow fighters on a weekly basis (as opposed to a monthly one) (Maher, 2010).

Though the sport has developed in North America primarily through television programming and live events, it has been exported to the masses through a variety of means. While promotional firms like the UFC continue to forge new partnerships with U.S. network television stations (Ourand, 2011), the sale of MMA-apparel has proved to be a unique marketing tool that has allowed fans to share their affinity for the sport without having to watch or attend a fight.

Fans of popular North American sports publicly display their associations with teams and athletes by purchasing apparel (End, Dietz-Uhler, Harrick & Jacquemotte, 2006). Fans of MMA have exhibited similar practices. However, unlike most other sports where athletes don a team jersey or uniform, there is no similar apparel that identifies a fan’s association with MMA, per se. As a result, athletes and (athletic) apparel brands have free reign to develop products that enable MMA fans to demonstrate their affinity for the sport or a particular fighter. This has led to the construction of tight, form-fitting apparel, glorifying the muscular, masculine body. This glorification attempts to attract fans of the sport that associate with the athletic prowess and power that MMA fighters are believed to exude (Flaherty, 2010). Brands such as TapouT, Affliction and Warrior International reinforce this glorification by using dark colours, tribal and religious imagery (e.g., crucifixes, skulls, fleur-de-lis, and Viking helmets). Pardun and McKee (1995) have noted that religious, tribal and sacred symbols have been increasingly utilized in popular culture to establish meanings of strength, dominance and heroism. In this respect, the consumption of MMA apparel represents more than just publicly
declaring support for the sport and/or brand; it underscores fans wanting to exude the perceived physical dominance and power that MMA athletes personify.

In addition to the consumption of MMA apparel and increased spectatorship, the UFC has utilized video games to extend fan involvement. Research has suggested that the 18-34 year old male demographic, which MMA promoters target, is more prone to video game consumption than television consumption (Glass, 2007). Thus, the UFC and other MMA promotional firms in North America have developed video games attempting to attract this cohort by recreating the live experience. Glass’ (2007) study of boxing video games (which are comparable in feel and gameplay to MMA video games) reveals that video gaming provides consumers an opportunity to be a character/fighter and experience the fighting atmosphere (complete with advertisements, sponsors and spectators). After developing its first video game in 2009, the UFC has produced annual instalments of the franchise, known as *UFC Undisputed*.

The organization has also taken to Twitter and other social media sites (e.g., Facebook) to grow its brand and keep consumers engaged. The UFC and one of its subsidiary MMA promotions, Strikeforce, instituted a policy whereby contracted fighters would receive financial incentives for creative “Tweeting” and having a large Twitter following (Hendricks, 2011). With this established incentive, fans have felt inclined to follow fighters to see creative “Tweets” and help their favourite fighters achieve the financial bonuses set by Strikeforce (or the UFC as the case may be). It has also led to an influx of fighters joining Twitter to achieve these financial bonuses and generate more exposure, such as Cris “Cyborg” Santos, one of the world’s top female MMA fighters, who has more than 28,000 Twitter followers (Hendricks, 2011). Indeed, the sport
continues to grow in North America as promotional firms like the UFC have found new and innovative ways to establish and maintain fan interaction with the sport and athletes alike.

The continual growth of MMA in North America is partly attributable to promotional firms like the UFC offering a variety of consumption opportunities for fans and sport consumers. Whether in the form of television programming, video gaming or utilizing social media, consumers have multiple avenues by which to access MMA content. In the subsequent section, literature on sport consumption will be identified for the purpose of understanding the benefits to traditional and non-traditional (e.g., social media) forms of sport consumption.

**Sport Consumption**

While there are multiple modes of sport consumption, spectatorship has been identified as a dominant form (Fink, Trail & Anderson, 2002; James & Ridinger, 2002; Trail & James, 2001). Yet, spectatorship itself is a broad term that encompasses multiple methods of consumption. Duncan and Brummett (1989) suggested that spectatorship can be categorized into three forms: newspaper spectatorship, stadium spectatorship, and television spectatorship. For the purposes of this research, stadium spectatorship was modified to include multiple venues and spaces that host sporting events and thus will be referred to as venue spectatorship. In each of these three contexts, the individual experiences sport differently. Thus, information has been researched on each circumstance. In essence, the individual can be connected to sport by different means, but could experience the pleasure of spectatorship differently depending on the medium selected (Duncan & Brummett, 1989). In this section, sport consumption will be
identified using the three-pronged definition described above by Duncan and Brummett (1989) while incorporating additional consumption methods such as social media activity, video gaming and the purchasing and donning of sport apparel.

**Newspaper Spectatorship**

Newspaper spectatorship (and print media spectatorship more broadly) in sport can be traced back to the eighteenth century. According to Boyle and Haynes (2009), accounts of village cricket matches in England were first documented in the 1720s-1730s. These accounts culminated in the 1790s with the establishment of a sporting magazine in Great Britain (McChesney, 1989). With the establishment of the magazine, sports coverage in print media expanded to meet the interests of horseracing and boxing enthusiasts (Boyle & Haynes, 2009). Print media coverage of sport soon emerged in the United States, leading to a boom in sports coverage in the nineteenth century. Horse race schedules, results, and baseball box scores were included in print media, exposing more Americans to sport (McChesney, 1989). The boom was not relegated simply to the United States however, as Canadian print media began to cover more sport content. Urban newspaper dailies began to shift their coverage towards a focus on culture and community life that, by extension, included local sport coverage of lacrosse, American football and baseball (Lorenz, 2003). From a business perspective, print media outlets viewed sport coverage as an effective means of attracting more wage-earning men to their publications and generating advertising revenue (Lorenz, 2003). The expansion of print media coverage of sport in the eighteenth and nineteenth centuries gave credence to sport; print media enabled audiences to connect to a sporting event or team, develop
feelings and emotional ties, and generate commonality with others in their community (Lorenz, 2003).

In the early twentieth century, the consumption of sport content in print media amassed to a point where sport was a part of the dominant discourse. By 1940, sport coverage in national press publications was rampant and content was inclusive of sports that were once perceived as ill-mannered. In particular, boxing and prizefighting were able to shed their sleazy reputations in North America through increased print coverage of champions and match results (Gorn, 1986; Lorenz, 2003; Sammons, 1988). As McChesney (1989) noted however, most of this coverage could be attributed to bribes and payoffs which involved the “close [and corrupt] interaction between sports promoters and sportswriters” (p. 58). The symbiotic relationship between sports promoters and sportswriters increased consumer access to boxing and prizefighting content and could follow storylines and the progress of their favourite fighters in mass-circulated publications. The growth of sports coverage in national print media outlets reduced the fragmented number of sports print publications (Boyle & Haynes, 2009). With mass-circulation newspapers covering sport, individuals and families could get all of the information they wanted to obtain from one source. Mass circulation would also increase the popularity and credibility of sports like boxing beyond urban centres to other more remote or rural areas within North America.

In the modern setting, “print media remains an important source” (Boyle & Haynes, 2009, p. 164) for sport consumers. In spite of technological advancement enabling other forms of news consumption, many consumers still enjoy the
comprehensive package of sports information that newsprint offers (Farhi, 2005). This concept of print media offering extensive coverage of sport is identified by Rowe (1992).

Rowe (1992) suggested that print media coverage of sport consists of four typologies: hard news, soft news, orthodox rhetoric, and reflexive analysis. Hard news reflects information pertaining to scores and results, while soft news focuses on gossip, rumours and speculation about individual athletes or sport administrators. Rowe (1992) described orthodox rhetoric as columns and articles with authors celebrated for their opinions and (often-abrasive) assessments of athlete and team behaviours (in sport and non-sport contexts). Lastly, reflexive analysis refers to articles and information provided regarding critical reflection of sport (e.g., injuries in contact sport). Each of these four typologies serves to entice readers depending on their level of sports interest. Some readers may be more inclined to read about match results or might be curious to read about the rumours about their favourite athlete (or perhaps both). Indeed, Rowe’s (1992) typologies indicate that print media coverage of sport is comprehensive, offering multiple features that are designed to increase readership.

Newspaper spectatorship of sport continues to be a popular mode of sport consumption. With newsprint media outlets boasting large human and financial resources (Farhi, 2005), coverage of sports in print media has broadened. Moreover, as Rowe (1992) indicated, print media offers content for different degrees of sport consumers (e.g., casual or heavily vested fans) which has kept newspaper spectatorship as a prominent form of sport consumption.
**Venue Spectatorship**

The second form of spectatorship is venue spectatorship, a term that is modified from Duncan and Brummett’s (1989) notion of stadium spectatorship. This form of spectatorship refers to consumers physically being present at a sporting event, experiencing all the sights, sounds, and even tastes. This type of spectatorship and sport consumption is not new by any means. Venue spectatorship is often linked back to ancient Greece and the Olympic contests (Guttmann, 1981). The following suggests that sport consumers are choosing venue spectatorship as their mode of sport consumption because it provides them with a direct, face-to-face experience with the sport product.

Scholarship on sport event attendance has primarily focused on providing sport marketers with vital information (Sloan, 1989; Trail, Fink & Anderson, 2003) in order “to provide products and services that continually meet the needs and wants of sport consumers” (Dwyer & Kim, 2011, p. 70). In order to provide sport managers with said information, researchers like Sloan (1989) have examined (in-game) spectator motivation from psychosocial viewpoints. Many scholars have extended Sloan’s work and devised instrumentation designed to measure attendance motives (Trail, Anderson & Fink, 2000; Trail et al., 2003; Trail & James, 2001; Wann, 1995). Through the multiple studies that have explored this issue, several common motivations for venue spectating have been established, which have aided sport marketers in the process of increasing attendance and revenue for sport organizations.

Live spectating has been found to provide consumers with entertainment value (Gantz & Wenner, 1991), escape from stress and additional social benefits (Melnick, 1993; Wann, 1995). Sport produces excitement for spectators who attend the event in
person, especially considering that these spectators know that the outcome has yet to be
decided (Vosgerau, Wertenbroch, & Carmon, 2006) and because viewing the game live
reaffirms their identities as fans (Snelgrove, Taks, Chalip & Green, 2008). The concept of
indeterminacy entices individuals to attend a sporting event in person so that the
individual can experience the results of said event in real time. In their review of the sport
consumption literature, Farrell, Fink and Fields (2011) indicated that fans also attend
sporting events for the “vicarious achievement” (p. 191). This vicariousness enables
spectators to live out their dreams and identify with the sport team or athlete and their
successes (Wenner & Gantz, 1998). This sentiment was also expressed by Funk, Mahony
and Ridinger (2002), who noted that a key driver for in-game spectatorship was enabling
consumers to see the athletes themselves. Research conducted by Dietz-Uhler, Harrick,
End and Jacquemotte (2000) revealed that a primary motive to attend a sporting event
was family based (i.e., they went because their family went or were participants in the
event). These motives to attend sports venues reveal the complexity of venue
spectatorship. Given the range in motives to attend a sports venue, it is prudent to identify
research on fandom and the degrees to which an individual connects with a sport, team or
athlete. In doing so, the notion of individuals choosing venue spectatorship as their
primary form of sport consumption becomes more evident.

In the literature on in-game spectatorship, scholars have made a distinction
between casual attendees and heavily devoted consumers of sporting events. Sloan (1989)
referred to the venue spectators as “avid fans” (p. 229), a notion that is supported by
individuals who attend sporting events as either die-hard or fair-weather fans. In this
sense, fair-weather attendees of sporting events support the team or athlete when successful, but leave when the team or athlete starts losing or has a bad reputation. Die-hard fans keep attending the sporting event irrespective of the success or reputation of the team or athlete. Another way of categorizing individuals who attend sporting events is by using the three level approach put forth by Sutton, McDonald, Milne and Cimperman (1997).

The three levels of fandom conceived by Sutton et al. (1997) refer to social, focused and vested fans. Social fans are those individuals who enjoy the socialization and experience of attending, but care little about the outcome of the event. At the second level, there are focused fans. Focused fans have more interest in the event and are more knowledgeable than social fans. At the third level, there are the vested fans. Vested fans have strong emotional connections to the team and/or athlete(s) participating and, as Robinson and Trail (2005) noted, are very knowledgeable about the event and participants. Vested fans willingly invest into the sport and attend the sporting events despite the major financial and time commitments required.

In the research on venue spectatorship, there are similarities amongst the classification of casual and dedicated attendees. Functionally, the distinction of a casual and dedicated venue spectator reveals that individuals who consume sporting events by attending in person are diverse in nature; motives for sport event attendance vary from person to person. This is important to note as, although “attendance is becoming less central to an organization’s profitability” (Pritchard & Funk, 2006, p. 316), many individuals will continue to repeat their attendance at sporting events (Hill & Green, 2000).
Television Spectatorship

Television spectatorship, unlike venue spectatorship, allows consumers to view the event without physically attending the game. As such, consumers can spectate from multiple locations: their homes, a sports bar or even while working out at a fitness centre. Despite the fact that television spectators could be viewing a taped game and already know the potential outcome of the event (Vosgerau et al., 2006), television spectatorship, unlike venue spectatorship, is generally not affected by weather and ticket costs (Dwyer, 2011), which makes it a more viable option for consumers looking to spectate sport.

In essence, individuals choose television as their mode of spectatorship because it is a different experience than what they consume when attending the event in person or because they do not have the means (e.g., financial, transportation, accommodation) to attend the live event. Sports broadcasts on television are not only championed for their “accessibility to fans” (Kang, Lee & Lee, 2010, p. 356), but also for the graphics, commentary and expert analysis that is packaged with the program. Parker and Fink (2008) stated that, “viewers watching the game on television are exposed to close-ups, replays, and graphics chosen by the producers as well as the insights and viewpoints of the sport commentators” (p. 117). The insights and viewpoints to which Parker and Fink (2007) refer differ from what a spectator would experience in newsprint media or through attending the venue. In her research on Yao Ming and basketball commentary, Lavelle (2011) identified that commentary in televised sport was “spontaneous” (p. 52) and synchronized with the actions occurring in the game. Moreover, sport broadcast commentary can convey a message or story to the spectator over the course of a season, not just one game (Lavelle, 2011). When viewing sport on television, one is enamoured
with former elite athletes commenting on strategy or recognizable on-air personalities talking about human-interest stories, embellishing the event and generating suspense for the audience simultaneously (Comisky, Bryant & Zillman, 1977). This production captivates audiences in a manner that the actual event potentially could not. In practice, sports commentary adds to how sport is packaged for television spectators; given that stadiums and arenas have a maximum capacity of spectators, television enables a seemingly unlimited audience and offers a unique alternative to going to the event altogether.

Each of the three forms of spectatorship described by Duncan and Brummett (1989) can be viewed as traditional or conventional in nature. Even with the advent of television and the technological advancements that provide on-screen graphics to spectators, television spectatorship is a practice that dates back to the mid-1900s when British cricket matches first aired (Haynes, 2009). That is not to suggest that television spectatorship or the other forms described by Duncan and Brummett (1989) are out-dated per se, but rather that sport consumers have sought additional means to spectate that complement one another. In the past decade, spectators have become “increasingly comfortable watching video online” (Mellis, 2008, p. 259) and have flocked to the World Wide Web to view sport content.

**World Wide Web Spectatorship**

World Wide Web (WWW) spectatorship of sport content has increased in the past decade due in large part to accessibility and convenience for the consumer. The development and availability of broadband Internet access (Prieger, 2003) and wireless connectivity have enabled individuals in North America to stream video on demand.
Where spectating via television would require the spectator to be in a setting with a television and either cable or satellite accessibility, WWW spectating has created the opportunity for sport consumers to spectate in locations that do not bear the requirements of spectating via television. Moreover, programs viewed on the WWW are not subject to television programming schedules either and spectators can consume live sport content or taped content (with the latter on demand).

With the increased availability of sport content on the WWW, piracy and illegal viewing of live sportscasts have taken place. Mellis’ (2008) research on illegal spectatorship found that the “piracy of live sports telecasts is a growing problem” (p. 283). Large-scale sporting events that are offered to consumers via pay-per-view (PPV) services are being accessed illegally on the WWW. While this practice detracts from the revenue a sport organization can generate, it has led to an increase in spectatorship through the WWW.

Spectatorship, as means of sport consumption, enables individuals to connect to sporting events and sport related content. Whether through print media, attending the event, television or the WWW, audiences are able to consume sport in more ways than ever before. Although traditional spectatorship continues to be a prominent form of consumption, there are additional manners by which individuals can connect with sport.

**Social Media**

Alongside the development of WWW spectatorship is the consumption of sport through social media. Social media and social-networking websites have established online communities where individuals share multimedia and interact with others from around the world (Pegoraro, 2010). With the advent of virtual communities, sport
organizations, athletes and journalists have begun to embrace social media in recent years. Social media provides fans and sport consumers unique access behind the scenes (Pegoraro, 2010). That is to say, sport consumers gain access to content outside of the event or match (e.g., meetings, locker room discussion, and personal opinion). As the subsequent discussion indicates, social media has indeed established a new form by which to consume sport.

The social media juggernaut, Twitter, has become extremely popular in the sport consumption discourse. Twitter’s website enables users to follow a message stream of communications in addition to posting their own messages (i.e., “Tweets”) of 140 characters or less for others to follow (Sheffer & Schultz, 2010). The Twitter phenomenon, originally thought to be a tool for friends and relatives to connect with each other, has morphed into a tool for celebrities and athletes to express themselves. In fact, athletes and key sports figures have attracted “devoted followings on Twitter” (Sheffer & Schultz, 2010, p. 227). Part of the appeal of Twitter for athletes is the ability to “avoid the mainstream media and present their message unfiltered” (Schultz & Sheffer, 2010, p. 475). Athletes traditionally connect to fans and sports consumers through media, but are subjected to what and how the media chooses to report its information. With social media, and Twitter in particular, athletes have direct communication with the public and are able to express their feelings pertaining to sport or everyday life. Prominent athletes such as Shaquille O’Neal, Serena Williams, and Paul Pierce are just a sample of the elite athletes using Twitter, all of whom boast a following of over 1.5 million users (Pegoraro, 2010).
Sport organizations have even encouraged the increasing use of Twitter as a means of generating interest from fans. The National Lacrosse League (NLL), for example, has used Twitter to keep followers updated with roster moves and even promotional campaigns (Hambrick, Simmons, Greenhalgh & Greenwell, 2010). From the viewpoint of the consumer, Twitter users have received an “unprecedented look into the lives of their favorite [sic] sport stars” (Pegoraro, 2010, p. 504). Twitter has also given fans and sport observers an opportunity to see sports broadcasters and journalists express their personal views in an unfiltered manner. Many sports journalists are using Twitter as a vehicle “primarily for opinion and commentary” (Schultz & Sheffer, 2010, p. 480) on actions and events related to the sporting realm.

Although Twitter is a new medium, it has dramatically altered how individuals connect to sport (Phua, 2010); the social media website has significantly changed the sport consumption paradigm. Moreover, while other social networking forms exist (e.g., Facebook, MySpace, and Google+), Twitter has ascended as a dominant form of social media for athletes and administrators alike. In addition to social media, sport consumers have also been able to connect with their favourite sports and athletes through sport-themed video games.

**Sport-Themed Video Games**

Another prominent form of sport consumption in the contemporary North American setting is through video games. The relationship between video games and sport is complex, but incredibly lucrative. As Crawford and Gosling (2009) identify, sport-themed video games are one of the bestselling genres in the marketplace. The high sales of sport-themed games suggest that it is a popular form of sport consumption.
One of the primary reasons why video games have become a popular form of sport participation is that it is interactive and engages to the consumer. Similar to social media consumption, gamers must perform (Eskelinen, 2001; Ivory, 2006) and remain engaged. This interaction has even led some scholars (Dill & Dill, 1998) to suggest that sport-themed video games are addictive. In several games, including Electronic Arts’ Madden National Football League franchise, users can control a team over multiple seasons, making in-game as well as front-office decisions such as scouting, player development, contract negotiations and player drafting (Crawford & Gosling, 2009; Oates, 2009). Sports fans often argue with friends, family and coworkers regarding management decisions of their favourite team. Sport-themed video games like the Madden franchise offer an opportunity for fans to implement management decisions themselves (Scott & Ruggill, 2004). In addition to modes that allow users to simulate operating a team like a general manager, users can select one player, play with that one player throughout multiple seasons, and experience how an athlete is developed in the minor leagues and promoted to the major leagues. In essence, the user, through their participation, understands the financial and managerial aspects that shape professional sport, thus receive a complex, more encompassing sport experience (Scott & Ruggill, 2004).

The idea of authenticity and realism is another factor that lures individuals to want to play sports video games. As Crawford and Gosling (2009) underscore, sport-themed video games are constructed to mimic every minute detail, “creating realistic looking models of sports stadiums, athletes, game rules and physics” (p. 58). With the increasing realism in sport-themed games providing users an opportunity to operate
teams and individual athletes, there is a vicarious presence. It is difficult to fathom a scenario where the average sports fan would be able to control and manage a professional sport franchise. As such, the modes available in these sport-themed video games generate the “what if?” narrative (Crawford & Gosling, 2009), allowing the user to feel as if they were in the professional ranks and to create random scenarios that would be highly unlikely in the real world. This sentiment is (particularly) evident in combative sport games like MMA and boxing where users can choose matchups irrespective of attribute ratings, weight class and even generation (e.g., Muhammad Ali boxing against Mike Tyson or Tito Ortiz in a MMA contest against Jon Jones).

Taken a step further, the interaction required of contemporary sports games allows users to customize their experiences. The ability to select branded clothes, shoes, and equipment (Scott & Ruggill, 2004) encompasses the customization aspect of sports video games and is frequent amongst combative sport games in particular. Games like UFC Undisputed feature create-a-fighter game modes where users can create their own virtual athletes and customize their appearances as if they were fighting themselves.

These points support the idea of realism and authenticity in sport-themed video games.

Video games have become an important component in the everyday lives of many individuals (Crawford & Gosling, 2009), including sports fans. With games providing a virtual world inclusive of player likenesses, stadiums, sponsors and brand-name equipment, sport consumers can take control of their favourite players and experience the thrills of elite competition. With billions of dollars in sales (Crawford & Gosling, 2009), it is evident that sport-themed video games have become a dominant form of sport consumption.
Licensed Apparel

Aside from spectatorship, social media, and video gaming, the purchasing of licensed apparel and merchandise by individuals has been a prominent form of sport consumption. Licensed sports apparel is a multi-billion dollar industry in North America (Kwon, Kim & Mondello, 2008) and “the competition for the sport consumer dollar has increased tremendously in the last decade” (Trail et al., 2003, p. 8). Companies within the sporting realm have found innovative ways to market and secure demand for their products. These tactics demonstrate how merchandise is being sold to fans, but also raise the issue of why fans are consuming licensed apparel product in the first place.

The consumption of licensed apparel and merchandise are often viewed as a secondary, but necessary component of the sport industry (Fink et al., 2002). In the contemporary North American setting where there is vast competition for the sport consumer dollar, licensed products and well-managed branded apparel produce significant revenues for sport organizations and businesses (Gladden & Milne, 2004). In this sense, licensed apparel and branded merchandise can provide “on-site ancillary revenues” (Howard & Crompton, 2004, p. 93) from fans who have chosen to spectate at the stadium. While on-site revenues are important in their own right, the true importance and value of licensed apparel lies off-site. Similar to video game and social media consumption, consuming licensed apparel can occur outside of the stadium and the consumption may have no direct link to a live sporting event. Thus, there may be no game or event, but apparel is being purchased and/or worn by fans. Sport organizations and teams have even taken the step of co-branding their products with popular manufacturers (Kwon et al., 2008), driving off-site revenues and popularity amongst
sports fans. An example of this would be the sports apparel company Reebok, which has produced licensed apparel for the National Football League for the past ten years (Kwon et al., 2008). The result is fans purchasing apparel because it is associated with their favourite team or player and because it is manufactured by a prominent brand name (in this case Reebok). For its revenue generation alone, licensed apparel has become a crucial part of the sport industry.

Another intriguing aspect of licensed apparel, with respect to sport organizations and consumption, is the idea of symbolism. In Sage’s (1996) research on licensed merchandise, it was made evident that sport apparel features written and pictorial imagery that attempts to cultivate meaning for consumers. Symbols and monikers of patriotism, dedication, and toughness are utilized to invoke feelings or attributes (Kwon & Armstrong, 2002) from the consumer with the hope of sport consumption (through apparel or otherwise). Examples of these types of symbols are country flags and images of rocks and dirt. In this sense, the product being bought and worn has multiple meanings: one of the team, sport or athlete and the representation of patriotism, toughness, strength and other athletic qualities (e.g., stamina and perseverance). Apparel that boasts these multiple meanings and symbols provide incentive to sport consumers to purchase and don these products.

**Cyclical Outcomes of Sport Consumption**

Within the sport consumption literature, several scholars have noted that there exists a link between sport consumption (in the forms mentioned previously) and the identity of the consumer (Madrigal, 1995; Laverie & Arnett, 2000; Trail, Anderson & Fink, 2005; Wann & Branscombe, 1990). In research conducted by Kwon, Trail and
James (2007), the concept of sport consumer identity focused on the idea of having an affinity for a team (also known as team identification). Appropriated from the social identity theory in psychological research, team identification suggests that individuals classify themselves as members of a particular group based on certain characteristics and attributes (Kwon et al., 2007). In practice, this sentiment partly explains why individuals become fans, especially the die-hard fans to which Wann and Branscombe (1990) referred. As such, individuals who identify as “fans” of a particular team may purchase and don licensed apparel to “fortify the sense of belongingness” (Kwon & Armstrong, 2002, p. 154) with that team. Moreover, this idea of identity as a motivator for sport consumption can be applied to individual athletes. Individual athletes may endorse a particular product or brand separate from their own team or sport organization. “As more fans identify more strongly with an athlete, the more they intend to purchase the endorsed products” (Carlson & Donavan, 2008, p. 154). This is not only true for well-known athletes in team sports, but those athletes who compete in individual sports (i.e., boxing) as well. This notion has unique implications when a team or sport endorses one product and an individual athlete within that sport endorses a rival product. In either case, fan identity with a team or player can have significant implications on their purchases of licensed apparel and other products. A strong association with a team or player may induce fans to wear licensed products in non-sport settings, communicating to others their support for that team or player. Indeed, there seems to be evidence to suggest a link between sport identities and sport consumption.

This discussion purposefully omits how different sports are consumed because, for this research, the means of MMA consumption are most relevant. However, given the
relationships and the messages that the UFC and MMA perpetuate, it is imperative to illustrate how men and women in contemporary North America consume the sport. A discussion of this nature will identify the social norms for each gender and how certain MMA products are marketed to particular gendered demographics.

Gender

Within the academic literature on sport lies significant information regarding gender and the social connections of men and women that evolve through the influence of sport. In the case of men, gender research has focused on hegemonic masculinity (Connell, 1987; Donaldson, 1993; Hearn & Morgan, 1990) or the dominant form of masculinity to which males are expected to aspire in contemporary society. The notion of male hegemony is partly derived from initial research on femininity and understanding the subordinate role women occupy within a male dominated North American society (Schippers, 2007). This section of the literature review examines gender as a determinant in the explanation and understanding of sport consumption based on the roles men and women assume in contemporary society.

Hegemonic Masculinity

In contemporary society, men have continually found spaces in which to reinforce their “power and privilege over women” (Holthuysen, 2011, p. 21). The institution of sport is one such space. Sport has been recognized by scholars to be an institution developed by men for men (Messner, 1988; 1992; Messner & Sabo, 1994). As such, sport allows males to form and reinforce a dominant image of masculinity and maleness (Theberge, 2000) to which males in North American society generally subscribe. Qualities such as athletic ability, strength and muscularity (Hargreaves, 1994) equate to
power and control and are a part of this prevailing image for men commonly recognized in society as the dominant form of masculinity (Connell, 1987; Connell & Messerschmidt, 2005). The following provides a discussion on how the dominant image of men in North American society is defined as hegemonic masculinity.

Hegemonic masculinity as a concept has developed over recent decades with scholars noting its significance in society. Connell (1990a) defined hegemonic masculinity as “the culturally idealized form of masculine character” (p. 83). Another way of defining it would be the “ascendancy of a particular version or model of masculinity that…defines ‘what it means to be a man’” (Hanke, 1990, p. 232). In either case, an idealized form of masculinity becomes hegemonic when it becomes widely accepted by both males and females and reinforces the dominant gender ideology of the culture (Connell, 1990b). Once accepted as the dominant form, hegemonic masculinity is continually reproduced through discourses that are seemingly “natural, inevitable, and morally right” (Stibbe, 2004, p. 33). This notion raises the intriguing question of how an idealized form of masculinity is constructed and how it works. One prominent way would be the influence of social institutions like media (Silverblatt, 2004) and sport. While there are several social institutions (e.g., religion, education, family, and government), Silverblatt (2004) identified media as a powerful mechanism to reinforce the values of hegemonic masculinity.

Media representations emphasize spaces in which an idealized form of masculinity can become hegemonic. Wetherell and Edley (1999) indicated that social institutions (like the media) can present “prescriptive social norms” (p. 336) that reinforces the dominant, ideal form for men. Examples of this are prominent popular
culture examples such as the action-movie characters *Captain America* and *James Bond* who have been featured in the media. While the characters themselves are fictitious in nature, they personify men with large muscle definition, vast strength and who exert high levels of aggression to gain power and control. In the case of *James Bond*, the character also achieves power through the hypersexualization (and womanizing) of female subordinates. In these instances, the media outlines the ideal representation of masculinity that males should aspire to achieve (e.g., being muscular, aggressive, and dominant).

Like the media, sport as a social institution serves as a means to reinforce hegemony and projects it to male (and female) audiences as the dominant form of masculinity. Hargreaves (1982) indicated that sport presents symbolic representations of dominant values and ideas, including those that define fundamental gender expectations. A prime example of this can be found in the research conducted by Trujillo (1991) on former baseball star Nolan Ryan. At the height of his career, Ryan dominated opposing batters with what the media characterized as a rugged, powerful, in control and hard-working man (Trujillo, 1991). In essence, Ryan was shown to hold qualities which male baseball fans (and males in general) should embrace. This principle further supports the idea of social institutions reinforcing a form of masculinity which has been accepted as the dominant ideal (e.g., muscular, rugged and aggressive) for men in society.

The strength of hegemonic masculinity lies in the notion of co-optation and acceptance. As Wetherell and Edley (1999) indicated, men accept the notion of hegemonic masculinity because it provides a level of gratification, knowing they are part of the more dominant sex in society and benefitting from the privilege that it affords.
That being the case, Hearn (2004) noted that hegemonic masculinity thrives on individuals working toward achieving the cultural ideal for their own benefit (which is a form of co-optation). Men without power (those with no social or institutional influence) accept the principles of hegemonic masculinity because they aspire to achieve the dominant form of masculinity and the power associated with it. Moreover, men are co-opted into believing that they can achieve that dominant form of masculinity without any difficulty. Klein’s (1993) ethnographic study however, revealed that this is a never ending quest. He observed male body builders and identified an ongoing struggle that exists to achieve the ideal masculine form. Klein (1993) suggested that even if the ideal form of masculinity is achieved, it is tremendously difficult to sustain over time. As such, while males are in constant pursuit of power and achieving “the dominant position” (Connell, 1995, p. 77) in society, it is difficult to attain the idealized form of masculinity for men, individually, in all spheres of life.

A part of the literature on hegemonic masculinity identifies how the experiences of men in a contemporary setting will differ, but ultimately connect to the prescribed ideal. Hearn and Morgan (1990) observed that experiencing masculinity could happen in a variety of manners (e.g., employment and sport consumption). However, masculinity can also be experienced through associating with other men who aspire to achieve the ideal masculine image (Connell, 1995). This premise addresses the idea that while each individual male will have a different experience, the collective male experience is connected to the dominant image of masculinity.
**Fraternal Masculinity**

Within the literature on men and hegemonic masculinity lies the notion of fraternity. Fraternity in the context of masculinity refers to an exclusive group of men who share an activity that is tied to their male identity (O’Sullivan, 1998). Kimmel (2008) identified these activities as “drinking, sex, and video games” (p. 9), but there are others such as playing and watching sports. For these men, their bond with other males establishes a sense of entitlement (Mansfield, 2006), prestige and validation of their manliness. As a result, men in this fraternal culture accept stereotypes such as being promiscuous, a braggart, dogmatic, sexist, and homophobic (Kimmel, 2008) because to not accept these values of manhood would cause them to be “outcast, marginalized, and shunned” (p. 61). Indeed, this reinforces Connell’s (1995) assertion that men develop tendencies of promiscuity, abrasiveness and narcissism as expressed through “male bonding” (p. 46) activities.

The idea of fraternity helps explain why men choose to engage in a certain activity, especially sport-related, with other men. It suggests that sport consumption is not as much about an affinity for the sport or self-identifying as a fan of a sport, than it is about identifying as a man and a dominant man at that. Kimmel (2008) asserts that sport “is a currency that one can spend in any male arena” (p. 142). This helps explain why clusters of males actively attend live sporting events or sports bars and play sport-themed video games against one another. It is not about the product or the entertainment value derived but engaging in activities that validate their identity as men and reasserts their dominance over others. This finding has been communicated by Jansz (2005) who
indicated that video gaming enables males to achieve forms of masculinity that are unattainable in everyday life (e.g., fighting with and against hyper muscular men).

The concepts of status and assertiveness are also important to the idea of fraternal masculinity. Ridgeway (2011) has acknowledged that individuals with a higher status are more talkative and influential, and assert themselves as the agenda setter. In fraternal male relationships, status can be defined using identifiers such as socio-economic positioning, race, age, the attractiveness of a female partner/spouse (Ridgeway, 2011), and even the clothes one wears or the car one drives. However, achieving status in a group of men can also be generated through assertiveness. Mansfield (2006) contended that men demonstrate assertiveness to raise matters, but also to strut, boast and gain attention from others. In this sense, “showing a firm attitude” (Barker, 2005, p. 19) makes men feel manlier and raises the reputation of a male in a group of other males. Being assertive can be expressed in a variety of ways, but is generally concentrated on the idea of being loud and aggressive (Ridgeway, 2011). When combining these principles with the concept of consumption, it is possible that men consume sport (especially combat sport) to exert their masculinity amongst other males and assert themselves as the dominant male in the group.

The concept of fraternity helps identify male behaviour and male dominance in contemporary society. Brod (1990) referred to this idea as a “fratriarchy:” a structure where men rival each other yet simultaneously protect the dominant image of what a man is (hegemonic masculinity). Thus, while men rival each other, it is their shared, collective beliefs that help reinforce hegemonic masculinity and the normalization of behaviour associated with this form of masculinity.
Gender Order in Sport

In discussing hegemonic and fraternal masculinity, the idea of a gender order in sport cannot be overlooked. Often, society appears to relegate issues of masculinity and femininity to the individual, negating any structural or institution influence (Connell, 1998). However, as Connell (1990a; 1995) recognized, social institutions have been structured such that heterosexual men collectively hold far more power and status than women and homosexual men. Messner and Sabo (1990) demonstrated that sport structurally places men above women in a gender hierarchy. Moreover, when women (and disadvantaged men) attempt to change the hierarchical structure of sport through their participation, it is perceived to be “unnatural practices” (Mennesson, 2000, p. 21). But despite these attempts to change the gender hierarchy with unnatural practices, the institution of sport has continued to be “a proving ground for masculinity” (Wheaton & Tomlinson, 1998, p. 253) and maintains an order whereby men dominate women.

This order is reproduced throughout the sporting world, but is particularly prominent in combative sport. Mennesson’s (2000) research on gendered boxing in France suggested that females in combat sport (in this case boxing) are “tolerated as long as they demonstrate they do not have the same fighting ability as men” (p. 28). While this sentiment applies to the fighters themselves, a similar gender order can be applied to consumers of combat sport. Sports fandom and consumption are not gender neutral (Messner, 2007) and, women are only tolerated in their fandom so long as they do not affect the prescribed notions of women within the gender order. As an example, female ice hockey fans are often viewed as “groupies” or “puck bunnies” who attend games as objects for male sexual gratification (Robinson, 1998) and who adhere to the established
gender order. When females exhibit more knowledge, fandom or enthusiasm than male consumers (or participate in the sport itself), it creates the perception of changing the gender order with the potential that they may be considered to be masculine and labelled a lesbian or a “tomboy” (Harry, 1995). Indeed, what this identifies is that within the sporting realm exists a universal gendered order which dictates men as dominant and women as subordinate.

**Men and (Combative) Sport Consumption**

Men value hegemonic masculinity, fraternity and their position in the gender order, and combat sport can be used to reinforce their dominance and manliness. As previously indicated, sport is a space for men (Messner, 1992). However, it is combative sport where principles of violence, heterosexuality, aggression and the subordination of women are glorified and championed. Sports like boxing and MMA place men into positions of power and control (Connell, 1995), whether as a fighter or consumer who lives vicariously through the fighters.

As MMA consumers, men exhibit and perform hegemonic and fraternal masculinity much like the fighters. Twitchell (2006) stated that combat sport allows men to boast and show off. Male MMA consumers do this by demonstrating their knowledge of the sport, their affinity for certain fighters and by attempting to mimic fighters through dress, language and muscularity. Thus, when Twitchell (2006) asserted that “men do not like to be embarrassed” (p. 43), it is plausible that some men consume the sport because they recognize MMA is masculine and to do otherwise would marginalize them in the eyes of other men and women. Wacquant’s (1995) ethnographic study on males in boxing further supports this idea. In that study, boxing was viewed as a space where men (in this
case referring to the athletes) feel proud of themselves. This notion of pride is closely linked to the concept of hegemonic masculinity. By participating in the sport as fans/sport consumers, men have a vicarious opportunity to be “macho” (Oates, 1987) and showcase the pride they have in their manliness. Collectively, men congregate for high profiled fights and sporting events in places like bars and other non-sport spaces (i.e., a friend’s house) to demonstrate their pride, their masculinity and because they are doing “what men do” (Wenner, 1998, p. 310). In other words, given the idea of fraternity and sport as male preserve (Kidd, 1990), men are fans and sport consumers of MMA because it provides a means to reinforce their masculine identity and failure to express this masculinity in some way would make them effeminate and less of a man.

In order to further demonstrate their masculinity as sport consumers of MMA, men may choose to emulate the physical fitness that fighters have in the sport (Cheng, 1996). For these male fans, wearing tight-fitting MMA branded apparel in addition to exercising regularly makes them feel like athletes themselves; individuals who epitomize hegemonic masculinity (i.e., aggressive, violent and domineering). In addition to viewing fights live, through the media or by wearing apparel, male fans of MMA maintain their connection to the sport and the fighters by consuming MMA video games which feature authentic fighter likenesses and manoeuvres, corporate sponsorships and a high level of realism with blood, cuts and bruises. These characteristics are common to the masculine narrative of video games (Dietz, 1998) and to the masculine narrative associated with MMA. Moreover, males can follow their favourite fighters on Twitter, creating another opportunity to vicariously live through fighters and presumably become manlier.
To fully comprehend how male sport consumers’ masculine identities are reinforced by MMA, it is also prudent to discuss the role of women. Just as with males, understanding concepts like hegemonic femininity can aid in understanding female consumption of MMA. Indeed the subsequent section discusses these concepts with the purpose of understanding if women adhere to the idealized form of femininity and their support of the dominant form of masculinity in contemporary society through their consumption of MMA.

**Hegemonic Femininity**

The male preserve of sport (Kidd, 1990) offers unique implications for women and the ideal form of femininity. Females occupy a subordinate role in relation to men and the gender order of society (Connell, 1987; Lenskyj, 1994). This social role ascribed to women vastly differs from men (Rich, 1980; Wenner, 1998) and the powerful, authoritative positions that they assume. In roles such as the “soccer mom,” women may not accomplish their personal dreams and goals (if they had any) because the dominance and direction of the men in their lives (e.g., husband, boyfriend, father, son and brother) can serve as a barrier to achieve those goals. In addition to a social role that devalues their contribution, the idealized form of women has physical expectations that are in direct contrast to male physicality. Women are expected to “entertain, please, gratify, satisfy and flatter men with their sexuality” (Millett, 1969/2000, p. 81) with a youthful, sexy and “tight, toned body” (Krane, 2001, p. 118). Moreover, women must do so while still being “maternal, compassionate, and gentle” (Krane, 2001, p. 117), as to be too sexy would be cause for labels such as a “slut or whore” (Edler, 1995, p. 129). Indeed, like
hegemonic masculinity, hegemonic femininity (the socially defined ideal for women) is also reinforced by social institutions like media and sport.

Women will strive to achieve the idealized form of femininity and embody the associated qualities (e.g., powerlessness, sexy, and compassionate) (West & Zimmerman, 1987) because media serves as a powerful source to project that image as the socially accepted form of femininity. In her research on media displays of sexuality and gender, Kalof (1993) described the images of a Michael Jackson music video in which Jackson attempts to gain the affection of a “good looking” woman. Kalof (1993) stated that while the woman rejected his advances for the majority of the video, she ultimately warms up to him for protection and comfort. In this example, women are portrayed in the media as indefensible to the advances and will of men and “objects of men’s desire” (Stankiewicz & Rosselli, 2008, p. 582). However, the notion of the feminine ideal is not relegated to music video media alone. Print media projections of female beauty and feminine ideals are often embedded in features on dieting, celebrity and fashion (Tiggeman, 2003) and emphasize thin waists, lean bodies, big breasts and firm buttocks (Ahern, Bennett, Kelly, & Hetherington, 2011). The homogenous media depictions of women as sexual objects available for male pleasure (Krassas, Blauwkamp, & Wesselink, 2001) have also been documented to have a significant impact on the socialization of adolescent youth (Peter & Valkenburg, 2007). These representations of femininity are present in cartoon characters (England, Descartes, & Collier-Meek, 2011) and even video games (Jansz, 2005; Jansz & Martis, 2007) targeted to adolescents. In these respects, young females (and males) are exposed to the feminine ideal and continually work towards said ideal with these constant media projections of femininity.
Sport, too, offers projections of women in an idealized form of femininity in the contemporary setting. Unlike male athletes, women in sport tend to adhere to supportive roles such as the cheerleader. Cheerleaders are “erotic icons” who perform for large audiences in an attempt to build spirit amongst fans while wearing skirts and form-fitting apparel (Kurman, 1986, p. 58). In this respect, female cheerleaders are “relegated to the sidelines” (Charlebois, 2011, p. 138) and play a secondary role to the powerful, more aggressive male athlete. As athletes, females are required to downplay masculine components such as competitiveness in addition to emphasizing their heterosexuality and conforming to societal expectations (Adams, Schmitke, & Franklin, 2005), suggesting that women are constantly negotiating their gender identity. The result is female athletes using markers/symbols to highlight their adherence to the prescribed roles for women in society. Examples of markers include donning make-up and long haired ponytails with ribbons (Adams et al., 2005). In essence, these images in media and sport represent the cultural ideal of a female in society; an ideal which includes adhering to a slim body type, supporting men (as athletes and consumers), and putting their femininity on display at all times (even if they are the athletes themselves). Indeed, women “are viewed within sex roles before they are considered as [sport consumers]” (McDonagh & Pappano, 2008, p. 170) which potentially devalues their sport experience.

Women and (Combative) Sport Consumption

Combat sports like boxing and MMA provide a site where women are largely excluded from participation (Hargreaves, 1997) and their consumption as a fan is guided by the idealized form of femininity. As fans, females still maintain their roles as supportive wives, mothers or girlfriends (Oates, 1987). In this capacity, females will
consume sport because they want to support the men in their lives (Halbert, 1997).

Simply put, women will accompany or “ride” with men (Wenner, 1998, p. 319) in their consumption of combat sport. This connection is particularly prevalent in non-sport, social settings like bars and nightclubs. Wenner (1998) contends that “two or three women sometimes ‘ride’ with one man” (p. 319) to a local bar to watch the big fight or game. As “rides,” women are accessories to the game and are “objects of male pleasure” (Snow, 1989, p. 30). Indeed, as consumers of MMA in bars or clubs, females find themselves in a position to be under the gaze of men, subject to their judgment (Borer, 2009). At live MMA events, women who enter these settings to consume combat sport succumb to the “male gaze” (Skelton, 2002) and become objects for the viewing pleasure of men. As a result, women as combat sport consumers must adhere to the idealized form of femininity and accept their position in the male gaze or risk homophobic labels. Indeed, many women will wear tight-fitting, sexually provocative apparel during their combat sport consumption, accepting the sexual objectification that defines their role in male territory (Wenner, 1998).

To understand how this point is incorporated into the culture of MMA, it is critical to address the concept of “ring girls.” While MMA (much like boxing) is simply about two men fighting each other (Delgado, 2005), women within the sport are packaged for male consumption. Prior to the start of a round, a scantily clad female with a slim, toned body will parade around the fighting area holding up a sign indicating to the audience what round is about to commence. In this instance, the sole purpose of the ring girl is to exist as an accessory to the fight itself and for the pleasure of the male MMA consumer. When a female individual challenges hegemonic femininity and the idealized
form of a woman (who consumes sport), she is often labelled a “lesbian” and/or “bitch” (Schippers, 2007). These terms are used in a derogatory manner and demonstrate that there is a stigma placed on those women who do not conform.

Based on this literature review, female hegemony suggests that women consume sport (and combat sport in particular) based on traditional gender roles for women (Krane, 2001) and their position in relation to men in North American society. Given the docile and passive roles to which women adhere, consuming MMA does not challenge the norms of hegemonic femininity if the women are riding with males or occupying roles that benefit or entertain men. Thus, while females may consume MMA, they are expected to adhere to their predominantly in relation to male consumers of MMA.

The gendered consumption of MMA is a complex issue. This study identified the types of MMA consumption by males and females and contributes to the understanding of this consumption. In order to achieve this, a set of research questions were used to guide the study’s methodology.

**Research Questions and Propositions**

Given the purpose and intent of this study and the existing literature on MMA, sport consumption and gender, two research questions emerged:

RQ$_{1a}$ – How do males and females engage in the consumption of MMA?

RQ$_{1b}$ – What are the differences and similarities between male and female consumption of MMA?

RQ$_2$ – How do males and females account for their consumption of MMA?

RQ$_3$ – Is the instrument used in this study viable to assess the consumption of MMA?
Recognizing that previous research has not examined the gendered consumption of MMA, no hypotheses have been proposed. However, based upon the literature on masculinity and femininity, particularly within sport culture, the following propositions are advanced:

P_1 – Males are more likely to engage in MMA than females and do so using multiple modes of consumption. These include a combination of newspaper spectatorship, venue spectatorship, television spectatorship, licensed apparel, social media and video games.

P_2 – Males are more likely to engage in MMA to satisfy their own interests, while females are more likely to engage in MMA to satisfy the interest of others (e.g., friends, family, and significant other), not their own.

P_3 – Male consumption of MMA is an expression of their masculinity and manliness.

P_4 – The instrument used in this study is viable to assess the consumption of MMA.
CHAPTER III

DESIGN AND METHODOLOGY

This chapter will outline the methodology for the present research. The goal of this section is to indicate how the study was conducted to ultimately address and answer the research questions proposed and assess the research propositions being advanced. Included in this chapter are sections on the study’s philosophy, design, participants, instrumentation, procedures, data analysis, ethical procedures, delimitations and limitations.

Philosophical Worldview

In order to address the research questions, it is important to have a structure, strategy or philosophy that will frame how the research will be conducted. Palys (2003) described research design as “a game plan through which one can gather information that addresses one’s research purpose in a simple, elegant, and systematic way” (p. 71). Thus, it is important to recognize the research philosophy or “worldview” being utilized for this particular investigation.

A worldview shapes a researcher’s beliefs and can guide their investigative approach (Creswell, 2009). In practice, a worldview is similar to a paradigm (Lincoln & Guba, 2000) in that it reflects the discipline area of the investigator and the overall nature of the research. Based on the four worldviews that Creswell (2009) cited (i.e., postpositivism, social constructivism, advocacy, and pragmatism) this study will be guided by a social constructivist worldview.

Social constructivism is a “flexible, culturally relativistic and contemplative perspective” (Doolittle & Hicks, 2003, p. 5). Within this perspective are researchers who seek to attach meanings to the subjective experiences of human beings (Creswell, 2009).
The focus shifts away from the researcher and moves towards the participants whose views matter. The investigator can then “inductively develop a theory” (Creswell, 2009, p. 8) or develop conclusions based on the interpretation of others.

Social constructivists position issues and problems in relation to a particular context. Once framed within a context (e.g., social or historical), constructivists look to critique or challenge the issue or problem (Schwandt, 2007). Consequently, it is the primary motivation of the social constructivist to examine all aspects of the world in which human beings live. These aspects could include conditions (e.g., health), labels (e.g., deviance) and practices/rituals (e.g., prayer), but also extend to concepts, theories and perceived truths (Hacking, 1999). Therefore, social constructivists can be found in many academic disciplines, analyzing issues that affect and shape the world.

There are three primary assumptions to the social constructivist worldview (Crotty, 1998). First, it is important to recognize that the meanings constructed by research participants are not absolute truths, but are subjective interpretations. The second assumption is that a social constructivist must “get close to the data” (Filstead, 1970, p. 6). Face-to-face interaction and observing participants’ interacting with each other helps construct meaning. Lastly, because interpretation can change, it is important to follow an inductive approach such that the researcher can generalize results. In all three assumptions, there is a commonality in the notion of interpretation, subjectivity and change.

Based on the current issue and the research questions, this study was guided by the social constructivist worldview. This worldview enables a study to be more open and “illuminate social realities” (Owens, 1982, p. 6) as opposed to being rigid and solely
guided by the preconceived notions of the investigator. This is a critical point as the primary researcher of this study is an avid MMA consumer and identifies as a fan of the sport. While the researcher will have had a significant impact on the study (e.g., development of phases, instrument, questions), the social constructivist worldview places the importance on the participants and their subjective interpretations of the phenomenon. This worldview is also conducive to a study on MMA because as the sport continues to grow, opinions will continue to differ from individual to individual. Fundamentally, this worldview fits well with mixed methods designs of which this study features.

As an additional guiding framework, this study incorporated exploratory and descriptive research principles, which also fit well in the social constructivism worldview. Descriptive research seeks to describe a situation or group, while exploratory studies look to achieve new insights (Palys, 2003). The nature of both descriptive and exploratory research feature elements of the social constructivist worldview and were adopted for this study.

**Research Design**

A mixed methods approach was utilized to answer the research questions in this study. Mixed method studies have been utilized by social science researchers (Tashakkori & Teddlie, 2003) because it integrates the benefits of both traditional forms of quantitative and qualitative methods which complement each other by one method building on a second method. Tashakkori and Teddlie (1998) explained that in a mixed methods approach, the results of one method could produce data that significantly influence the questions, participants and nature of a second method. This notion of one method influencing and helping to develop a second method is at the core of a sequential
mixed methods design, which is the variation that was selected to address the research questions in this study.

The sequential mixed method design has two distinct phases: a quantitative phase followed by a qualitative phase (Creswell, 2009). The researcher first collects data through quantitative methods and uses the information generated to collect additional data through qualitative methods. The idea is that the quantitative data provides general, factual information and a sequential qualitative component can then spawn more in-depth data to provide a deeper understanding of the issue (Hanson, Creswell, Plano Clark, Petska, and Creswell, 2005; Ivankova, Creswell, & Stick, 2006).

The decision to use a mixed methods approach is often unclear (Bazeley, 2004), thus it is vital to demonstrate why this approach was well-suited for the study. By initiating the research with a quantitative method, this study gauged MMA consumption habits of the research participants through an online survey and addressed RQ1a (How do males and females engage in the consumption of MMA?) and RQ1b (What are the differences and similarities between male and female consumption of MMA?). Subsequently, information obtained in the survey aided in the development of questions for the focus groups, which were designed to explore the individual and collective meanings of MMA consumption thus addressing RQ2 (How do males and females account for their consumption of MMA?).

Like any other method, there are strengths and weaknesses to this approach. From a strengths standpoint, this approach can potentially overcome the bias and narrow focus of a single method (Creswell, 2009; Rocco, Bliss, Gallagher & Perez-Prado, 2003) and is tailored to answer the research questions when one method alone cannot achieve this.
However, there are some weaknesses to this approach. Mixed method designs can be very lengthy in time and may require more resources (e.g., human and financial) (Ivankova et al., 2006) than if the study were to employ simply one qualitative or one quantitative phase. There is also the possibility of poor or no integration of the phases. Despite its weaknesses, this type of design fit best with the study given the nature and complexity of the research questions. Research conducted by Evans and Mathur (2005) suggested that online surveys have significant advantages over other methods of data collection, especially with respect to yielding fast results and the dissemination of the responses. As a result, phase one of this study consisted of an online survey that is quantitative in nature, while phase two of the this study consisted of focus group sessions that build upon some of the data collected from phase one and go more in-depth with emergent themes.

**Research Participants**

Consumers of MMA vary in terms of demographics (e.g., age, sex, class), but the cohort of 18-34 year olds were identified as the primary target demographic for MMA promoters and marketers (Kim et al., 2008). As Kumar and Lim (2008) indicated, the Generation Y demographic, consisting of individuals born between the years 1980-1994 (in 2006), have significant purchasing power. The age range of this generation in the present-day is 18-32, which falls within the highly coveted MMA target demographic. As such, it was logical that a population of study for MMA consumption be derived from the Generation Y demographic. Given the focus of this study, a population was identified that would reflect the Generation Y cohort: undergraduate students.
With the selection of undergraduate students as the population of study, it was vital to delimit the participant base to a smaller group of individuals. To do so provided greater participant accessibility and allowed the recruitment process to be less arduous for the researcher (Teddlie & Yu, 2007). As such, the researcher narrowed the population to individuals who were current kinesiology undergraduate students at the University of Windsor. There were approximately 750 undergraduate students in the kinesiology program (an exact number could not be obtained due to fluctuating enrolment), enabling the researcher to recruit participants from a sizeable pool.

Delimiting the participant base to a cohort consisting of kinesiology undergraduate students identified this group as a convenience sample. Convenience samples are comprised of “individuals who are readily available to participate” (Henry, 1990, p. 18) and are the “least costly to the researcher, in terms of time, effort and money” (Marshall, 1996, p. 523). What makes this particular group of individuals readily available is their affiliation with the Faculty of Human Kinetics (FHK), to which the researcher shares an affiliation, and is where this study took place. It is also important to recognize that kinesiology students would have some interest and experience in sport and, in theory, would be exposed to more MMA content than students in another academic discipline. While this may have potentially impacted responses in both phases of the study, it was researcher’s contention that the sample have baseline knowledge about MMA and sport in general and thus using kinesiology undergraduate students would satisfy this requirement.

Individuals within this group varied in terms of their age and sex. As the cohort spans from first year to fourth year, undergraduate student participants were primarily
within the 17 to 24 age range (however, it may have been higher in the case of mature students). This group was also comprised of an approximately equal distribution of both males and females (with females slightly outnumbering males) according to staff members in the FHK. While this sample was one of convenience, it enabled the researcher to recruit members of the Generation Y cohort.

**Recruitment**

Participants from the sample were recruited for both phases of the study. Participants could choose to participate solely in the survey or in both phases (survey and focus group). Participants who participated in both phases of the study were considered a subset of the sample for data analysis purposes. Those who were recruited and participated in one (or both) phases of the study were eligible for compensation (see the next section for more details).

The recruitment of participants from the sample consisted of two methods: e-mail and Facebook group (social media) invitations. These methods were chosen because they provided more avenues to connect with the sample in a cost-effective manner. Moreover, these recruitment techniques reflected the sample’s usage of new media in the present-day and thus are likely to increase the response rate.

Using the e-mail method, all kinesiology undergraduate students received an e-mail to their University of Windsor e-mail account with a link to the online survey (see Appendix A). All e-mails were delivered by the University of Windsor’s Information Technology Services (ITS) department and /or the FHK administrative staff on behalf of the researcher. This initial contact also invited students to volunteer for participation in the focus group sessions. In addition, potential participants were also e-mailed once
surveys had been completed, reminding them of the opportunity to participate in the focus group sessions. In this capacity, the entire sample was contacted to participate.

Unique to this study was the recruitment of participants through social media, specifically Facebook. The University of Windsor Department of Kinesiology operates a Facebook group consisting of approximately 400 users. These users are current undergraduate and graduate students, faculty, staff, and alumni. An invitation to participate in the study was posted in the Facebook group by the administrator of the group, who is an FHK staff member. This method of recruitment was chosen as young adults are frequent visitors of social media websites like Facebook (Correa, Hinsley, & de Zuniga, 2010). While this method posts a general invite, it indicated that the study was intended for current undergraduate students only. The Facebook group was utilized to post the link for the online survey and to remind individuals of the opportunity to participate in the focus groups (see Appendix B). The addition of this recruitment technique assisted in communicating with those students who do not use their University of Windsor e-mail accounts frequently or outside of the academic.

As an enhanced recruitment technique, Facebook and e-mail invitations (see Appendix A) to participate were accompanied by a Quick Response (QR) barcode enabling prospective participants mobile smartphones. Smartphones are mobile phones that allow users to access e-mail, web browsing and other applications with ease and in a cost-effective manner (Raento, Oulasvirta, & Eagle, 2009). Smartphones also enable users to scan QR barcodes, which are square barcodes designed for quick responses, and pull up information contained within the barcode (Jackson, 2011). In this study, QR barcodes that contained the link to the survey were developed and posted in the Facebook
group mentioned above. The purpose of posting the QR barcode in addition to the physical link in the Facebook group was to allow participants the opportunity to participate in the survey on the go. However, the QR barcode was only used to enhance the recruitment of participants for the survey, not the focus groups. This was because the technique is an incompatible process; the QR barcode can bring participants to the online survey, but a QR barcode cannot assign participants to a focus group. Thus, the inclusion of the QR barcode in this research was meant to provide greater participant availability to the online survey, not as a primary form of recruitment.

While the Facebook group and e-mail invitations were focused on recruiting kinesiology undergraduate students, it was possible for individuals outside of this sample to gain access to the online survey. As Phelps, Lewis, Mobilio, Perry and Raman (2004) identified, individuals may pass along e-mails to their peers. In this circumstance, individuals from outside the sample could have had friends within the sample forward the e-mail invitation and accessed the survey in that manner. Individuals could have also gained accessed to the survey link through the Facebook group if they were a member of the group, but not a current kinesiology undergraduate student (e.g., alumni or supporter of the kinesiology program). However, at the end of each day the online survey would be live, the researcher would examine responses and, if a respondent indicated they were not a current kinesiology undergraduate student, their response data would be immediately removed. Moreover, with respect to the focus groups, the researcher would have examined participant survey responses prior to each session, thus removing any chance of individuals from outside of the sample attempting to participate.
Compensation

Participants of the study were compensated depending on their involvement in the study. Those who took part in the survey were asked if they would like to provide their University of Windsor e-mail address to enter a random draw for one $50 gift card to the University’s bookstore. In order to be eligible for this compensation, participants must have consented to participate in the survey. At the end of the survey, if participants were interested in entering the draw, they clicked on a link that took them an external site. There, they were greeted and prompted for their University of Windsor e-mail address. If participants did not consent to complete the survey, they did not arrive on the final page of the survey with the link to the external site and were not be eligible to enter the random draw. While the researcher kept the collection of e-mail addresses, the survey and e-mail address pages were hosted separately and the researcher was not be able to connect a survey to an e-mail submitted for the random draw. The random draw was conducted by the researcher by assigning the collected e-mails a number and randomly selecting a number thereafter. The winner was contacted by the researcher and was awarded the gift card prize.

In addition to the chance to win a $50 gift card prize, participants who volunteered for the focus group sessions received pizza and beverages upon the completion of their respective session. Participants who were not selected for a focus group or withdrew from a focus group session before completion were not eligible to receive any compensation.
Data Collection

Instrumentation

The instrument used in this study (see Appendix C) was a modified version of the instrument developed by Fink et al. (2002) (see Appendix D). In their study, Fink et al. (2002) developed a 31-item instrument to assess the gender and team factors that were associated with sport consumption and venue spectatorship. These 31 items were split into three scales and 12 subscales, based upon the research objectives of the study. After data were collected, Cronbach’s alpha coefficients (the measure used to assess the internal consistency of the subscales) were calculated with ten subscales rendering a result of .73 or greater. The other two subscales only had one item respectively and therefore could not be assessed. Given the strength of the Cronbach alpha scores for the subscales, the researcher analyzed each subscale looking for items to potentially adopt for this study.

In total, one scale and six subscales were adopted from the Fink et al. (2002) instrument. The subscales chosen included friend influence (α was not performed because only one item was present), family involvement (α = .77), merchandise consumption (α = .75), print media consumption (α = .73), TV media consumption (α = .87), and wearing team paraphernalia (α = .89). Items from these subscales were modified to reflect MMA and then inserted into the instrument used in this study. The remaining scales and subscales were eliminated from use because those items failed to address the research questions posed in this study. In total, 12 items were used from these six subscales that were deemed appropriate by the researcher to help answer the research questions.

While these items were helpful, they were not all encompassing given this study’s research questions. As such, several “new” items were devised to address the nature of
MMA consumption, technological advances and new marketing tools. Prior to doing so, the researcher received the permission from Fink et al. (2002) to modify their research tool (Fink, personal communication, February 20, 2012). Once permission was received, “new” items were constructed using similar wording and phrasing to that of the Fink et al. (2002) items to enhance clarity for the participants. In total, this modified instrument consisted of 43-items (39 of which are answered on a Likert scale) that reflect MMA consumption and demographical information (i.e., age, sex and year of study).

The modified instrument utilized a seven-point Likert scale where participants reported their consumption of MMA. According to Dawes (2008), a seven-point Likert scale can increase the content validity of the instrument over a five-point Likert scale and provide more clarification to participants. The scale was numerically anchored with strongly disagree (1) at one end and strongly agree (7) on the other end. Prior to gauging their consumption using the seven-point Likert scale, participants were subjected to “skip” questions. Skip questions were designed to screen out participants who do not consume MMA in a particular area. For instance, the first skip question on the survey was “I attend live MMA events.” If the participant answered “no,” the survey would skip items #1-5 because those items probed into who/what influences their venue spectatorship, allowing the participant to go directly to the next skip question. If the participant answered “yes,” items #1-5 would ask the participant to assess their consumption using the seven-point Likert scale. If a participant answered no to a skip question, a value of 1 (strongly disagree) was assigned for all the items that were skipped. In total, there were nine skip questions that were designed to expedite the participant through the survey should questions not be reflective of their behaviour.
Given that the instrument used in this study had been strongly modified from the original Fink et al. (2002) study, issues of internal consistency and the overall viability of the instrument were raised. Although not all the Fink et al. (2002) subscales were adopted for use in this study, the researcher identified subscales that were applicable to MMA and that had two or more items such that Cronbach alpha scores could be obtained after the data collection. It was the contention of the researcher that the internal consistency of the new instrument was not in jeopardy, however, it was still a possibility. As a result, in understanding the focus of this study, the researcher put forth RQ3 (Is the instrument used in this study viable to assess the gendered consumption of MMA?). In this respect, if the instrument was found to lack internal consistency after data collection, the researcher would be able to speak to RQ3 and P4 (the researcher’s proposition that the instrument would in fact be viable for this study).

**Proposed Focus Groups**

With participant responses to the online survey unknown, the researcher had to anticipate how respondents would report their consumption in order to develop a method for the focus group phase. If respondents answered in a manner not anticipated, the researcher would revisit the initial plan for the focus group phase and make appropriate changes to the method. If respondents did answer in a manner anticipated by the researcher, the focus group phase would remain unchanged.

According to the initial focus group strategy, six focus groups would be held with a total of eighteen males and eighteen females. Two groups were comprised with six males each, two groups with six females each and two groups each integrating three males and three females. Each of these groups would also have participants with similar
MMA consumption habits, resulting in the following sessions: all-male social, all-male vested, all-female social, all-female vested, sex-integrated social and sex-integrated vested.

The notion of vested and social fans was adopted from Jackowski and Gray (2004) and research conducted by Sutton et al. (1997). Vested fans refer to those individuals who “use sport as an extension of their community” (Jackowski & Gray, 2004, p. 283). These fans have deep emotional ties to sport. For the purposes of this research, the notion of vested fans was grouped together with the category of the focused fan. Focused fans are attracted to sport, “but only [sports that are] popular” (Jackowski & Gray, 2004, p. 283). In contrast, the social fan is someone who does not really care about the sport or outcome but consume to enjoy the overall entertainment experience (Jackowski & Gray, 2004; Sutton et al., 1997). These fans are attracted to the “big game” (Sutton et al., 1997) or, in the case of MMA, the “big fight.” The researcher concluded that because of the nature and development of MMA that there would be a small proportion of vested fans and thus it would be appropriate to amalgamate vested fans into the focused fans category. The researcher, according to the initial focus group strategy, would use these classifications to stratify participants into a particular focus group.

In order to be eligible to participate in the focus group, an individual would have had to complete the online survey, providing an opportunity for the researcher to stratify participants. When participants agreed to participate in the focus groups, the researcher asked for their University of Windsor student identification number to retrieve their surveys. The researcher would then analyze the main item topics (i.e., venue
consumption, reading, watching, social media, video games, and clothing/apparel) of these survey responses to identify respondents as social fans or vested fans.

Respondents with high (average item) scores for watching MMA but low scores for the other topics were identified as social fans. Conversely, respondents with high scores for watching MMA as well as the other topics would be identified as a vested fan. In these instances, high scores referred to anything above “neutral” (or a 4 on the Likert scale). For the stratification, anything below a score of 4 was considered low as it suggested a low frequency of consumption; the term neutral draws an indifferent connotation and vested fans should be those who acknowledge their consumption. If scores were too low, respondents were classified as non-MMA fans. The researcher determined how many additional topics sufficed for a participant to be categorized as a vested fan on a case by case basis.

**Revised Focus Groups**

Upon review of the quantitative data, it was determined that the overall consumption of MMA in the sample was lower than anticipated (refer to Table 4 in Chapter III for mean scores of survey items). The data indicated that there were not many individuals stratified as vested fans, especially those who identified as a female. Conversely, there seemed to be many respondents (both males and females) who reported little to no consumption of MMA altogether. As a result, it became apparent that the anticipated schedule of six sessions (all-male social, all-male vested, all-female social, all-female vested, sex-integrated social, and sex-integrated vested) would not adequately represent the consumption habits of the sample and would aggravate the recruitment process given that response rates to the survey were also lower than expected.
Based on the researcher’s interpretation of the data, the total number of focus
groups was decreased from six to five, with the overall number of participants decreasing
from 36 to 27 (15 males, 12 females). The first session was comprised of individuals with
no MMA fandom (consumers who had relatively little or no MMA consumption
according to their survey responses) and was open to members of both sexes. The second
session was comprised of vested MMA fans, also open to members of both sexes. The
remaining three sessions were comprised of all-male social fans, all-female social fans
and a sex-integrated social fan group. All five of these groups had a range of four to six
participants per session, with the sex-integrated group slated to have an equal number of
males and females participate. With a revised focus group strategy, focus group questions
were developed for the no MMA fandom session (see Appendix E), the vested fan
session (see Appendix F), and the three social fan sessions (see Appendix G) with each
session slated to last approximately 60 minutes as outlined in the original focus group
strategy. Questions were constructed and fell into one of six themes: appeal, behaviour,
locale, marketing, identity and influence. These themes were developed based on the
results of the quantitative data (see Chapter III) and the objective of addressing RQ2.

Procedures

Survey Administration

The first step in the data collection segment of this study was the administration
of an online survey to the sample. The survey was administered to participants
electronically using FluidSurveys, a WWW survey-hosting webpage. The previous
section on recruitment discussed how the survey was advertised to the sample.
When participants arrived on the webpage that hosted the survey, they were immediately on page one of the survey, the letter of information and consent (see Appendix H). The letter featured the purpose of the study, as well as the contact information for the researcher, the principal advisor of the study and the chair of the Research Ethics Board (REB) at the University of Windsor. Participants had the opportunity to click “yes” which indicated their consent to participate in the study or “no” which terminated their participation session. At no time during this consenting phase were participants asked to identify themselves or provide any information that could identify them to the researcher.

After consenting, participants completed the items on the survey. “Save” and “resume” options were made available on the webpage if the participants wanted to pause. However, participants were informed that they had 48 hours in which to complete the survey. At the end of the survey, participants were presented with a brief note regarding the second phase of the study, the focus group phase. At this stage, participants of the survey could enter their e-mail addresses into a text field so that the researcher may contact the participant with more information regarding the focus group sessions. If a participant willingly provided their e-mail address at this stage, anonymity of the participant was no longer present. However, the researcher would still maintain confidentiality with the data provided by the participants. Participants, whether they submitted their e-mail address for more information about the focus groups or not, were required to provide their University of Windsor student identification number in a text field. The purpose of indicating their student identification number was to help the researcher locate a participant’s survey for the stratification of participants into a focus
Participants would click “submit” to send their responses to the researcher at which point they were directed to the termination page. At this point, participants would receive an expression of the researcher’s appreciation for their contribution and were provided with the link for the opportunity to register for the compensatory draw. Time estimates to complete the items in the study ranged between 6-10 minutes. The sample was informed of this range, in addition to their 48 hours to complete the survey once they had initiated it.

**Focus Group Administration**

Prior to the start of the focus group sessions, participants were asked to consent to the session and to being audio recorded (see Appendix I). All sessions were recorded using a Sony digital audio recording device and participants were given pseudonyms to protect their identities in the reporting of the results. The questions asked in the focus groups were derived from a question schedule that the researcher developed after the survey data have been analyzed. The objective of the questions for the focus groups was to discuss particular patterns or trends identified from the survey analysis based on consumption, gender, new media, and consumption in particular environments (i.e., bars and nightclubs). As such, the focus groups were semi-structured in nature to allow for an open discussion and to encourage participants to reveal their thoughts on the issues. Focus groups were tentatively scheduled to last approximately 60 minutes, but the duration of each focus group depended on the discussion generated by the participants.

**Data Analysis**

For the quantitative phase, data analysis included an exploratory factor analysis (EFA), a Cronbach alpha test, a one-way multivariate analysis of variance (MANOVA)
and a one-way analysis of variance (ANOVA) test. The EFA is a commonly used test in social science research, helping to determine the number of common factors (Fabrigar, Wegener, MacCallum & Strahan, 1999) or components in an instrument. In essence, the EFA (which was conducted using IBM SPSS 20 software) provided the researcher with components that indicated which items correlated (based on participant responses), allowing for a Cronbach alpha test. The Cronbach alpha test is a measure of reliability and can be performed for each of the components that the EFA identified. Once these measures were conducted, the researcher provided descriptive statistics of the components such as mean scores, standard deviation scores, and the Cronbach alpha scores. Following the EFA and descriptive statistics, a MANOVA test was conducted to identify the differences among the subscales between the two genders (males and females). However, for a MANOVA to have statistical power and merit, 50 respondents would be required for each subgroup (Van Voorhis & Morgan, 2007). In this study, there were two subgroups (male and female) and thus a minimum of 100 respondents equally divided was required. A post-hoc analysis test would not be conducted for this study as post-hoc analysis tests (e.g., Tukey test) only apply when there is more than one variable. As this study only looks at sex as the primary variable, no post-hoc test is applicable. However, an ANOVA test would identify where differences occurred (if there were any as indicated by the MANOVA).

Data analysis for the qualitative phase of this study was conducted using open and axial coding techniques. Open coding delineates the data while axial coding puts data into sections based on themes and patterns (Strauss & Corbin, 1990). All sessions were transcribed manually by the researcher after the sessions using the audio recordings and
computer software (Sony Digital Editor 2). Once all focus group sessions were transcribed by the researcher, the data were condensed (Neuman, 1997) into categories or “themes” based on the participants’ responses. Afterward, the researcher examined the themes and developed key concepts or “nodes,” developing subsections within the themes, a process representative of the axial coding technique (Neuman, 1997). Once both steps had been completed, the concepts were examined in relation to the existing literature for similarities and differences. Based on the literature and the method used in this study, an initial analysis chart (IAC) was drafted. The IAC enabled the researcher to organize themes, nodes and quotes and was utilized in the analysis of the focus group sessions. With themes established, the researcher conceived nodes for each theme and modified the IAC to incorporate these themes and nodes (see Appendix J).  

**Ethical Procedures**

This study was conducted with the approval of the University of Windsor’s REB. In accordance with the policies and procedures of the REB, the investigator had successfully completed the Tri-Council Policy Statement (TCPS2) tutorial on research ethics. Participants of the study were provided with the contact information of the REB chair should they have had any concerns or questions about the study. Prior to any data collection, the investigator obtained the consent of the participants. The investigator also provided an on-going report to the REB during the research as the focus group question schedules were developed after REB clearance was initially received. Once REB approved the question schedule, the focus groups were conducted by the researcher.

The principles of anonymity and confidentiality were also taken into consideration during this research. Participant responses remained anonymous for the
survey (except for instances where participants willingly provided their e-mail to be contacted for focus group participation). For participants selected to be in the focus group phase, anonymity was not fully guaranteed for two reasons: (1) the researcher needed to link participant to survey results (for the purposes of stratification) and, (2) participants would be interacting with other focus group participants in person. Confidentiality was provided by the researcher throughout the study and during the reporting of the findings. When participants agreed to the focus group sessions, the researcher maintained strict confidentiality with respect to their survey responses. During the focus group process, participants were asked to keep information discussed in their respective sessions confidential. However, despite this announcement, the researcher could not fully guarantee confidentiality with this portion of the study should participants decide to share information outside of their session.

**Delimitations**

The researcher has delineated the scope of the study in the following ways:

1. The study focuses on current kinesiology undergraduate students at the University of Windsor who may be more exposed to sport and able to comments on MMA content.

2. The study is delimited by the instrument used to assess MMA consumption amongst males and females.

3. The study is focused on the sport of MMA and not the gendered consumption of other sports, which may or may not differ.
4. Participants in the qualitative phase of the study had to meet criterion established by the researcher indicating the degree to which they consume MMA. As a result, participants may have been excluded from the sessions.

5. The study collapses the notions of vested and focused fans into one category known as “vested fans.”

6. Due to time constraints, the researcher planned to hold six focus group sessions. If more sessions were planned, additional insights or opinions could be expressed by more participants.

7. The results of the study may not be generalized to the greater MMA cohort of 18-34 year olds.

**Limitations**

The researcher acknowledges the subsequent limitations:

1. Participation in the study is dependent on students opening and responding to their University of Windsor e-mail and/or checking the University of Windsor Human Kinetics Facebook group.

2. The study is set to be conducted in the summer months in which there are fewer students may actively check their university e-mail account or be physically available to attend focus group sessions (if they are eligible to do so).

3. The study requires participants to self-report their MMA consumption; participants may vary in terms of how they define the frequency of their consumption.
4. The study relies on participants providing truthful and accurate responses. Participants may express opinions that they do not necessarily believe, but those that are socially desirable (i.e., opinions that others will agree with and support).

5. Because the sample population stems from kinesiology students at the University of Windsor, it is possible for students to recognize their peers and for a participant’s identity to become exposed. This may result in participants not providing fully honest responses.

6. Focus group participants may have a certain perspective they are hoping to advance through their participation.

7. Using the Facebook recruitment technique is limited to those who have a Facebook account and are members of the University of Windsor Human Kinetics Facebook group. It is limited to these 400 individuals who are in the group and not the entire student cohort identified for this study.

Summary of Method

The preceding section documented the methodology used to answer the research questions of this study. A mixed methods approach was designed to yield as much information as possible while adhering to the philosophical principles of the social constructivist worldview. Moreover, the approach utilized was conducive to using participants from a university cohort, the selected sample for this study. As a result, this methodology was designed to conduct this research.
CHAPTER IV
RESULTS AND DISCUSSION

Quantitative Phase

Data collection for the quantitative phase began on June 11\textsuperscript{th}, 2012 and ended on July 11\textsuperscript{th}, 2012. Within this time frame, a total of four e-mails were delivered to the sample population (three from ITS, one from FHK administrative staff), which yielded a total of 170 responses. Of the 170 collected, 151 were answered fully and submitted to the researcher. As summer enrolment varies with students withdrawing and opting into classes, the data were collected from a sample size of 750 students and yielded an overall response rate of 20%. According to FluidSurveys, the average amount of time a respondent took to complete the survey was five minutes and 14 seconds. Moreover, the site, which hosted the online survey, identified 22.5\% of the total number of respondents accessing the survey by using Facebook or the QR barcode feature posted in the University of Windsor kinesiology Facebook group. Thus, over three quarters of the respondents (77.5\%) accessed the survey by clicking on the hypertext link in the e-mail or by manually entering the survey link into their web browser either from the e-mail invitations or by copying the link from the Facebook group (as opposed to clicking and being redirected to the survey page).

The demographic composition of the respondents varied across age, sex and year of study. Table 1 presents the age of respondents and the number of males and females for each age while Table 2 presents the year of study of the respondents. It was calculated that the mean age for respondents was 20.44 years. Responses from fourth-year students were much higher than that of the other three years which may reflect senior students’ appreciation for research and respect for student researchers in their
attempt to complete their academic pursuits and the culture of the kinesiology program to assist their peers.

From the outset of the quantitative data collection, the anticipated response rate was about 30%, as indicated by Saunders, Lewis, and Thornhill (1997). However, as responses came in, expectations lowered. Once the actual response rate reached the 20% mark, the survey was closed. While the actual response rate was 10% lower than initial expectations, it is still higher than the 6% response rate that Ranchhod and Zhou (2001) found and parallels the 19.3% response rate yielded by Schuldt and Totten (1994) in their comparison of e-mail and postal mail surveys. Moreover, while response rate expectations were lowered, the total number of respondents included more than 50 males and 50 females, the minimum figures required for subgroups in a MANOVA. Thus, with 151 responses and a 20% response rate, the researcher could carry out the data analysis procedures as outlined in the methodology.

**Exploratory Factor Analysis (EFA)**

An EFA was conducted on all 39 Likert scale items from the completed surveys ($n = 151$) to determine components (also known as subscales) within the instrument used for analysis. A component was produced when the EFA grouped items that were highly correlated together. In order to assess correlation, the EFA had assigned a numerical figure known as a factor loading ($FL$) to all items. There were no restrictions placed on the EFA and thus there would be no set number of components as they would be created based on the factor loadings and correlations between items.

When the EFA was performed, it yielded a total of eight components. Items whose factor loading values approached a value of 1 were grouped together in a
component, while items with a factor loading figure below 0.30 were excluded from that component because they were not highly correlated to other items in that component. In addition to the EFA chart, a visual representation of the components was produced by SPSS in a scree plot (see Figure 1). Upon review of the scree plot, the researcher determined that there should be six components, not eight. There were two primary reasons for this. First, the researcher felt that components were too spread out and by imposing a restriction of only six components, it could increase the correlations of items within a particular component. Secondly, reducing the number of components from eight to six reduces the likelihood of having components with fewer than three items within it. The assessment of the scree plot and the decision to limit the components in the EFA to six was confirmed by a data analysis specialist, an objective third-party with no connections to the study and the procedure followed by Strigas and Jackson (2003). Table 3 presents the EFA with the six component only restriction. The six components are listed numerically 1-6, while the correlated items within each component are bolded with grey shading in the background.

The components within the revised EFA (with the six component restriction) varied in size, consisting of as little as four and as many as thirteen items per component. Component 1 consisted of thirteen items that focused on MMA consumption through reading and television viewing and was labelled “passive consumption.” Component 2, which consisted of seven items, was a mixture of purchasing and wearing MMA apparel and was labelled “apparel consumption.” Component 3 featured six items that identified consumer perceptions of gender in MMA. As such, component 3 was labelled “perceptions of gender.” Component 4 consisted of four items that grouped MMA
consumption through video games and was labelled “video game consumption.”
Component 5 was comprised of four items based on following or posting about MMA on
social media platforms and was labelled “social media consumption.” The final
component consisted of five items which consolidated items pertaining to live MMA
spectatorship and was labelled “venue consumption.” All the items within each
component were highly correlated with no FL value less than 0.40 or greater than -0.40.
Values for each FL that were negative indicated that there was still high correlation but
that respondents strongly disagreed to the item (e.g., respondents do not attend live mixed
martial arts events often with family members).

The components that were generated from the EFA were a slight departure from
the researcher’s hypothesized components. Initially, items were grouped together in the
survey based upon consumption theme and were thought to be valid components (hence
the construction of yes/no questions prior to Likert scale items). However, after running
the EFA, there were similarities that existed between many of these themes (e.g., wearing
MMA clothing and buying MMA clothing), which collapsed some of the initially
hypothesized components.

**Reliability and Descriptive Statistics**

Once labelled, the six components were tested individually to identify their
reliabilities. In order to do so, a reliability analysis test was performed which analyzes all
of the items within a component and provides the mean and standard deviation for the
items listed in addition to the Cronbach alpha value for that component. Cronbach alpha
values are represented as a numerical figure, which represent the degree to which a
component has internal consistency. Table 4 provides the alpha coefficients for all six
components as well as standard deviation and mean scores for the items within each component, rounded to the nearest hundredth.

As George and Mallery (2003) suggest, Cronbach alpha values greater than 0.70 are acceptable, greater than 0.80 are good and greater than 0.90 are excellent. Indeed, four of the six components in this study each bore Cronbach alpha values greater than 0.90, demonstrating excellent internal consistency of the items within their respective scales. These components were passive consumption (α = .95), apparel consumption (α = .94), social media consumption (α = .94), and venue consumption (α = .95). The remaining two components also demonstrated good and acceptable scores of internal consistency with no component bearing a Cronbach alpha value of less than 0.70. The high Cronbach alpha scores demonstrate that the six components derived from the instrument had high levels of internal consistency. Moreover, no item had a standard deviation score above 2.44, illustrating that respondents interpreted and answered items in a similar manner.

It should be noted that for one of the components (perceptions of gender), there was a negative value associated with one of the items (“I believe MMA is a sport that appeals strongly to females) when other values in the component were positive. In order to keep all values positive, this particular item was reverse coded so that the negative score became a positive one. The reverse coding procedure consisted of creating a new item in SPSS and transforming the data such that positive values would be produced. This was a minor transformation and did not have implications for other items or components. Once the new item was created, it replaced the original item with the negative value in the reliability analysis test.
MANOVA

After the reliability analysis tests were performed, the six components were adopted and transformed into new variables in the SPSS data sheet bearing the labels mentioned above. These variables were each given values derived from the mean of all items in that component. For example, the video_game_consumption variable would be comprised of the mean scores for the four items within it. Once each variable had a mean value, a one-way MANOVA test (see Table 5) was performed to assess the similarities and differences between males and females.

When the MANOVA was produced, it automatically generated four multivariate tests that determined if there was a significant difference in MMA consumption habits across male and female respondents. Despite there being four tests, Andrew, Pedersen and McEvoy (2011) suggested that for research in the field of sport management, “the most common overall test statistic for a MANOVA is Wilks’ lambda” (p. 238). Wilks’ lambda ($\lambda$) values range from 0 to 1, with scores closer to 0 indicating highly significant results. The Wilks’ lambda value presented in Table 5 identified that there was a difference between male and female responses with respect to their MMA consumption ($\lambda = .628, p = .000$), though it is not a very strong one as the value of $\lambda$ is closer to 1 than it is 0. While the Wilks’ lambda value did indicate that a difference between male and female responses existed, it did not provide information as to where these differences (and possible similarities) are. However, when a Wilks’ lambda score is significant, it automatically prompts a follow-up univariate analysis (ANOVA) test in SPSS to determine which dependent variables have similarities and differences across the independent variable (Andrew et al., 2011). Table 6 illustrates the follow-up ANOVA.
The follow-up ANOVA suggested that males and females significantly differed in their responses to three of the six dependent variables. Passive consumption, video game consumption and social media consumption all bore values that indicated a significant difference in responses by males and females (p = .000 in all three cases). The apparel consumption and perceptions of gender variables demonstrate a lack of a significant difference in responses by males and females. The venue consumption variable slightly exceeded the 0.5 threshold (p = .051), suggesting that there is not a significant difference in reporting, although males might be slightly more inclined to consume MMA through venue consumption than females. To confirm the results of the ANOVA, the researcher briefly analyzed the descriptive statistics of the MANOVA (see Table 7). The similarities and differences between male and female responses towards their MMA consumption were confirmed by the descriptive statistics table. Moreover, with respect to the venue consumption variable in the ANOVA (where p = .051), the mean of the summed score for males was higher than the mean of the summed score for females, but very slightly ($M_m = 1.45, M_f = 1.14$).

**Research Questions and Propositions**

The first set of research questions that this study investigated focused on the differences and/or similarities of MMA consumption by males and females.

RQ$_{1a}$ – How do males and females engage in the consumption of MMA?

Based on the scores to items in the survey (see Table 3 and Table 6), it is evident that while both males and females are using various methods to consume MMA (albeit moderately based on low scores for many items), it is the passive forms of consumption (i.e., reading and television viewing) that primarily account for their consumption ($M =$
This result was expected given the benefits of television viewership outlined by several scholars (Dwyer, 2011; Kang et al., 2010; Lavelle, 2011; Wenner & Gantz, 1998) such as engaging socially with others and reducing boredom. Reading items had the lowest mean values in this factor, though, as Farhi (2005) and Rowe (1992) have indicated, newspaper spectatorship exhibits similar properties to television viewership (e.g., not a heavy commitment required to pass the time and readily accessible). These passive forms also allow males and females to “learn about [fighters]” (Wenner & Gantz, 1998, p. 236) by themselves, or in the company of friends and family, without having to expend more time, energy and money to attend a live event.

An interesting and unanticipated result of the study was that far more females responded to the survey than did males. This finding is consistent with Sax, Gilmartin, and Bryant’s (2003) research assessing response rates in web surveys. However, the finding is not consistent with the work of Smith and Leigh (1997) who contended that more males respond to online surveys than females. While there is no conclusive reason as to why more females responded to the survey, it is the contention of the researcher that females may have felt more inclined to voice their opinions given that the online survey protected their anonymity. It is also the contention of the researcher that females may have wanted to express their opinions about sport, a domain that has been identified as a masculine (Kidd, 1990). Furthermore, the researcher contends that males were less likely to respond to the online survey (as compared to females) because MMA is perceived to be a masculine activity, and thus, their opinions would only confirm what they believe to be already true.
RQ$_{1b}$ – What are the differences and similarities between male and female consumption of MMA?

The differences and similarities between males and females in terms of their MMA consumption has been depicted through table 6. The key differences in MMA consumption by sex lie in passive consumption (i.e., reading and television viewership), social media consumption and video gaming. While females may partake in these forms of MMA consumption, the mean score for males is greater than the mean score for females for these variables. As an example, while passive consumption was the predominant form of consumption for both sexes, male consumption far exceeded female consumption according to the mean scores ($M_m = 4.03$, $M_f = 2.12$). In the case of the apparel and venue consumption types, neither had significant differences in responses by sex as table 6 demonstrates ($p = .229$, $p = .051$). However, males still had a higher mean score than females for venue spectatorship ($M_m = 1.45$, $M_f = 1.14$) and apparel consumption ($M_m = 1.32$, $M_f = 1.16$). The results (see Table 6) also confirm the researcher’s initial expectations ($P_1$) that males are more likely to engage in MMA than females in all facets of consumption, whether by reading, television viewing, venue spectatorship, video game consumption, social media consumption and by consuming MMA apparel (though mean scores for both sexes were far lower than anticipated).

RQ$_3$ – Is the instrument used in this study viable to assess the consumption of MMA?

The initial expectation of the researcher ($P_4$) was that the instrument used in this study would be appropriate to assess the consumption of MMA. The Cronbach alpha scores yielded as a result of SPSS testing (see Table 3) indicated significantly high levels
of internal consistency within the instrument’s components (or subscales). Thus, items in
the instrument that were similar in nature produced similar responses by the participants.
In this respect, the instrument was highly reliable. If respondents had similar responses
for all items, the Cronbach alpha scores for the instrument’s components would have
been much lower, indicating low levels of internal consistency. However, responses did
result in variance across sex which reveals the tool as a highly reliable one. With respect
to the validity of the instrument, an analysis of the scree plot and the clarity in the
components extracted by the EFA (Strigas & Jackson, 2003) identified that the
instrument was a valid one as well. Given that the instrument was found to be both valid
and reliable, it was determined that the instrument was indeed viable to assess the
consumption of MMA and, as a result, supported P₄.

Qualitative Phase

No MMA Fandom

The first focus group session focused on individuals with no MMA fandom (n =
4) and consisted of three females and one male. Respondents in this session were also
comprised of two second-year, one third-year and one fourth-year kinesiology
undergraduate students. Throughout the session, it was evident that the female
respondents were adamant about their disapproval of MMA and their lack of interest.
While the lone male respondent was not a fan of MMA, he was more receptive to
potentially consuming more MMA in the future. Table 8 provides the IAC chart for the
no MMA fandom session while the following documents the responses and reactions
from the first focus group session.
When asked about the appeal of MMA, the respondents seemed to have mixed reactions. Two females felt that MMA was not that popular, while the other female and the lone male both agreed that it was a popular sport, “almost as popular” as other professional sports in North America. When asked about the reasons why MMA has reached such popularity, the lone male in the group indicated that, “People like the action. They like the intensity and seeing people fight.” Two of the three females in the session declined to comment on the appeal of MMA as they did not feel it was a popular sport and could not identify with social or vested fans of the sport. When asked about the behaviour of MMA fans and the MMA experience, all four respondents indicated that the MMA environment was conducive to social interaction between individuals. As one female noted, “I think the atmosphere is more fun… hang out with friends.” This was seemingly a popular sentiment as respondents identified alcohol as a key contributor to the social interaction that exists in the MMA consumption environment. Furthermore, respondents believed that with the increase in alcohol consumption and the violent nature of the sport that (male), MMA fans tended to be loud and boisterous. One female in the session went as far as to state, “When fans of MMA think it’s really boring, they’ll start to boo.” It should be noted that when referring to MMA fans being loud, the respondents were referring to male fans of MMA, not female fans.

When respondents were asked about the spaces that MMA was consumed in, it was evident that there were two predominant places: living rooms and bars. The male in the session indicated that the living room in a home is a setting where a fan could “have a bunch of friends over,” to watch MMA and consume alcohol. However, it was the bar setting which all four respondents identified as the quintessential environment to
consume MMA because “that’s just where you see people watching it.” Bars were viewed by the respondents as an environment conducive to consuming MMA for its bigger television screens, loud music in the background as well as the presence of alcohol and food (e.g., chicken wings and nachos). As one female in the session contended, “The atmosphere at a bar, like there’s just so many people...it’s a totally different experience.” To this point, respondents expressed that unlike the living room environment, bars had more (rambunctious) fans present that contributed to the overall MMA consumption experience. Bars were also championed for their cost-effectiveness; three out of the four participants indicated that while alcohol and food purchases at a bar would be higher than drinking and eating at home, it would be less costly overall than purchasing the PPV broadcast on top of their alcohol and food consumption. As such, there seemed to be some element of conformity amongst the respondents who cited the benefits of the bar setting and did not explore the benefits of consuming in a living room.

When questions regarding marketing were raised, there were clear divisions between the females and the lone male. In reference to the type of apparel that MMA fans consume, the male suggested that it was about comfort and wearing it in support of the sport and the training. Conversely, the three females in the session contended that MMA apparel (notably the TapouT brand) was typically worn by male fans to demonstrate toughness and aggression. As one female said, “I feel like when they put those shirts on they feel like they’re an MMA fighter without the training.” Though the male and females differed on this subject, both sexes accurately described the apparel’s large type font and use of symbols (although symbol specifics were not identified). Despite the female respondents expressing some disdain for the apparel and the males who wear
them, they did suggest that MMA apparel was marketed as “a bar shirt” and what men would wear in a downtown environment.

With respect to the usage of ring girls, the respondents were not as divisive as they were with MMA apparel. In his opinion, the male in the session maintained that the ring girls were there “just to appeal to the male fans…male fans would rather see a girl in a bikini than a fat male with a beer belly.” The three females agreed with this point, except one female attributed the existence of the ring girls to the history of combat sport. She claimed that, “Like boxing has had those [sic] for years and I think it’s just part of the sport tradition.” It was her belief that MMA incorporated the ring girl tactic to mimic the marketing of boxing promotions as that is what (male) consumers would expect. However, when asked if removing the ring girls would deter fans, the respondents indicated that the sport would not lose many male fans, but alas, it “would not make other girls watch.”

With respect to identity, it was evident that respondents felt that the sport was tied to men and, while there were more females starting to consume it, that it was geared toward males. In fact, the three female respondents conveyed the idea that many male consumers of MMA were “douchebags.” When asked to describe the term, the females indicated that they were males who exuded arrogance as they “walk around like their shit doesn’t stink.” One female explained that, “They just think that they’re better…they think they’re tough.” Collectively, the female respondents also asserted that these douchebags were more prone to get into a verbal disagreement or a physical altercation with other consumers of MMA, particularly in a bar setting. When probed about why a physical altercation would develop with fans of MMA, the respondents indicated that the
douchebags wearing MMA apparel, and drinking alcohol would start fights at bars and in nightclub settings in an attempt to emulate the fighters they admire. As one female in the group put it, “Yeah, I’m going to go throw on my TapouT and punch somebody out because that’s what they do in MMA.”

When questions focused on the perceptions of male fandom in MMA, respondents indicated that males connected with the sport for the violence and the aggression. One of the females in the session suggested that, “They probably like to watch people get punched…or the blood.” When the questioning shifted towards perceptions of female fandom in MMA, respondents explained that females who did like the sport are often stereotyped as “butchy or lesbian.” While this was the prevailing thought, the discussion focused on male fans as the respondents believed consumption was heavily dominated by men.

With respect to influences, respondents indicated that their own MMA consumption in the future would be plausible, especially with the pressure of a significant other. One female, in reference to going to a live event with a partner noted, “If they’re paying and that’s what you want me to try and I like you enough…I’m just saying I would go to go with them, like, yeah.” However, the female respondents did not see friends generating much influence on future consumption. One of the females went as far as to state, “Just because my friends do it doesn’t mean I do it.” Although, during this line of questioning, one female did concede that her friends could influence her to watch, but her enthusiasm and excitement would be quite low. When questioning shifted toward perceptions of other females who currently consume, respondents cited their consumption being tied to males “like boyfriends or guy friends that want to watch it and they just tag
The male in the session, similar to his female counterparts, suggested a strong likelihood of future consumption stating, “I could see myself liking the sport.” Indeed, while this session was focused on individuals with a lack of MMA consumption, there was evidence to suggest that future consumption of the sport would be possible (though there was also evidence to support a lack of future consumption too).

**Vested MMA Fans**

The second focus group session focused on individuals who were stratified as vested MMA fans \((n = 5)\) and consisted entirely of males. While participants in this session were senior level kinesiology undergraduate students (two third-year, three fourth-year), it was evident that all five were avid consumers of the sport as perceived through their enthusiasm and level of engagement during the session. Table 9 displays the IAC chart for the second focus group session.

Respondents suggested that while MMA was appealing to them and other vested fans, it was still a “discipline that a lot of people don’t really understand.” In fact, four out of the five respondents indicated that MMA started appealing to them while they were in high school (around sixteen years of age), while the fifth male suggested the “the acceptance into Canada was the big thing.” When asked about the reasons why MMA appealed to them, one respondent identified that the athleticism, violence and constant action were the primary motivators for him. As he put it bluntly, “I like the excitement, I like the big knockouts.” One of his peers in the session followed suit stating that, “You love seeing someone get knocked out.” The remaining respondents agreed, but with slight variations in their opinions. For instance, one respondent suggested the appeal of the sport was associated with the rapport between athletes and the close-knit community of
vested MMA fans. Another suggested it was the “mono et mono” aspect (individual sport versus team sport) that appealed to him and allowed MMA to become as popular as he believed it to be.

Questions regarding the behaviour of MMA consumers met similar responses from the respondents. With respect to venue consumption, two out of the five respondents indicated that there was a “good chunk of followers” whose consumption was motivated by a local fighter or someone they knew who was fighting (i.e., friend or relative). The additional three respondents claimed to have not attended a live event, though one explained he was going to a UFC event in Toronto in the following weeks. It was also apparent that the social aspects of consuming were a popular motivator for respondents when questions about the consumption environment were posed. One respondent commented, “Watching with your friends, you get like, you get like crowds, you get like cheers, you get like screaming,” while another explained that consuming MMA is preconceived days in advance, involving “some beers and buddies.” Furthermore, respondents agreed that beer allowed for a “kind of relaxed environment” in which to watch MMA. Though all respondents noted the social benefits of consuming MMA, three out of the five tended to associate their consumption to an appreciation of the training and technical aspects of the sport.

When asked about where they would consume MMA, there was an overwhelming consensus amongst the group that a living room in a house was the preferred space. One respondent explained that in a private setting like a living room “you have the capacity to house all your friends on the big screen TV.” He went further to suggest that watching at home “takes away all those advertising distractions” and that “you’ve got who you want
there….come together with people of like minds.” Another respondent suggested that “you can actually hear what they’re saying.” In contrast, four out of the five respondents did indicate that they have consumed MMA at a bar. Although, they were not fond of the bar setting, citing loud music/noises, distractions and “that outside guy that nobody knows.” As mentioned earlier, two out of the five respondents had attended live events before and they offered a unique opinion regarding that setting. With one of the more local promotions that staged an event, the respondent indicated that there were a lot of presentation issues (e.g., music playing while fighters fought) that detracted from the overall experience. These two respondents also noted that ticket prices were quite high for venue spectatorship and that if you did not pay large sums of money for tickets you were “pretty much at the ceiling.” But again, all respondents collectively agreed that consumption at a home, whether their own or a friend’s, provided the most enjoyable setting.

When asked about the different marketing strategies used in MMA, respondents did mention the use of conventional techniques (e.g., billboards and posters), but focused the discussion on more modern techniques (apparel, reality-television shows and video games). One respondent suggested that the apparel was so flashy and prominent that the branding is very visible to other consumers. In line with this sentiment, another respondent suggested that MMA apparel serves as “a badge of honour” that not only promotes the sport (and apparel brand) but that symbolizes toughness and “coolness.” Another respondent went so far as to say that MMA apparel was similar to wearing a “Hell’s Angels” or a gang shirt in that it is distinguishable from other hostile brands and apparel, while having specific meanings associated with it.
With respect to the marketing of MMA through reality television, respondents argued that it was “the story behind the story” that continually attracts the audience. One respondent even attributed his initial MMA consumption to the reality television show *The Ultimate Fighter*. He explained that, “*The Ultimate Fighter* secured me into like UFC…seeing like all their lifestyle, how hard it really is, and the ups and downs.” Respondents identified *The Ultimate Fighter* has a crucial aspect of the sport’s development as consumers were able to attach themselves and connect with fighters outside of the cage, viewing their personalities, training habits and learning about the upbringings.

Respondents also commented on their consumption of MMA video games, a platform which allows them to consume MMA fights at any time (but in a virtual world). In describing the experience, one respondent compared video game consumption to the real (physical) world stating that, “it’s like fighting someone.” Another respondent summarized the benefits of video game consumption as “instant gratification” that acquaints consumers with the sport and its intricacies. Indeed, while respondents felt the video games just added to the overall experience, the reality-television program was unanimously viewed as an imperative aspect of the sport’s marketing and development. The respondents also felt that while the apparel was an important part of the marketing, it was not as vital and was more connected to consumers’ identity.

When asked to comment on the use of sex as a marketing tool in MMA, respondents expressed a similar sentiment. “Sex sells,” explained one respondent. “I don’t think having them takes anything away, but if they lost them, they’d lose a percentage of their audience,” replied another in reference to the ring girls that are
present in MMA events. In fact, one respondent suggested that the use of ring girls was a part of the “the whole show” and that the experience of an event was full of “models, lights and big screens.” One respondent suggested that some consumers were not interested in the sport, but the sexual objectification of women stating that, “Some people go just to look at the girls’ asses and shit.” These opinions were also expressed during a comparison of MMA to other sports.

Some respondents felt that the marketing tools utilized in MMA were similar to those used in other North American professional sports. One respondent noted the use of rings girls to being a “traditional” tactic that followed the lead of boxing. Another respondent argued that the ring girls were similar to the use of cheerleaders in football. While three of the five respondents expressed this argument, the remaining two declined to offer an opinion.

Respondents were very passionate in their responses regarding the identity of MMA fans. While this session was made up of vested fans themselves, the concept of “Meatheads” continually arose. According to the respondents, a Meathead referred to a male fan of MMA who are “all just jacked up” and who constantly don MMA apparel. While some of the respondents mentioned that they owned MMA apparel, there was a consensus that no one would “wear any MMA apparel, Tapout, or anything that signifies fighting clothing downtown [at a bar].” It was apparent that Meatheads would use MMA apparel to signify their status as a fan, but, as the respondents divulged, also to demonstrate their toughness. One respondent commented that, “They’re basically throwing out a challenge…they’re looking to throw punches.” As the respondents noted, Meatheads were prone to viewing MMA at a bar and to consuming excessive amounts of
alcohol, being lewd and raucous. Moreover, the vested fans in this group noted that Meatheads had no real appreciation for the technical aspects of the sport.

With respect to the identity of female fans, the respondents felt that their consumption was tied to boyfriends or trying to impress male consumers. As one respondent advanced, “I feel like [women] like it because maybe their boyfriend likes it, you know?” While respondents conceded that they had seen more females consume MMA at bars and don MMA apparel, they were confused as to their motives. “Does she really think she’s worthy of wearing that shirt?” asked one respondent. Despite this opinion, four out of the five respondents indicated that females wearing MMA apparel were “hotter” and more attractive. One respondent summarized the identity of male and female fans by stating that “there seems to be a requirement for [men and women] to be tough.”

Respondents also shared similar views with respect to external influences and their personal consumption habits. Two out of the five respondents indicated that their consumption was tied to family members who also consumed, while all five noted that friends had a significant impact on their consumption. Respondents did not believe that females had any impact on their consumption, but did argue that males heavily influenced female consumption (as previously discussed). One respondent even suggested that females were obligated to watch MMA if they were trying to attract the attention of a male.

**Social MMA Fans**

There were three sessions dedicated to social MMA fans. The first session was an all-male session ($n = 6$), the second session held was all-female ($n = 6$), and the third
session was split-sexed \((n = 6)\) and contained an equal number of males and females. While all respondents in these sessions were stratified as casual, there were clear differences in opinion between the male and female responses. The following illustrates how respondents expressed their opinions with respect to the six primary themes. In addition, Table 10 provides the IAC for the all-male session, Table 11 for the IAC for the all-female session and Table 12 for the split-sex focus session.

The appeal of MMA for the respondents varied across the three sessions and by sex. For males in the all-male session, the violence and quick pace were qualities that made MMA popular and appealing to them and their peers. As one male in that session indicated, “It’s just the whole thrill of it…stand up and beatin’ the shit out of each other.” Respondents from the all-male session also suggested that MMA gained notoriety and started appealing to the masses because of *The Ultimate Fighter* reality television program. The females in the all-female session had a different take. For these respondents, the appeal of MMA was rooted in the social aspects, not the actual content. As one female noted, “Last year we were watching in the [residence] lounge, so that’s how we started.” Furthermore, the members of the all-female session agreed that it was because of the immense popularity of the sport that they were consuming it. Respondents in the split-sex session offered differing opinions. The males in the split-sex session identified the violence and aggression as prominent characteristics of MMA’s appeal. One male respondent described it “as primitive a sport can get kind of thing. It’s two guys going at it to try and knock each other out.” The male respondent continued his argument suggesting that consumers of MMA, males in particular, want to see one man dominant over another. The females in the split-sex session were more reserved about
commenting on the appeal of the sport, but did indicate that there were social benefits to consuming MMA and that it was incredibly popular with their friends (who were predominantly male).

With respect to the theme of behaviour, respondents in the three social MMA fan focus groups focused the discussion on consumption motives and the MMA consumption environment. In the all-male session, respondents indicated that one of the primary motivators was the presence of other consumers. “It’s the people pretty much… ‘cause everyone else is there to see the same thing you are,” contended one respondent. Another respondent took this sentiment further and stated that, “You’re with your buddies and watching like people fight.” In addition to being able to consume with other people (especially friends), respondents indicated that another primary motivator was the nature of the sport. One respondent noted that “people like physical contact” and that “violence drives people.” Moreover, respondents suggested that the violence within the sport created more excitement amongst fans and made the consumption experience positive.

The respondents in the all-female session presented similar thoughts about consuming with others but rejected the presence of violence as a motivator for their consumption. One respondent recounted an experience at a downtown bar watching MMA with a female friend and explained that they “just wanted the experience” of lots of people crowding around reacting to the fights on the big screen. Other females in the session identified the struggle of the fighters themselves as a motivator to consume. “They pull on your heart strings making you attached to them,” noted one of the female respondents.

When asked about why others were motivated to consume, one female responded that because many people have “never got into a fight,” that it was easy to become
enamoured with a sport that features athletes “doing things you could never imagine could be done.” Respondents of the split-sex session offered opinions that varied, but were similar to those expressed by their same-sex counterparts in the all-male and all-female sessions. The males in the group discussed getting “amped up” watching MMA with friends, especially montages on the World Wide Web. One male respondent also discussed how their motivation to consume MMA was built into their nightly outing to go dancing and drinking in the entertainment district. Females in the split-sex session referred to the personal connections they had developed with some fighters, but like the males, agreed that it was the social aspects of consuming (e.g., watching with friends, eating chicken wings and drinking beer) that fuelled their consumption.

The theme of location generated much discussion amongst the three social MMA fan sessions and was mainly comprised of arguments regarding private home viewing and bar viewing. While respondents in the all-male session claimed to have consumed MMA at their own house or at a friend’s, there was a consensus amongst all six that a bar was the place to go because of “the environment.” One of the respondents indicated that while you could consume beer and chicken wings at home, it was still “better to go downtown” because it was more fun to be in a space crammed full of cheering fans. Respondents also identified the cost benefits to consuming downtown as opposed to private home viewing. One member of the all-male session documented the comparison and said, “You’re going to spend maybe $20-25 on like food and beer and stuff like that, compared to sixty bucks just for the fight and like, then you have to start making food for the people that are going to come over. There’s so much more preparation you have to get done.”
In the all-female session, respondents were more reserved, but commented that consuming MMA was a more enjoyable experience at a house. While going to a bar was considered to be “rowdy and wild” and “a cool experience,” consuming MMA at home was considered to be more comfortable. As one female noted, “You can just sit on a nice comfy couch in front of your big TV and you don’t have to share with like 600 other people or a guy beside you yelling in your ear that you don’t know.” One female also brought up the cost difference identifying that “it’s a lot cheaper to [consume] it in your house.”

As for the split-sex session, males agreed that the bar was the setting that dominated consumption while the females were more inclined to consume it at home. One male was very blunt stating that the reason for his consumption at a bar was that he would not “have to pay for PPV.” Another male respondent added to that comment in his belief that going to a bar would not just save you money, but that if there is a quick knockout, you wouldn’t have wasted “$75 for a main event that lasts six seconds.” In any event, it was evident that males preferred the bar setting “for the friendly atmosphere” where they could “go with friends and grab some beer and stuff.” The females in the split-sex session were more opposed to consuming at a bar because of the many fans yelling and expressing their opinions during the fight. One female even claimed that she would not be able to focus on the event at a bar as there would be too many distractions (e.g., people, noise, advertisements).

Social fans also had varying opinions regarding how the sport was marketed. When asked about MMA apparel, respondents in the all-male session explained that consumers of these products were generally “jacked people.” While only one member of
the group had worn the apparel, all respondents conceded that the apparel had “pretty cool designs.” Respondents also went on to claim that there was an intimidation factor associated with the apparel. The all-male session also raised the issue of ring girls and their use in the sport. One respondent explained that their presence “just adds appeal” and that “everybody likes a hot girl, to be honest.” The other members of the session held a similar opinion and justified the presence of ring girls by illustrating that “it drives the fans.” Respondents in this group also spoke about social media and video games and how those media made them feel more connected to the sport. In one instance, when a respondent was asked about the appeal of playing MMA video games, he said, “You get to beat on the other guy. Make him bleed.”

In the all-female session, respondents suggested that MMA apparel was predominantly consumed by “big guys” and were being worn in everyday life, from the fitness gyms to shopping centres. When asked if they had ever worn the apparel, the female respondents were adamant in their disdain for MMA apparel and suggested that if a “girl” were to wear it, it was because she was trying to impress a male. When the topic of ring girls was raised, the female respondents suggested that their presence attracted men through “tiny little booty shorts.” One female went as far to state that while fighting is very exciting, they need something else to “keep them excited…cause they don’t want to just stare at men all day.” Females in the session also voiced their displeasure with the presence of ring girls as they felt it suggested that women “can’t fight, but they can hold a sign up and look good.” Only one female respondent in the all-female session had identified herself as having played MMA video games previously, but only insofar that her brother wanted to play with her.
When respondents in the split-sex group were asked about marketing in the sport, males focused on discussing the apparel, while females felt more inclined to speak up when the issue of ring girls was introduced. With respect to the apparel, males in the split-sex session described the clothing as bearing “tribal print” with “a lot of graphics.” In fact, one male member of the session described the style of MMA apparel as “almost more of a counterculture...it reflects those base [primal] emotions.” Another male in the session explained that wearing the apparel was “alpha male” and that it was for “showing off the glory muscles.” One female did comment on MMA apparel and believed that the apparel was “more everyday apparel” as opposed to apparel from other sports (i.e., hockey jerseys). When questioning shifted to other marketing tools, the females in the session identified the use of the ring girls. As one female expressed, ring girls were just “little girls in bikinis with barely you can read [sic] round two signs.” Another female suggested that all the advertising in the sport was “very much tailored to men.” When males in the split-sex session discussed the ring girl issue, they were in consensus that if ring girls were no longer present, they would still consume, but that some males would “make a big deal about it.”

When asked about fan identity, social fans in all three sessions offered different opinions regarding male and female MMA consumers. In the all-male session, respondents compared male fans in MMA to those in other sports, but that there was an element of toughness for those more “jacked” fans. In comparing MMA fans to hockey fans, one male respondent revealed that fans of MMA are “just as dedicated.” When asked about female fans, it was apparent that the males believed female consumption was tied to men. “I think that maybe the only real drive for them is to meet other guys,”
commented one respondent. “Like they’re going to be with another guy and accompanied if they’re going to watch this fight,” explained another. One respondent even claimed that females watch MMA so that males can approach them and start a conversation because they “have the same interest.”

Conversely, members of the all-girls session expressed a different sentiment. For the female respondents, male fans of MMA were viewed as “typical jocks” and “bigger guys like football head people [sic].” Moreover, members of the all-female session cited that male fans identified with the sport because “it’s a masculine activity.” When asked about female fans, the respondents of the all-female session indicated that females were more prone to consuming MMA in large groups, but did not mention whether these groups would be predominantly male or female.

When fan identity questions were posed to the members of the split-sex group, male respondents believed male consumers of MMA identified with the domination of another person which was a “very alpha male thing.” One male respondent also associated male MMA fandom to activity that was appropriate for his gender in a “man” dominated society. Female respondents did not offer an opinion on male fans, but did respond when asked about female fans. In the split-sex session, females identified as fans because they were in awe of the struggle to become a fighter and the will to compete. However, one female respondent revealed that, in her opinion, “Females don’t feel comfortable getting involved in [MMA].” Both sexes in the split-sex session also agreed that if a female were an avid consumer of MMA and were rowdy, she would be labelled “a bitch” or a “lesbian.” While some men are labelled “Meatheads,” members of the split-
sex session indicated that men are still considered to be acting appropriately for their gender type.

Social fans of MMA in the three sessions also spoke about the influence of peers and significant others. In the all-male session, respondents identified that much of their consumption came from the influence of peers. One respondent presented the idea that on nights when a large-scale MMA event is being televised live, it creates an opportunity to “hang with the boys and shit.” One of the all-male respondents also claimed one of his close friends was an avid MMA fan (potentially a vested fan) and that his consumption was vastly influenced by his friend. When asked about the influence for females, the male respondents focused on the influence of men on women, especially significant others.

Members of the all-female session cited similar influences on their consumption. As one female noted, “You don’t go by yourself. You usually go with a group of friends.” One member of the all-female session indicated that her (male) friends were such a heavy influence on her that her consumption would increase in the future. However, respondents in this session did note that if they were with a group of females, they could also be influenced to consume MMA and “hang out. “When asked about external influences for male consumers, the female respondents revealed that it was a group activity where “guy friends get together and they watch it.”

In the split-sex group, females connected their consumption to a “boyfriend” or a male friend because women are “submissive and like nurturing and like not violent.” Males in the split-sex session concurred with the females, identifying that they are with “their Meathead boyfriend.” In this circumstance, both male and female respondents
identified women as consumers, but only when in the presence of a male (e.g., a significant other, friend, or a relative).

**Masculinity**

Upon reflection of the focus group process, male respondents expressed sentiments that reinforced notions of hegemonic and fraternal masculinity. Males in the social and vested fan sessions, for instance, were quite enthusiastic about the questions being posed as to demonstrate their vast knowledge of the sport as if to validate and reinforce their masculinity (Theberge, 2000; Twitchell, 2006) to the other males present. Moreover, regardless of the intensity of their fandom, male respondents had indicated that the sport reproduced values of the dominant form of masculinity (Hargreaves, 1982) through symbolic representations (e.g., hyper muscularity, dominating an opponent, ring girls). It was also apparent that male respondents would interact with other males (and females) in a way in which they were trying to advance their opinion as the prevailing thought, providing more indication of how men are in constant pursuit of “the dominant position” (Connell, 1995, p. 77). Indeed, some male respondents utilized homophobic slurs and made sexist remarks toward women which reflected Kimmel’s (2008) assertion of the fraternal masculine culture. One example of this was the all-male social session where one respondent commented that “some guys can be faggots.” In that same session, a respondent referred to an attractive female MMA consumer as a “smokeshow,” supporting the notion that women are viewed as sex objects first, and sport consumers second (McDonagh & Pappano, 2008), but also that in order to be accepted in the focus group, males had to demonstrate heteronormative tendencies. Male respondents were also more inclined to use vernacular terms such as “Meatheads,” “jacked,” “posers,” and
“badass,” which, as Barker (2005) identified, seemingly gave them more credibility and respect with other males in the group. As such, there were several instances in the focus group sessions where male participants reinforced hegemonic and fraternal masculine behaviours.

While respondents in the male focus group sessions were actively validating their masculinity, when female participants were present, males were much more reserved and more selective in their responses. When respondents were asked to comment on feminine behaviour in relation to consuming MMA, males spoke slowly and did not often complete their thoughts; such was the case when a male respondent said, “I don’t think women would engage in that kind of—.” The hesitation in responses in these circumstances supports Twitchell’s (2006) assertion that males do not want to be embarrassed in the eyes of other men and women. If male respondents were to express certain (sexist) remarks in the presence of women, there would have been the potential for an animated discussion, one in which men could have felt emasculated by women.

While the IAC for each focus group summarized much of the results, male respondents also offered additional opinions which reinforced notions of sport as a masculine activity. When referring to female MMA fighters, male respondents (in the vested session) claimed they would watch amateur female fights as opposed to professional fights (because amateur fighters have more “heart” and passion), supporting Mennesson’s (2000) claim that females in combat sport cannot demonstrate similar fighting ability as men do. Though, in the all-male social fan session, a male respondent (in reference to female fighters) explained that, “There’s nothing appealing about the girls in cornrows. They look like they’re in prison almost.” This last quote indicates the
disregard males have for females in sport and reinforces the assertion of Millet (1969/2000) and Adams et al. (2005) that women are to entertain and gratify men with their heterosexual attributes and not demonstrate physicality, aggression, or don an appearance similar to men (e.g., cornrows and muscularity). Other male respondents were less emphatic about their disdain for female MMA fighters, but still indicated that “girls fighting is still really taboo for our society,” underscoring the concept that sport, especially combat sport, remains a space for men (Messner, 1992).

“Meatheads”

Perhaps the most intriguing concept that was revealed through an analysis of the transcriptions was the idea of a hyper masculine group of fans: the “Meatheads.” Research conducted by Jackowski and Gray (2004) and Sutton et al. (1997) established the concept of social, focused and vested fans in professional sport (also depicted in Figure 2). While the current study examined two types of fandom (social fans and focused/vested fans together), responses from the focus groups seemed to suggest a new phenomenon with respect to sport consumption, specifically in the consumption of MMA.

Respondents in all five sessions identified the existence of a specific or potentially new consumer type, with participants in four out of the five focus groups referring to these individuals as Meatheads (participants in the no MMA fandom session did not explicitly refer to these individuals as Meatheads). According to the respondents, the term Meathead is used to describe their physical appearance (meat referring to their muscularity) and their poor wit. Respondents claimed this new type of consumer consisted exclusively of males who were avid MMA fans as demonstrated by their
consumption of the sport, but did not appreciate the intricacies and technical aspects of it. In essence, Meatheads embraced the hyper masculine, misogynist principles and the values of violence, dominance and aggression that MMA promotes. Moreover, there were seemingly three primary characteristics of these Meatheads: their appearance, their excessive alcohol consumption, and their lewd, aggressive behaviour.

With respect to appearance, respondents noted that Meatheads are “jacked” individuals that frequent fitness centres and are much larger (hyper muscular) than most individuals, especially in the upper torso. Indeed, these individuals are so preoccupied with their appearance that one respondent in the vested MMA fan session even suggested that Meatheads are users of anabolic steroids who like to stick a “needle in [their] butt.” Respondents also revealed that, given Meatheads are preoccupied with their appearance, they often “flaunt” their masculinity by wearing MMA apparel like TapouT, invoking feelings of toughness and attitude (Kwon & Armstrong, 2002). While some respondents in the vested MMA fan session did indicate that they owned MMA apparel, they refused to wear said apparel in settings like bars and nightclubs because to do so would signal toughness and offer a physical challenge to a Meathead. Conversely, respondents in all five groups suggested that Meatheads would wear their MMA apparel in many places, especially while simultaneously watching MMA fights at bars and nightclubs. As such, it became apparent through participant responses across the five focus groups that Meatheads continually aspired to emulate and achieve an appearance that resembled their favourite fighter (Cheng, 1996), a notion that also underscores men in society reinforcing a dominant image of maleness and masculinity (Theberge, 2000).
The second characteristic embodied by Meatheads (according to the respondents) is the mass consumption of alcohol, especially while simultaneously consuming MMA. One of the respondents in the all-female social fan session indicated that Meatheads like to “slam [their] beer bottle down hard” and keep drinking while MMA fights are on. Another respondent suggested that, at the end of the fights, a Meathead “will be face down” because of their excessive alcohol intake. Members of the all-male social session expressed a similar opinion, with one respondent suggesting that a Meathead would be consuming heavy amounts of alcohol, specifically beer, while watching MMA at a bar or nightclub. Meatheads consuming excessive amounts of alcohol while at bars and nightclubs, wearing MMA apparel and viewing MMA fights also demonstrates a shared activity tied to their male identity (O’Sullivan, 1998).

The last primary characteristic of the Meathead that respondents expressed was the notion of the lewd, aggressive behaviour. Female respondents in the no MMA fandom session claimed that Meatheads were “douchebags,” a derogatory term used to refer to males who are overly aggressive towards women and narcissistic. Female respondents in the all-female session and the split-sex session also mentioned how prone Meatheads were to making unwanted advances on females while at a bar. However, the aggressive behaviour of the Meatheads did not just affect female respondents. One male in the all-male social fan session explained that, “[Meatheads] just piss me off. It’s like holy fuck.” When asked why Meatheads were bothersome, the male respondent indicated that they were excessively loud and were highly susceptible to starting or being involved in a physical altercation with a bar patron and/or a fellow MMA consumer. This idea of Meatheads participating in physical altercations was also brought up in the other four
focus groups by both males and females, indicating that these individuals are constantly looking for opportunities to exert their manliness (Oates, 1987).

While it was initially thought that Meatheads were the most intense degree of vested fan, as more responses were analyzed it became apparent that this type of consumer was a separate form of consumer when the definitions of social, focused and vested fans were reviewed. As Jackowski and Gray (2004) contended, the first stage of fandom (presumably after no fandom at all) is the social fan where the individual does not care about the sport but enjoys the overall experience. As focused fans, individuals are attracted, but only because they know the sport is popular. When an individual moves up to vested fan status, sport is viewed as a communal activity and there are strong emotional connections as well as a passion for techniques, skillsets and abilities. In reviewing these definitions, it was believed that the Meathead was a separate stage that consumers could achieve.

Based on the respondents’ descriptions of these individuals, it was evident that Meatheads believed MMA to be popular (like focused fans) but to an extreme degree. That is to say, Meatheads supported the sport for its violence and high intensity. Moreover, it was also quite clear from participant responses (particularly vested respondents) that these individuals did not appreciate the technicality or intricacies of the sport and only consumed because it was “cool” and characterized what men are supposed to like (e.g., violence, aggression, and sexy women) (Wenner, 1998). The term Meathead was utilized to represent this new type of MMA consumer.

Figure 3 depicts the progression of (male) MMA consumption with the inclusion of the Meathead consumer. Once an individual reaches the social fan stage of
consumption, they can continue forward to a focused fan or choose to become a Meathead. If they progressed to become a focused fan, an individual may progress to become a vested fan or choose to become a Meathead. According to the model in Figure 3, there is no link between a vested fan and a Meathead. The primary reason for this is the Meatheads lack of appreciation for the intricacies and technical skills involved in MMA (e.g., ground game). While it is highly unlikely that a Meathead becomes a vested fan, the fan could be a Meathead for such a long time that an appreciation of the sport has been developed to the point where they in fact become a vested fan. It is important to clarify that Figure 3 only identifies the forward progression of (male) MMA consumption. It would be possible for fans to become more apathetic to the sport and regress down in the model. Therefore, it would be possible for a Meathead to regress in their fandom and become a focused or social fan.

In incorporating the Meathead into the MMA consumption paradigm, it is important to recognize that social, focused and vested fans may also demonstrate some Meathead characteristics. For example, a social fan of MMA may ingest equally excessive amounts of beer as a Meathead would. However, what separates and distinguishes the Meathead fan is embodying all three characteristics (hyper muscular appearance, binge drinking and aggressive, confrontational behaviour) and not just one or two.

It is also important to note that the addition of the Meathead to MMA consumption paradigm refers to male consumers only. Meatheads were exclusively male according to focus group respondents and, as a result, females cannot reach this stage of MMA fandom. However, as female consumption in MMA grows, there is a possibility
that they may move from the social fan stage to the focused fan stage and to the vested fan stage thereafter. However, this progression is likely to be slow and gradual given that most female consumption in MMA, according to the responses in the focus groups, is predicated on accompanying men (Wenner, 1998) and supporting their male friends or boyfriends (Halbert, 1997). Moreover, if females progress to a focused fan or vested fan of MMA, they are more likely to be viewed as “lesbians” or “bitches” for entering a male domain (Schippers, 2007).

**Femininity**

Reflection of the focus group sessions also revealed female respondents advancing thoughts that reinforced notions of hegemonic femininity and the gender hierarchy which subverts women. Indeed, female respondents noted that some males label them and other female consumers of MMA as “lesbians,” supporting Schippers’ (2007) concept of adopting a male activity and rejecting the prescribed role for females in society. The labels that female respondents explained were placed on them and others by men also support Mennesson’s (2000) contention that females who enter the male domain of sport are not performing expected or natural practices for women. Female respondents of the all-female social fan session and no MMA fandom session also voiced their displeasure when noting that in a MMA consumption setting like a bar, they were being viewed as objects for male consumption (Skelton, 2002; Snow, 1989; Stankiewicz & Rosselli, 2008), whether they were consuming MMA or not. Moreover, most of the female respondents across the focus groups indicated that in a social setting like a bar, they had to be “sexy” in the appearance, demonstrating that women continue to adhere to Krane’s (2001) and Millett’s (1969/2000) notion of being sexy for male gratification.
Female respondents attributed their consumption of MMA to their adherence of the feminine gender role. One respondent claimed that she had played “pretty intense” MMA video games with her brother and boyfriend but never played alone, indicating that her consumption was predicated on males consuming with her. Many female respondents also commented on the fact that women were relegated to the sidelines in the guise of ring girls, illustrating that women are largely excluded from participation (Hargreaves, 1997) and are viewed as sexual objects first, and sport consumers second (McDonagh & Pappano, 2008).

An intriguing aspect from the interactions of females in the split-sex session (where males were present) was how reserved they were overall, yielding to the males on most topics, especially questions pertaining to male behaviour. While the three females in this group were stratified as social fans, they were more docile than respondents in the all-female session and let the three males in the session control the dialogue. Two possible explanations for the behaviour of females in the split-sex session were: (1) they wanted to withhold information and did not feel comfortable voicing their opinion because males were present or; (2) they felt their opinions would be rejected and overshadowed by the males in the group. In either case, it was apparent that females were looking for social acceptance and deferred to their male counterparts, accepting the traditional gender roles for women (Krane, 2001).

Gender roles also seemingly played a part in the responses of female respondents toward their choice to watch male fighters over female fighters. In the non-MMA fandom session, when asked about future consumption, females (and the lone male) identified that even though they had not watched MMA, they were more likely to watch males
Female respondents in this session rationalized their choices by stating that male fighters are “more well-known and stuff.” When asked if they would watch a male or a female fight, one female respondent in the all-female session responded, “The men, ‘cause that’s just life.”

**Research Questions and Propositions**

The second set of research questions that this study investigated focused on the rationale for the consumption of MMA by males and females.

RQ2 – How do males and females account for their consumption of MMA?

Based on the responses from participants in the focus groups, there were clear distinctions in how males accounted for their consumption of MMA. The consumption of MMA for males was predicated on the belief that men are just naturally drawn to violence and the action. This is consistent with the literature that suggests men do what they believe to be manly (Hanke, 1990; Wenner, 1998) and because those values have been accepted by both men and women as the idealized form of masculinity (Connell, 1990b). Moreover, according to the respondents, men are choosing to consume MMA because they feel expected to do so (Stibbe, 2004) and because they do not want to be outcasts (Kimmel, 2008). Male respondents also accounted for their MMA consumption by noting the sport’s social benefits, identifying that the sport brings men and their friends together. This sentiment is consistent with the Connell’s (1995) notion of ascribing to the idealized form of masculinity through “male bonding” (p. 46).

Female respondents accounted for their MMA consumption (or lack thereof) by stating that they used MMA as a social activity that enabled them to watch or be with friends, family and/or a significant other. This notion is consistent with the research
conducted by Oates (1987) that demonstrates that females will adhere to their supportive roles (e.g., girlfriend, sister, mother) and be there for the men in their lives (Halbert, 1997). Females also explained their less exuberant behaviour while consuming MMA in the bar setting because women are expected to behave in a particular way, a social role that vastly differs from the one specified for men (Rich, 1980; Wenner, 1998). Female respondents also claimed that many other females do not consume the sport because they do not wish to enter a male domain (Kidd, 1990) and risk being gazed at by men (Skelton, 2002).

These accounts of male and female consumption of MMA also supports P2, that males engage in MMA to satisfy their own interests (performing manly activities) while females consume to satisfy the interest of others (assuming a supportive role). Moreover, males conceded that consuming MMA is a manly activity, supporting P3 as well (the idea that their consumption of MMA is an expression of their masculinity and manliness and a forum to validate said masculinity). Indeed, while the male and female accounts for MMA consumption differ, they are strongly supported by the literature on sport consumption and gender.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Implications of Findings

The purpose of this study was to examine the differences and similarities in the consumption behaviours of men and women to understand the impact gender has had on the growth of MMA. After reviewing the appropriate literature and applying the findings from the quantitative and qualitative phases, it is evident that while gender has played a role in potentially increasing fandom, it is difficult to ascertain whether gender has impacted the overall growth of the sport. What this study has identified, however, is the ways in which gender roles have affected fandom within the sport.

Though previous literature had examined sport as a male dominated institution (Messner, 1988; 1992; Messner & Sabo, 1994), this study illuminated the notion of fraternal masculinity and the idea of MMA consumption as a “male bonding” (Connell, 1995, p. 46) activity. It must be noted that the quantitative phase suggested that there was not a great deal of consumption taking place overall. However, the qualitative phase of this study demonstrated that when males do consume MMA, they do so because it reinforces their understanding of masculinity (Hanke, 1990).

The findings of this study were also consistent with the literature regarding female consumers. While the quantitative phase demonstrated that females were consuming far less MMA than males were, the qualitative phase underscored that when women do consume MMA, they do so in large part because of their connection to males. Indeed, the findings reveal that women continue to adhere to supportive roles (Krane, 2001; Oates, 1987) and will simply accompany men when sport consumption is taking place (Wenner,
As such, female consumption of MMA is seemingly indirect and closely associated with male consumption.

In these respects, this study has provided further evidence that the institution of sport continues to provide a space to reinforce masculine and feminine gender roles and the dominant/subordinate gender order. Whether in a living room, at the bar, or at the event itself, men consume MMA as a means of achieving the idealized form of masculinity (Connell, 1987; Connell & Messerschmidt, 2005). While overall consumption of MMA was low, males consumed higher amounts of MMA relative to females, underscoring that sport consumption is not gender neutral (Messner, 2007). The findings have also indicated that men are above women in the gender hierarchy (Messner & Sabo, 1990). This is evidenced by the notion that females were more comfortable consuming MMA with males, whereas when consuming without males, their consumption was extremely limited. Conversely, males faced far fewer restrictions and were expected to consume MMA because of their gender type. In this context, women continue to be marginalized as sport consumers and are positioned below men in the gender order.

Recommendations for Future Research

In light of this research, there are three prominent areas that require further investigation. This study attempted to understand the impact of gender on the growth of MMA. However, MMA’s growth has occurred over a number of years. Therefore it would be difficult to determine the impact gender has had just by simply surveying and performing a qualitative analysis on undergraduate students in 2012. Thus, the first recommendation of this study is to develop a longitudinal study that examines male and
female MMA consumers over time. A study of this nature could not only identify how males and females account for their consumption but track their progression (or regression) as fans over a length of time. The second recommendation for future research is with respect to the existence of the Meathead MMA consumer. While respondents noted their existence, this cohort requires further analysis to understand their behaviours and interaction with MMA fans. In this respect, an ethnographic study of MMA consumption in a bar setting is highly recommended for future study. An ethnographic study of this nature will not only illuminate the dynamic between Meatheads and other MMA fans, but examine how male and female bar patrons interact and adhere to (or reject) prescribed gender roles. The final recommendation for future research is extending the current study to a much larger sample. Knowing that the instrument used in this study is a reliable and valid tool, a future study could utilize this survey to administer across a different demographic group (e.g., 40 year olds and up) to understand whether older populations are consuming MMA and whether or not gender has an impact on their MMA consumption.
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Dear Human Kinetics Undergraduate Student,

My name is Michael Naraine and I am a master’s student in the Faculty of Human Kinetics (HK) at the University of Windsor, and I am currently conducting a research study titled, “Developing an understanding of the role of gender in the consumption of mixed martial arts” for my master’s thesis. This research aims to examine differences in the consumption behaviours of men and women in order contribute to a better understanding of gender as a factor in the rapid growth and popularity of mixed martial arts (MMA). To do this, I will be conducting research that is split into two phases: an online survey and six focus group sessions.

If you are enrolled as an undergraduate student in the Faculty of Human Kinetics, you are being invited to participate in the online survey. The survey includes 44-items that will ask you to assess your MMA consumption habits. The survey will take 6-10 minutes to complete. For your participation in this survey, you can enter a random draw for a $50 gift card to the University of Windsor bookstore.

This study has been approved by the University of Windsor Research Ethics Board (REB) #12-098. If you have any questions, comments or concerns, please contact the researcher, Dr. Marge Holman (Advisor) at holman@uwindsor.ca, or the REB Chair at ethics@uwindsor.ca.

To access the survey you can click on the link or scan the QR barcode with a mobile smartphone.

http://uwindsor.fluidsveys.com/s/mmasurvey/

Sincerely,

Michael Naraine (narainem@uwindsor.ca)
Dear Human Kinetics Undergraduate Student,

My name is Michael Naraine and I am a master’s student in the Faculty of Human Kinetics (HK) at the University of Windsor, and I am currently conducting a research study titled, “Developing an understanding of the role of gender in the consumption of mixed martial arts” for my master’s thesis. This research aims to examine differences in the consumption behaviours of men and women in order contribute to a better understanding of gender as a factor in the rapid growth and popularity of mixed martial arts (MMA). To do this, I will be conducting research that is split into two phases: an online survey and six focus group sessions.

If you are enrolled as an undergraduate student in the Faculty of Human Kinetics, you are being invited to participate in the focus groups.

Each focus group is scheduled to last approximately sixty minutes. You will receive a pseudonym to protect your identity. In order to be eligible for the focus group, you must also complete a survey to assess your consumption habits. Anonymity cannot be guaranteed in this study.

For your participation in the focus group, you will receive pizza and beverages.

This study has been approved by the University of Windsor Research Ethics Board (REB) #12-098. If you have any questions, comments or concerns, please contact the researcher, Dr. Marge Holman (Advisor) at holman@uwindsor.ca, or the REB Chair at ethics@uwindsor.ca. To participate in the focus groups, please e-mail the researcher.

Sincerely,

Michael Naraine (narainem@uwindsor.ca)
APPENDIX C

MMA Consumption Survey

Definition: MMA is defined as contests that pit two individuals against each other in a cage or ring that is a mixture of boxing, wrestling, judo and other martial arts disciplines and are commonly referred to as ultimate fights and cage fighting.

* Skip questions are italicized.

** 1, 2, 3…etc. denotes items that will require scaled responses: strongly agree (7) to strongly disagree (1).

I attend live MMA events.

1. I attend live MMA events.
2. How often do you attend live mixed martial arts events with friends?
3. How often do you attend live mixed martial arts events with family members?
4. How often do you attend live mixed martial arts events with a life partner (e.g., spouse, boyfriend, or girlfriend)?
5. Have friends or family ever influenced your decision to attend a mixed martial arts event?

I read about MMA.

6. I read about MMA.
7. I read newspaper articles about MMA.
8. I read articles about MMA on the Internet.
9. I read magazines that are MMA based or that often feature MMA articles.
10. I read about MMA news, updates and other information through social networking websites (e.g., Facebook and Twitter).

*I watch MMA on television.*

11. I watch MMA on television.

12. I watch MMA fights/programs on television at bars/nightclubs.

13. I watch MMA reality-television based shows (e.g., *The Ultimate Fighter*).

14. I watch MMA fights and videos on the internet (e.g., YouTube).

*I buy MMA clothing.*

15. I buy MMA clothing.

16. I buy MMA clothing (e.g., t-shirts, caps, fight shorts, board shorts, and hoodies) for myself.

17. I buy MMA clothing for friends, family, partners and/or life partners.

18. I know where to buy “licensed” MMA clothing.

*I wear MMA apparel.*

19. I wear MMA apparel.

20. I wear MMA apparel on a regular basis.

21. I wear MMA apparel at nightclubs and bars.

*I follow MMA using social media websites.*

22. I follow MMA using social media websites.

23. I post comments on my Twitter, Facebook or other social media website page about MMA fights.

24. I follow MMA athletes and personalities on Twitter, Facebook or other social media websites.
25. I post MMA videos and articles on my Twitter, Facebook or other social media website pages.

_I play MMA video games._

26. I play MMA video games.
27. I play MMA video games with friends.
28. I play MMA video games with family members.
29. I play MMA video games with my significant other/life partner.

(No skip questions from this point onward)

30. I believe MMA to be more violent and brutal than other sports.
31. I believe MMA fans are rowdy, “macho,” and masculine.
32. I believe MMA is a “man’s sport.”
33. I believe females will only watch MMA because they have male friends, family members and/or male partners who watch MMA too.
34. I believe MMA is a sport that appeals strongly to females.
35. I believe females assume submissive, stereotypical roles in MMA.
36. I consider myself a fan of MMA.
37. I would watch an MMA fight if two females were competing.
38. I feel proud when my favourite MMA fighter does well.
39. Because I have been exposed to the sport, I have thought about/am getting MMA instruction or taking MMA fitness classes.

(These items will ask respondents to select a choice or input information)

40. I identify as a:
   i. Male
ii. Female

iii. Other

41. I am a:

i. First-year kinesiology undergraduate student

ii. Second-year kinesiology undergraduate student

iii. Third-year kinesiology undergraduate student

iv. Fourth-year kinesiology undergraduate student

v. Other year/discipline, please specify… [text field]

42. How old are you?

i. [text field]

43. To maintain the confidentiality of this survey, please provide your University of Windsor student identification number.

i. [text field]
APPENDIX D

Fink et al. (2002) Sport Consumption Items.

*Chart used with permission from authors

<table>
<thead>
<tr>
<th>Environmental Factors</th>
<th>M</th>
<th>SD</th>
<th>β</th>
<th>SE</th>
<th>t</th>
<th>α</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ticket pricing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. There is a range of affordable prices for tickets.</td>
<td>5.15</td>
<td>1.87</td>
<td>.861</td>
<td>.008</td>
<td>105.6</td>
<td>.94</td>
<td>.84</td>
</tr>
<tr>
<td>2. The tickets to the basketball games are reasonably priced.</td>
<td>5.18</td>
<td>1.82</td>
<td>.966</td>
<td>.005</td>
<td>211.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Cyclone basketball is fairly priced entertainment.</td>
<td>5.20</td>
<td>1.71</td>
<td>.916</td>
<td>.006</td>
<td>152.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>4. Friends who were attending influenced my decision to attend.</td>
<td>4.07</td>
<td>2.42</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.77</td>
<td>.51</td>
</tr>
<tr>
<td>5. The game provides an opportunity for me to spend time with my family.</td>
<td>4.26</td>
<td>2.51</td>
<td>.813</td>
<td>.020</td>
<td>41.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The game provides an opportunity to spend time with my spouse.</td>
<td>3.92</td>
<td>2.76</td>
<td>.662</td>
<td>.021</td>
<td>31.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The game provides an opportunity to spend time with my children.</td>
<td>2.93</td>
<td>2.82</td>
<td>.696</td>
<td>.021</td>
<td>33.40</td>
<td></td>
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</tr>
<tr>
<td>Advertising/promotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.90</td>
<td>.71</td>
</tr>
<tr>
<td>8. Newspaper ads for Cyclone games</td>
<td>2.36</td>
<td>.90</td>
<td>.783</td>
<td>.012</td>
<td>61.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Cyclone television commercials</td>
<td>2.43</td>
<td>1.90</td>
<td>.911</td>
<td>.007</td>
<td>124.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Radio ads for Cyclone games</td>
<td>2.45</td>
<td>1.92</td>
<td>.883</td>
<td>.008</td>
<td>106.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Cyclone billboard ads</td>
<td>2.12</td>
<td>1.72</td>
<td>.792</td>
<td>.012</td>
<td>66.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.75</td>
<td>.52</td>
</tr>
<tr>
<td>Merchandise consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I buy Cyclone clothing (T-shirts, caps, etc.).</td>
<td>5.49</td>
<td>1.66</td>
<td>.844</td>
<td>.012</td>
<td>70.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I buy Cyclone apparel for other people.</td>
<td>4.95</td>
<td>1.94</td>
<td>.768</td>
<td>.014</td>
<td>54.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I can easily find “licensed” Cyclone merchandise.</td>
<td>5.52</td>
<td>1.60</td>
<td>.495</td>
<td>.023</td>
<td>21.41</td>
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<tr>
<td>Print media consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.73</td>
<td>.58</td>
</tr>
<tr>
<td>15. I read about the basketball team in the daily sport pages.</td>
<td>5.62</td>
<td>1.60</td>
<td>.780</td>
<td>.016</td>
<td>47.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I read magazines that have articles on the Cyclone basketball team.</td>
<td>4.84</td>
<td>1.90</td>
<td>.742</td>
<td>.017</td>
<td>43.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV media consumption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.67</td>
<td>.70</td>
</tr>
<tr>
<td>17. When I cannot attend a Cyclone game, I watch it on television if possible.</td>
<td>6.02</td>
<td>1.47</td>
<td>.765</td>
<td>.013</td>
<td>56.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I watch sports broadcasts or the local TV news for information about the team.</td>
<td>5.73</td>
<td>1.33</td>
<td>.895</td>
<td>.009</td>
<td>102.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I watch TV for news about the team.</td>
<td>5.61</td>
<td>1.64</td>
<td>.852</td>
<td>.010</td>
<td>84.32</td>
<td></td>
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<tr>
<td>Wearing team paraphernalia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.89</td>
<td>.75</td>
</tr>
<tr>
<td>20. I wear Cyclone clothing when I attend a game.</td>
<td>5.29</td>
<td>1.91</td>
<td>.768</td>
<td>.013</td>
<td>60.61</td>
<td></td>
<td></td>
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<tr>
<td>21. I wear Cyclone apparel on a regular basis.</td>
<td>4.95</td>
<td>1.91</td>
<td>.940</td>
<td>.006</td>
<td>154.2</td>
<td></td>
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<tr>
<td>22. I wear Cyclone paraphernalia even when I’m not at a game.</td>
<td>4.85</td>
<td>1.98</td>
<td>.873</td>
<td>.008</td>
<td>104.8</td>
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<tr>
<td>Tracking statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.88</td>
<td>.79</td>
</tr>
<tr>
<td>23. I regularly track the statistics of specific Cyclone basketball players.</td>
<td>4.38</td>
<td>1.91</td>
<td>.820</td>
<td>.012</td>
<td>66.01</td>
<td></td>
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<tr>
<td>24. I follow the team’s statistics on a regular basis.</td>
<td>4.81</td>
<td>1.88</td>
<td>.956</td>
<td>.010</td>
<td>95.10</td>
<td></td>
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</tr>
<tr>
<td>Behavioral Intentions</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>.90</td>
<td>.76</td>
</tr>
<tr>
<td>Continued loyalty</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>25. Regardless of whether they win or lose, I will continue to support the team.</td>
<td>6.18</td>
<td>1.14</td>
<td>.905</td>
<td>.008</td>
<td>109.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. I will continue to back the team even if they do not win the conference title.</td>
<td>6.29</td>
<td>1.07</td>
<td>.854</td>
<td>.010</td>
<td>86.69</td>
<td></td>
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</tr>
<tr>
<td>27. Even if the team’s winning percentage is below .50%, I will still be a fan.</td>
<td>2.93</td>
<td>1.18</td>
<td>.849</td>
<td>.010</td>
<td>84.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attendance intentions</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I am more likely to attend future games.</td>
<td>6.00</td>
<td>1.18</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise consumption intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.87</td>
<td>.70</td>
</tr>
<tr>
<td>29. I am more likely to purchase the team’s merchandise.</td>
<td>4.48</td>
<td>1.49</td>
<td>.858</td>
<td>.011</td>
<td>80.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I am more likely to buy Cyclone clothing.</td>
<td>4.45</td>
<td>1.54</td>
<td>.950</td>
<td>.009</td>
<td>107.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. I am more likely to support the Cyclones.</td>
<td>5.20</td>
<td>1.34</td>
<td>.684</td>
<td>.016</td>
<td>41.92</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

Focus Group Question Schedule (probes listed under “a”)

(No MMA Fandom)

Appeal

1. Is MMA unappealing to you?
   a. If so, why? If it does appeal to you, why do you not consume it?

2. Is MMA important to you?
   a. Why not?

3. Do you have friends and/or family that are fans of MMA? What do they like about it?

Behaviour

4. How popular is MMA?
   a. What contributes to its popularity?

5. How would you compare fans of MMA to fans of other sports?
   a. Vocal? Intensity? Engagement?

6. Are there certain spectator environments suitable for MMA fans?
   a. Live attendance viewing? Public media viewing? Private viewing?

Locale

7. What do you think is the preferred location for MMA consumption?

8. Why do you think fans choose the location that they do to consume MMA?

9. Why do you think fans choose bars/nightclubs as a primary location to consume MMA?
a. Why do you think fans choose home viewing for their MMA consumption?

Marketing

10. What are the differences between MMA apparel and apparel from other sports?
11. Do you consume MMA in the same manners as you would with other sports?

Identity

12. What do others think about your lack of support of MMA?
13. Why do you think men identify as fans of MMA?
14. Why do you think women identify as fans of MMA?
15. Historically, MMA has been a male activity. What qualities define the sport as masculine?
16. What qualities attract females to the sport of MMA?
17. Where within the sport are females included?
18. What are the differences between female and male fighters?
   a. How do they express their sexuality?

Influence

19. How do you perceive others judge male fans of MMA? Female fans?
20. How do you believe future influences will affect your consumption of MMA?
APPENDIX F

Focus Group Question Schedule (probes listed under “a”)

(\textit{Vested Fans})

Appeal

1. When did you start consuming MMA?

2. How did your interest in MMA develop?

3. What has sustained your interest?

4. What has diminished your interest?

5. How important is it for friends and family to be fans of MMA for you to continue your interest?
   
a. Do you consume MMA for the social connection to others?

6. Why is MMA important to you?
   
a. Why is it not important to you?

Behaviour

7. How popular is MMA?
   
a. What contributes to its popularity?

8. How would you compare fans of MMA to fans of other sports?
   
a. Vocal? Intensity? Engagement?

9. Are there certain spectator environments suitable for MMA fans?
   
a. Live attendance viewing? Public media viewing? Private viewing?

Locale

10. What do you think is the preferred location for MMA consumption?

11. Why do you think fans choose the location that they do to consume MMA?
12. Why do you think fans choose bars/nightclubs as a primary location to consume MMA?
   a. Why do you think fans choose home viewing for their MMA consumption?

Marketing

13. What are the differences between MMA apparel and apparel from other sports?
14. Do you consume MMA in the same manners as you would with other sports?

Identity

15. What do others think about your support of MMA?
16. Why do you think men identify as fans of MMA?
17. Why do you think women identify as fans of MMA?
18. Historically, MMA has been a male activity. What qualities define the sport as masculine?
19. What qualities attract females to the sport of MMA?
20. Where within the sport are females included?
21. What are the differences between female and male fighters?
   a. How do they express their sexuality?

Influence

22. How do you perceive others judge male fans of MMA? Female fans?
23. How do you believe future influences will affect your consumption of MMA?
APPENDIX G

Focus Group Question Schedule (probes are listed under “a”)

(Social Fans)

Appeal

1. When did you start consuming MMA?
2. How did your interest in MMA develop?
3. What has sustained your interest?
4. What has diminished your interest?
5. How important is it for friends and family to be fans of MMA for you to continue your interest?
   a. Do you consume MMA for the social connection to others?
6. Why is MMA important to you?
   a. Why is it not important to you?

Behaviour

7. How popular is MMA?
   a. What contributes to its popularity?
8. How would you compare fans of MMA to fans of other sports?
   a. Vocal? Intensity? Engagement?
9. Are there certain spectator environments suitable for MMA fans?
   a. Live attendance viewing? Public media viewing? Private viewing?

Locale

10. What do you think is the preferred location for MMA consumption?
11. Why do you think fans choose the location that they do to consume MMA?
12. Why do you think fans choose bars/nightclubs as a primary location to consume MMA?
   a. Why do you think fans choose home viewing for their MMA consumption?

Marketing

13. What are the differences between MMA apparel and apparel from other sports?

14. Do you consume MMA in the same manners as you would with other sports?

Identity

15. What do others think about your support of MMA?

16. Why do you think men identify as fans of MMA?

17. Why do you think women identify as fans of MMA?

18. Historically, MMA has been a male activity. What qualities define the sport as masculine?

19. What qualities attract females to the sport of MMA?

20. Where within the sport are females included?

21. What are the differences between female and male fighters?
   a. How do they express their sexuality?

Influence

22. How do you perceive others judge male fans of MMA? Female fans?

23. How do you believe future influences will affect your consumption of MMA?
APPENDIX H

Letter of Information and Consent for Online Survey Participation

Faculty of Human Kinetics
401 Sunset Avenue
Windsor, Ontario
N9B 3P4

Title of Study: Developing an understanding of the role of gender in the consumption of mixed martial arts

You are invited to participate in a research study being conducted Michael L. Naraine from the Department of Kinesiology at the University of Windsor. This survey is part one of a two part research design that is being utilized to complete a master’s thesis.

PURPOSE OF THE STUDY
The purpose of the study is to examine differences and similarities in the consumption behaviours of men and women in order to contribute to a better understand of gender as a factor in the rapid growth and popularity of MMA.

PROCEDURES

- It will involve 44-items that will ask you to assess your MMA consumption habits. In addition to those questions, the survey will ask about age, sex, and year of study. You will also be required to indicate your UWindsor student identification number that will help the researcher during part two of this study. The researcher has no mechanism to find out your identity just by having your student number.

POTENTIAL RISKS AND DISCOMFORTS

Risk associated with participation will be no greater than what you would experience in your daily life. Questions may result in low psychological, emotional and social risks. Questions are not expected to cause participants to feel uncomfortable, embarrassed, anxious or upset.

POTENTIAL BENEFITS TO SUBJECTS

Participants may benefit from this study in that they may gain greater knowledge about their self and become more educated on consumption habits, gender issues, and
research related to mixed martial arts. It is also a professional benefit to Human Kinetics students who may recognize the importance of research to the field of study.

COMPENSATION FOR PARTICIPATION

In appreciation for your participation, those who complete the survey can enter a random draw for a $50 University of Windsor bookstore gift card.

CONFIDENTIALITY AND ANONYMITY

Because of the survey’s design, respondents can be assured that their participation is anonymous although the focus group participants will not be granted anonymity. Information provided by participants to the researcher will be kept with the strictest confidence. Moreover, participant identity will remain anonymous, as there are no questions asking the participants to identify themselves. New consent will be obtained for the second phase of the study, the focus groups.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

Results of the study will be published in the master’s thesis and will be available to the participants by accessing the Faculty of Human Kinetics or the University of Windsor library system. A summary of the results will also be made available through the Research Ethics Board website (www.uwindsor.ca/reb).

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH SUBJECTS

If you have any questions or concerns about the research, please contact the principal researcher by e-mail (narainem@uwindsor.ca). In addition, you may contact the principal advisor of this research, Dr. Marge Holman, by phone or e-mail (519-253-3000 ext. 2436 or holman@uwindsor.ca). For questions about participant rights, please contact the Research Ethics Board Chair by phone or e-mail (519-253-3000 ext. 3948 or ethics@uwindsor.ca).

Do you consent to participate in this survey?

Yes       o

No        o
APPENDIX I

Letter of Information and Consent for Focus Group Participation

Title of Study: Developing an understanding of the role of gender in the consumption of mixed martial arts

You are invited to participate in a research study on mixed martial arts (MMA) being conducted Michael L. Naraine from the Department of Kinesiology at the University of Windsor. This survey is part two of a research design that is being utilized to complete a master’s thesis.

PURPOSE OF THE STUDY

The purpose of the study is to examine differences and similarities in the consumption behaviours of men and women in order to contribute to a better understanding of gender as a factor in the rapid growth and popularity of MMA.

PROCEDURES

If you volunteer to participate in a focus group:

- You will be placed in a session with five other individuals with similar MMA consumption behaviour
- Your name will not appear anywhere, but anonymity cannot be guaranteed
- You will be asked semi-structured questions; the focus group is scheduled to last up to sixty minutes.
- You consent to being audio recorded so that the researcher can transcribe and analyze the session.

POTENTIAL RISKS AND DISCOMFORTS

Risk associated with participation will be no greater than what you would experience in your daily life. Questions may result in low psychological, emotional and social risks. Questions are not expected to cause participants to feel uncomfortable, embarrassed, anxious or upset.

POTENTIAL BENEFITS TO SUBJECTS

Participants may benefit from this study in that they may gain greater knowledge about
their self and become more educated on consumption habits, gender issues, and research related to mixed martial arts. It is also a professional benefit to Human Kinetics students who may recognize the importance of research to the field of study.

COMPENSATION FOR PARTICIPATION

In appreciation for your participation, those who participate in the focus group will receive a pizza meal.

CONFIDENTIALITY

Because of the survey’s design, respondents can be assured that information provided by participants will be kept with the strictest confidence by the researcher. However, confidentiality and anonymity cannot be guaranteed as the other participants in the focus group may identify you and may speak about the information provided in the focus group to their friends or family.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

Results of the study will be published in the master’s thesis and will be available to the participants by accessing the Faculty of Human Kinetics or the University of Windsor library system. A summary of the results will also be made available through the Research Ethics Board website (www.uwindsor.ca/reb).

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH SUBJECTS

If you have any questions or concerns about the research, please contact the principal researcher by e-mail (narainem@uwindsor.ca). In addition, you may contact the principal advisor of this research, Dr. Marge Holman, by phone or e-mail (519-253-3000 ext. 2436 or holman@uwindsor.ca). For questions about participant rights, please contact the Research Ethics Board Chair by phone or e-mail (519-253-3000 ext. 3948 or ethics@uwindsor.ca).

I, _________________________________, hereby consent to participate in the focus group and to being audio recorded.

________________________________  _______________________
Signature                            Date
APPENDIX J

Initial Analysis Chart (IAC)

<table>
<thead>
<tr>
<th>Themes</th>
<th>Nodes</th>
<th>Supporting Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appeal</td>
<td>1. Triggers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Popularity</td>
<td></td>
</tr>
<tr>
<td>Behaviour</td>
<td>1. Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Motivation</td>
<td></td>
</tr>
<tr>
<td>Locale</td>
<td>1. Living Room</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Bars/Nightclubs</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>1. Apparel/Sex</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Comparisons</td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>1. Male fans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Female fans</td>
<td></td>
</tr>
<tr>
<td>Influence</td>
<td>1. Peers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Significant Other</td>
<td></td>
</tr>
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</table>
### Table 1

**Age and Sex of Respondents**

<table>
<thead>
<tr>
<th>Age of respondent (in years)</th>
<th>I identify as a</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>9</td>
<td>13</td>
</tr>
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<td>19</td>
<td>3</td>
<td>23</td>
</tr>
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<td>20</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>21</td>
<td>10</td>
<td>12</td>
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<td>22</td>
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<td>25</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>43</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>91</td>
</tr>
</tbody>
</table>

### Table 2

**Year of Study of Participants**

<table>
<thead>
<tr>
<th>Year of Study (as a kinesiology undergraduate student)</th>
<th>Total</th>
<th>Percentage Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-year</td>
<td>29</td>
<td>19%</td>
</tr>
<tr>
<td>Second-year</td>
<td>31</td>
<td>21%</td>
</tr>
<tr>
<td>Third-year</td>
<td>34</td>
<td>23%</td>
</tr>
<tr>
<td>Fourth-year</td>
<td>57</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>Component 1</td>
<td>Component 2</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>I read about MMA</td>
<td>.962</td>
<td>-.010</td>
</tr>
<tr>
<td>I read articles about MMA on the internet</td>
<td>.949</td>
<td>-.021</td>
</tr>
<tr>
<td>I read about MMA news, updates and other</td>
<td>.930</td>
<td>-.072</td>
</tr>
<tr>
<td>information through social networking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>websites (e.g., Facebook and Twitter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I read newspaper articles about MMA</td>
<td>.870</td>
<td>-.008</td>
</tr>
<tr>
<td>I read magazines that are MMA based or that</td>
<td>.819</td>
<td>.033</td>
</tr>
<tr>
<td>often feature MMA articles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I watch MMA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fights and videos on the internet</td>
<td>.635</td>
<td>.100</td>
</tr>
<tr>
<td>(e.g., YouTube)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I watch MMA on television</td>
<td>.588</td>
<td>.105</td>
</tr>
<tr>
<td>I consider myself a fan of MMA</td>
<td>.576</td>
<td>.013</td>
</tr>
<tr>
<td>I watch MMA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fights/programs on television at bars/</td>
<td>.566</td>
<td>.152</td>
</tr>
<tr>
<td>nightclubs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I watch MMA reality-based shows on</td>
<td>.550</td>
<td>.187</td>
</tr>
<tr>
<td>television (e.g., The Ultimate Fighter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would watch an MMA fight if two females</td>
<td>.478</td>
<td>.153</td>
</tr>
<tr>
<td>were competing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Because I have been exposed to the sport, I have thought about/am getting MMA instruction or taking MMA fitness classes. 

<table>
<thead>
<tr>
<th>Scales</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel proud when my favourite MMA fighter does well</td>
<td>( \beta = .449 )</td>
</tr>
<tr>
<td>I wear MMA apparel</td>
<td>( \beta = .926 )</td>
</tr>
<tr>
<td>I buy MMA clothing</td>
<td>( \beta = .911 )</td>
</tr>
<tr>
<td>I buy MMA clothing (e.g., t-shirts, caps, fight shorts, board shorts, hoodies) for myself</td>
<td>( \beta = .911 )</td>
</tr>
<tr>
<td>I wear MMA apparel on a regular basis</td>
<td>( \beta = .889 )</td>
</tr>
<tr>
<td>I wear MMA apparel at nightclubs and bars</td>
<td>( \beta = .791 )</td>
</tr>
<tr>
<td>I know where to buy &quot;licensed&quot; MMA clothing</td>
<td>( \beta = .661 )</td>
</tr>
<tr>
<td>I buy MMA clothing for friends, family, partners and/or life partners</td>
<td>( \beta = .532 )</td>
</tr>
<tr>
<td>I believe MMA is a &quot;man's sport&quot;</td>
<td>( \beta = .848 )</td>
</tr>
<tr>
<td>I believe MMA fans are rowdy, &quot;macho&quot; and masculine</td>
<td>( \beta = .790 )</td>
</tr>
<tr>
<td>I believe females will only watch MMA because they have male friends, family members and/or male partners who watch MMA too</td>
<td>( \beta = .782 )</td>
</tr>
<tr>
<td></td>
<td>Value 1</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>I believe females assume submissive, stereotypical roles in MMA</td>
<td>-.199</td>
</tr>
<tr>
<td>I believe MMA is a sport that appeals strongly to females</td>
<td>.014</td>
</tr>
<tr>
<td>I believe MMA to be more violent and brutal than other sports</td>
<td>-.073</td>
</tr>
<tr>
<td>I play MMA video games</td>
<td>.187</td>
</tr>
<tr>
<td>I play MMA video games with my significant other/life partner</td>
<td>-.119</td>
</tr>
<tr>
<td>I play MMA video games with friends</td>
<td>.252</td>
</tr>
<tr>
<td>I play MMA video games with family members</td>
<td>.109</td>
</tr>
<tr>
<td>I post comments on my Twitter, Facebook or other social media</td>
<td>-.049</td>
</tr>
<tr>
<td>I post comments about MMA fights</td>
<td>-.049</td>
</tr>
<tr>
<td>I follow MMA using social media websites</td>
<td>.042</td>
</tr>
<tr>
<td>I follow MMA athletes and personalities on Twitter, Facebook</td>
<td>-.009</td>
</tr>
<tr>
<td>I follow MMA athletes and personalities on other social media</td>
<td>-.009</td>
</tr>
<tr>
<td>I post MMA videos and articles on my Twitter, Facebook</td>
<td>.004</td>
</tr>
<tr>
<td>How often do you attend live mixed martial arts events with</td>
<td>.123</td>
</tr>
<tr>
<td>family members?</td>
<td>.171</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>I attend live MMA events</td>
<td>.201</td>
</tr>
<tr>
<td>How often do you attend live mixed martial arts events with a life partner (e.g., spouse, boyfriend, or girlfriend)?</td>
<td>.116</td>
</tr>
<tr>
<td>Have friends of family ever influenced your decision to attend a mixed martial arts event?</td>
<td>.293</td>
</tr>
</tbody>
</table>

Table 4

*Descriptive Statistics for Components and Items*

<table>
<thead>
<tr>
<th>Component (items listed numerically)</th>
<th>Mean</th>
<th>SD</th>
<th>(\alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive consumption</td>
<td></td>
<td></td>
<td>.95</td>
</tr>
<tr>
<td>1. I read about MMA</td>
<td>2.38</td>
<td>2.10</td>
<td></td>
</tr>
<tr>
<td>2. I read articles about MMA on the internet</td>
<td>2.50</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>3. I read about MMA news, updates and other information through social networking websites (e.g., Facebook and Twitter)</td>
<td>2.29</td>
<td>2.10</td>
<td></td>
</tr>
<tr>
<td>4. I read newspaper articles about MMA</td>
<td>2.19</td>
<td>1.91</td>
<td></td>
</tr>
<tr>
<td>5. I read magazines that are MMA based or that often feature MMA articles</td>
<td>1.83</td>
<td>1.59</td>
<td></td>
</tr>
<tr>
<td>6. I watch MMA fights and videos on the internet (e.g., YouTube)</td>
<td>2.83</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>7. I watch MMA on television</td>
<td>3.38</td>
<td>2.44</td>
<td></td>
</tr>
<tr>
<td>8. I consider myself a fan of MMA</td>
<td>3.20</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td>9. I watch MMA fights/programs on television at bars/nightclubs</td>
<td>3.22</td>
<td>2.44</td>
<td></td>
</tr>
<tr>
<td>10. I watch MMA reality-based shows on television (e.g., The Ultimate Fighter)</td>
<td>2.89</td>
<td>2.19</td>
<td></td>
</tr>
<tr>
<td>11. I would watch an MMA fight if two females were competing</td>
<td>3.54</td>
<td>1.98</td>
<td></td>
</tr>
<tr>
<td>12. Because I have been exposed to the sport, I have thought about/am getting MMA instruction or taking MMA fitness classes</td>
<td>2.99</td>
<td>1.97</td>
<td></td>
</tr>
<tr>
<td>13. I feel proud when my favourite fighter does well</td>
<td>4.22</td>
<td>1.62</td>
<td></td>
</tr>
<tr>
<td>Apparel consumption</td>
<td></td>
<td></td>
<td>.94</td>
</tr>
<tr>
<td>14. I wear MMA apparel</td>
<td>1.26</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>15. I buy MMA clothing</td>
<td>1.26</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>16. I buy MMA clothing (e.g., t-shirts, caps, fight shorts, board shorts, hoodies) for myself</td>
<td>1.26</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I wear MMA apparel on a regular basis</td>
<td>1.13</td>
<td>0.63</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>18.</td>
<td>I wear MMA apparel at nightclubs and bars</td>
<td>1.11</td>
<td>0.60</td>
</tr>
<tr>
<td>19.</td>
<td>I know where to buy “licensed” MMA clothing</td>
<td>1.36</td>
<td>1.30</td>
</tr>
<tr>
<td>20.</td>
<td>I buy MMA clothing for friends, family, partners and/or life partners</td>
<td>1.17</td>
<td>0.76</td>
</tr>
<tr>
<td>Perceptions of gender</td>
<td></td>
<td></td>
<td>.78</td>
</tr>
<tr>
<td>21.</td>
<td>I believe MMA is a “man’s sport”</td>
<td>4.27</td>
<td>1.76</td>
</tr>
<tr>
<td>22.</td>
<td>I believe MMA fans are rowdy, “macho” and masculine</td>
<td>4.47</td>
<td>1.56</td>
</tr>
<tr>
<td>23.</td>
<td>I believe females will only watch MMA because they have male friends, family members and/or male partners who watch MMA</td>
<td>3.81</td>
<td>1.78</td>
</tr>
<tr>
<td>24.</td>
<td>I believe females assume submissive, stereotypical roles in MMA</td>
<td>4.36</td>
<td>1.54</td>
</tr>
<tr>
<td>25.</td>
<td>I believe MMA is a sport that appeals strongly to females</td>
<td>5.10</td>
<td>1.23</td>
</tr>
<tr>
<td>26.</td>
<td>I believe MMA to be more violent and brutal than other sports</td>
<td>4.89</td>
<td>1.63</td>
</tr>
<tr>
<td>Video game consumption</td>
<td></td>
<td></td>
<td>.89</td>
</tr>
<tr>
<td>27.</td>
<td>I play MMA video games</td>
<td>2.18</td>
<td>2.08</td>
</tr>
<tr>
<td>28.</td>
<td>I play MMA video games with my significant other/life partner</td>
<td>1.38</td>
<td>1.10</td>
</tr>
<tr>
<td>29.</td>
<td>I play MMA video games with friends</td>
<td>2.19</td>
<td>2.08</td>
</tr>
<tr>
<td>30.</td>
<td>I play MMA video games with family members</td>
<td>1.64</td>
<td>1.55</td>
</tr>
<tr>
<td>Social media consumption</td>
<td></td>
<td></td>
<td>.94</td>
</tr>
<tr>
<td>31.</td>
<td>I post comments on my Twitter, Facebook or other social media website page about MMA fights</td>
<td>1.48</td>
<td>1.36</td>
</tr>
<tr>
<td>32.</td>
<td>I follow MMA using social media websites</td>
<td>1.68</td>
<td>1.74</td>
</tr>
<tr>
<td>33.</td>
<td>I follow MMA athletes and personalities on Twitter, Facebook or other social media websites</td>
<td>1.45</td>
<td>1.36</td>
</tr>
<tr>
<td>34.</td>
<td>I post MMA videos and articles on my Twitter, Facebook or other social media websites pages</td>
<td>1.29</td>
<td>1.02</td>
</tr>
<tr>
<td>Venue consumption</td>
<td></td>
<td></td>
<td>.95</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
<td>---</td>
</tr>
<tr>
<td>35</td>
<td>How often do you attend live mixed martial arts events with family members?</td>
<td>1.24</td>
<td>0.94</td>
</tr>
<tr>
<td>36</td>
<td>How often do you attend live mixed martial arts events with friends?</td>
<td>1.32</td>
<td>1.21</td>
</tr>
<tr>
<td>37</td>
<td>I attend live MMA events</td>
<td>1.34</td>
<td>1.23</td>
</tr>
<tr>
<td>38</td>
<td>How often do you attend live mixed martial arts events with a life partner (e.g., spouse, boyfriend, or girlfriend)?</td>
<td>1.21</td>
<td>0.90</td>
</tr>
<tr>
<td>39</td>
<td>Have friends or family ever influenced your decision to attend a mixed martial arts event?</td>
<td>1.20</td>
<td>0.84</td>
</tr>
</tbody>
</table>
Table 5

**MANOVA for MMA Consumption Habits Based on Gender**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Noncent. Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillai's Trace</td>
<td>.372</td>
<td>14.239&lt;sup&gt;b&lt;/sup&gt;</td>
<td>6.000</td>
<td>144.000</td>
<td>.000</td>
<td>85.433</td>
<td>1.000</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.628</td>
<td>14.239&lt;sup&gt;b&lt;/sup&gt;</td>
<td>6.000</td>
<td>144.000</td>
<td>.000</td>
<td>85.433</td>
<td>1.000</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.593</td>
<td>14.239&lt;sup&gt;b&lt;/sup&gt;</td>
<td>6.000</td>
<td>144.000</td>
<td>.000</td>
<td>85.433</td>
<td>1.000</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.593</td>
<td>14.239&lt;sup&gt;b&lt;/sup&gt;</td>
<td>6.000</td>
<td>144.000</td>
<td>.000</td>
<td>85.433</td>
<td>1.000</td>
</tr>
</tbody>
</table>

<sup>a</sup> Design: Gender (q_hkp9obknvs_score)
<sup>b</sup> Exact statistic
<sup>c</sup> Computed using alpha = .05

Table 6

**Follow-up ANOVA for MMA Consumption Based on Gender**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Noncent. Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive_consumption</td>
<td>131.957</td>
<td>1</td>
<td>131.957</td>
<td>.000</td>
<td>69.686</td>
<td>69.686</td>
<td>1.000</td>
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<tr>
<td>Apparel_consumption</td>
<td>.968</td>
<td>1</td>
<td>.968</td>
<td>1.460</td>
<td>.229</td>
<td>1.460</td>
<td>.225</td>
</tr>
<tr>
<td>Video_game_consumption</td>
<td>47.149</td>
<td>1</td>
<td>47.149</td>
<td>.000</td>
<td>23.408</td>
<td>23.408</td>
<td>.998</td>
</tr>
<tr>
<td>Social_media_consumption</td>
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<td>22.604</td>
<td>.000</td>
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<td>15.212</td>
<td>.972</td>
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<tr>
<td>Venue_consumption</td>
<td>3.386</td>
<td>1</td>
<td>3.386</td>
<td>.051</td>
<td>3.869</td>
<td>3.869</td>
<td>.498</td>
</tr>
</tbody>
</table>

<sup>a</sup> Computed using alpha = .05
Table 7

Descriptive Statistics for the MANOVA

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive_consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4.0321</td>
<td>1.71294</td>
<td>60</td>
</tr>
<tr>
<td>Female</td>
<td>2.1217</td>
<td>1.10066</td>
<td>91</td>
</tr>
<tr>
<td>Total</td>
<td>2.8808</td>
<td>1.66153</td>
<td>151</td>
</tr>
<tr>
<td>Male</td>
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<td>.98567</td>
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</tr>
<tr>
<td>Apparel_consumption</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.1554</td>
<td>.67902</td>
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</tr>
<tr>
<td>Total</td>
<td>1.2204</td>
<td>.81562</td>
<td>151</td>
</tr>
<tr>
<td>Male</td>
<td>4.1139</td>
<td>1.02671</td>
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</tr>
<tr>
<td>Perceptions_of_gender</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.1209</td>
<td>.90542</td>
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<tr>
<td>Total</td>
<td>4.1181</td>
<td>.95211</td>
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</tr>
<tr>
<td>Male</td>
<td>2.5375</td>
<td>1.76286</td>
<td>60</td>
</tr>
<tr>
<td>Video_game_consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
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<td>1.13900</td>
<td>91</td>
</tr>
<tr>
<td>Total</td>
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<td>151</td>
</tr>
<tr>
<td>Male</td>
<td>1.9500</td>
<td>1.73864</td>
<td>60</td>
</tr>
<tr>
<td>Social_media_consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.1593</td>
<td>.69173</td>
<td>91</td>
</tr>
<tr>
<td>Total</td>
<td>1.4735</td>
<td>1.27546</td>
<td>151</td>
</tr>
<tr>
<td>Male</td>
<td>1.4467</td>
<td>1.26135</td>
<td>60</td>
</tr>
<tr>
<td>Venue_consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.1407</td>
<td>.63700</td>
<td>91</td>
</tr>
<tr>
<td>Total</td>
<td>1.2623</td>
<td>.94437</td>
<td>151</td>
</tr>
</tbody>
</table>
Table 8

*IAC for No MMA Fandom*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Nodes</th>
<th>Selection of supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appeal</td>
<td>Popularity</td>
<td>“Compared to like NHL and NBA and stuff, I don’t think it’s as popular.” - Tina</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“People like the action. They like the intensity and seeing people fight.” – Gill</td>
</tr>
<tr>
<td></td>
<td>Triggers</td>
<td>“Because everyone that I know goes to watch the fights every Saturday and I’m in a small town.” - Stephanie</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Environment</td>
<td>“Uh, I think the atmosphere is more fun there. And then people are drinking.” – Stephanie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“They’re loud and like cheering and stuff.” - Sandra</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td>“They like watching for the social aspect.” – Gill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It’s kind of unpredictable.” – Gill</td>
</tr>
<tr>
<td>Locale</td>
<td>Living room</td>
<td>“And I think, think at home, too with a bunch of friends over at your place drinking.” - Gill</td>
</tr>
<tr>
<td></td>
<td>Bars</td>
<td>“That’s just where you see people watching it.” – Tina</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“You also don’t have to pay for it at the bar.” – Stephanie</td>
</tr>
<tr>
<td>Marketing</td>
<td>Apparel/Sex appeal</td>
<td>“There’s like a lot of symbols and stuff.” – Stephanie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I think it’s just to appeal to the male fans. I think that male fans in general would rather see a girl in a bikini than a fat male with a beer belly.” – Gill</td>
</tr>
<tr>
<td></td>
<td>Comparisons</td>
<td>“Like boxing has had [ring girls] for years and I think it’s just part of the sport tradition.” – Stephanie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I think that they buy [MMA video games] for the same reason they go out and buy NHL or Madden.” – Gill</td>
</tr>
<tr>
<td>Identity</td>
<td>Male fans</td>
<td>“They walk around like their shit doesn’t stink. They think they’re tough.” – Sandra</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Because they probably just get an adrenaline rush from it, I guess. Just seeing guys getting beat up.” – Tina</td>
</tr>
<tr>
<td></td>
<td>Female fans</td>
<td>“I think more and more females are watching it.” – Stephanie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Stephanie said that women aren’t giving it a chance, like, I’m probably one of those women. Like, it just doesn’t interest me, it’s not appealing for me to like engage in watching that so I just don’t.” – Sandra</td>
</tr>
<tr>
<td>Influence</td>
<td>Peers</td>
<td>“Just ‘cause my friends do it doesn’t mean I do it.” – Sandra</td>
</tr>
<tr>
<td></td>
<td>Significant other</td>
<td>“I have a lot of friends who are into it.” - Gill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Yes, I’d go, yeah. But I’m not saying I’m going to enjoy watching it. I’m just saying I would go just to spend time with the person.” – Tina</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“They just like it because their significant other or guy friends like it and they just want to fit in.” – Stephanie</td>
</tr>
<tr>
<td>Themes</td>
<td>Nodes</td>
<td>Selection of supporting quotes</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td><strong>Appeal</strong></td>
<td>Popularity</td>
<td>“Constant evolving and changing and plus it’s a discipline that a lot of people don’t really understand it until you do it.” – Carlos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I think it was the acceptance in to Canada. That was the big thing.” – Leopold</td>
</tr>
<tr>
<td></td>
<td>Triggers</td>
<td>“Now they get into their lifestyle, you know, their history, you know it’s the same thing with the Super Bowl.” – Leopold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“On a really good fight card, you’re going to have the two big fighters. You know what I mean? That’s what brings excitement.” – Carlos</td>
</tr>
<tr>
<td><strong>Behaviour</strong></td>
<td>Environment</td>
<td>“It allows that kind of party situation...like just that kind of relaxed environment. It gets you talking.” – Benjamin</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td>“I love seeing someone get hit, you know someone get smashed.” – Evan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Obviously human nature is to crave violence, right? We crave it a little bit.” – Jeffrey</td>
</tr>
<tr>
<td></td>
<td>Living room</td>
<td>“I would prefer at home. You have the capacity to house all your friends on the big screen TV...takes away all those advertising distractions.” – Leopold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Yeah, like it’s actually better than like the noises and like distractions. You can actually hear what they’re saying.” – Evan</td>
</tr>
<tr>
<td></td>
<td>Bars</td>
<td>“When you go, you see just a lot of big ‘meatheads’.” – Carlos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I’ll go at the bar. I can’t just watch on a little TV like this.” – Evan</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td>Apparel/Sex appeal</td>
<td>“A person that’s being rowdy with a TapouT shirt is much easier for someone to spot than a person being rowdy with a pink shirt.” – Carlos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It’s like a badge of honour. Like wearing a karate belt or something&quot; – Leopold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Its entertainment, you know? Some people just go to look at the girls’ asses and shit.” – Jeffrey</td>
</tr>
<tr>
<td></td>
<td>Comparisons</td>
<td>“Yeah, I’d say The Ultimate Fighter like secured me into the UFC. Seeing like all their lifestyle, how hard it really is.” – Benjamin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Boxing is a little different. The fighters have a different attitude.” – Carlos</td>
</tr>
<tr>
<td><strong>Identity</strong></td>
<td>Male fans</td>
<td>“They think they’re good enough. They think they’re equal or they can do what the fighters do. They’re basically throwing out a challenge” – Leopold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“They’re trying to be tough.” – Jeffrey</td>
</tr>
<tr>
<td></td>
<td>Female fans</td>
<td>“I feel like they like it because maybe their boyfriend likes it, you know?” – Evan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Does she really think she’s worthy of wearing that shirt?” – Leopold</td>
</tr>
<tr>
<td></td>
<td>Peers</td>
<td>“It’s like the social aspect of it...being with friends.” – Leopold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Get some beers and buddies.” – Jeffrey</td>
</tr>
</tbody>
</table>
| Influence   | Significant other | “Most of the time they’re there with boys or their like boyfriend or whatever.” – Benjamin  
“Yeah, like if a girl likes a guy and she knows the guy likes MMA, she has to watch MMA at least just to be with him.” - Evan |
### Table 10

**IAC for All-Male Social MMA Fans**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Nodes</th>
<th>Selection of supporting quotes</th>
</tr>
</thead>
</table>
| **Appeal**     | **Popularity**  | “It got more popular in Canada once it came to Canada…first show at the Rogers Centre.” – Cody  
First time I watched was The Ultimate Fighter…it was like the best fight ever.” – Noah                                                                                                                                  |
|                | **Triggers**    | “You see what they do at training. You see like the behind the politics of it all.” – George  
“Yeah, hang with the boys and shit.” – Cody                                                                                                                                                                 |
| **Behaviour**  | **Environment** | “Yeah, you can get jacked up.” – Noah  
“It’s social. Lightens you up a bit. You get emotional.” – Bobby  
“Beer is a big part of it kind of thing.” – Larry                                                                                                                                 |
|                | **Motivation**  | “Yeah. I like watching someone get knocked out.” – Noah  
“Violence drives people…if there is constant physical contact, people are going to watch it.” – Larry                                                                                                        |
| **Locale**     | **Living room** | “Like just chill at home and try and de-stress and watch…it’s not more of a social thing, more for the enjoyment.” – George  
“My buddies would rent the PPV… like a ritual thing.” – Cody                                                                                                                                 |
|                | **Bars**        | “Like you have the dim lights, you got your beer, you’ve got your chicken wings.” – George  
“You can get all the stuff at home, but like, at the same time, it’s still better to go downtown.” – Bobby  
“Just showing up to the bar, alright here’s my $25, get me some beers, get me some wings or nachos or some shit and let’s watch.” – Larry                                                                 |
| **Marketing**  | **Apparel/Sex appeal** | “Big people, usually jacked people usually wear them.” – Noah  
“Like I don’t know, like they have pretty cool designs on them.” – Anthony  
“Just adds appeal. Hot girl like that wearing a bathing suit…everybody likes a hot girl, to be honest.” – Noah                                                                 |
|                | **Comparisons** | “The majority of the audience is guys, so they like took that into consideration when they got ring girls.” – Noah  
“Just the smack talk. In hockey commercials, you don’t see smack talk at all. You don’t get that back story.” – George                                                                                              |
|                | **Male fans**   | “Yeah, ‘cause the guys are jacked as fuck and they’re tough and they’re just beating each other up. Male dominance.” – George  
“Makes you look tougher…intimidation factor.” – Cody  
“Why wouldn’t guys want to go downtown?” – George                                                                                                                                         |
|                | **Female fans** | “I think that maybe the only real drive for them is to meet other guys.” – George  
“I think they’re using it as a tool just to get us.” – Bobby                                                                                                                                 |
|                | **Identity**    |                                                                                                                                                                                                                                 |
| **Influence**  | **Peers**       | “One of my best friends watches UFC all the time, so I’ll be like what are you doing, he’s like watching the fight, alright I’ll come over.” – Bobby  
“It’s like a night that you can just hang with the boys and do something.” – Larry                                                                                                                     |
| Significant other | “I think it’s more, ‘oh I’m watching the fight because of you.’” | Noah |
## Table 11  
### IAC for All-Female Social MMA Fans

<table>
<thead>
<tr>
<th>Themes</th>
<th>Nodes</th>
<th>Selection of supporting quotes</th>
</tr>
</thead>
</table>
| Appeal      | Popularity          | “I was going to say, it’s probably one of the top, most popular watched things right now.” – Tecia  
“It’s like the fastest growing sport in the world.” – Kimberly  
“I think for the time it’s been so popular, it’s just kind of rocketed.” – Rebecca |
|             | Triggers            | “Last year we were watching in [residence], so that’s how we started watching.” – Justine  
“They do a huge story on like where they were raised and their hard lives and where they came from.” – Nicole |
| Behaviour   | Environment         | “Yeah, [beer] is one of those things. Relaxes you.” – Rebecca |
|             | Motivation          | “They pull on your heart strings making you attached to them. You’re rooting for them.” – Cynthia  
“We just wanted the experience…we bought nachos and I had a beer. “ – Cynthia |
|             | Locale              | “It’s a lot cheaper to do it in your house.” – Tecia  
“Like you can just sit on a comfy couch in front of your TV and you don’t have to share your TV with like 600 other people.” – Tecia |
|             | Bars                | “It was a cool experience like it’s rowdy and wild.” – Kimberly  
“To feel everyone’s charge. You’re so in to it. It’s so intense.” – Kimberly |
| Marketing   | Apparel/Sex appeal  | “That’s what they wear so it also kind of translates into everyday wear.” – Rebecca  
“They can’t fight. But they can hold a sign up and look good.” – Tecia  
“A hot girl walks by. Be like, ‘damn, oh yeah, drink my beer, can’t wait until the next round.’ It’s like a nice little segue.” – Cynthia |
|             | Comparisons         | “I don’t think it’s as big as football, though.” – Rebecca  
“They don’t promote…trying to demolish someone. You’re trying to show your skills.” – Kimberly |
| Identity    | Male fans           | “They’re typical jocks is what they are.” – Tecia  
“They’re bigger guys, too. More like bigger football head people, like a little slower.” – Cynthia  
“If they have the muscles, I feel like they flaunt them.” – Tecia |
|             | Female fans         | “If we were downtown wearing that like, we’ll obviously be stereotyped as probably like butch, I guess.” – Tecia  
“I think there would be social pressures. Like you’d want to watch the men.” – Cynthia |
| Influence   | Peers               | “My brother watches it a little.” – Kimberly  
“A lot of my guy friends get together and they watch it.” – Justine  
“Yeah, you don’t go by yourself. Like, I wouldn’t go by myself.” – Cynthia |
|             | Significant Other   | “Like if my boyfriend watched it, then obviously like I’m going to be more subject to watch it because he likes to watch it.” – Tecia |
Table 12

*IAC for Split-Sex Social MMA Fans*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Nodes</th>
<th>Selection of supporting quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appeal</td>
<td>Popularity</td>
<td>“Pretty much when it first came on TV basically.” – Ryan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I think it exploded in a very short time. That’s why it’s so big.” – Tara</td>
</tr>
<tr>
<td></td>
<td>Triggers</td>
<td>“It was pretty hardcore and then they started making the show <em>The Ultimate Fighter</em> and a few people go into it.” – Antonio</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Yeah, <em>The Ultimate Fighter</em> is literally what I think made it.” – Kendall</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Environment</td>
<td>“I think it gets a little bit aggressive. It’s too rowdy.” – Antonio</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td>“Yeah, personal connections. I know that’s what made me start watching.” – Kendall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Yeah, if I’m watching MMA, you know, beer, manliness, and what not, wings, nachos…” – Sylvester</td>
</tr>
<tr>
<td>Locale</td>
<td>Living room</td>
<td>“‘Cause I don’t have to pay for PPV” – Sylvester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“‘Cause I don’t think I enjoy other people’s input while watching something.” – Tara</td>
</tr>
<tr>
<td></td>
<td>Bars</td>
<td>“Like I go with friends and we grab some beer and stuff, so it’s kind of a social thing.” – Sylvester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It’s just easier to go pay $5 cover at a bar, have a beer, just watch the fight. If there’s like a quick knockout, you didn’t just waste $74 for a main event that lasts six seconds.” – Antonio</td>
</tr>
<tr>
<td>Marketing</td>
<td>Apparel/Sex appeal</td>
<td>“It’s a different style though, I think. The MMA style is almost more counterculture.” – Ryan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Tribal prints…a lot of graphics.” – Camilla</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Every aspect is tailored to guys. Like you go downtown, you see all the guys drinking beer, you got this little girl in little bikinis with barely you can read round 2 signs.” – Tara</td>
</tr>
<tr>
<td></td>
<td>Comparisons</td>
<td>“Well it’s like saying you watch NASCAR for the racing. You watch NASCAR for the crashes.” – Sylvester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Even the commercials, it’s all like Budweiser, Coors Light, it’s very much tailored to men.” – Camilla</td>
</tr>
<tr>
<td>Identity</td>
<td>Male fans</td>
<td>“Just for males…it’s a very alpha male thing.” – Sylvester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Guns, girls, fast cars, bullets, girls moaning, guys fighting…that’s what being a ‘man’ in society is like.” – Sylvester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Guys are likely to spend money when they’re turned on.” – Antonio</td>
</tr>
<tr>
<td></td>
<td>Female fans</td>
<td>“Not the actual fight, but the fight within. The willpower.” – Kendall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Females don’t feel comfortable getting involved in that dominant sport.” – Tara</td>
</tr>
<tr>
<td></td>
<td>Peers</td>
<td>“We’ll go for a couple beers at my buddies’ house and then we’ll pull up montages of who is fighting.” – Sylvester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“We went to the fight and then we went out after.” – Camilla</td>
</tr>
</tbody>
</table>
| Influence | Significant other | “The majority of the time, [women] are with someone…their boyfriend. That’s how they’re introduced to it.” – Tara  
“Their meathead boyfriend.” – Sylvester |
FIGURES

Figure 1

*Scree plot from EFA*
Figure 2

*Progression of Sport Consumption*

No fandom $\Rightarrow$ Social $\Rightarrow$ Focused $\Rightarrow$ Vested

Figure 3

*Progression of (male) MMA Consumption*

No fandom $\Rightarrow$ Social $\Rightarrow$ Focused $\Rightarrow$ Vested $\Rightarrow$ Meathead
<table>
<thead>
<tr>
<th>Name:</th>
<th>Michael Lance Naraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place of Birth:</td>
<td>Toronto, Ontario, Canada</td>
</tr>
<tr>
<td>Year of Birth:</td>
<td>1987</td>
</tr>
<tr>
<td></td>
<td>University of Toronto Honours Bachelor of Arts Toronto, Ontario, Canada 2006 – 2010</td>
</tr>
<tr>
<td></td>
<td>University of Windsor Master of Human Kinetics (Sport Management) Windsor, Ontario, Canada 2010 – 2012</td>
</tr>
</tbody>
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