

# Exploring the marketing of mixed martial arts in South Africa

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Mini-dissertation submitted in partial fulfilment of the requirements for the degree *Magister in Business Administration* at the Potchefstroom Campus of the North-West University

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# ABSTRACT

The purpose of the study has been to identify the motivational factors prompting the South African MMA (Mixed Martial Arts) fan to attend events and how these factors are influencing their spending patterns and media consumption. With the growing popularity of Africa's biggest MMA promoter and the production values and size of events, EFC (Extreme Fighting Championship) is taking the African market to a global level. To understand the South African MMA fan, marketers should differentiate strategies to meet these various customers' satisfaction needs and demands. Media plays a big role in the growing of the sport, and Twitter, Facebook, YouTube and television broadcasts all contribute to fans gaining access to the MMA sport.

The following motivational factors were used to measure the MMA fan: Aesthetic quality, Sports interest, Drama/Eustress, Socialising, Vicarious achievement, Fighter interest, Adoration/Hero, Violence, Escape, National Pride and Economic Factors.

Participants who attended the local amateur MMA fights in the south of Johannesburg were requested to complete the online web questionnaire to establish the motivational factors of South African MMA fans. Aesthetic quality, Sports interest and Drama/Eustress were ranked as the highest motivators. There were some gender differences where females indicated that they were more interested in the Drama factor and the males in the Sports interest factor.

It was clear from the results that most male fans were drawn to MMA by word-of-mouth, clubs or events. The female fans used the internet and television as their media consumption of MMA. Although the study was limited to a local MMA event, insights into the motivation of the South African MMA fan were discovered as well as how media is consumed differently by different genders.

**Keywords:** Mixed Martial Arts (MMA), media consumption, spectator motives

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# CHAPTER 1: INTRODUCTION AND STATEMENT OF THE PROBLEM

## 1.1 Introduction

The Mixed Martial Arts sport has grown rapidly over the past ten years. According to Seungmo *et al.* (2008:157) in the USA the Ultimate Fighting Championship (UFC) draws better television ratings than the National Basketball Association (NBA). With the pay-per-view industry generating more than \$200 million in 2006, it is clear that this sport warrants exploration.

MMA (Mixed Martial Arts) was established by Sensei Johan McCain in 1996. He mainly advertised the sport through the violence angle and this brought MMA almost to a standstill in 2000, as most states banned the sport due to the perceived brutality. Many believed MMA would not survive as a sport (Wallace 2008:62).

In 2001, Zuffa bought the UFC brand for a mere \$2 million; he then spent \$44 million on marketing and started introducing live events in Las Vegas. Umstead (2009:18) reported after an interview with UFC president, Dana White, that changing the marketing strategies launched UFC to what it is now - a huge sport. Currently UFC draws more than two million viewers per episode and has established the brand as one of the most popular and recognizable sports franchises in the USA.

In 2009 the first South African MMA live event was held at the Coca Cola Dome, Johannesburg. EFC Africa (Extreme Fighter Championship) was launched earlier that year and has gone from strength to strength since then (EFC 2009:1).

EFC Africa has been awarded the "Promoter of the Year" award at the MMA ITC Awards (EFC 2013:2), for the second time in 2012, rising above all international productions around the globe. This placed Africa's talent in the spotlight. EFC's aim is to move further into Africa and promote the sport through live events and television broadcasts.

In previous studies, such as the one conducted by Suengmo *et al.* (2008:157), in the USA and Korea the aim was to measure what motivated spectators to attend and watch MMA events. Through those studies it became clear that sports interest, fighter interest and drama were the attractions for the American audience, whereas Korea's motivations were adoration, sports interest and drama (Seungmo *et al.* 2008:158). No studies have been done on the growing MMA market in South Africa. By understanding the local market, appropriate marketing strategies could be created to penetrate the new market effectively.

Certain questions arise when evaluating the fans' motives:

- Will a third-world country be more receptive to the MMA sport due to the aspect of violence so prominent in it?
- Or is crux of the matter the lack of a male figure in our society today, where boys and men are stripped of their manhood (Bonde 2009:1523)?
- Do men long for some kind of release or outlet for aggression (Roux 2009:22)?
- Do South Africans long for an icon or a hero in these fighters, like Bruce Lee or Chuck Norris (Roux 2009:48)?

With four to five live events per year, at a cost of R225 up to R1290 per ticket, and an attraction rate of more than 5000 spectators, this is a big money-maker. The MMA market consists of merchandise, clothing deals with Mr. Price, sponsorships with Everlast, live television agreements with E-TV and NuMetro and even their own magazine: *Fighters only* (EFC 2013:2).

The various media play a big role in the growing of the sport, Twitter, Facebook, YouTube and television broadcasts all contribute to fans gaining access to the MMA sport. This study examined the South African MMA fan's needs and demands and would give an insight into new marketing opportunities and the media consumption by the spectators, as previously done by Seungmo *et al.* (2008:167) in other countries.

## **1.2 Objectives of the study**

### **1.2.1 Primary objective**

The primary objective of the study has been to identify the motivational factors of South African MMA fans and how these influence their media consumption and spending on MMA merchandise.

### **1.2.2 Secondary objectives of the study**

The secondary objective is to compare the cross-national differences in the motivational factors among South Africa, America and Korea. It is clear from the rapid increase in the growth and interests associated with the sport, that the sport is heading for long-term success, as competition between different sports is strong and this creates the need to better understand the motivators attracting fans to these events, (Seungmo *et al.* 2008:110). It is, however, argued by Wallace (2008:60) that MMA will run its course and eventually shrink and die as a sport.

Against this background this study aims to answer the following research questions:

- What motivates the South African MMA fan to maintain and increase the attraction rate and make MMA a long-term player?
- Which forms of media are the MMA fans consuming and what are they spending on MMA merchandise?
- What are the cross-national differences of the spectators of South Africa, when compared with the American and Korean markets?

Questionnaires were filled in at a local MMA event through an online web link, in the south of Johannesburg, to test the spectator motives and establish why South Africans are so interested in this sport. Participants could complete the survey while at the event on a smart phone or computer. Primary data were collected by the researcher and compared to secondary data of similar studies in America and Korea. A combination of nominal, interval and ratio measurement instruments was used.

### **1.3 Motivation for the study**

The main focus of this research has been to clearly understand the motivation of the South African MMA fan. Marketers need to understand the local market first, before attempting to expand further into Africa – a typical question would then be which media should be used and to whom it must be directed. The differences in the motivational factors of the nationalities might give an insight into our local market and how to expand the industry. Live feeds are available through social networking, keeping fans informed and up to date with the MMA community (Young 2010:59) and this creates a huge opportunity for direct marketing and building of brands.

### **1.4 Research methodology**

The research method consists of a literature review and an empirical study

#### **1.4.1 Literature review**

The literature was consulted on spectators' motives and media consumption, and was assessed through the use of previously published studies (Funk *et al.* 2002; Kim *et al.* 2007; Trail & James 2001; and Wann 1995). Similar questionnaires were used to identify the motives of the South African fans (Seungmo *et al.* 2008).

#### **1.4.2 Empirical research**

Permission to use this questionnaire was obtained by e-mail (see Attachment 1). Because the questionnaire was previously used by Damon, its reliability and validity are not in question.

A questionnaire was used from a previous study conducted by Damon, who is the acting Dean and Professor at the College of Health and Human Services, Troy University. This questionnaire was used to measure the spectator motives in the USA and Korea. The questionnaire was then set up online through the Survey Money service and a web link was created for easy access to the questions ([https://www.surveymonkey.com/s/MMA\\_study](https://www.surveymonkey.com/s/MMA_study)).

This online web link was sent to all participants at the event, which they were asked to complete easily on their smartphones or computers through the use of social

media. MMA social media groups can easily make any link or questionnaire accessible to many fans.

A set of factor analyses and Cronbach internal consistency analyses were conducted to interpret the data collected. A correlation analysis of the motivational factors was conducted to examine the associations among the motivators.

### **1.4.3 Scope of the study**

#### *1.4.3.1 Population*

The population of the study was identified as all fans of MMA in South Africa.

#### *1.4.3.2 Sample*

Fans who attended the local amateur MMA event held in June 2013 in Johannesburg were used as a sample for the study. There were 78 fans who attended this event, out of which 53 responded on the link (67.9 % response rate), and 51 were usable for the study.

## **1.5 Limitations of the study**

The study had the following limitations:

- The population was limited to one event at a specific location and cannot be generalized.
- To get a usable sample size that was willing to complete the structured questionnaires or conduct an interview was challenging.
- The cross-national difference study was conducted in 2008 and some motivational factors could have changed since then.
- Limited information available on the South African MMA market.

The primary limitation of the study is that only current fans who attend the South African events were surveyed. Limited financial figures were available and only estimates could be obtained from the fans. Previous MMA motivational studies of American and Korean fans were conducted in 2008.

It is assumed that respondents would be fans of MMA and would spend money on merchandise, events and obtaining skills through training. It is also assumed that the 2008 study data are still valid (Seungmo *et al.* 2008).

## **1.6 Conclusion**

By knowing which factors play an essential role in the impact of MMA on fans in South Africa, marketers and brands can appropriately position themselves to capture and grow the local market. Further research must be done in the South African market to create a path to successfully grow the sport into Africa.

Martial arts have gained a worldwide fan base and at the same time began to “Americanise” the sport (Filipiak 2010:51).

It must be said that the modernisation of martial arts has started to break the bonds with the original holistic and complex character of Eastern martial art forms.

We must accept the fact that the process of modernised combat sports has helped mixed martial arts to be accepted and grown into becoming the current sports giant that it is.

Chapter two explores and discusses MMA in detail and also looks at the different sports motivational factors. These factors are then discussed and evaluated against the local markets results, leading to recommendations concerning the future.

# CHAPTER 2: LITERATURE REVIEW: MIXED MARTIAL ARTS

## 2.1 Introduction

This chapter offers a discussion of the MMA style and explains the current MMA climate from the literature. Diagram 1 below (Bruce Lee, Tao of Jeet Kune Do, 1975:34) will give a schematic overview of the discussion to follow on the origin and growth of the MMA sport. Mixed Martial Arts as a sports code has been very controversial over the past decades and has struggled to be accepted as an individual sport.

Timeline of major events in MMA history	
Ancient Greece	Pankration
Late 19 <sup>th</sup> century	Hybrid martial arts
Late 1880s	Early NHB and Mixed Style contests
1899	Judo interests grow
Early 1900s	Merikan contests
1920s	Early vale tudo and Gracie Challenge
1960s and 1970s	Bruce TV and Jeet Kune Do
1962	Robert Beal/Fred Degerberg and Bushido
1970s	Antonio Inoki and Ishu Kakutōgi Sen
1976	Mohammed Ali contests in mixed fight
1989	First professional Shooto event
1991	First Desafio (BJJ vs. Luta Livre) event
1993	Pancrase TV
1993	UFC TV and fights starts in Denver
Mid/Late 1990s	International Vale Tudo
1997–2007	PRIDE FC and UFC era
2000	New Jersey SACB develops Unified rules
2001	Zuffa buys UFC
2005	The Ultimate Fighter Debuts
2005	TV Army begins sanctioning MMA
2006	UFC dominance and international growth
2006	Zuffa buys WFA and WEC
2006	UFC 66 generates over a million PPV buys
2007	Zuffa buys PRIDE FC
2008	EliteXC: Primetime gains 6.5 million peak viewers on CBS
2009	Strikeforce holds 1 <sup>st</sup> major card with female main event
2009	First South African EFC event held at Coca Cola Dome
2011	WEC merged with UFC
2011	Zuffa buys Strikeforce
2011	Live broadcast on E-TV
2011	UFC on Fox gains 8.8 million peak viewers on Fox

There are many forms of martial arts and there has always been a battle as to which one is the best or greatest form or style:

- *Muay Thai* is to be believed to be one of the most brutal fighting styles in the world (Loong 2011:34). Its origins date back hundreds of years to when the Thai armies needed to protect their borders.

This fighting style is also known as the “science of eight limbs” (Loong 2011:33). It is native to Thailand and makes use of hands, elbows, knees and legs. Muay Thai has grown in popularity due to mixed martial arts absorbing their techniques into their arsenal of lethal skills.

- *Judo* was very popular in the 1960s in the Western regions (Bonde 2009:1524). This is a grappling fighting style, where you pin your opponent to the ground. People have always loved fighting and it has drawn huge crowds. In 1911, more than 35 000 fans were drawn to watch the rematch between Fank Gotch (1878-1917) and Georg Hackenschmidt (1878-1968), Hlinak (2009:11). This match bout came to \$87 000, over \$1.8 million in today’s currency.

Many cultures have been participating in different forms of grappling since before recorded history (Hlinak 2009:12). Members of the warrior class could only demonstrate their masculinity through some form of fighting style when there was no war to fight.

The western world enjoyed judo as a smaller man or even a woman could defeat a larger opponent through making use of the proper skills (Hlinak 2009:14).

- In 1970 *Karate* became a serious competitor for Judo. Karate makes use of striking to knock your opponent down (Bonde 2009:1524).
- The art of *Tae Kwon Do* was introduced to the Western world in the late 1980s; the aim is to kick at specific protected parts of the body (Bonde 2009:1524).

- *Aikido* is known as a softer martial art. In this style you use the opponent's strength to neutralise the attack (Vertonghen & Theeboom 2010:535).
- The techniques of *MMA (Mixed Martial Arts)* are divided into two sections: striking and grappling. Striking includes moves such as punching, elbowing, slapping, kicking, kneeing or stomping within a certain rule bracket (Ferguson 2011: 29). Grappling uses techniques like chokeholds, strangling holds, hold downs, pins, take downs and throws. Under the MMA rules, the winner is the individual who shows more control over the cage, his opponent and if he/she can inflict more damage than he/she receives (Ferguson 2011:28).

According to the studies done by Ferguson (2011:33), matches ending in a chokehold submission were mainly found in the light-weight division (25.34%) and only 7.18% of the chokehold endings were in the heavy-weight division. The average percentage for an MMA fight to end in a chokehold is only 17.89% (Ferguson 2001:33).

It is believed that the fighting style of Bruce Lee named *Jeet Kune Do* was the true beginning of the formless form of fighting styles (Schneiderman 2009).

Jeet Kune Do favours formlessness so that it can assume all forms and, since it has no style, Jeet Kune Do fits in with all styles. As a result, Jeet Kune Do uses all ways and is bound by none and, likewise, uses techniques or means that will serve its end. In this art, efficiency is anything that scores (Bruce Lee, Tao of Jeet Kune Do).

Bruce Lee was of the opinion that you cannot view a street fight out of the eyes of a boxer, kung-fu man, karate, wrestler, judo or any other form of fighting art practitioner. He believed that you can only see the true fight when fighting styles do not interfere. Bruce Lee (1975) described Jeet Kune Do as a tool of formless form.

Hlinak (2009:15) agrees with this as he too has found that mixed matches were tremendously popular in the early 1900s. Higher billings could be charged and greater media attention was received on these fights.

According to the *Wisconsin Medical Journal*, martial arts have been practised for thousands of years and have been modified for sport, self-defence and recreational purposes (Woodward 2009:40).

In 2000 the medical costs among older people due to falls were more than \$19 billion only in the USA. Interventions were then launched to reduce this number and one of them was the focus on balance and coordination. The practice of martial arts has a strong focus on balance, breathing and coordination in all its movements.

Martial arts have been linked to general well-being, a pathway to self-mastery, anger management, self-respect and courtesy to others ((Woodward 2009:41). Thus the practice of martial art is a common and important form of exercise for many, irrespective of age and sex. This is supported by Vertonghen and Treeboom (2010:528), who found that martial arts could play a role in positive learning for the youth in general.

Woodward (2009:40) has found that martial arts can have a positive impact on people practising it, such as:

- Better overall health and balance,
- Improved sense of psychological wellbeing,
- It does not promote aggression, and
- May be used as a treatment for youths who are prone to violence.

These views have been contradicted by Pearn (1998) who is of the opinion that there is no place for a sport, among the youth, that has a primary goal of inflicting physical damage on an opponent.

The term *Martial Arts* is used to summarise different disciplines, for example:

- Karate and taekwondo are typically striking with feet and fists.
- Judo and jujitsu fall under the grappling styles with joint locks and throwing techniques.
- Mixed Martial Arts are the modern style that blends all of these different styles together.

Research indicates that Martial Arts do not generally promote violence in individuals or attract violence (Woodward 2009:41). This is confirmed by the study done in America where violence was only fifth on the motivational scale for spectator motives (Suengmo *et al.* 2008:113). The current study will indicate the motivation of the South African fans and whether violence is ranked higher on the motivation scale.

It has always been believed that Martial Arts are a very important form of exercise. While any form of exercise is good for a person; Martial Arts can also improve a sense of psychological well-being and provide a self-defence tool (Woodward 2009:42).

Professional trainers and coaches will gain extensive skills and knowhow in MMA and will tend to create new training and coaching systems. The coach will need to do some research into techniques, styles and human behaviour (Ferguson 2011:34). This will build a foundation for practices, fight camps, curricula and research data.

Fighters often changed from true basic techniques to flashier and more appealing moves to attract crowds and build a fan base (Ferguson 2011:34).

## **2.2 Literature review of MMA**

According to Seungmo *et al.* (2008), Mixed Martial Arts as a fight genre, has grown and captured the attention of television viewers, sports fans and participants across the world in recent years. MMA is a fighting style which combines various martial arts disciplines such as wrestling, boxing, jiu-jitsu and kickboxing. Fighters win by either knocking the opponent out, forcing him into submission or by the judge's decision. Martial Arts has developed a worldwide appeal and at the same time a trend has been noticeable towards a seemingly "Americanized form of globalisation" of the old Eastern fight styles (Filipiak 2010:51).

Fighting has always been a kind of manhood test, where boys and men are taught certain masculine codes of behaviour (Bond 2009:1523). Family structures do not always offer boys the opportunity of finding masculine figures of identification within their immediate surroundings; the great threat was the feminized weak society

gradually coming into existence in the new white-collar workers' movement (Bond 2009:1524).

This is why heroes and icons are followed and created by everyday men and women. George Washington and Abraham Lincoln were both well-known for their grappling skills (Hlinak 2009:11). According to Burdick (1999), even President Theodore Roosevelt was a great admirer of Judo.

It is believed by Roux (2009:42) that participation in sport discharges one's aggressive behaviour in controlled situations. This argument is part of the *Catharsis hypothesis*: The term *catharsis* derives from the Greek word "kathairein" which means "to cleanse". The hypothesis postulates that through the expression of aggression, bottled-up emotions can be discharged or purged (Berkowitz 1970:106) and discharged harmlessly.

March (1975:8), states that aggressive behaviour will be copied because it demands respect, even when such behaviour is condemned in society.

Agreeing with this statement is Paul Robie, a pastor at South Mountain Community Church, who works with young troubled men who did not know their fathers or only knew the angry and aggressive way to survive in society and deal with everyday life (New York Times 2010). The goal of Pastor Robie is to inject some machismo into the Church and the image of Jesus. Students will realise that they can fight for good, redirecting the aggressive behaviour to create a better life.

Over the years Mixed Martial Arts have had many definitions and stigmas associated with the fighting style. According to Frommer (1978) the term Martial Arts refers to the military. The connotations of the term "Martial Arts" would be "the art/skill related to military". Recent definitions describe the sport as a combination of techniques from a host of fighting styles – from Brazilian jiu-jitsu to Thai kickboxing (Scheinderman 2009).

Cheever (2009) defines it as a challenging form of competitive combat in which two opponents enter a ring or cage, each wearing only a pair of shorts and compact 4-ounce gloves, and fight with the goal of winning. Politicians like Senator John

McCain of Arizona had the sport banned and described it as “human cock fighting” (Krauss 2004). Another opinion is that MMA is styled after the *Vale Tudo* (Portuguese for “anything goes”) matches in Brazil (Peligro 2003).

In 649 B.C., the sport of *pankration* was introduced into the Olympic Games. The name is a combination of two Greek words, pan, meaning “all” and kratos, meaning “powers” (Seungmo *et al.* 2008). Pankration was described as a combination of boxing and wrestling. It is believed that this was the origin of MMA.

35 years ago, Bruce Lee’s high-flying techniques and combinations of fighting styles popularised martial arts in America (Schneiderman 2009). At the time, the fight style was revolutionary for its fusion of different styles, as cross-training in different martial arts styles was unthinkable in the 70s.

Even Mohammed Ali took part in a mixed fight contest against the Japanese professional wrestler, Antonio Inok. It took place in 1976 and a big crowd watched the fight in Tokyo. The fight had very specific rules and the result came to a draw as some fouls reduced Inok’s points. Spectators did not accept the draw and did not understand the rules. Inter-fight style matches were not popular at that stage, however, as they were called the Pioneers of MMA (YouTube 2011).

According to Greenberg (2000) and Warren (1993), Martial Arts organisations have increased dramatically over the past three decades. Grady (2002) states that Martial Arts have gained huge popularity in movies and sporting events. Recent movies include titles like “Redbelt”, “Warrior”, “Rocky” and “Here comes the Boom”.

It is called “fightsploitation”, where the basic template includes blood and porn aspects. It is believed, however, that these types of films have hit a commercial ceiling (Peisner 2013).

In 1993 the first professional UFC Mixed Martial Arts bouts were held in Denver, USA. The sport had limited rules and struggled because of all the negative publicity of violence and brutality (Seungmo *et al.* 2008:110).

Wallace wrote in the *Black Belt Magazine* in 2008 that he believed that MMA had run its course and would start to shrink. He considered MMA fighters as brawlers and not true martial arts specialists.

Mixed martial arts were viewed as too risky for corporate America, but the huge success of UFC has changed these perceptions since the “brutal, no rules” era (Schneiderman 2009).

As stated in the introduction, in 2001 the UFC franchise was sold to Zuffa. The sport was repositioned and great effort was put into changing the perception of MMA (Seungmo *et al.* 2008:110). This helped to legitimize the sport once again in many USA states. Bod Reilly, a Democrat from Albany, believed that if the rules of MMA changed with the violence taken out, he would find it acceptable and the sport could then be legalised in New York (Eligon 2012).

Fighters were now forbidden to head-butt, stomp or knee an opponent on the ground. No striking was allowed to the throat, spine or back of the head. Fighters were to fight in predetermined weight classes and could only have one fight per night.

Since then the sport has experienced exponential growth in the last couple of years; the main fights draw more than 1.6 million viewers in the 18-34 year old male demographic, which is the primary target of UFC.

The first EFC local event was held at the Coca Cola Dome on the 12<sup>th</sup> of November 2009. It took about two years for this fighting style to take off. In February 2011 MMA fighting events were broadcast live for the first time and a deal was signed with NuMetro Cinema to screen events live throughout the country. The main card fights are also broadcast through E-TV and EFC has since then set its targets on the wider African market.

We do not know much about the South African MMA fan and this underlines the relevance of the study. Why is South Africa so interested in MMA? The wave of fans is just spreading through Southern Africa as fighters of Angola, Nigeria and

Congo are challenging our local fighters. Currently the light-weight title holder is Demarte Pena from Angola (EFC 2013).

Over the past few years the popularity of MMA has exploded, and the combination of elements of boxing, kickboxing, wrestling, jujitsu and other disciplines has had fans marvelling at the skills of fighters (Gregory 2007:40). The production value of EFC, the crowds, fans, events and television ratings are beating Europe hands down (EFC 2013). The challenge is to identify how to capitalize on MMA enthusiasms, and formulate events and merchandise that will appeal to those who are part of the subculture of MMA (Kim & Chalip 2010:308).

Media has often portrayed martial arts in a very negative way, glamorising “Hollywood” violence (Woodward 2009:41). This brings about a misconception that martial arts attract violent individuals, promoting aggression and causing injuries.

Studies have been done on types of injury in mixed martial arts competitions (Bledsoe, Hsu, Grabowski, Brill & Li 2006:140). It was found that older fighters were at a greater risk of injury than those who had lost a match due to a technical knockout or knockout.

MMA did have a high rate of overall injury, but this is in line with other striking combat sports. A different study has found that most martial arts injuries are minor although they are frequent (Woodward 2009:40). Risks can be reduced by limiting inexperienced students, as well as using the protective and right equipment, like mouth guards and gloves.

Physicians should know about the benefits and risks of martial arts, common injuries that occur during participation and the prevention thereof. Children with ADHD or who are at risk of violence may be recommended to take part in martial arts as a form of treatment (Woodward 2009:42). Patients suffering from depression or sleep disturbances can also be referred to take up martial arts just as a form of exercise.

When comparing technical knockouts (TKOs) between professional boxing (38%) and MMA they are similar (Bledsoe *et al.* 2006:140).

MMA does have a mechanism to stop the fight at any time through performing a “tap out”; the fighter can decide whether he wants to end the fight at any time. It is important to note that sports codes involving grappling have shown much lower rates of injuries (Bledsoe *et al.* 2006:140).

Bledsoe *et al.* (2006:141) are of the opinion that MMA should be properly supervised by trained professional referees and ringside medical personnel. The rules implemented - such as weight classes, limited rounds per match, specific fighting gloves and banning of various moves - should be firmly enforced.

Instructors should also ask students to leave the club if their behaviour or attitude is not compatible with the philosophy of the club. Thus, students who have reached an advanced level of success may have been selected as being less aggressive (Woodward 2009:41).

Decisive restraint of aggressive behaviour in the club and on the street is part of martial arts (Cynarski 2006:57). This is an ethical code that is enforced by the instructor to the students. Discipline, rules, completing a task and determination are key aspects of any martial art style.

A number of personal styles of fighting have appeared over the years, but most were based on someone’s personal ambitions or greed and had never risen to a truly great sport (Cynarski 2006:58).

### **2.3 Literature review of sports motivation**

A discussion is offered of the different sports motivators and how different nationalities might influence the importance of each motivator. Researchers have identified motivational factors in previous studies and have developed scales to measure all the different motivational factors of sports consumers (Funk, Mahony & Ridinger 2002; Kahle, Kambara & Rose 1996; Milne & McDonald 1999; Trail & James 2001; Wann 1995).

Trail and James (2001) evaluated the previous scales of Wann (1995) and Milne and McDonald (1999) and developed the Motivation Scale for Sports Consumption (MSSC). This scale features nine factors to measure why sports fans attend sports

events. These factors were vicarious achievement, acquisition of knowledge, aesthetics, social interaction, drama, physical attractiveness of the participants, escapism and physical skills of the participants (Seungmo *et al.* 2008:111).

Even though previous studies have provided the motives of general sports consumers, James and Ross (2004) indicated that sport-specific motivators are still lacking. Research shows that motives of sport consumers may differ regarding the type of sport, for example gymnastics versus mixed martial arts. Seungmo *et al.* (2008) identified the gap in the analysis of spectator motives of mixed martial arts fans and developed a new instrument incorporating previously identified factors as well as adding additional motives unique to MMA.

According to Bond (2009:1525) the cowboy or the ninja attracts us through excitement, the danger and the man-to-man combat. To the modern boy the samurai becomes a hero. With modern civilisation, people do not need to defend themselves anymore and this brings about a feeling of indifference and lack of meaning (Bond 2009:1526).

Our modern society has also been termed “the fatherless society”, as broken homes have become the norm. Hlinak (2009:12) states that in the absence of war, sports codes involving fighting become the sole means by which people can demonstrate their masculinity. Martial Arts bring in a sense of order and rules; our society consists of boys and young men, who are confused and rootless (Bond 2009:1534). With the main market of MMA focused on 18-34 year-old males, it could be assumed that their engagement in martial arts is a signal for limits, but it must make them feel alive and masculine.

“We have a lot of troubled young men, who grew up without fathers and they’re wandering and they’re hopeless ...” says Paul Robie, 54, a pastor at South Mountain Community Church in Utah.

Many community churches are now part of some ministry that has started to incorporate Christianity with mixed martial arts, trying to teach the boys and young men to fight for what is right and good (Schneiderman 2010).

Women have always been a contradictory topic in any martial art style. Martial Arts have always been seen as a “hazardous sport” (Bonde 2009:1524) and not appropriate for women and girls. The sexes are kept apart during most martial arts performances and competitions (Bind 2010:1531). Most studies have only been conducted on a male audience and females might have showed different results (Vertonghen & Theeboom 2010:534). Wallace (2008:62) has a very strong opinion about women in fighting, he is against such fights. He does not want to see girls beat each other up.

Studies have shown that breast cancer survivors who took part in “tai chi” practice gained self-esteem compared to those in a control group (Woodward 2009:41). Groups and events are still growing and pushing for women in fighting, despite all the negative views (Gregory 2007). Fatal Femmes Fighting Championship, an all-female mixed martial arts event, is a very popular fight event among MMA female fighters. Gina Carano, a female fighter for UFC, draws more traffic to the website than any male fighter (Gregory 2007), but it is still believed that women fights will only be sold as entertainment for men.

To date, many studies have been done to test the socio-psychological outcomes of martial arts, and the conclusions have ranged from very positive to very negative (Vertonghen & Treeboom 2010:534).

A number of trends have also changed in the research of martial arts practices (Vertonghen & Treeboom 2010:534):

- A shift towards younger participants,
- More emphasis on the relationship between marital arts practice and aggressive behaviour, and
- More studies are done on western martial arts.

Social development changes are in line with these shifts as there is an increased popularity of martial arts among the youth who are socially vulnerable (Vertonghen & Treeboom 2010:534). The presumed effect cannot be attributed solely to mere sports participation as other factors will have an influence as well.

## 2.4 Conclusion

Martial Arts have been institutionalised over the years to be more acceptable to Western society (Cynarski 2006:55).

Aspects that contributed to this are:

- The acceptance of regulations and foundation for new sports codes,
- The establishment of legal regulations,
- The internationalising of Eastern martial arts,
- Organisational development,
- The introduction of students' and masters' degrees in MMA,
- Training of instructors in the teaching of Eastern martial arts,
- New forms of martial arts, for example MMA.

Although various other styles have been loved by great names like George Washington and Abraham Lincoln, Mixed Martial Arts have struggled to be seen as a sport and to be accepted by most fighting styles. As stated above, MMA as a sport has now got much needed attention to be able to be recognized and to qualify as a legitimate sport. The physical closeness, the smell of a body close to you, of sweat, perhaps blood and a pumping breath give MMA its particular aura. In our society where physical contact is a rarity, martial arts will always intrigue, fascinate and outrage people (Bonde 2009:1533). Fighting has always been and will always be part of human nature.

The process of modernising Eastern martial arts has changed the connection with philosophical ideas and religious thoughts. We have to accept that modernisation creates new organisations and sports codes (Filipiak 2010:50). MMA has gained worldwide spectators from every background, culture and belief.

The regulations of combat sports have been evolving and moved into a space where it appeals to the public; it must be safe for the fighter, comprehensible to the audience and appropriate for broadcasting (Cynarski 2006:56).

If MMA promoters are to build on their success, especially in the South African market, they need to understand what is attracting the South African MMA fan to the

events. Marketing in the sports arena is getting increasingly competitive and to grow a fan base and keeping their interest will always pose a challenge.

From the literary review it seems that what motivates the MMA fan is not certain and that we need to establish the root cause of why fans are so attracted to the sport. Ultimately the results of the study will be a tool for sports marketers to develop strategies to attract and retain MMA fans specifically in the South African market.

According to Adam Geisler, the president of Everlast, the growth of mixed martial arts is a great opportunity for the brand to extend to younger consumers.

Appropriate marketing strategies can give great insight into and stimulate growth in the untapped African market (EFC 2013).

# CHAPTER 3: RESEARCH METHODOLOGY

## 3.1 Introduction

The purpose of the study was to identify and examine the spectators of the emerging sport of Mixed Martial Arts, by exploring the motivations and experiences of consumers attending MMA events.

The study was also able to identify the differences in motivations between male and female spectators.

An existing questionnaire was used as measuring instrument; the questionnaire was developed specifically to measure the motives of MMA fans in a study conducted in the USA (Seungmo *et al.* 2008:112). Written permission was obtained from Damon P. S. Andrew, Ph.D. Dean and Professor, at the College of Health and Human Services at the Troy University in February 2013 to use as the developed tool for the South African study.

## 3.2 Selection of respondents

Fans who attended a local MMA event were used in this study.

## 3.3 Gathering of data and respondents

The study measured spectator fans of MMA and thus is limited to existing or current fans. Data were collected at a local amateur MMA event, held in June 2013, in a suburb of southern Johannesburg. Fans at the event were an ideal sample as this was the first event held in this area and it was a good indication of the growth of the sport. An online web link was sent to all entrants to complete on their smartphones or computers.

There were 78 attendees and 53 responded on the link (67.9% response rate), 51 were usable for the study.

Gender analysis was included in the study, with the ratio of males (n = 43 for 81.1%) to females (n = 10 for 18.9%) being available.

The age group with the most participants was the 18-28 years age group (51.9%), followed by the 38-48-years age group (22.6%).

The level of education among the participants varied, as 32.1% had a matric, 26.4% had a certificate or diploma, 17% had a degree and 15.1% had a post-graduate qualification.

The majority of the crowd was White (75.5%), 11.6% were Indian and 7.5% were Black.

54.7% were single and 35.8% were married.

What was interesting is that 28.3% of the participants fell in the R20 000 – R30 000 income per month bracket and 24.5% in the over-R30 000 bracket.

49.1% indicated that they would not spend more than R300 on an MMA event, 28.3% would spend between R300 and R600 and only 3.8% would spend over R1500 per event.

An online link was sent to the respondents and stored on an online database.

### **3.4 Measuring instrument**

The standardized questionnaire that was used was specifically designed to measure the motives of MMA spectators through a Likert scale by Dr. Damon of the Troy University. The fan motives were measured by twelve factors: Aesthetic Quality, Sports interest, Drama/Eustress, Socialising, Vicarious achievement, Fighter interest, Adoration/Hero, Violence, Escape, National Pride and Economic Factors.

Four steps were followed in the development of the instrument:

- (1) Ten motives were identified based on the previous studies done,
- (2) Data from a representative sample were gathered from a local amateur MMA event held in June 2013,
- (3) A seven point Likert scale was used starting with Strongly disagree (1) and ranging to Strongly Agree (7)

- (4) Items were added to gather demographic data, MMA experiences and events and media usage.

### **3.5 Description of the questionnaire**

#### **3.5.1 Fan motives**

The motives scale developed by Kim *et al.* (2007) for the sport of MMA was adopted for this study. Two additional items – fighter interest and organisational interest – were added to the original list. The fan motives under investigation are:

- (1) **Drama** (Funk *et al.* 2002; Sloan 1989; Trail & James 2001; Wann 1995). MMA fans are excited by a thrilling event, which happens in a very short time compared to other sports or by a close match where the fans cannot anticipate a result. They like it to not know what the outcome will be.
  - I enjoy the drama of close fights
  - I prefer watching a close fight rather than a one-sided fight
  - I enjoy fights where the outcome is uncertain
  
- (2) **Escape** (Trail & James 2001; Wann 1995). Sports fans watch sporting events in an attempt to temporarily forget their problems or to energize their life by escaping from their routine.
  - I attend fights to avoid the hustle and bustle of daily activities
  - Watching fights offers me an opportunity to get away from my everyday routine
  - Fights are opportunities to forget about my problems
  
- (3) **Aesthetic qualities** (Funk *et al.* 2002; Milne & McDonald 1999; Trail & James 2001; Wann 1995). Some hard-core MMA fans who know fighting techniques well enough enjoy set-up matches between well-trained fighters, with excellence and skill providing more than just a bloody fight between amateur fighters.
  - I appreciate the beauty and grace of MMA fights

- I like MMA because it is a form of art
  - Watching a well-executed athletic performance is something I enjoy
- (4) **Vicarious achievement** (Funk *et al.* 2002; Trail & James 2001; Wann 1995). While the average MMA fan does not participate in fighting often, the sport still attracts them. Watching MMA, fighters can provide fans with an awareness which they cannot achieve themselves.
- When my favourite fighter wins, I feel a personal sense of achievement
  - When my favourite fighter wins, I feel my status as a fan increases
  - I feel proud when my favourite fighter does well
- (5) **Socialising** (Funk *et al.* 2002; Trail & James 2001; Wann 1994). Sporting events are widely used to socialise with friends. MMA clubs are for fans who want to socialise with others who have similar interests, watch the matches with them and attend events. In local amateur MMA events, it is not hard to find fans coming to the event in a group to cheer for fighters from their own clubs. This brings the feeling of pride to the measuring instrument.
- Matches are great opportunities to socialise with other people
  - Interacting with other fans is a very important part of being at MMA events
  - I am the kind of person who likes to be with other people
- (6) **National pride** (Funk *et al.* 2002). National pride appears to have played a significant role in the success of MMA, especially where clubs are represented by fighters. Johannesburg clubs are always trying to dominate Durban club fighters.
- I attend MMA matches to support my country's fighters
  - Patriotism is a big reason why I attend fights
  - When my country's fighters win, I feel proud to be a citizen
- (7) **Economic factors** (Guttman 1986; Wann 1995). Due to the nature of a combat sport like boxing, MMA events have provided fans with the opportunity

to bet on anticipated outcomes of MMA matches; betting exchanges have been widely used in South Africa as a betting tool for fans.

- Betting or making bets is one enjoyable aspect of being a fan
- I like to bet on fights with my friends and colleagues
- I like MMA because I can bet on the fights

(8) **Adoration** (Lee, Kim, Greenwell, Andrew & Mahony 2006). This motive addresses the idea that spectators may be appealed to by athletes who are heroic and appear unbeatable. Fans love to wear their favourite fighter's clothes and logos.

- When a fighter appears to be unbeatable, he becomes a hero to me
- MMA fighters are my role models because of their highly advanced skills
- I watch MMA fights to witness greatness

(9) **Violence** (Coakley 2006; Goldstein & Arms 1972). Since MMA is considered to be more lifelike than other combat sports, the accompanying of violence by a one-on-one combat fight may be predominantly attractive to fans.

- I like MMA because it has more violence than other sports
- I like the matches more when they get bloody
- I enjoy the violence of MMA

(10) **Sports interest** (Funk *et al.* 2002). As an emerging sport, MMA appears to have been successful in stimulating sports fans' interest, and MMA fans are attracted to attend events and watch the match because they like the sport.

- I am a huge fan of MMA in general
- I consider myself a fan of MMA
- I care about the sport of MMA

(11) **Fighter interest** was adapted from Funk *et al.* (2002) as an 'interest in players' scale to address the fact that MMA fighters often fight for different organisations, clubs or trainers and fans may be interested to watch specific events to see the results thereof.

- I tend to follow individual fighters more than MMA organisations (e.g. UFC)
- I am more of a fan of individual fighters than of any MMA fight
- I tend to watch MMA to see my favourite fighters

(12) **Organisational interest** was also adapted from the Funk *et al.* (2002) 'interest in team' scale. In contrast to many traditional mainstream sports where there are few leagues and many teams, the MMA industry consists of more than ten organisations promoting individual events. This motive creates the possibility that viewers could be fans of the organisation endorsing the event.

- I tend to follow individual fighters more than MMA organisations (e.g. UFC)
- I am a huge fan of MMA in general
- I consider myself a fan of MMA

### **3.5.2 Media consumption behaviour**

Three media consumption items (adapted from Fink *et al.* 2002) were integrated into this study, and one was added for the South African MMA spectator. The items for media consumption were measured with a seven-point Likert scale fixed by Strongly Disagree (1) and Strongly Agree (7) and included:

- I read about MMA news over the internet,
- I watch MMA events on television,
- I buy the *Fighters Only* magazine every month,
- I watch MMA reality shows on television,

By identifying the main source of media consumption of the current spectator, marketers can advertise directly to the right type of person. Hitting the correct target group is always very important to have money well spent.

35.8% indicated that they read about MMA occasionally over the internet, while 28.3% said they frequently used the internet as a reading source on MMA.

34.6% of the participants use television to watch MMA occasionally and 29.5% frequently watch events on television.

What is quite interesting is that 49.1% indicated they never buy the *Fighters Only* magazine. Only 18.9% frequently buy the magazine published every month.

Watching reality MMA shows is fairly split at 24.5% for rarely, occasionally and frequently.

### **3.5.3 Demographics**

Demographic information, including gender, age, marital/household status, income bracket and educational level formed part of the questionnaire collected from participants.

### **3.5.4 MMA experiences and preferences**

In terms of the MMA experience, two items are included:

- How did you find out about Mixed Martial Arts (MMA) for the first time? and
- How many MMA events have you attended?

Preferences were measured by adding these additional questions:

- Which of the following is your favourite MMA event?
- Which of the following is your favourite weight class?

### **3.5.5 Data analysis**

A set of confirmatory factor analyses and Cronbach analyses were conducted to evaluate the construct validity and inter-item reliability for the respective data.

Descriptive statistics were calculated to assess overall demographics, MMA experiences, MMA preferences, MMA fan loyalty and motives to attend and watch MMA events. A correlation analysis of the sports motivation factors was conducted to examine associations among the factors.

### 3.5.6 Scale validity and reliability

As the questionnaire used to measure the motives of Mixed Martial Arts (MMA) has been standardized, reliability and validity could be considered to have been taken care of.

Three items for each motive were assessed with a seven-point Likert scale anchored by Strongly Disagree (1) to Strongly Agree (7).

Cronbach Alphas for each motivational factor and a correlations matrix among the identified motives are reported in Table 1. Cronbach Alphas ( $\alpha$ ) were computed for each of the motivational factors to verify internal consistency. The range of Cronbach Alphas ( $\alpha$ ) were from  $\alpha = 0.693$  (National) to  $\alpha = 0.923$  (Economic), therefore all the coefficients exceeded the recommended benchmark of 0.70 (Nunnally & Bernstein 1994).

Although most of the motivators were significantly correlated, the relationship between the Aesthetic factor when compared with the Economic and Violence factors was not significant.

**Table 1**  
Correlations among factors and Cronbach Alphas

Factors	Drama	Achievement	Escape	Economic	Aesthetic	Adoration	Violence	National	Socialising	Sport	Fighter
Drama	$\alpha = 0.787$										
Achievement	.479**	$\alpha = 0.892$									
Escape	.532**	.562**	$\alpha = 0.768$								
Economic	.101	.129	.280*	$\alpha = 0.923$							
Aesthetic	.539**	.495**	.351**	-.067	$\alpha = 0.841$						
Adoration	.294*	.712**	.549**	.204	.404**	$\alpha = 0.791$					
Violence	.251	.470**	.642**	.352**	.058	.695**	$\alpha = 0.909$				
National	.161	.615**	.303*	.345*	.235	.421**	.230	$\alpha = 0.693$			
Socialising	.413**	.546**	.357**	.160	.380**	.492**	.362**	.196	$\alpha = 0.720$		
Sport	.364**	.540**	.365**	.021	.700**	.454**	.106	.278*	.552**	$\alpha = 0.930$	
Fighter	.491**	.530**	.529**	.059	.390**	.616**	.499**	.228	.380**	.412**	$\alpha = 0.785$

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### **3.5.7 Preferences and motives**

Descriptive statistics were calculated for spectators' MMA experience, MMA preferences and motives to watch and attend MMA events.

It is clear that word of mouth was very important as 41.5% indicated that they found out about MMA from friends and 24.5% had been introduced to MMA through a fight club, due to the various clubs opening because of the sport's growing interest.

Participants were very clear on their favourite MMA event, and 86.8% preferred EFC above a local MMA event.

Participants were asked to indicate what weight class they liked the most. The results were fairly split as 28.3% chose heavy-weights (93 - 120kg) as their preferred weight class. 24.5% preferred the light heavy-weights (84 - 93kg) and 18.9% favoured the middle-weights (77 – 84kg) class. A mere 3.8% liked the bantam weights (57 – 61kg).

The average number of MMA events the participants attended was 8.3 events per person; this includes local and national events.

Table 2 shows the standard deviations and means for motivations per gender. The means for each motive ranged from a low for Economic Factor (M = 2.07) to a high for Aesthetic Quality (M = 5.32). Sports Interest (M = 4.88) was the second highest factor for the spectators attending MMA events followed by Drama (M = 4.87), Socialising (M = 4.64), Vicarious achievement (M = 4.59), Fighter interest (M = 4.48), Adoration/Hero (M = 4.43) and Violence (M = 4.20). Escape (M = 3.99), National Pride (M = 3.95) and Economic Factor (M = 2.07), however, were below the midpoint of the scale (M = 4.00).

**Table 2**  
**Means and Standard Deviations motivations by Gender**

	Total		Male		Female	
	M	SE	M	SE	M	SE
Drama/Eustress	4.87	1.39	4.95	1.20	4.80	1.58
Vicarious achievement	4.59	1.28	4.88	1.15	4.30	1.40
Escape	3.99	1.32	4.19	1.23	3.80	1.40
Economic Factor	2.70	1.49	3.20	1.50	2.20	1.48
Aesthetic Quality	5.32	1.30	5.31	1.09	5.33	1.51
Adoration/Hero	4.43	1.32	4.39	1.13	4.46	1.52
Violence	4.20	1.57	4.30	1.55	4.10	1.59
National Pride	3.95	0.97	4.17	1.01	3.37	0.92
Socialising	4.64	0.90	4.82	1.05	4.46	0.75
Sport interest	4.88	1.49	5.10	1.34	4.66	1.64
Fighter interest	4.48	1.35	4.51	1.20	4.46	1.58

M = Mean

SE = Standard Deviation

### **3.5.8 Gender differences**

Gender differences in the motivational factors were examined through a one-way ANOVA calculation and significant differences were found in the following motivational factors: Escape, Economic, National Pride and Sports Interest factors.

It is clear that females are not as fond of MMA as the male group; their media consumption also differs greatly.

Females would rather read about MMA over the internet or watch it on television, than to attend an MMA event. They would also not spend money to buy the *Fighters Only* magazine (Male M = 2.37 / Female M = 1.60). Males do like to attend the events as most indicated that they have attended more than 9 events on average, whereas the female spectators only attended 3 on average.

Males indicated that they had been introduced to MMA through clubs and magazines, whereas the females got to know about MMA through the internet and friends.

As the data indicate, females were more interested in MMA due to the Aesthetic Quality (M = 5.33), Drama/Eustress (M = 4.80) and then Sports interest (M = 4.66) factors. The males also preferred the Aesthetic Quality (M = 5.31) factor first, followed by Sports interest (M= 5.10) and then Drama/Eustress (M = 4.95).

### **3.6 Conclusion**

It is clear from the results that the media consumption was driven by three aspects: word of mouth was the most used, followed by internet reviews and research and then watching events on television.

The majority of the participants were young, white, well-educated, single men, most of which fell in a very high income bracket; the willingness to spend money on this type of event is, however, a problem.

Most chose the EFC events above local events and enjoyed the heavy-weight fights more. The average number of events attended was 8, which is a good indication that these were true fans who participated in the study.

Violence only ranked eight on the motivational factor scale, Aesthetic Quality and Sports interest were the highest.

Females preferred to watch MMA fights over the internet or television, whereas the males indicated that they would like to participate in the sport through clubs and events like EFC. Although both male and females were firstly interested in the Aesthetic Quality of the sport, the females were more interested in the Drama motive, where the males were captivated by the Sports interest motive.

# CHAPTER 4: RESULTS AND RECOMMENDATIONS

## 4.1 Introduction

This study contributes to existing research on sports fan motivation to provide a better understanding of the MMA phenomenon. With the growing popularity of MMA, it is very important to understand the motivators and characteristics of the fans in order to develop target-specific marketing strategies. It also contributes to the research in sports consumption motives in an individual sport in contrast to a team sport and also in a rather new sport than a well-established sport.

Taking into account the newness of MMA, it is important to understand who comprises the spectators' audience. Spectators in this study were mostly young males, which is currently the target market for the sport.

What is very interesting is that two-thirds of the spectators had a qualification higher than matric and 52% earned more than R20 000 per month; this contradicts the critics' claims that the sport only attracts a lower-class violent spectator.

Taking these findings into account it leaves a very promising prospect for the MMA marketers, as financial growth within the industry seems high in the advertising sector. What was interesting is that 49% indicated that they would not spend more than R300 at an MMA event.

This is an area that the industry can and must improve on, as the spectators have the money to spend, but need the appropriate material to make them want to buy it.

The next key point to consider is the methods through which people were introduced to the sport, considering that almost half had been introduced to MMA by friends, implying that word of mouth may be a very effective way to reach new customers.

As a quarter of the respondents learned about MMA through a fight club, this opens up opportunities to go directly to clubs and advertise the sport and merchandise at the local clubs to the fans.

In dealing with a hard to reach market segment, there are activities designed to generate word-of-mouth advertising, such as unique “once in a life time” experiences, special events and social marketing, using Twitter, Youtube and Facebook. These have often proved to be effective (Greenwell & Andrew 2007:159).

Television and the signing of fight nights with NuMetro played a key role in bringing MMA to the spectators of the sport. Reality series such as “The Ultimate Fighter”, were very important to reach new customers. The series could introduce the fight style, the fighters, the rules, fighting strategies and explain the training techniques.

This opens up the sport to newcomers and gives them insight into the sport, as this was only accessible to the most hard-core supporters. With most MMA fights being held in Johannesburg at Carnival City, the NuMetro deal made the event accessible to the whole country and even to the other Southern African countries. Fans can now take part in the live action at a very reasonable price and without having to travel. The live screening of the fights gives EFC the chance to move into Africa without having to invest greatly in infrastructure.

#### **4.2 Motivations to watch mixed martial arts**

The strongest motivational factor was the aesthetic quality. This clearly shows that MMA fans enjoy close fights and appreciate the strategy of the sport and the beauty of the moves. Fans are drawn to fights that are based on well-prepared strategies and fighters who trained very hard, not necessarily to the bloody brawling type of fights.

It was found that MMA fans prefer the heavy-weights to the light-weights; this might be related to the fighter’s brute strength and not just style and techniques.

MMA marketers should clearly continue to focus marketing strategies on creating exciting, unpredictable, good close fights. Fans should be kept on the edge of their seats. Certain fighters might even have a negative image to keep fans intrigued and engaged (Seungmo *et al.* 2008:116).

In addition marketers should provide a variety of fighting styles and MMA fans appreciate the grace and beauty of the expertise of fighters. Spectators who love

Kickboxing might be interested to see how a fighter with a Kickboxing background competes against a fighter with a Judo background.

Sports interest was the second highest motivational factor, followed by Drama. As an emerging sport, MMA seems to have been a very inspiring sport to young men and sports fans. Many participants indicated that they were interested in the sport itself and thus were attracted to attend and participate in events.

A couple of years ago MMA as a sports code was still very new and within recent years fans have come to the conclusion that they are MMA fans and would follow it as a proper sport. The sport has moved from a spectacle to a legitimate sport. Events such as EFC have educated fans and generated awareness about the rules, athleticism and culture associated with MMA. These results suggest that marketers, like EFC and *Fighters Only* magazine, should continue to educate their market about the fighting styles, techniques and the uniqueness of the MMA sport. The *Fighters Only* magazine has a section in each issue that explains, with illustrations, how to execute a certain move or grip. Fans can then understand and even practise the move to create a feeling of involvement between the sport and fans.

Contrary to the beliefs of critics, Violence ranked eight out of the eleven motivational factors. This could be why MMA did not take off as a sport when it was initiated. Marketers focused on the violent aspect of the sport and almost killed the sport. From this study it is clear that fans are interested in the Aesthetics, Sports interest and Drama factors more than the violence aspect.

During the start of MMA, marketers focused on the violence and “no rules” aspects, which led to the belief that MMA is “human cockfighting”, barbaric or gladiatorial violence (Wertheim 2007:54). When UFC was established, the promoters changed the rules and began to educate the general fan about the skill, technique, how to protect the fighter and the strategy behind each fight. Some believe that this had a good effect on the sport and by changing the view of MMA, it led to rapid growth in the sport.

There are no data available in South Africa on the interest in the sport in its infancy, but the fact that the aesthetic and sports interests were the strongest factors in the

current study could be an indicator that the decrease of the violent marketing did not have a negative effect on the sport but rather a positive one, as the growth in interest has shown. It is believed that this change caused the sport to change from a violent spectacle to a legitimate sport (Seungmo *et al.* 2008:117).

Although the sport is practised around the world and between various nations, national pride was second to last on the motivational factors. While Funk *et al.* (2002) used this motive in the study of team sports, it was of interest as South African fighters are competing against Angolan, Nigerian and even Egyptian fighters. Although the study took place at a local event with only South African fighters, most fans were introduced by the UFCs, EFCs and international reality shows.

It is unlikely that a fan would watch MMA based only on national pride, but it is plausible that it could be a strong factor to attend a certain fight or event. National pride was emphasized in event marketing during the growth phase of MMA and even used in South Africa today by EFC, trying to incorporate and get Africa interested in MMA. UFC has not given this much attention and has focused marketing efforts more on the individual fighters and their characteristics.

The low level of the national pride factor could give an indication that it did not play a major role in the development of MMA and in capturing fans. The results show that the focus of marketing on nationalities would not be an appropriate strategy for any local event. However, more research is needed in the African market to determine if national pride has any significant contribution to fan base expansion.

By examining the economic factor it was clear that betting on the fight was the lowest motivational factor for the spectators. The willingness to spend money at the events is also very low as indicated by the spectators. Marketers should take this information into account and use it to create merchandise that fans would want to buy - items that would grow and advertise MMA to potential new fans.

Results have, however, been calculated on a local event and the larger events might have a different outcome, especially where betting lines are posted, like Bet exchange at EFC events.

As noted earlier the lack of research on sport consumption motives for South African individual sports is an obvious gap in the spectator motive literature. More future research in the individual sport motivational factors is required. Sports interest received a very high rating in the study conducted and suggests one difference between individual and group sports: in team sports such as University rugby the spectator might not be interested in rugby but supports the University team or to identify with the University (Seungmo *et al.* 2008:117).

With individual sports types it seems that the spectators are rather interested in the individual and the actual sport, there is no team to support in tennis, MMA or golf. Thus the spectator is interested in the sport and would identify a favourite person to support in this particular sport. This suggests that event marketers must put more focus on the idea to see or experience the sport when marketing individual sports.

The high rating for Drama also suggests that there are differences between individual and team sports. Prior research into drama was mostly dealt with in team dynamics, where only one outcome is opposed. With only one outcome spectators' chances of seeing a dramatic event are limited. MMA events involve multiple fights over the course of a fight card, generating more results and a greater opportunity to witness dramatic and unexpected outcomes.

This is comparable to swimming and track events where spectators are sure to see more than one close finish.

Various achievements ranked fifth on the motivation factors list; this indicates that South Africans tend to follow and like a particular fighter. They like to track the fighter's progress and feel proud when this fighter wins. Spectators can also have multiple fighters to follow in each weight class, making sure that as the fight card progresses the spectators have an interest in each fight, which will add to the drama and excitement of the event. Instead of focusing on one team, fans can focus more on MMA as a whole, with a continuous involvement throughout the event.

In the demographic difference, the majority of the participants were male and MMA marketers have always focused more on the young male target market. For example, EFC advertises the event on SuperSport which is watched more by males

than females and ring girls are dressed in a provocative fashion to appeal to the male fans. Only a fifth of the participants were female, thus this could lead to an opportunity to expand in to the female audience.

Many of the females have been attending MMA events to spend time with their male friends, but this cannot rule them out as a future potential fan base, therefore, MMA marketers may want to incorporate the results of the present study in order to grow the interest among the female segment. The aesthetic quality and drama were reported the most important motivational factors by the female participants, and MMA promoters should thus promote high quality, evenly matched fights in order to grow the female spectator base.

Due to the growing nature of MMA, the various motives that predict media consumption are of great importance to marketers in order to grow the market rapidly. To attend live events may present certain geographical and financial limitations to some fans, while consumption of the sport through media reduces some of these constraints while still growing the revenue of MMA promoters through pay-per-view events like the NuMetro live screening of MMA events.

Furthermore, the MMA events are not as regular as other sports and this creates a need for other consumption norms for the sport. The analysis of spectator's motives gives insight into why the current MMA fan is watching events while not attending. Aesthetic quality and sports interest presented themselves as high predictors of media consumption by fans.

The results showed that most fans like to read about MMA over the internet and to watch fights on television, and 50% indicated that they did not buy the fighting magazines.

Fans seem to like reading about the fighters and MMA through social media, like Twitter feeds and Facebook photos, as this gives them direct access to their favourite fighters and to go with them on the journey of preparation for a big fight. This creates a build-up and anticipation for a live event. Fans also feel they know their fighter and the strategic plan when he steps into the ring on fight night.

Because MMA fighters in South Africa are predominantly male at this point, men might find it easier to feel a sense of triumph when their favourite fighter defeats an opponent.

### **4.3 Conclusions**

It is clear that MMA fans are drawn to the sport due to the aesthetic quality, sports interest and drama. They want to see and experience the glory of well-prepared fighters, skills, strategies and being part of a MMA group or identity.

Since drama is an important motivational factor, promoters should avoid mismatching of fights and seek to promote fights where spectators are uncertain of the outcome. Also drama was ranked higher than adoration, which suggests that MMA fans would rather see a close fight than a fighter dominating the other, a seemingly unbeatable fighter.

Martial Arts are a growing and important form of exercise to many individuals of all ages. The merging of different styles into one form, namely MMA, has brought together the whole fighting community, from Muay Thai, Judo, Boxing, Kickboxing and Jujitsu, and people who practise these various styles are all drawn to MMA. The uncertainty of a fight's outcome excites the spectators and builds suspense.

MMA serves as a good setting to determine the efficacy of the various martial arts styles and techniques. The events seem to indicate that there is not only one martial arts style that is effective across all others. As a result of the lack of one style beating the rest, MMA fans have learned to anticipate the possibility of a huge upset during a fight.

Stigmas tend to let you think of contact sports codes as violent and brutal, whereas this study has shown that this is not true. Women are still very much excluded in the fighting scene, although some have started to draw more attention to MMA than some of the male fighters. Female fights are still not generally accepted by society and disapproved of by many male fighters.

What is troublesome from the study is the lack of willingness to spend money at events by spectators; this would have to be addressed by marketers as revenue

opportunities do exist among fans, fighters and merchandise. Because of the dominating demographic group of young males social media is a very powerful tool that needs to be used in marketing the sport. Other potential fans also need to be approached to grow the fan base and thus create more opportunities to market.

As the sport grows and continues to attract fans, marketers can truly satisfy their needs by giving fans what they truly want. To do this more research is required in the motivational factors of South African fans nationally.

This study also sought to understand the motives that drive the media consumption. Relatively few people can attend EFC events in Johannesburg, thus creating a need to generate exposure and revenue through media consumption.

Slight differences in the way MMA is promoted in different countries may have a significant impact on the acceptance and growth in those countries. Africa is still a mostly untapped market and MMA is a very new sport. Africa also has its own fighting styles and these might even be incorporated into the MMA African scene.

#### **4.4 Recommendations**

Promoters should seek to educate spectators about a fighter's background, history, fighting styles and strengths. Developing an interest in fighters is very important, but not to a lesser opponent, as this will impact on the drama of the fight.

This study provides a profile of MMA fans in a local amateur event, thus future research should be at different levels including the professional arena because the motivational factors might influence consumers differently at various levels of MMA events (Mahony *et al.* 2002:12). For example, future studies should include not only local events, but also national and international spectators. It might prove that economic motivations can play an important role in attracting MMA fans to watch, attend and spend more on merchandise.

In addition, the study was conducted at a local South African event, but the MMA phenomenon is being experienced in several parts of the world. It would be interesting to see how a third-world country compares to the United States of America or an Asian country. The way the sport has been marketed to different

cultures and the acceptance of martial arts among cultures might also have a huge impact on motivational factors.

Previous studies also suggested that motivational factors for team sports might also differ from individual sports, and future research should examine these differences in order to better advertise to different event types.

Future research should include various segments of MMA to understand fans better. For example this study proved, contrary to the beliefs about contact sports, that violence is not the main attracting factor to MMA fans, but rather the percentage of spectators at the event who classify themselves as true MMA fans.

It could be possible that fans with a lower level of fan identity could be more interested in the violent part of the sport. By understanding the different levels and sectors of MMA fans, marketers could create strategies and differentiate between the segments to meet various customers' satisfaction.

National pride must be researched between the African countries, as within the South African context national pride as a motivational factor might not be ranked very high. Africa has always been busy with battles and cross-country sports competing, like soccer and athletics, MMA might bring forth a higher ranking for the National Pride motivational factor.

Research into the acceptance of women in MMA would also be very interesting, South Africa has a very conservative background and it would be interesting to see in future research if any of the perceptions of women in fighting has changed.

The use of social media as a marketing tool can also give greater insight into the marketing to MMA spectators. Social media should be researched more in depth to establish which tool would be most effective in reaching MMA fans.

Finally, MMA and other upcoming sports are the ideal arenas to explore factors that contribute to one's initial attraction or interest to a sport, while Funk and James' (2001; 2006) *Psychological Continuum Model* serves as an excellent explanation of how one might develop from a casual fan to a devoted fan.

Studies into how a fan moves over to a loyal fan is still lacking and MMA provides an ideal sport to investigate this as the sport draws great numbers of first-time attendees, which can be compared to the regular spectators.

#### **4.5 Limitations of the study**

As indicated at the outset, the study was limited by factors such as the fact that the population was limited to one event as a specific location, which makes generalization difficult, it was challenging to obtain a proper sample size and to conduct interviews, and in view of the fact that cross-national difference study had been done in 2008 it could be assumed that the motivational factors might have changed, and only limited information is available for the South African MMA market. However, it is felt that the present study does contribute to an understanding of the present market for MMA in South Africa and that further studies can build on it.

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## **6 ANNEXURES**

## 6.1 Written consent by the author to use the questionnaire

Sanrie,

Please feel free to use our survey and cite it accordingly. The specific items from the survey are found in Table 1 of the manuscript, which I have attached to this message for your convenience. Good luck with your MMA research!

Best,

Damon

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From: Sanrie Steenkamp [mailto:sanrie@a-cai.com]  
Sent: Saturday, February 02, 2013 3:04 AM  
To: dandrew@troy.edu  
Subject: Research study

Good day Sir,

I am from South Africa and currently completing my studies on my MBA (Masters' in Business) at the North-West University.

We are required to conduct a research project for our final dissertation.

I have read your paper on: Analysis of spectator motives and media consumption behaviour in an individual combat sport: cross-national differences between American and South Korean Mixed Martial Arts fans, (2008).

My aim is to further your research on this matter here in South Africa, as the MMA sport has boomed over the last three years locally. Our biggest MMA promoter, EFC Africa, has won the "Promotion of the year" award for the second time at the International MMA: Inside the Cages awards 2012.

As I love the sport and is also an Everlast ambassador locally, I would like your permission on reusing your questionnaire that was used in the study conducted in 2008. Can you please provide me a copy of the questionnaire; I would however like to include just a couple of financial questions.

We have an event coming up on the 1st of June and I would like to distribute the questionnaires among +- 200 fans. As I know getting the information out of the fans is quite hard, I'm already in discussions with EFC to assist me in distributing and gathering the information.

Your permission and any assistance would be greatly appreciated.

Regards,

## 6.2 TURN-IT-IN REPORT

## 6.3 QUESTIONNAIRE

## 6.4 RESPONSES



## Your digital receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

Paper ID	372039288
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Author	SANRIE STEENKAMP
E-mail	12791024@nwu.ac.za
Submission time	11-Nov-2013 11:15PM
Total words	13834

### First 100 words of your submission

SOLEMN DECLARATION Comment [RS1]: (Aanbevelings van abstract ABSTRACT en hoofstuk 1 soos vorige epos moet bygewerk word) The purpose of the study is to identify the motivational factors of the South African MMA (Mixed Martial Arts) fan and how these factors are influencing their spending patterns and media consumption. With the growing popularity of Africa's biggest MMA promoter and the production values and size of events, EFC (Extreme Fighting Championship) is taking the African market to a global level. To understand the South African MMA fan, marketers could differentiate strategies to meet these various customers' satisfaction needs and demands. The media plays a big role in the growing...

# Mixed Martial Arts - The new money maker

## \*1. How old are you?

## \*2. What is your gender?

- Female  Male

## 3. Race (Optional)

- Black  Indian  White  Asian

Other (please specify)

## \*4. Marital/household status?

- Married  Single  Divorced

Other (please specify)

## \*5. Average income per month?

- Under R5000  R5000 - R10000  R10001 - R20000  R20001 - R30000  Over R30000

## \*6. Amount spent on a MMA event/evening?

- Under R300  R300 - R600  R601 - R1000  R1001 - R1500  Over R1500

## \*7. What is the highest level of education you have completed?

- Less than  Matric  Certificate/Diploma  Apprenticeship  Degree  Post Graduate

Matric

## \*8. I read about MMA news over the internet

- Never  Rarely  Occasionally  Frequently  Very Frequently

## \*9. I watch MMA events on television

- Never  Rarely  Occasionally  Frequently  Very Frequently

## \*10. I buy the "Fighters Only" magazine

- Never  Rarely  Occasionally  Frequently  Very Frequently

## \*11. I watch MMA reality show on television

- Never  Rarely  Occasionally  Frequently  Very Frequently

# Mixed Martial Arts - The new money maker

## \*12. How did you find out about MMA for the first time

- TV       Fight club       Magazine       Internet       Friends

Other (please specify)

## \*13. How many MMA events have you attended?

## \*14. Which of the following is your favourite MMA event?

- EFC       Local club events

Other (please specify)

## \*15. Which of the following is your favourite weight class?

- Bantamweight     Featherweight     Lightweight     Welterweight     Middelweight     Light     Heaveyw  
57 to 61 kg      61 to 66 kg      66 to 70 kg      70 to 77 kg      77 to 84 kg      Heaveyweight    93 - 120 kg  
84 to 93 kg

## \*16. I enjoy the drama of close fights

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

## \*17. When my favourite fighter wins, I feel a personal sense of achievement

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

## \*18. I attend fights to avoid the hustle and bustle of daily activities

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

## \*19. Betting or making bets is the one enjoyable aspect of being a fan

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

## \*20. I appreciate the beauty and grace of MMA fights

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

## \*21. When a fighter appears to be unbeatable, he becomes a hero to me

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

## Mixed Martial Arts - The new money maker

**\*22. I like MMA because it has more violence than other sports**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*23. I attend MMA matches to support my country's fighters**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*24. Matches are great opportunities to socialise with other people**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*25. I am a huge fan of MMA in general**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*26. I tend to follow individual fighters more than MMA organisations (e.g. UFC)**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*27. I prefer watching a close fight rather than a one-sided fight**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*28. When my favourite fighter wins, I feel my status as a fan increases**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*29. Watching fights offers me an opportunity to get away from my everyday routine**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*30. I like to bet on fights with my friends and colleagues**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*31. I like MMA because it is a form of art**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

**\*32. MMA fighters are my role models because of their highly advance skill**

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

## Mixed Martial Arts - The new money maker

### \*33. I like the matches more when they get bloody

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*34. Patriotism is a big reason why I attend fights

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*35. Interacting with other fans is a very important part of being at MMA events

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*36. I consider myself a fan of MMA

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*37. I am more of a fan of individual fighters than of any MMA fight

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*38. I enjoy fights where the outcome is uncertain

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*39. I feel proud when my favourite fighter does well

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*40. Fights are opportunities to forget about my problems

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*41. I like MMA because I can bet on the fights

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*42. Watching a well-executed athletic performance is something I enjoy

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

### \*43. I watch MMA fights to witness greatness

Strongly disagree    Mostly Disagree    Disagree    Neutral    Agree    Mostly agree    Strongly agree

## Mixed Martial Arts - The new money maker

### \*44. I enjoy the violence of MMA

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

### \*45. When my country's fighters win, I feel proud to be a citizen

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

### \*46. I am the kind of person who likes to be with other people

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

### \*47. I care about the sport of MMA

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

### \*48. I tend to watch MMA to see my favourite fighters

- Strongly disagree     Mostly Disagree     Disagree     Neutral     Agree     Mostly agree     Strongly agree

### 49. I would like to be included in the competition

- Yes     No

Email

RespondentID	CollectorID	StartDate	EndDate	IP Address	How old are you? - What is Open-Ended Response	Race (Optional) - Other (please specify)	Marital/household status? - Other (please specify)	Average income per month?	Amount spent on a MMA event/evening?	What is the highest level of education you have completed?
2803762260	38352109	09-10-2013	09-10-2013	41.13.238.201	18 Male	White	Single	R5000 - R10000	Under R300	Matric
2803758453	38352109	09-10-2013	09-10-2013	41.13.238.201	26 Male	Black	Single	R20001 - R30000	R300 - R600	Certificate/Diploma
2803754953	38352109	09-10-2013	09-10-2013	41.13.238.201	24 Male	Indian	Single	R20001 - R30000	R601 - R1000	Certificate/Diploma
2803751935	38352109	09-10-2013	09-10-2013	41.13.238.201	26 Male	Asian	Single	R20001 - R30000	R601 - R1000	Digree
2803748776	38352109	09-10-2013	09-10-2013	41.13.238.201	28 Female	White	Single	R20001 - R30000	R300 - R600	Post Graduate
2803743922	38352109	09-10-2013	09-10-2013	41.13.238.201	24 Male	Indian	Single	R10001 - R20000	R300 - R600	Digree
2803734593	38352109	09-10-2013	09-10-2013	41.13.238.201	21 Male	Black	Single	Under R5000	Under R300	Matric
2803731150	38352109	09-10-2013	09-10-2013	41.13.238.201	16 Male	Black	Single	Under R5000	Under R300	Less than Matric
2803726802	38352109	09-10-2013	09-10-2013	41.13.238.201	17 Male	Black	Single	Under R5000	Under R300	Less than Matric
2770314407	38352109	08-19-2013	08-19-2013	196.207.39.248	26 Female	White	Married	R20001 - R30000	Under R300	Matric
2739397569	38352109	07-29-2013	07-29-2013	93.186.16.213	29 Male	White	Single	R10001 - R20000	R601 - R1000	Matric
2739082667	38352109	07-29-2013	07-29-2013	93.186.16.244	26 Female	White	Married	R5000 - R10000	Under R300	Matric
2739014334	38352109	07-29-2013	07-29-2013	93.186.16.211	30 Male	Coloured	Single	R5000 - R10000	Under R300	Certificate/Diploma
2738981498	38352109	07-29-2013	07-29-2013	93.186.16.243	27 Male	Indian	Single	R5000 - R10000	R300 - R600	Less than Matric
2738413406	38352109	07-29-2013	07-29-2013	41.133.101.117	39 Male	White	Married	R20001 - R30000	R300 - R600	Less than Matric
2738401837	38352109	07-29-2013	07-29-2013	41.123.98.252	25 Male	White	Single	R20001 - R30000	R300 - R600	Digree
2735633820	38352109	07-26-2013	07-26-2013	41.160.186.43	32 Male	White	Married	Over R30000	Under R300	Post Graduate
2735331495	38352109	07-26-2013	07-26-2013	196.210.118.151	35 Male	White	Single	Over R30000	Over R1500	Matric
2734321655	38352109	07-25-2013	07-25-2013	197.73.18.180	25 Male	White	Single	R5000 - R10000	R300 - R600	Matric
2733577335	38352109	07-25-2013	07-25-2013	41.160.79.140	27 Male	White	Married	R20001 - R30000	R300 - R600	Certificate/Diploma
2733569131	38352109	07-25-2013	07-25-2013	196.37.52.124	39 Female	White	Married	R5000 - R10000	Under R300	Certificate/Diploma
2733563801	38352109	07-25-2013	07-25-2013	196.37.52.124	41 Female	White	Divorced	R10001 - R20000	Under R300	Matric
2733559274	38352109	07-25-2013	07-25-2013	196.37.52.124	34 Male	Indian	Married	R10001 - R20000	Under R300	Certificate/Diploma
2733558683	38352109	07-25-2013	07-25-2013	196.37.52.124	28 Male	White	Divorced	R20001 - R30000	Under R300	Certificate/Diploma
2733556612	38352109	07-25-2013	07-25-2013	196.37.52.124	32 Male	White	Married	R20001 - R30000	Under R300	Certificate/Diploma
2733556183	38352109	07-25-2013	07-25-2013	196.37.52.124	40 Male	White	Married	Under R5000	Under R300	Matric
2733550824	38352109	07-25-2013	07-25-2013	196.37.52.124	Old enough darling	Male	Unknown	Over R30000	Under R300	Digree
2733541366	38352109	07-25-2013	07-25-2013	196.37.52.124	28 Male	White	Single	Over R30000	Under R300	Certificate/Diploma
2733535259	38352109	07-25-2013	07-25-2013	41.13.24.7	28 Male	Indian	Single	R10001 - R20000	R601 - R1000	Digree
2702356103	38352109	07-02-2013	07-02-2013	165.145.153.178	40 Male	White	Single	Over R30000	Over R1500	Post Graduate
2702348454	38352109	07-02-2013	07-02-2013	93.186.16.214	40 Male	White	Married	R20001 - R30000	R300 - R600	Apprenticeship
2702341288	38352109	07-02-2013	07-02-2013	93.186.16.237	39 Female	White	Married	Over R30000	Under R300	Certificate/Diploma
2702234302	38352109	07-02-2013	07-02-2013	93.186.22.122	24 Female	White	Single	Under R5000	Under R300	Post Graduate
2702206928	38352109	07-02-2013	07-02-2013	93.186.16.211	20 Male	White	Single	Under R5000	R601 - R1000	Digree
2702147878	38352109	07-02-2013	07-02-2013	197.87.147.67	27 Male	White	Single	R10001 - R20000	Under R300	Matric
2702125518	38352109	07-02-2013	07-02-2013	196.215.54.69	36 Male	White	Single	Over R30000	Under R300	Certificate/Diploma
2702116462	38352109	07-02-2013	07-02-2013	93.186.16.158	24 Male	White	Single	R5000 - R10000	Under R300	Matric
2702114719	38352109	07-02-2013	07-02-2013	70.198.14.227	25 Male	White	Single	Over R30000	R1001 - R1500	Post Graduate
2702105745	38352109	07-02-2013	07-02-2013	93.186.16.211	28 Male	White	Single	R10001 - R20000	R601 - R1000	Matric
2702089181	38352109	07-02-2013	07-02-2013	41.13.60.33	28 Male	White	Married	Over R30000	Under R300	Digree
2702087798	38352109	07-02-2013	07-02-2013	93.186.16.244	31 Male	White	Single	R20001 - R30000	R1001 - R1500	Matric
2702086930	38352109	07-02-2013	07-02-2013	105.248.95.158	24 Female	White	Married	R5000 - R10000	R601 - R1000	Matric
2702086228	38352109	07-02-2013	07-02-2013	41.26.74.247	39 Male	White	Married	Over R30000	Under R300	Post Graduate
2702081525	38352109	07-02-2013	07-02-2013	105.224.54.107	41 Male	White	Divorced	R20001 - R30000	R300 - R600	Certificate/Diploma
2496605357	38352109	03-04-2013	03-04-2013	196.11.134.77	24 Male	Indian	Single	R10001 - R20000	R300 - R600	Certificate/Diploma
2496603222	38352109	03-04-2013	03-04-2013	105.226.133.4	42 Male	White	Married	Over R30000	R300 - R600	Digree
2496592290	38352109	03-04-2013	03-04-2013	93.186.16.212	26 Male	White	Married	R5000 - R10000	R1001 - R1500	Matric
2489309246	38352109	02-27-2013	02-27-2013	93.186.16.236	34 Male	White	Married	Over R30000	R300 - R600	Certificate/Diploma
2489220415	38352109	02-27-2013	02-27-2013	41.13.52.13	32 Male	White	Married	R10001 - R20000	Under R300	Matric
2489191320	38352109	02-27-2013	02-27-2013	41.164.142.178	39 Female	White	Divorced	R20001 - R30000	Under R300	Post Graduate
2489174454	38352109	02-27-2013	02-27-2013	196.41.222.126	31 Male	White	Divorced	R20001 - R30000	Under R300	Digree
2479081211	38352109	02-21-2013	02-21-2013	93.186.23.82	17 Male	White	Single	R10001 - R20000	R300 - R600	Matric
2473601611	38352109	02-18-2013	02-18-2013	41.223.62.5	28 Female	White	Single	Over R30000	R300 - R600	Post Graduate

I read about MMA news over the internet	I watch MMA events on television	I buy the "Fighters Only" magazine	I watch MMA reality show on television	How did you find out about MMA for the first time	How did you find out about MMA for the first time - Other (please specify)	How many MMA events have you attended? - Open-Ended Response	Which of the following is your favourite MMA event?	Which of the following is your favourite MMA event? - Other (please specify)	Which of the following is your favourite weight class?
Occasionally	Occasionally	Occasionally	Occasionally	TV			2 EFC		Heavyweight 93 - 120
Occasionally	Occasionally	Occasionally	Occasionally	Fight club			4 EFC		Middleweight 77 to 84
Frequently	Frequently	Frequently	Frequently	TV			8 EFC		Light Heavyweight 84
Frequently	Frequently	Frequently	Frequently	Internet			3 EFC		Light Heavyweight 84
Frequently	Frequently	Frequently	Frequently	Fight club			6 EFC		Light Heavyweight 84
Frequently	Frequently	Frequently	Frequently	Fight club			4 EFC		Light Heavyweight 84
Frequently	Frequently	Occasionally	Occasionally	TV			1 EFC		Light Heavyweight 84
Occasionally	Frequently	Occasionally	Frequently	TV			0 EFC		Light Heavyweight 84
Occasionally	Frequently	Occasionally	Frequently	Fight club			2 EFC		Heavyweight 93 - 120
Occasionally	Rarely	Never	Never	Friends			1 EFC		Heavyweight 93 - 120
Occasionally	Very Frequently	Frequently	Very Frequently	Fight club			12 EFC		Heavyweight 93 - 120
Occasionally	Frequently	Never	Never	Friends			4 EFC		Lightweight 66 to 70 kg
Very Frequently	Very Frequently	Occasionally	Rarely	Fight club		Plenty	EFC		Welterweight 70 to 77 kg
Frequently	Occasionally	Rarely	Occasionally	TV			6 EFC		Lightweight 66 to 70 kg
Very Frequently	Occasionally	Never	Very Frequently	Friends	Work as a coach	Too much to mention	EFC		Middleweight 77 to 84
Frequently	Frequently	Frequently	Frequently	Friends			30 EFC		Bantamweight 57 to 61
Rarely	Rarely	Never	Rarely	Friends			0 Local club events	internet	Heavyweight 93 - 120
Very Frequently	Occasionally	Never	Occasionally	Friends			5 EFC		Heavyweight 93 - 120
Occasionally	Occasionally	Never	Never	Friends			2 EFC		Heavyweight 93 - 120
Occasionally	Rarely	Never	Never	Internet		None	Local club events		Light Heavyweight 84
Occasionally	Occasionally	Never	Occasionally	Friends		None, only JKA	EFC		Middleweight 77 to 84
Rarely	Rarely	Never	Never	Fight club			7 Local club events		Light Heavyweight 84
Very Frequently	Very Frequently	Frequently	Never	TV	I saw EFC Africa on E-	None. I watch at Nu Mt	0 EFC		Featherweight 61 to 66
Never	Never	Never	Never	Friends			0 Local club events	None	Heavyweight 93 - 120
Never	Never	Never	Never	Internet			0 EFC	none	Light Heavyweight 84
Never	Occasionally	Never	Occasionally	TV			0 EFC		Heavyweight 93 - 120
Never	Never	Never	Never	TV		How many have there	Local club events	Women's mud wrestling	Bantamweight 57 to 61
Rarely	Rarely	Never	Rarely	TV			1 EFC		Welterweight 70 to 77 kg
Frequently	Frequently	Frequently	Frequently	Fight club			5 EFC		Middleweight 77 to 84
Frequently	Very Frequently	Frequently	Frequently	Friends		10plus	EFC		Heavyweight 93 - 120
Frequently	Frequently	Never	Occasionally	TV			0 EFC		Welterweight 70 to 77 kg
Rarely	Rarely	Never	Rarely	Friends			0 EFC		Featherweight 61 to 66
Never	Never	Never	Never	TV			0 EFC	Other	Heavyweight 93 - 120
Occasionally	Frequently	Rarely	Occasionally	Friends			1 Local club events		Heavyweight 93 - 120
Rarely	Occasionally	Never	Rarely	TV			2 EFC		Middleweight 77 to 84
Occasionally	Occasionally	Occasionally	Occasionally	Magazine		all events even be 4	0 EFC		Middleweight 77 to 84
Occasionally	Occasionally	Rarely	Rarely	Friends			6 EFC		Welterweight 70 to 77 kg
Occasionally	Occasionally	Occasionally	Rarely	Friends			0 EFC		Light Heavyweight 84
Frequently	Frequently	Frequently	Occasionally	Fight club	did myself		9 EFC		Heavyweight 93 - 120
Occasionally	Occasionally	Never	Rarely	Friends			2 EFC		Light Heavyweight 84
Very Frequently	Very Frequently	Very Frequently	Frequently	Fight club			50 EFC	UFC	Middleweight 77 to 84
Frequently	Frequently	Never	Frequently	Friends		Lots	Local club events		Welterweight 70 to 77 kg
Occasionally	Rarely	Never	Occasionally	Magazine			0 EFC		Heavyweight 93 - 120
Occasionally	Occasionally	Never	Rarely	Friends	Worked for an organis		19 EFC		Middleweight 77 to 84
Frequently	Occasionally	Never	Rarely	Friends			5 EFC		Lightweight 66 to 70 kg
Frequently	Occasionally	Never	Never	Fight club		Three	EFC		Welterweight 70 to 77 kg
Frequently	Frequently	Very Frequently	Frequently	Friends		20 round about	EFC		Light Heavyweight 84
Occasionally	Occasionally	Never	Rarely	TV			4 EFC		Welterweight 70 to 77 kg
Very Frequently	Occasionally	Never	Occasionally	Fight club			100 EFC		Middleweight 77 to 84
Never	Never	Never	Never	Friends			0 EFC		Middleweight 77 to 84
Rarely	Rarely	Rarely	Rarely	Friends			1 EFC		Light Heavyweight 84
Rarely	Very Frequently	Very Frequently	Frequently	Friends			20 EFC		Lightweight 66 to 70 kg
Occasionally	Occasionally	Occasionally	Rarely	Fight club			6 EFC		Heavyweight 93 - 120

I enjoy the drama of close fights	When my favourite fighter wins, I feel a personal sense of achievement	I attend fights to avoid the hustle and bustle of daily activities	Betting or making bets is the one enjoyable aspect of being a fan	I appreciate the beauty and grace of MMA fights	When a fighter appears to be unbeatable, he becomes a hero to me	I like MMA because it has more violence than other sports	I attend MMA matches to support my country's fighters	Matches are great opportunities to socialise with other people	I am a huge fan of MMA in general
Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Agree	Mostly agree
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Strongly agree	Mostly agree	Strongly agree	Strongly disagree	Strongly agree	Mostly agree	Strongly agree	Neutral	Agree	Mostly agree
Mostly agree	Mostly agree	Mostly agree	Neutral	Mostly agree	Mostly agree	Mostly agree	Neutral	Mostly agree	Mostly agree
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Agree	Agree	Agree	Neutral	Agree	Agree	Agree	Neutral	Agree	Mostly agree
Mostly agree	Agree	Neutral	Neutral	Agree	Agree	Agree	Neutral	Agree	Agree
Mostly agree	Disagree	Mostly Disagree	Strongly disagree	Mostly agree	Neutral	Mostly Disagree	Neutral	Agree	Neutral
Mostly agree	Mostly agree	Neutral	Neutral	Mostly agree	Agree	Agree	Agree	Agree	Mostly agree
Agree	Agree	Neutral	Strongly disagree	Disagree	Disagree	Disagree	Neutral	Agree	Agree
Neutral	Strongly agree	Strongly disagree	Disagree	Strongly agree	Neutral	Strongly disagree	Neutral	Agree	Strongly agree
Mostly Disagree	Neutral	Neutral	Strongly disagree	Agree	Disagree	Disagree	Neutral	Agree	Agree
Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Neutral	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly agree
Neutral	Agree	Agree	Neutral	Agree	Neutral	Disagree	Neutral	Agree	Agree
Neutral	Disagree	Disagree	Disagree	Disagree	Disagree	Agree	Disagree	Neutral	Disagree
Agree	Neutral	Strongly disagree	Strongly disagree	Strongly agree	Neutral	Strongly disagree	Strongly disagree	Strongly agree	Strongly agree
Agree	Agree	Neutral	Strongly disagree	Agree	Agree	Strongly agree	Neutral	Agree	Neutral
Mostly agree	Neutral	Disagree	Mostly agree	Agree	Neutral	Neutral	Agree	Agree	Neutral
Agree	Disagree	Strongly disagree	Strongly disagree	Agree	Disagree	Disagree	Neutral	Agree	Neutral
Strongly agree	Strongly agree	Neutral	Neutral	Mostly agree	Agree	Neutral	Neutral	Neutral	Neutral
Agree	Agree	Disagree	Strongly disagree	Agree	Disagree	Disagree	Disagree	Neutral	Strongly agree
Neutral	Neutral	Neutral	Agree	Neutral	Agree	Strongly disagree	Strongly disagree	Neutral	Strongly disagree
Agree	Neutral	Neutral	Neutral	Mostly agree	Neutral	Mostly agree	Neutral	Neutral	Neutral
Strongly agree	Strongly agree	Neutral	Strongly agree	Strongly agree	Disagree	Disagree	Neutral	Mostly agree	Agree
Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree
Agree	Agree	Disagree	Agree	Agree	Agree	Agree	Disagree	Agree	Neutral
Agree	Agree	Agree	Disagree	Agree	Agree	Agree	Neutral	Mostly agree	Agree
Mostly agree	Agree	Disagree	Disagree	Agree	Agree	Neutral	Agree	Agree	Mostly agree
Agree	Agree	Neutral	Disagree	Agree	Agree	Mostly agree	Neutral	Neutral	Agree
Neutral	Neutral	Neutral	Neutral	Neutral	Agree	Neutral	Neutral	Neutral	Neutral
Mostly Disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree
Strongly agree	Neutral	Disagree	Disagree	Agree	Strongly disagree	Strongly disagree	Neutral	Agree	Agree
Strongly agree	Agree	Disagree	Mostly Disagree	Disagree	Agree	Agree	Agree	Disagree	Neutral
Strongly agree	Strongly agree	Disagree	Strongly disagree	Strongly agree	Strongly disagree	Strongly disagree	Strongly agree	Agree	Strongly agree
Neutral	Neutral	Strongly disagree	Strongly disagree	Agree	Neutral	Neutral	Neutral	Neutral	Neutral
Agree	Agree	Agree	Agree	Mostly agree	Mostly agree	Agree	Mostly Disagree	Agree	Mostly agree
Mostly agree	Agree	Disagree	Neutral	Strongly agree	Agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree
Disagree	Agree	Disagree	Disagree	Neutral	Mostly agree	Mostly agree	Strongly disagree	Mostly agree	Agree
Strongly agree	Mostly agree	Neutral	Agree	Neutral	Disagree	Disagree	Neutral	Mostly agree	Strongly agree
Agree	Agree	Neutral	Neutral	Agree	Agree	Agree	Neutral	Neutral	Strongly agree
Agree	Neutral	Neutral	Strongly disagree	Agree	Disagree	Disagree	Agree	Agree	Neutral
Strongly agree	Neutral	Disagree	Agree	Agree	Neutral	Disagree	Agree	Agree	Disagree
Agree	Agree	Strongly disagree	Neutral	Agree	Neutral	Disagree	Agree	Agree	Mostly agree
Strongly agree	Neutral	Agree	Strongly disagree	Strongly agree	Neutral	Strongly disagree	Mostly agree	Agree	Strongly agree
Neutral	Agree	Agree	Agree	Agree	Agree	Neutral	Agree	Agree	Mostly agree
Mostly agree	Neutral	Disagree	Agree	Agree	Strongly disagree	Strongly disagree	Agree	Agree	Agree
Agree	Strongly agree	Disagree	Strongly disagree	Strongly agree	Disagree	Agree	Strongly agree	Agree	Strongly agree
Neutral	Agree	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Agree	Mostly agree	Strongly disagree	Strongly disagree	Mostly agree	Agree	Disagree	Neutral	Agree	Agree
Strongly agree	Strongly agree	Strongly agree	Neutral	Agree	Neutral	Mostly agree	Agree	Agree	Mostly agree
Mostly agree	Agree	Mostly agree	Mostly Disagree	Strongly agree	Mostly agree	Mostly agree	Mostly Disagree	Agree	Strongly agree

I tend to follow individual fighters more than MMA organisations (e.g. UFC)	I prefer watching a close fight rather than a one-sided fight	When my favourite fighter wins, I feel my status as a fan increases	Watching fights offers me an opportunity to get away from my everyday routine	I like to bet on fights with my friends and colleagues	I like MMA because it is a form of art	MMA fighters are my role models because of their highly advance skill	I like the matches more when they get bloody	Patriotism is a big reason why I attend fights	Interacting with other fans is a very important part of being at MMA events
Agree	Agree	Mostly agree	Mostly agree	Neutral	Agree	Agree	Mostly agree	Neutral	Agree
Agree	Agree	Mostly agree	Agree	Neutral	Agree	Agree	Agree	Agree	Agree
Mostly agree	Agree	Agree	Mostly agree	Agree	Mostly agree	Mostly agree	Mostly agree	Neutral	Mostly agree
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Strongly agree	Strongly agree	Agree	Agree	Strongly disagree	Strongly agree	Strongly agree	Strongly agree	Neutral	Mostly agree
Mostly agree	Mostly agree	Mostly agree	Agree	Neutral	Mostly agree	Mostly agree	Mostly agree	Neutral	Mostly agree
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Neutral	Agree	Agree	Agree	Neutral	Agree	Agree	Mostly agree	Neutral	Neutral
Agree	Agree	Agree	Agree	Neutral	Agree	Agree	Agree	Neutral	Agree
Agree	Agree	Neutral	Neutral	Strongly disagree	Agree	Disagree	Neutral	Disagree	Neutral
Neutral	Agree	Agree	Agree	Neutral	Mostly agree	Agree	Agree	Neutral	Neutral
Agree	Strongly agree	Neutral	Disagree	Strongly disagree	Agree	Neutral	Neutral	Neutral	Neutral
Disagree	Disagree	Agree	Disagree	Disagree	Strongly agree	Strongly agree	Disagree	Neutral	Agree
Neutral	Agree	Neutral	Agree	Strongly disagree	Agree	Neutral	Neutral	Disagree	Agree
Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly agree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree
Agree	Agree	Neutral	Agree	Disagree	Agree	Disagree	Agree	Neutral	Agree
Disagree	Neutral	Disagree	Disagree	Agree	Disagree	Disagree	Disagree	Disagree	Disagree
Strongly agree	Strongly agree	Neutral	Strongly agree	Strongly disagree	Strongly agree	Strongly Disagree	Mostly agree	Neutral	Strongly agree
Neutral	Neutral	Mostly agree	Agree	Strongly disagree	Neutral	Agree	Strongly agree	Neutral	Neutral
Disagree	Agree	Agree	Agree	Mostly agree	Agree	Neutral	Agree	Neutral	Agree
Disagree	Agree	Disagree	Disagree	Strongly disagree	Strongly disagree	Mostly agree	Disagree	Neutral	Neutral
Neutral	Strongly agree	Neutral	Mostly agree	Neutral	Mostly agree	Neutral	Neutral	Neutral	Neutral
Agree	Mostly agree	Neutral	Agree	Strongly disagree	Mostly agree	Mostly agree	Disagree	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Strongly agree	Neutral	Neutral
Neutral	Mostly agree	Neutral	Neutral	Neutral	Mostly agree	Neutral	Neutral	Neutral	Neutral
Disagree	Strongly agree	Agree	Strongly agree	Neutral	Mostly agree	Strongly disagree	Neutral	Neutral	Agree
Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree
Agree	Disagree	Agree	Neutral	Disagree	Neutral	Neutral	Strongly agree	Disagree	Strongly agree
Agree	Mostly agree	Agree	Agree	Neutral	Agree	Agree	Mostly agree	Neutral	Agree
Agree	Agree	Neutral	Agree	Agree	Agree	Neutral	Disagree	Neutral	Agree
Disagree	Agree	Agree	Agree	Disagree	Neutral	Agree	Mostly agree	Disagree	Agree
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree
Neutral	Agree	Neutral	Agree	Neutral	Strongly agree	Neutral	Neutral	Neutral	Neutral
Agree	Mostly agree	Mostly agree	Agree	Disagree	Mostly agree	Mostly agree	Neutral	Neutral	Mostly agree
Agree	Strongly agree	Agree	Mostly Disagree	Strongly disagree	Strongly agree	Strongly agree	Neutral	Neutral	Agree
Neutral	Neutral	Neutral	Neutral	Strongly disagree	Agree	Mostly agree	Agree	Neutral	Agree
Mostly Disagree	Agree	Agree	Agree	Agree	Mostly agree	Agree	Agree	Mostly agree	Agree
Neutral	Mostly agree	Strongly agree	Mostly agree	Neutral	Strongly agree	Mostly agree	Mostly agree	Mostly agree	Agree
Agree	Agree	Neutral	Agree	Disagree	Neutral	Neutral	Mostly agree	Agree	Agree
Neutral	Agree	Disagree	Neutral	Agree	Strongly agree	Neutral	Neutral	Neutral	Mostly agree
Mostly agree	Mostly agree	Neutral	Neutral	Neutral	Strongly agree	Neutral	Agree	Neutral	Neutral
Neutral	Mostly agree	Neutral	Agree	Strongly disagree	Disagree	Mostly Disagree	Neutral	Disagree	Neutral
Mostly agree	Mostly agree	Neutral	Agree	Agree	Agree	Disagree	Agree	Disagree	Agree
Neutral	Agree	Disagree	Disagree	Disagree	Neutral	Neutral	Disagree	Disagree	Agree
Mostly agree	Strongly agree	Mostly agree	Mostly agree	Strongly disagree	Mostly agree	Neutral	Neutral	Strongly disagree	Agree
Agree	Neutral	Agree	Agree	Agree	Mostly agree	Agree	Agree	Neutral	Agree
Neutral	Agree	Neutral	Disagree	Agree	Agree	Disagree	Disagree	Disagree	Neutral
Strongly agree	Strongly agree	Strongly agree	Strongly agree	Disagree	Strongly agree	Strongly agree	Strongly agree	Agree	Agree
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Neutral	Agree	Agree	Neutral	Mostly Disagree	Agree	Neutral	Neutral	Neutral	Agree
Agree	Agree	Neutral	Strongly disagree	Agree	Agree	Agree	Mostly agree	Neutral	Mostly agree
Agree	Mostly agree	Mostly agree	Agree	Strongly disagree	Mostly agree	Mostly agree	Agree	Strongly disagree	Mostly agree

I consider myself a fan of MMA	I am more of a fan of individual fighters than of any MMA fight	I enjoy fights where the outcome is uncertain	I feel proud when my favourite fighter does well	Fights are opportunities to forget about my problems	I like MMA because I can bet on the fights	Watching a well-executed athletic performance is something I enjoy	I watch MMA fights to witness greatness	I enjoy the violence of MMA	When my country's fighters win, I feel proud to be a citizen
Mostly agree	Agree	Agree	Agree	Agree	Neutral	Mostly agree	Mostly agree	Mostly agree	Agree
Agree	Agree	Agree	Mostly agree	Agree	Disagree	Agree	Agree	Agree	Mostly agree
Mostly agree	Mostly agree	Mostly agree	Mostly agree	Agree	Mostly agree	Strongly agree	Mostly agree	Strongly agree	Neutral
Agree	Agree	Mostly agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Mostly agree	Mostly agree	Strongly agree	Mostly agree	Agree	Strongly disagree	Strongly agree	Strongly agree	Strongly agree	Neutral
Mostly agree	Mostly agree	Mostly agree	Mostly agree	Mostly agree	Neutral	Mostly agree	Mostly agree	Mostly agree	Neutral
Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Agree	Agree	Agree	Agree	Agree	Neutral	Agree	Agree	Agree	Neutral
Mostly agree	Mostly agree	Neutral	Agree	Disagree	Strongly disagree	Strongly agree	Agree	Agree	Agree
Mostly agree	Neutral	Mostly agree	Mostly agree	Neutral	Neutral	Neutral	Agree	Agree	Agree
Agree	Neutral	Mostly agree	Agree	Disagree	Strongly disagree	Strongly agree	Agree	Neutral	Agree
Strongly agree	Neutral	Neutral	Strongly agree	Disagree	Disagree	Strongly agree	Agree	Disagree	Strongly agree
Agree	Neutral	Neutral	Agree	Agree	Strongly disagree	Agree	Disagree	Neutral	Agree
Neutral	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Agree	Strongly disagree	Strongly disagree	Strongly disagree
Agree	Neutral	Neutral	Neutral	Agree	Neutral	Agree	Agree	Disagree	Neutral
Disagree	Agree	Disagree	Disagree	Disagree	Disagree	Agree	Disagree	Disagree	Disagree
Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly disagree	Strongly agree	Strongly agree	Strongly agree	Neutral
Agree	Agree	Strongly agree	Mostly agree	Strongly agree	Strongly disagree	Strongly agree	Agree	Strongly agree	Agree
Neutral	Agree	Mostly agree	Agree	Neutral	Agree	Mostly agree	Neutral	Neutral	Neutral
Neutral	Disagree	Agree	Neutral	Neutral	Strongly disagree	Strongly agree	Mostly agree	Disagree	Neutral
Agree	Agree	Disagree	Mostly agree	Neutral	Disagree	Mostly agree	Neutral	Neutral	Agree
Strongly agree	Neutral	Agree	Agree	Disagree	Strongly disagree	Agree	Neutral	Disagree	Neutral
Strongly disagree	Neutral	Neutral	Neutral	Neutral	Neutral	Mostly Disagree	Neutral	Strongly agree	Neutral
Strongly disagree	Neutral	Neutral	Neutral	Neutral	Neutral	Mostly agree	Neutral	Neutral	Neutral
Agree	Strongly disagree	Strongly agree	Agree	Mostly agree	Strongly disagree	Mostly agree	Neutral	Neutral	Mostly agree
Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree
Neutral	Disagree	Strongly agree	Agree	Neutral	Strongly disagree	Agree	Neutral	Agree	Agree
Agree	Agree	Agree	Agree	Agree	Neutral	Mostly agree	Agree	Agree	Neutral
Agree	Agree	Agree	Agree	Agree	Neutral	Disagree	Agree	Neutral	Agree
Agree	Mostly agree	Disagree	Strongly agree	Mostly agree	Strongly disagree	Agree	Agree	Agree	Strongly agree
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Agree	Neutral	Neutral	Agree
Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Neutral	Strongly disagree	Strongly disagree	Neutral
Strongly agree	Neutral	Agree	Neutral	Strongly agree	Strongly disagree	Strongly agree	Agree	Strongly disagree	Neutral
Neutral	Agree	Mostly agree	Mostly agree	Agree	Disagree	Mostly agree	Mostly agree	Neutral	Agree
Strongly agree	Agree	Strongly disagree	Strongly agree	Agree	Strongly disagree	Strongly agree	Agree	Strongly disagree	Strongly agree
Agree	Mostly agree	Agree	Agree	Disagree	Strongly disagree	Agree	Neutral	Neutral	Neutral
Agree	Neutral	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
Strongly agree	Neutral	Agree	Strongly agree	Agree	Neutral	Strongly agree	Mostly agree	Agree	Mostly agree
Agree	Agree	Neutral	Agree	Neutral	Disagree	Agree	Agree	Mostly agree	Agree
Strongly agree	Mostly Disagree	Mostly agree	Agree	Neutral	Agree	Mostly agree	Agree	Neutral	Neutral
Strongly agree	Mostly agree	Disagree	Agree	Neutral	Neutral	Strongly agree	Agree	Agree	Agree
Agree	Agree	Agree	Mostly agree	Agree	Strongly disagree	Mostly agree	Agree	Disagree	Mostly agree
Neutral	Agree	Agree	Agree	Neutral	Neutral	Agree	Neutral	Neutral	Neutral
Agree	Agree	Agree	Strongly agree	Strongly disagree	Mostly Disagree	Strongly agree	Agree	Mostly Disagree	Neutral
Strongly agree	Strongly agree	Mostly agree	Mostly agree	Neutral	Strongly disagree	Strongly agree	Agree	Strongly disagree	Strongly disagree
Mostly agree	Agree	Agree	Mostly agree	Mostly agree	Neutral	Mostly agree	Mostly agree	Agree	Agree
Agree	Agree	Agree	Agree	Strongly disagree	Neutral	Agree	Neutral	Strongly disagree	Agree
Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Disagree	Strongly agree	Strongly agree	Strongly agree
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Mostly agree	Mostly Disagree	Mostly Disagree	Agree	Mostly Disagree	Strongly disagree	Agree	Neutral	Mostly Disagree	Mostly agree
Mostly agree	Strongly disagree	Strongly disagree	Neutral	Agree	Strongly disagree	Neutral	Agree	Mostly agree	Agree
Mostly agree	Agree	Mostly agree	Mostly agree	Mostly agree	Strongly disagree	Mostly agree	Mostly agree	Mostly agree	Disagree

I am the kind of person who likes to be with other people	I care about the sport of MMA	I tend to watch MMA to see my favourite fighters	I would like to be included in the competition
Agree	Agree	Agree	No
Agree	Agree	Agree	No
Mostly agree	Mostly agree	Mostly agree	No
Agree	Agree	Agree	No
Agree	Agree	Strongly agree	No
Mostly agree	Mostly agree	Mostly agree	No
Agree	Agree	Agree	No
Neutral	Agree	Agree	No
Agree	Agree	Agree	No
Disagree	Agree	Agree	Yes
Agree	Mostly agree	Mostly agree	Yes
Agree	Agree	Neutral	Yes
Strongly agree	Strongly agree	Neutral	Yes
Agree	Strongly agree	Neutral	Yes
Mostly Disagree	Neutral	Strongly disagree	Yes
Agree	Agree	Agree	No
Agree	Disagree	Disagree	No
Strongly agree	Strongly agree	Strongly disagree	Yes
Agree	Neutral	Strongly agree	Yes
Mostly agree	Mostly agree	Neutral	Yes
Neutral	Neutral	Neutral	No
Strongly agree	Agree	Agree	Yes
Strongly agree	Agree	Neutral	Yes
Strongly disagree	Strongly disagree	Neutral	No
Neutral	Neutral	Neutral	No
Strongly disagree	Agree	Agree	No
Strongly disagree	Strongly disagree	Strongly disagree	Yes
Agree	Agree	Neutral	No
Agree	Agree	Agree	No
Agree	Agree	Agree	Yes
Mostly agree	Agree	Mostly agree	Yes
Agree	Neutral	Neutral	No
Strongly agree	Strongly disagree	Strongly disagree	No
Mostly agree	Mostly agree	Neutral	Yes
Agree	Neutral	Agree	Yes
Agree	Strongly agree	Mostly agree	No
Agree	Agree	Neutral	No
Agree	Agree	Mostly agree	No
Strongly agree	Strongly agree	Strongly agree	Yes
Agree	Neutral	Agree	No
Mostly agree	Strongly agree	Agree	Yes
Agree	Strongly agree	Mostly agree	Yes
Agree	Neutral	Disagree	No
Agree	Neutral	Agree	No
Mostly agree	Mostly agree	Mostly agree	Yes
Neutral	Agree	Mostly agree	Yes
Neutral	Mostly agree	Agree	Yes
Neutral	Agree	Agree	Yes
Agree	Agree	Strongly agree	Yes
Neutral	Neutral	Neutral	Yes
Agree	Agree	Neutral	Yes
Neutral	Neutral	Agree	No
Mostly agree	Mostly agree	Mostly agree	No