

Competition and Participation in Combat Sports: A Case Study of Combat Sports Clubs at Loughborough University

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Abstract. This study explores the nature of the relationship between competition and engagement in combat sports, aiming to move beyond existing research that primarily focuses on motivation and competition's general role in sports participation. This paper therefore seeks to examine motivations for participation in combat sports. The influences of participating in competitions in combat sports, and how competition affects sustained sport participation in combat sports in particular. This study adopted a qualitative case study approach involving 10 semi-structured interviews with participants in combat sports clubs. The interviews were recorded and transcribed, and then analyzed thematically. The findings present four main themes: 1. Motivation to participate in combat sports; 2. Benefits to participants from competitions; 3. Challenges to participating in competitions; 4. Importance of competition on retention in combat sports. In summary, this study contributes novel insights and evidence pertaining to the motivational dynamics and inherent value associated with participation in combat sports. Moreover, it critically assesses the role that competition plays in sustaining long-term engagement within the realm of combat sports.

Keywords: Combat Sports; Competition and Participation; Loughborough University.

1. Introduction

In recent years, research on sport participation has been examined in many different forms. Participation in sport provides benefits to both physiological and psychological health, as well as social cohesion and well-being (Allender, Cowburn, and Foster, 2006; Lara-Lopez and Rapún-Gárate, 2007; Molanorouzi, Khoo and Morris, 2014). Specifically, combat sports, which are the focus of this study, can improve self-defense, release anxiety, and develop ethical and moral values (Lundberg, Bennett, and Smith, 2011; Caddick and Smith, 2014). Also, there are some studies that indicate that participation in sports may occasionally cause harm, such as sports injuries (Pieter, Fife, and O'sullivan, 2012). There are numerous studies that have examined motivations for people to participate in sports, and these indicate a range of different motivations (Koivula, 1999; Millar and Stevens, 2012; Molanorouzi et al., 2014). For example, some studies were concerned with factors of internal personal desire such as building good body shape, developing fitness, weight loss, and learning new skills that can encourage people to get involved in sports activities (Allender et al., 2006; Lera-Lopez and Rapún-Gárate, 2007; Molanorouzi et al., 2014). Similarly, there are some external factors that can also influence the motivation for the public to engage in sports, such as age, gender, the sports system, education, and income (Gill, Dzewaltowski, and Deeter, 1988; Kumar, Manoli, Hodgkinson, and Downward, 2018).

Sport competition can also play a significant role in influencing sports participation (Clancy, Herring, McDonald, and Campbell, 2016). Competition is one of the most important elements in sports. Participating in competition may have both positive and negative impacts on sport participation rates. For example, individuals can increase their self-confidence and personal achievement through taking part in competition, which may therefore promote people engaging in sports (Hunt, Rietschel, Hatfield, and Iso-Ahola, 2013). On the other side, competition may decrease sport engagement due to negative factors such as high pressure, competition-led anxiety, and the risk of being hurt (Courneya and Carron, 1992). Relatively, combat sports, as a type of contact fighting sport, have more complex impacts from competition. People participate in combat sports because it can reduce



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stress and increase self-esteem (Caddick and Smith, 2014). Moreover, combat sport competition can particularly improve people's self-control and performance (Thomassen and Halvari, 1996; Peter et al., 2012). Nevertheless, competing in combat sports may decrease motivation for participation if they are affected by the violence and aggression (Maxwell, Visek, and Moores, 2009).

A number of existing studies indicated there are several reasons about why people participate in sports, and there is existing literature focused on the sport competition in particular relating to the competition influence in sport in general(Robinson and Carron, 1982;Caddick and Smith, 2014;Megheirkouni and Roomi, 2017). However, although a body of existing research addressed that competitions might influence people continued participating in general sports (Scanlan and Lewthwaite, 1984), relatively few researches have examined the role of competition in relation to the combat sports context (Dogen, Gümral, Oksüz, Kaplan, Serin and ilkit, 2013). In other words, a gap exists in the literature regarding the impact of competition upon the people participating in combat sports.

This present study addresses that gap by examining the relationship between competition and combat sports participation. The purpose of this study was sought to explore the relationship between competition and participation in combat sports. Specifically, the study firstly examines the reasons why people participate in combat sports. Secondly the study explores the influence of competition particularly within combat sports, and the influence of competition on people's continued engagement in combat sport. Such consideration within earlier literature lead to three research questions as follows:

RQ 1:How are people attracted to participated in combat sports

RQ 2:What roles does competition play in combat sports

RQ 3:How does competition influence people's decision for continued participate in combat sports,

This investigation adopted a qualitative case study approach, with semi-structured interviews. The findings analysed the interview transcripts with the thematic analytical technique.

The structure of this research includes six chapters. Chapter 1 briefly describes the key theory and issues, purpose, objectives and research question of the project, and the expected contribution of this study. Chapter 2 reviews the literature on the fundamental for research and identify the keywords established in this study, thus finding the research gap in terms of clarifying the theoretical and substantive focus of the research. Chapter 3 describes the methodology of the study, that incorporate the philosophical underpinning, the research design and the details of the design. Chapter 4 reports the main findings that examined interview data, and presents the discussion of the findings which based on the research question, and relevant literature mentioned in the literature review. Chapter 5 summarises the key findings and presents the implications and limitations of the research and suggests the direction of future research further.

2. Literature Review

2.1. Introduction

This chapter demonstrates the literature that has been reviewed for the project. Regarding the purpose of this study, which is intended to focus on the relationship between competition and sport participation in combat sports, with a case study of combat sports societies in Loughborough University. There are four areas of literature that have been reviewed. Sport participation, sport competition, combat sport, and methods of the research related to sport participation. Sport participation is the key element of this research. And this is addressed initially by examining the benefits that can arise through sport and the determinants of participation. Secondly, sport competition is an important variable which can influence participation positively and negatively and result in both positive and negative outcomes. The remaining sections examine combat sports reviewed. It will helps to identify the research gap. The methodological review can lead to the discussion of research methodology for this study in the next chapter.

2.2. Sport Participation

When considering sports participation, it is important to identify key terms. Sport participation is defined as the people regularly engaging in physical and sport activities (Koivula, 1999; Gröpel, Wegner and Schüler, 2016; Kumar et al., 2018). The existing literature on sports participation have well documented that participation in sports and physical exercise can generally promote benefits to people's health (physical and psychological), and provide social support and emotional benefits (Wold and Anderssen, 1992; Molanorouzi et al., 2014; Eime, Harvey, Charity, Casey, Van Uffelen and Payne). For instance, Eime et al. (2015) states physical engagement may contribute to reducing the risks of diabetes, obesity, cardiovascular and depression. Moreover, frequent training and participating in sport activities and exercise program can provide opportunities to develop the sport technical skills, improve competence in sport competition (Gröpel et al., 2016).

The literature focuses on reasons for participation or non-participation in sport and physical activities, one of the significant factors that can increase sport participation is the motivation. For example, according to the study by Molanorouzi et al. (2014) shows that the motives of people participating in sport can be classified in two aspects, body-mind motives (psychological, physical and appearance) and social motives (affiliation and community). And there is also literature on the motivation of positive effects achieved through sport activities which can encourage people's participation in sports. For example, through sport engagement, people can receive resources of social interaction, increase their sport skills, access sport facilities, gain sport experience, build good body shape, stress management, competition and enjoyment (Wold and Anderssen, 1992; Allender et al., 2006; Eime et al., 2015). However, the above factors can also impact on motivation and dropout rate. Previous literature suggests that some people can decrease their participation in sports due to the poor experience in sport facilities, lack of support from family and peers, lack of time and financial support, sport injuries, risk factors and sport safety issue (Allender et al., 2006; Emery and Tyreman, 2009).

2.3. Sport Competition

Since the definition of sport has been defined from The Council of Europe's Sport Charter in previous part, it is clear that competition is one of the fundamental elements of the nature of sport. Competition can refer to performing competitively and capable of achieving a result (Molanorouzi et al., 2014). Regarding the sport competition, it can be classified according to different dimension. For example, it can be divided into three categories based on the number of competitors, such as individual sports competitions, dual sports and team sports (Scanlan and Lewthwaite, 1984). It can also be classified as amateur and professional competitions, which can be distinguished based on whether participants are paid when they participate in competitions and training (Thomassen and Halvari, 1996). Here this study refers to sport competition as the sport match or event in amateur level, with a focus on non-professional sport.

There is an amount of studies which relate to sport competition. Some researchers have been focused on the benefits through sport competition. For example, Robinson and Carron (1982) suggested that competition in sport can positively influence people's achievements, including their goals, self-motivation, competence and skills. As well as, other studies also claimed that sport can generally promote people's sporting experience, challenging and enjoyment, self-control, self-presentation and cognitive development (Leary, 1992; Sofia and Cruz, 2015; Sofia and Cruz 2016; Clancy et al., 2016).

Nevertheless, sport competition can also have some potential negative effects on both professional athletes and non-professional participants (Clancy et al., 2016). For example, multiple studies claimed that sport matches can bring some psychological problem such as competition-led anxiety, competitive stress and pressure, anger and violence emotion (Robinson and Carron, 1982; Scanlan and Lewthwaite, 1984; Petrie, 1993; Maxwell et al., 2009). In addition, other researchers have focused on the physical problem effected by sport matches such as sport injuries, illnesses and incident (Ngai, Levy and Hsu, 2008; Emery and Tyreman, 2009). For instance, Wang, Mayer and Hang (2017) suggest

that individual or team contact sport like football and rugby have high risk about muscle and bone injuries. By contrast to the non-contact sport such as golf have high risk about connecting-tissues.

Regarding the role of competition in sport participation, there are studies which claimed that the competitiveness required by and cultivated through various forms of competitions can affect people's participation or non-participation in sport activity, both professional athletes and non-professional players alike (Scanlan and Lewthwaite, 1984; Sabin and Marcel, 2014; Clancy et al., 2016). In particular, the competitive goal include rewards in the game, overcoming challenges and improving oneself competence can generally motivate people engaging in sport activities (Thomassen and Halvari, 1996). However, the negative competition-led effects which are mentioned above could impact on people's participation in physical activities (Robinson and Carron, 1982; Salguero, Gonzalez-Boto, Tuero and Marquez, 2003)

2.4. Combat Sports

Combat sport is the kind of contact sport usually referred to on one to one competitive fighting sport which wins by scoring more points than the opponent, such as Boxing, Kickboxing, fencing, Mixed Martial Arts, Taekwondo, Karate (Dögen et al., 2013; Greenwell, Hancock, Simmons and Thorn, 2015). The stereotype of combat sports is aggressive, dangerous and high risked injury (Parry, 1998; Shirani, Motamedi, Ashuri and Eshkevari, 2010). In terms of reducing sport injuries and incidence in combat sport participation, different combat sports have different rules and equipment. Most of the combat sport competitors need to wear the particular protective clothing (Jenkins and Ellis, 2011). Even though most of the combat sports have protective equipment in terms of reducing incident in people's participation, most image of combat sports still categorized to high risk of sport injuries. Previous research on combat sports have focused on the aggression and injuries. A bulk of literature has shown that combat could bring many types of injuries, such as Chronic brain injury, Neurological injuries and facial injury (Pappas, 2007; Ngai et al, 2008; Zazryn, McCrory and Cameron, 2008).

However, the study by Pappas(2007) argued that different types of combat sports have different level of injury rate. And combat sport does not have higher injury rates compared to non-combat sport. Moreover, there are a lot of literature claimed that participating in combat sports is good for people's health, such as dealing with stress, self-confidence and mental advantage (Chapman, Lane and Brierley, 1997; Pettersson, Ekström and Berg, 2013). For example, one study by Binder(2007) suggested that Martial arts could encourage people's good moral and ethical development.

Regarding the relationship between sport competition and combat sport, existing studies focused on competition's effect on individual participants in combat sports. For example, Jenkins and Ellis (2011) found that through participating combat sports, individual participants can release their anxiety and stress, increase their self-esteem and self-control. Moreover, some studies have noticed the gender differences in combat sports. For example, Greenwell et al. (2015) find that males tend to be attracted more to participate in combat sport than females. This is due to the factors such as violence innate to combat sports (Greenwell et al., 2015).

2.5. Conclusion

This chapter reviewed relevant literature and provided a background on which the project is based. Having firstly located the research in sport participation, which focuses on the factors influence on people engaging in physical activities. Then the research narrowed down to sport competition which is one of the significant variables in sport participation. After that, the review moved to the literature on one particular type of sport which combat sports that are directly relevant to this study.

Among the research on sport competition and sport participation, most literature (Chapman et al, 1997; Pettersson et al., 2013) claimed that sport competition can generate positive effects on sport engagement. However, only a few studies (Robinson and Carron, 1982; Salguero et al., 2003) have

provided analysis that sport competition may impact on dropout or decrease people's participation in sports. In addition, a few researches have been focused on combat sports which include the positive and potential negative effects. Nevertheless, less research has examined about the factors of sport participation and competition in combat sports. Therefore, how to develop the advantages role of sport competition in participating in combat sports, and thus motivating people's engagement is worth to consideration. Taking these theories together, can raise awareness that there is a gap about the role of competition in combat sport participation. Through a critical review from the methodological perspective, there are both quantitative and qualitative methodologies, that are widely used in preceding studies. Quantitative methods are often employed in studies that examine the concept of the sport participation research. And qualitative methods are applied to the study of understanding the varying levels of importance on different elements of sport participation related research. The methodology and methods of this project are the focus for the next chapter.

3. Methodology

3.1. Overview

This investigation aims to explore participants' experiences of combat sport participation and the role of competition in sustaining participation in combat activities. The study utilizes a case study approach focused on Loughborough University Combat sports societies. Data was collated using qualitative semi-structured interviews with participants who are the members of the current community or former members of the community but still live in the university. The details of the research design process, the procedure of data collection and the challenge of qualitative case study method of this study are discussed further in this chapter.

3.2. Philosophical Underpinning

Ontology and epistemology are two essential considerations regarding the philosophy research process. Ontology refers to concerns regarding the nature of the being (Lewis-Beck, Bryman and Liao, 2003; Scotland, 2012). Ontological considerations are regarded with constitute reality and constructions to social interaction (Bryman, 2012). There are two basic positions which are taken in terms of claiming the perceptions and actions of a social phenomenon that what exists things and how things work. Bryman (2012) suggests that objectivism is a position of ontological considerations that asserts the organization of social science, illustrates the social entity should be conducted with an external objective reality that is independent of social actors' awareness. By the opposition from objectivism position, is constructionism position of ontological considerations (Scotland, 2012). This position demonstrates the culture of social science, asserts the social phenomena which do not have an independent existence, rather things are constructed and built up by human beings and the social interactions of social actors (Bryman, 2012).

Epistemology refers to claims relating the nature and forms of knowledge (Lewis-Beck et al., 2003; Scotland, 2012). Clearly, the distinction between ontology and epistemology is about the philosophy of things. Epistemology is a study of knowledge while ontology is about the being and existing (Bryman, 2012). Particularly, epistemological considerations are viewed with how and what knowledge can be discovered, studied and known (Scotland, 2012). According to Bryman (2012) claims that there are two essential epistemological positions, positivism and interpretivism. Specifically, positivism is a natural science epistemological position (Guba and Lincoln, 1994). This position concerns the relationship between social reality and research theories. It focuses on obtaining objective knowledge and generalization. Interpretivism is an alternative epistemological position that advocates critical views of researching between objectives and social actions. This position focuses on the specific subject context and perceived knowledge (Bryman, 2012). For this study that the considerate ontological position which desire to understand the knowledge of the relation on competition and participation in combat sports.

Methodology refers to the research strategy or action plan which justifies the chosen research method (Bryman, 2012). There are two basic research strategies which are qualitative research and quantitative research(Tuli, 2010). The main distinction between qualitative and quantitative methodology is the relationship between theory and data. Quantitative research aims to test the collected data with a large variable and emphasizes quantification in the data analysis and the theories (Tuli, 2010; Bryman, 2012). The common sources of data in quantitative research include the surveys, observations and secondary data. Data analysis tool normally uses mathematical and statistical methods (Tuli, 2010; Bryman, 2012). By contrast, qualitative research aims to define the relationship between theories and research in terms of applying the social reality and individuals'views (Tuli, 2010). This research strategy focuses on words rather than numbers collated through approaches such as interviews (Bryman, 2012).

3.3. Method

Methods are the specific research tools used in order to answer research questions such as, how to collect the data and how to analysis the collected data(Crotty, 1998). In terms of answering the research questions of this study which aim to explore the relationship between competition and participation in combat sports, this research requires a qualitative case study research method. According to Berg (2007, p. 3)the qualitative method aims to investigate the 'meanings, concepts, definitions, characteristics, metaphors, symbols, and description'of a phenomenon, which constitute the 'essence and ambiance'of the phenomenon. Case study qualitative research method is suitable for research to explore the complex phenomena within a real-life context using a variety of data sources, especially the research focus on to answer the 'what'and'why'questions (Baxter and Jack, 2008). The 'case'being investigated should be specific, it can be an individual, organization, event or a specific project. The qualitative case study method is appropriate for the study has the clearly identified empirical inquire that seek to provide a complex and in-depth understanding of a phenomenon.

3.3.1. Case Study Selection

The chosen case in this study is Loughborough University combat sports clubs. Loughborough University is particularly well-known for its academic achievements in sport -related areas.

Also, Loughborough university is known for the best student experience, especially in terms of it is wealth of sporting societies and clubs. Students at Loughborough University can access 55 different sports clubs. Among these clubs, 8 clubs are related to combat sports, such as boxing, fencing, karate, judo, kickboxing (Sport at Loughborough University, 2019). This case provided the opportunity to recruit participants in combat sports.

3.3.2. Interview

Among the many qualitative methods and different investigative approaches, this study chooses the semi-structured interviewing approach to collect the data source. According to Denzin(2001, p. 26)suggests that people live in a'performance -based, dramaturgical culture'. In this sense, qualitative interviewing can be considered a type of social interaction performed in a complex, dramaturgy -like setting, where meanings of discourse, narrative, and culture converge and inform conversational actors. Berg (2007, p. 90)claims that interview can be simply defined as a'conversation with a purpose'. The conversation between two or more people are presented by the interviewer and interviewees, the information of the conversation is within the asked questions in terms of collecting the data sources.

In this study, the semi-structured interviews were employed. provides an interview structure and offers sufficient flexibility. Specifically, a semi-structured interview is involving an interview guide with a set of questions. There are four groups listed questions helped with the interview's direction, and make sure the conversation related to the research topic. In terms of the semi-structured interview, the questions should be asked flexibility rather than too specific, for example, one of the interview guide questions, 'how do you think the combat sports differ with the others sports you do'.

Ethical considerations are a primary consideration within social research. In particular, ethical statements are required in terms of protecting human or animal subjects in the research (Mason, 2017). In this study, ethic approval and risk assessment(Appendix A)required three documents, ethics awareness form, ethical clearance checklist and risk assessment. Ethical approval required the development of a participant information sheet(Appendix B)and informed consent sheet(Appendix C). These documents were approved by the School office and Compliance Support Administrator Finance and Research Office, School of Sport, Exercise and Health Sciences Loughborough University. The Reference Number of this study is SSEHS-PG143. The interview guide is included in Appendix D.

3.3.3. Pilot Study

The pilot study refers to the mini-scale study conducted in order to examine the feasibility, time scale, the important process of the study, and develop the study in terms of performance to a large-scale study (Kim, 2011). In this study, the interview guide was developed by starting with reflecting on the general research topics, and then formulating questions based on the issues raised in literature review and the researcher's own knowledge and experience. The pilot study was undertaken to check whether the question worked or needed further development. Around 6 volunteers helped with the pilot study and with, the finalising the interview guide. The semi-structured interview was undertaken in English and lasted up to 30 to 60 minutes. The interviews were located in public places located on Loughborough University campus.

3.3.4. Participants

In this study, a total sample of 10 interview participants(Appendix E)were recruited utilising snowball sampling in the recruitment. Snowball sampling refers to a sampling technique in qualitative research, in which the initial participants recruit other participants who have had the similar experiences relevant to same research subject area (Bryman, 2012).

In this study, all the participants were active members or former active members of a Loughborough University combat sports clubs. All participants in this study were adults. The sample included 2 females and 8 males and of these 7 participants had the competition experience. The participants were encouraged to share their own sports experiences in combat sports and the relationship between competition and participation in combat sports which based on their experience or personal view. All interviews were recorded and later transcribed before being analysed thematically.

3.3.5. Data Analysis

This research uses the thematic analysis technique to analyse the qualitative data. The thematic analysis is one of the most common approaches to analysing qualitative data. Braun and Clarke (2006)suggested that thematic analysis is a 'foundational method'for a qualitative researcher to identify the key patterns of the data and identify the codes, analysis and report the themes. Indeed, the search for themes or patterns is an essential analysis activity.

Data analysis in this investigation involved 10 individual semi-interviews. All interviews were audio-taped by the investigator and transcribed verbatim by the transcription software within approximately one week after the interview. In terms of ensuring data accuracy, all transcripts were checked with the original recording by the researcher. Codes were highlighted manually, and themes were allocated based on the core codes that are frequency appear at transcripts. The defined themes are related to the motivation, benefits, challenges and retention acquired through coding of transcripts. The description and exemplar quotes of each theme are presented in the findings section.

3.4. Limitations

The key elements of using qualitative case study research are to ensure the validity and credibility of the overall study(Baxter and Jack, 2008). There are a lot of frameworks have been studied that the importance of quality and trustworthiness of qualitative data (Guba and Lincoln, 1994). However, the data source quality in qualitative research is sometimes biased as the data collection is usually

dependent on the individuals' own skills and experiences, and it is influenced by the researcher's perspective. The research was conducted at only one university and did not target a wider population. Furthermore, the participants were recruited with snowball sampling which impacts on the representativeness of sample and it also could be lead bias views because of the peers' network.

4. Findings and Discussion

4.1. Findings

4.1.1. Overview

This investigation sought to explore the role of competition in sport participation, as well as the importance of competition in sport engagement. The research findings are presented thematically in this chapter.

The analysis revealed four key themes with sub-themes identified within the verbatim transcripts. The key themes are:

1. Motivation to participate in combat sports
2. Benefits to participants from competition
3. Challenges to participating in competitions
4. Importance of competition on retention in combat sports

4.1.2. Motivation to Participate in Combat Sports

This theme examines the factors that motivated people to engage in combat sports. Several motivations were identified as to why people participate in combat sports, such as to learn new skills, make friends, to have fun and to challenge themselves etc. These sub-themes are discussed below.

Enjoyment

The first motivation is that of enjoyment which was the most frequently reported reason for motivating people to participate in combat sports. Among the 10 interviewees all participants mentioned this theme. Enjoyment was also related to several codes mentioned by interviewees, 'have fun', 'make friends', 'enjoyed', 'have a good time', etc. Several participants reported that they join the combat sport club just for fun. For instance, one participant from the MMA club, said:

'You can be really fun to the procedure, just coming to learn and have a goodtime'(P2).

Similarly, other interviewees stated:

'I was looking something to get fun and I enjoyed the most'(P 1).

'I think I have good friends from boxing, everyone just likes to help each other to improve'(P 5).

Outcomes in fitness benefits were reported in 6 participants. Participants in several interviews talked about how combat sports benefit their fitness. The codes include 'fitness', 'health', 'physical'. Example quotes were:

'I want to try something was very good for my fitness, (boxing)was more energetic ...

I think it helps to build your fitness quite a lot more than other sports. '(P 1).

'I am enjoying kickboxing because kickboxing has an element of a lot of physical training. Some are here for health benefits like I want to move around a door avoid being too lazy. '(P 10).

Other interviewees also talked about health improvement and strength physical fitness as reasons for engaging combat sports clubs. For instance, one participant said he joined taekwondo because he wants to improve the strength of his ankle in particular (P 3).

Mentality benefits

Positive outcomes of mentality benefits were also widely reported by interviewees. Core codes of this theme are 'mentality' and 'psychological'. Several participants mentioned that mentality is the unique benefit compared to other kinds of sports. For instance, P1 said 'mentality is a lot of different in boxing...I learn a lot more even from failing'. Other participants claimed that:

'It is not just about improving your fitness, your physical health is also going on inside your head...really good mentality ...teach you to respect people'(P 3).

'I think it comes down to mentality and discipline'(P 10).

'I believe there is a psychological component in which you need to understand'(P 8).

Skills development

Skills development refers to participants' desire to learn new skills and techniques through participation in combat sports. The sub-codes of this theme are 'skills', 'technique', 'self-defence', 'learning' and 'challenging'. Most of the interviewees reported outcomes within this theme. For example, when one participant was asked what reasons motivated him to join the fencing club, he answered that:

'It is more challenging, you are learning techniques, you are learning new things...there is always a new way to get better'(P 7).

Similarly, other participants stated, they were motivated by the self-defence skills they developed: 'we do in basic skills, not just for recreational'(P 6).

'I think most of the combat sports they have the self-defence elements'(P 10).

'I like the fact it was more kinds of self-defence based instead of recreational'(P 4).

4.1.3. Benefits to Participants from Competitions

This theme refers to the positive values of competition for participants in combat sports. A range of benefits were reported by the participants, such as 'increase self-confidence', 'check where you are', 'good experience', 'practice', and 'improved performance' etc.

Competence experience

Competence experience is the most frequently reported theme for the benefits of participating in competitions. Competence experience in this study emphasises the competition experience, which is different from the benefits of regular training. Examples of comments include a 'good experience', 'fight for real' and 'new process'. Almost all participants contributed to this theme. When asked interviewees about how they think about sport competition, most of them reported positive opinions firstly. P 1 as a boxing player said, 'it was a good experience ... fight with someone in real'. Similarly, one Jiu-jitsu player strongly emphasised 'it is a good experience, definitely'(P4). Furthermore, another boxing participant explained:

'You went into a fight in a real competition, and you got hit a lot...you have the experience being in the actual fight in the competition, it is that different experience compared to just training'(P5).

Other interviewees also suggested they gained competence experience through engaging in competition. For example, two participants noted they cannot have the experience of other people fencing if they only competed against other people who in the same club (P8 and P9).

Self-evaluation

Self-evaluation is another widely reported benefit associated with competition, the codes related to this theme are 'checking' 'reflecting', 'evaluate', 'self-criticism' and 'self-expectation'. A participant explained 'I think like having a competition is almost like a time of reflection, where you were, how are you thinking'(P5). Similarly, one kickboxing participant supported this point as well, he believed

that competition is a kind of self- performance evaluation(P10). Other participants also highlighted self-evaluation can be gained from competition engagement:

'You can see your progression, you can see if you are doing better, if you are doing worse, it is earlier to evaluate yourself (P9).

'I quite like the fact that if you want to compete, you can regardless of your level, your belt or whatever'(P4).

Techniques and skills development

Outcomes of this theme refer to people improving their sports performance through participating in competitions. Some codes associated with this theme are'development', 'performance'and 'learn'. A majority of participants highlighted this benefit. For example, P5 stated:

'I think if they have a good experience, or even they have a bad experience, I think they will probably just like a child's life, improve themselves. I think competition will definitely help someone's performance'(P5).

Correspondingly, other interviewees also believed that competition can benefit people's techniques and skills improvement:

'Let you put into practice what you have learned in the training, you will go over something rather than you just practice it in one certain way, look at my performance in the different situation will really improve me like thinking'(P2).

4.1.4. Challenges to Participating in Competitions

This theme refers to the negative aspects of participating in the competition. Challenging aspects of being involved in competition include'need time to recover', 'you may get hurt'and 'self-pressure'. Those phrases occur current frequently are organized to the followed Sub-themes.

Stress and pressure

Several interviewees discussed the negative factors related to 'stress and pressure'. The core codes of this theme are'stress', 'pressure', 'embarrassing', 'shame', 'difficult', and 'sad'. Most of the participants stated that participating in competitions can be very stressful in different ways. For example, one interviewee who is active in Kungfu club reported:

'Sometimes, I feel pressure, I found it quite hard to sparring, the pressure quite high, so I can understand why people do not really into sparring sections'(P6).

The majority of participants mentioned that the self-expectation extends to the self-pressure.

For instance, one participant stated:

'I feel a bit of shame, because of lost, I think there is a lot of stress involved with training to compete, I feel a little bit pressure'(P1).

Time and physical demand

This theme refers to the time period and physical requirement for participating in competitions. Coding this theme with the highlighted phrases are 'time', 'physical demand', 'big step', 'get improvement'. Time and physical demands were widely reported by the participants. They stated that some people do not want to participate in competitions because competing requires certain skills to apply which need time to train in terms of preparation and recovery after the competitions. For instance, one interviewee said:

'You know, to be honest, to get wiped out or to get from white belt to yellow belt, you know, one, two months, maximum two months. You know it is a bit of time because a lot of people want to get in a straight way, but if you do not have that practice and perseverance to stay in practice, then taekwondo is not free'(P3), Similarly, another participant shared this opinion associated this theme

stating 'I can understand why, because it takes a long time to recover, and I do not think there is enough time to actually improve and prepare yourself (P5).

Competition structure of combat sports

Competition structure of combat sports refers to the grade and weight requirement for combat sports competition. The codes highlighted 'difficult', 'weight', 'grade', and 'level' apply to this theme. Outcomes were reported that the grades and weight structure in combat sports as one common challenge for participating competition as one participant explained:

'Because of the grade structure with martial art, when you compete, you have to compete against people with the same grade. We do not really get much of an opportunity to compete'(P4).

Other interviewees also discussed this issue. For instance, P2 said 'before you compete in a way, you actually need to fit a certain weight, you have to eat properly. Compare to a football match, you can eat whatever you want'.

Sport injuries

Sports injuries are another negative consequence of participating in competitions which were reported by some participants. Coding this theme focused on the phrases 'injuries', 'hurt' and 'pain'. Participant commented on the hurt associated injuries stating:

'It is a combat sport, it quite violent, you get hurt'(P1).

'That is certainly a risk... in think for some people have been competitions, you push yourself a bit more, do you are more likely to get hurt'(P2).

4.1.5. Importance of Competition on Retention in Combat Sports

The role of competition and how it influences people continued engaging in combat sports is the last theme that emerged in this investigation. All participants have indicated the critical points for this theme. On the one hand, they believed that competition in combat sports played a significant role which can positively motivate peoples' retention whilst on the other hand, they also stated that participating competition may decrease motivation in some way for people to continue to participate in sports. Those opinions will be described by two sub-themes.

Positive motivation

Positive motivation indicates that competition may encourage and increase sport participation. Codes included 'motivation', 'put a lot more time', 'improve', 'increase', 'positive', 'attract' and 'encourage'. Those phrases contributed to the positive outcomes of the relationship between competition and sport participation. All participants stated that competition may positively motivate people in different ways for example, some participants suggested that taking part in a competition can be a kind of self-expectation, people have a purpose to perform well and they expected to improve:

'The fact that you are training for a purpose, you have a goal, you want to show up your performance... I think competition is good for a group of people to come back and train harder'(P7).

Similarly, another interviewee strongly emphasized that the importance of competition has some positive effects that can encourage people retention on sports engagement, he said:

'I think the fact that you are under so much pressure, and you have to work so hard during a competition, you are working so hard, you actually learn much more, then you come back to your club, you want to improve so much more... I think that really increases involvement and motivation'(P3).

Negative motivation

The theme of negative motivation refers to the effects of competition that negatively influence peoples' sustained participation in sports. Coding this theme included 'give up', 'discourage', 'rivalry',

'do not care', 'negative' and 'difficult'. A negative effect discussed by the participants is people do not want to train too much after competing. Some interviewees stated that:

'(after the competition), because I do not have the competition to train for, it is not as important that I go, this is exams to do instead'(P1).

'If I go to competition this week, I can confirm that next week, I will not go to training' (P10).

Another widely reported negative motivation affected by competition focus on the club level participants. Some participants claimed that for the club level participation, some of them join combat sport for fun. Then competition was not important for them and that the competition was also difficult and hard for that group of participants. Hence, the role of competition of this group participants may be unimportant and even a negative influence on people continuing to participate in sports. For instance, one participant said 'club level people might be doing not care about the competition, they just come to try and move for fun, rather than getting serious and doing for competitions'(P2). Similarly, P7 reported his opinion'sometimes it (competition) is too hard, then you get frustrated, and then you give up'.

4.2. Discussion

This current study set out to examine the factors attract people to participate in combat sport, the influences on the competition for combat sports participants, and the relationship between competition and participation in combat sports. This study indicated that people engage in combat sport for several reasons (Pettersson et al., 2013). Moreover, it offers insights that the benefits and challenges associated with sport competition(Robinson and Carron, 1982; Maxwell et al., 2009). Furthermore, findings examined the role of competition that influence peoples'continued participation in combat sports.

The first research question examined how people are attracted to participate in combat sports. The findings are consistent with earlier research in terms of the outcomes of fitness benefits and mentality benefits are broadly support for(Caddick and Smith, 2014). In addition, interviewees reported skill development and enjoyment are the two common reasons that motivated people to participate in sport and particularly in combat sports (Koivula, 1999).

In terms of examining the benefits of participate in competition, studies such as Robinson and Carron(1982)suggest that sport competition can positively influence people's achievement.

The findings reported align with the literature as interviewees reported that competition can help with participants evaluating their skills and performance. In addition, consistent with the other research, competition also benefits people's competence experience(Leary, 1992). Moreover, skills and techniques development present another positive impact in combat sport participation, interviewees reported that competition can improve their sport ability and performance (Clancy et al., 2016). Combat sport competition is an under-researched research hence, those outcomes can grow the body of the existing research which focus on sport competition particularly in combat sports.

However interviewees reported challenges associated with combat sports competition including stress and pressure, time and physical demands, competition structures of combat sports, and sport injuries and these also support previous research (Shirani et al, 2010). Stress and pressure are a common problem in competition(Scanlan and Lewthwaite, 1984). One results of This study suggested that sport injuries did not discourage participation . This outcome challenges existing researcher which focus on the sport injuries that can challenge people engaging in combat sports competition(Greenwell et al, 2015). However, based on the interviewees'opinions, sport injuries are a risk that occurs in all types'sports, that influence people competing too much.

There is a critical link between the role of competition and influence on people is retention in combat sports. Competition in sport can either make participants more engaged or subsequently lead to them dropping out. In particular, the positive effects of competition can encourage people to engage in sports participation(Thomassen and halvari, 1996). Outcomes of positive motivation such as personal

goals, skills improvement and display of performance are reported by interviewees. These findings support the existing literature. For example, Thomassen and Halvari(1996)claimed that people can improve their self-achievement in sports competition, and encourage people to participate in sports. By contrast, there are some negative effects that can decrease participation in combat sports. Wang et al. (2017)suggest combat sport have a high risk of sports injuries that influence combat sports participation. However, the outcomes of this study may challenge this finding. Based on the interviewees reported the negative factors that influence people continued to participate in are presented in two aspects. One of the aspects associated with 'after competition'because people need time to recover, they may decrease motivation to involve in participation. Another aspect is 'clubs level participants', in terms of some clubs level people they participate in combat sports because they want to have fun, the competition seems too hard for them. Therefore, more pressure and stress affected by competition may decrease their motivation and retention.

5. Conclusion

5.1. Summary

This current study has explored the relationship between competition and participation in combat sports. Firstly, it has shown that people are attracted engaging in combat sports activities for several motivational factors. Such as the enjoyment of the positive emotional response (e. g. fun, liking), the benefits from physical and fitness, the mentality promotion (e. g. respect for others, learn patience), and skills development(e. g learn new technique), Secondly, the findings have reported that competition as one of the activities involved in combat sports participation, it has complex impacts for individuals. Specifically, the multiple positive effects such as good experience, self-reflection, skills improvement have been identified. However, the challenges have been reported by participants prospectively, such as competition-led stress, combat competition requirement (e. g. weight, grade, time), and the potential sports injuries. Finally, the findings provide evidence on the impacts of competition upon the retention of combat sports engagement. As stated previously, participating in the competition can have different effects on the participants. Correspondingly, these influences also affect people's motivations and decisions to participate in combat sports. On the one side, the benefits from competition encouraged people to participate in combat sports. Such as people desire to achieve personal goals, show up the better performance, that may positively motivate people to participate in combat sports constantly. On the other side, some negative effects from competition such as need time to recover, too much pressure, sports injuries may hinder people participate in combat sports.

5.2. Implications

Regarding the implications of the findings, there are two implications, are theoretical implication and the practical implication arising from this research. Specifically, for the theoretical complications, this study supports the evidence and offers new points for the theory related to the impact of competition influence on sport participation, particularly within the combat sports context. According to the interviews, the implication that people believe combat sport is a stereotypical sport which can provide both the general benefits (e. g. physical fitness) and specific benefits(e. g. self-defenses, moral promotion)for individuals, that motivated people to participate in combat sports. Moreover, In terms of combat sports is the individual sports, the impacts of competition highlighted the benefits such as increased self-confidence from taking competition, therefore motivated people continued to participate in combat sports.

However, it also can drive the negative impacts such as personal embarrassing when people do not fit the self-expectation, that can decrease people participate in combat sports in ways. That theoretical implication can contribute practical implications of this study.

Regards to the complex relationship between competition and participation in combat sports, for sport managers or community leaders who manage the combat sports participation, they really need to consider what the individual needs are. For example, for the people who participate in combat sports

motivated by skills development, they also prefer to improve their technique from taking part in a competition. Competition plays a positive relationship with participation, managers could hold more competition to encourage this group of people to participate in combat sports constantly. By contrast, for the people who engage in combat sports for enjoyment and experienced dominate, they are worried about such stress and pressure from competition. Hence, managers need to clarify their motivation and interest, make some plans to motivate that group of people who continue to participate in combat sports activities. Such as to hold the informal competition which can release competence intensity and focus on the experience and fun.

5.3. Limitations and Future Research Direction

Despite qualitative research providing an in-depth understanding of the given topic, it lacks the ability to develop the broadness of the results (Patton, 1990). This study had a certain limitation that the population of this research are limited. In terms of this research using the case study method, the chosen case was only one university. Even this university as the representative sports university, it can provide the expected sample to collect. However, all interviewees are students who studied in the same university, they may have a similar experience, that causes the results lack of credibility and validity. In taking the findings of this research further, as well as considering the implications and limitations of this research, one way of the future research direction may wish to increase the sample diversity (e. g. age, gender, social-economic state) to develop the generalizable result of this research. That may also develop more in-depth qualitative results. In another way, the future research direction may also wish to use the quantitative research method to build on the qualitative findings of this study. Finally, due to the lack of existing literature on participation in combat sports, it is recommended that future researchers expand research in this area from multiple perspectives.

References

- [1] Allender, S., Cowburn, G., & Foster, C. (2006). Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. *Health education research*, 21(6), 826-835.
- [2] Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, 13(4), 544-559.
- [3] Berg, L. (2007). Qualitative research methods for the social sciences. A Pearson Education Company
- [4] Binder, B. (2007). Psychosocial benefits of the martial arts: myth or reality. *Int Ryuku Karate Res Soc J*.
- [5] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- [6] Bryman, A. (2012). Social research methods (fourth edition). Oxford University Press.
- [7] Caddick, N., & Smith, B. (2014). The impact of sport and physical activity on the well-being of combat veterans: A systematic review. *Psychology of sport and exercise*, 15(1), 9-18.
- [8] Chapman, C., Lane, A. M., Brierley, J. H., & Terry, P. C. (1997). Anxiety, self-confidence performance in tae kwon-do. *Perceptual and Motor Skills*, 85(3_suppl), 1275-1278.
- [9] Clancy, R. B., Herring, M. P., MacIntyre, T. E., & Campbell, M. J. (2016). A review of competitive sport motivation research. *Psychology of Sport and Exercise*, 27, 232-242.
- [10] Courneya, K. S., & Carron, A. V. (1992). The home advantage in sport competitions: a literature review. *Journal of Sport & Exercise Psychology*, 14(1).
- [11] Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. Sage.
- [12] Denzin, N. K. (2001). The reflexive interview and a performative social science. *Qualitative research*, 1(1), 23-46.
- [13] Dogen, A., Gümral, R., Oksiz, Z., Kaplan, E., Serin, M. S., & İkit, M. (2013). Epidemiology of dermatophytosis in junior combat and non-combat sports participants. *Mycoses*, 56(2), 95-100.
- [14] Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International journal of behavioral nutrition and physical activity*, 10(1), 98.
- [15] Eime, R. M., Harvey, J. T., Charity, M. J., Casey, M. M., Van Uffelen, J. G. Z., & Payne, W. R. (2015). The contribution of sport participation to overall health enhancing physical activity levels in Australia: a population-based study. *BMC public health*, 15(1), 806.

[16] Emery, C. A., & Tyreman, H. (2009). Sport participation, sport injury, risk factors and sport safety practices in Calgary and area junior high schools. *Paediatrics & child health*, 14(7), 439-444.

[17] Gill, D. L., Dzewaltowski, D. A., & Deeter, T. E. (1988). The relationship of competitiveness and achievement orientation to participation in sport and nonsport activities. *Journal of Sport and Exercise Psychology*, 10(2), 139-150.

[18] Greenwell, T. C., Hancock, M., Simmons, J. M., & Thorn, D. (2015). The Effects of Gender and Social Roles on the Marketing of Combat Sport. *Sport Marketing Quarterly*, 24(1).

[19] Gröpel, P., Wegner, M., & Schüler, J. (2016). Achievement motive and sport participation. *Psychology of Sport and Exercise*, 27, 93-100.

[20] Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2 (163-194), 105.

[21] Hawkins, R. D., & Fuller, C. W. (1999). A prospective epidemiological study of injuries in four English professional football clubs. *British journal of sports medicine*, 33(3), 196-203.

[22] Hunt, C. A., Rietschel, J. C., Hatfield, B. D., & Iso-Ahola, S. E. (2013). A psychophysiological profile of winners and losers in sport competition. *Sport, exercise, and performance psychology*, 2(3), 220

[23] Jenkins, C., & Ellis, T. (2011). The highway to hooliganism? An evaluation of the impact of combat sport participation on individual criminality. *International Journal of Police Science & Management*, 13(2), 117-131.

[24] Kim, Y. (2011). The pilot study in qualitative inquiry: Identifying issues and learning lessons for culturally competent research. *Qualitative Social Work*, 10(2), 190-206.

[25] Koivula, N. (1999). Sport Participation: Differences in Motivation and Actual. *Journal of Sport Behavior*, 22(3)

[26] Kumar, H., Manoli, A. E., Hodgkinson, I. R., & Downward, P. (2018). Sport participation: From policy, through facilities, to users' health, well-being, and social capital. *Sport Management Review*, 21(5), 549-562.

[27] Leary, M. R. (1992). Self-presentational processes in exercise and sport. *Journal of sport and exercise psychology*, 14 (4), 339-351.

[28] Lera-López, F., & Rapún-Garate, M. (2007). The demand for sport: Sport consumption and participation models. *Journal of sport Management*, 21(1), 103-122.

[29] Lewis-Beck, M., Bryman, A. E., & Liao, T. F. (2003). *The Sage encyclopedia of social science research methods*. Sage Publications.

[30] Lundberg, N., Bennett, J., & Smith, S. (2011). Outcomes of adaptive sports and recreation participation among veterans returning from combat with acquired disability. *Therapeutic Recreation Journal*, 45(2), 105-120.

[31] Mason, J. (2017). *Qualitative researching* (Third edition). Sage.

[32] Maxwell, J. P., Visek, A. J., & Moores, E. (2009). Anger and perceived legitimacy of aggression in male Hong Kong Chinese athletes: Effects of type of sport and level of competition. *Psychology of sport and exercise*, 10(2), 289-296.

[33] Megheirkouni, M., & Roomi, M. A. (2017). Women's leadership development in sport settings: Factors influencing the transformational learning experience of female managers. *European Journal of Training and Development*, 41(5), 467-484.

[34] Millar, P., & Stevens, J. (2012). Management training and national sport organization managers: examining the impact of training on individual and organizational performances. *Sport Management Review*, 15(3), 288-303.

[35] Molanorouzi, K., Khoo, S., & Morris, T. (2014). Validating the physical activity and leisure motivation scale (PALMS). *BMC Public Health*, 14(1), 909.

[36] Ngai, K. M., Levy, F., & Hsu, E. B. (2008). Injury trends in sanctioned mixed martial arts competition: a 5-year review from 2002 to 2007. *British journal of sports medicine*, 42(8), 686-689.

[37] Pappas, E. (2007). Boxing, wrestling, and martial arts related injuries treated in emergency departments in the United States, 2002-2005. *Journal of sports science & medicine*, 6(CSSI-2), 58.

[38] Parry, J. (1998). Violence and aggression in contemporary sport. *Ethics and sport*, 205-224.

[39] Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.

[40] Petrie, T. A. (1993). Coping skills, competitive trait anxiety, and playing states: Moderating effects on the life stress-injury relationship. *Journal of sport and exercise psychology*, 15(3), 261-274.

[41] Pettersson, S., Ekström, M. P., & Berg, C. M. (2013). Practices of weight regulation among elite athletes in combat sports: a matter of mental advantage?. *Journal of athletic training*, 48(1), 99-108.

[42] Pieter, W., Fife, G. P., & O'Sullivan, D. M. (2012). Competition injuries in taekwondo: a literature review and suggestions for prevention and surveillance. *Br. J Sports Med*, 46(7), 485-491.

[43] Robinson, T. T., & Carron, A. V. (1982). Personal and situational factors associated with dropping out versus maintaining participation in competitive sport. *Journal of Sport and Exercise Psychology*, 4(4), 364-378.

[44] Sabin, S. L., & Marcel, P. (2014). Study regarding the impact of sport competitions on students socialization. *European scientific journal*, 10(26).

[45] Salguero, A., Gonzalez-Boto, R., Tuero, C., & Marquez, S. (2003). Identification of dropout reasons in young competitive swimmers. *Journal of Sports Medicine and Physical Fitness*, 43(4), 530.

[46] Scanlan, T. K., & Lewthwaite, R. (1984). Social psychological aspects of competition for male youth sport participants: I. Predictors of competitive stress. *Journal of Sport and Exercise Psychology*, 6(2), 208-226.

[47] Scotland, J. (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms. *English language teaching*, 5(9), 9-16.

[48] Shirani, G., Motamed, M. H. K., Ashuri, A., & Eshkevari, P. S. (2010). Prevalence and patterns of combat sport related maxillofacial injuries. *Journal of emergencies, trauma and shock*, 3(4), 314.

[49] Sofia, R. M., & Cruz, J. F. A. (2015). Self-control as a mechanism for controlling aggression: A study in the context of sport competition. *Personality and Individual Differences*, 87, 302-306.

[50] Sofia, R., & Cruz, J. F. A. (2016). Exploring individual differences in the experience of anger in sport competition: The importance of cognitive, emotional, and motivational variables. *Journal of Applied Sport Psychology*, 28(3), 350-366.

[51] Sport at Loughborough University (2019). Loughborough University. Retrieved from <https://www.Iboro.ac.uk/sport/> (Date accessed at April 2019)

[52] Tuli, F. (2010). The basis of distinction between qualitative and quantitative research in social science: Reflection on ontological, epistemological and methodological *Ethiopian Journal of Education and Sciences*, 6(1). perspectives.

[53] Thomassen, T. O., & Halvari, H. (1996). Achievement motivation and involvement in Sport competitions. *Perceptual and Motor Skills*, 83(3_suppl), 1363-1374.

[54] Wang, V., Mayer, F., & Hang, Y. H. (2017). Injury Types, Injury Risked Body Parts And Sport Type Specificity Of Elite Athletes. *BrJ Sports Med*, 51(4), 406-406.

[55] Wold, B., & Anderssen, N. (1992). Health promotion aspects of family and peer influences on sport participation. *International journal of sport psychology*.

[56] Zazryn, T. R., McCrory, P. R., & Cameron, P. A. (2008). Neurologic injuries in boxing and other combat sports. *Neurologic clinics*, 26(1), 257-270.