MOTIVATION ORIENTATION OF PARTICIPANTS IN EXTREME SPORTS IN KENYA: A CASE OF THE MOUNT KENYA EXTREME ADVENTURE CHALLENGE

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DECLARATION

I confirm that this research thesis is my original work and has not been presented in any other university.

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DEDICATION

This study is dedicated to God in whose provision I was able to carry on with the research in good and challenging times. Findings are dedicated to stakeholders in outdoor adventure, Kenya School of Adventure and Leadership, Kenya Forest Service, Kenya wildlife Service, Security Agencies and community who execute their duties in extreme conditions to make Mt Kenya Extreme Sports Event successful.

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LIST OF ABBREVIATIONS AND ACRONYMS

AM Amotivation

BASE Building, Antennas, Span and Earth

EXT External Regulation

KESAL Kenya School of Adventure and Leadership

KFS Kenya Forest Service

KWS Kenya Wildlife Service

IDE Identified Regulation

IMA Intrinsic Motivation to Accomplish

IMK Intrinsic Motivation to Know

IMS Intrinsic Motivation to Experience Stimulation

INT Introjected Regulation

KESAL Kenya School of Adventure and Leadership

MKESC Mt Kenya Extreme Sports Challenge

PM Participation Motivation

SMS Sport Motivation Scale

SPSS Statistical Package for Social Sciences

OPERATIONAL DEFINITION OF TERMS

Achievement- The extent to which individuals feel a sense of accomplishing set goals.

Corporate team- Participants sponsored to represent an institution in the Mt Kenya Extreme Sports Challenge.

Community Team Challenge- competitive activity that entails local people running a distance of 10 kilometre in Mt Kenya jungle through a pre-determined route that incorporate obstacle crossing

Extreme (Action/Free/Adventure) sports – Activities of high inherent risk, speed, height, specialized gear, physical exertion and skills. Competition is characterized by uncontrolled environmental variables and adopted rules based on the nature of the activities.

Extreme Adventure and **Extreme sports** are used interchangeably in this study

Extreme Adventure Challenge- A competitive team category that entails navigating through designated grid reference (check points) using a Map and Compass, Rock climbing, rappelling, High ropes course, High tower system and obstacle crossing.

Generation Y- Refers to individuals aged between 10 and 27 years.

Individual team - A unit of self-sponsored participants in the Mt Kenya extreme sport challenge event for personal needs.

KESAL bush race- Running competition covering a distance of 21 kilometers at an altitude of between 9,000 feet and 9,600 feet above sea level over designated obstacle in a team.

Motivation Orientation: The inclination of participants reasons for engaging in extreme sports and can either originate from internal desires (e.g. interest) or external compensation (e.g. money)

Motivation- The needs that drive extreme sports participants to engage in extreme sports activities and operate at the edge of perceived personal limit in an activity.

Mt Kenya Extreme Sports- Refers to a competitive sports event held at Kenya School of Adventure and Leadership at an altitude of 9,200 feet and 16,000 feet above sea level in Mt Kenya jungle.

ABSTRACT

Extreme sports have gained popularity and growth in participation as alternative sports from the dominant sports since 1970's. Social related factors in diverse cultural orientations influence decisions to participate in extreme sports. Participants seek 'extreme activities' that provide higher stimulation and excitement. In Kenya, Mt Kenya Extreme Sports Challenge, which is a team designed competition, has been held since 2011. Nonetheless, the motives for participation in extremes sports are not known in Kenya. The present study sought to explore motivation orientation of participants in Mt. Kenya Extreme Sports Challenge based on their demographic characteristics. In 2015, Mt Kenya school of adventure and leadership hosted 99 participants. Descriptive research design was used to assess motivation orientation of the Mt Kenya extreme sports challenge (MKESC) 2015 participants who were categorized into self sponsored individuals and corporate sponsored teams. A census survey was used in the study. Data was collected using adopted Sport Motivation Scale (SMS) by Pelletier *et al*., (1995). The SMS questionnaire assessed three main motivation categories; intrinsic, extrinsic and amotivation of the MKESC participants based on their demographic characteristics of age, gender, level of education and sponsorship status. Eighty four participants accepted to be respondents of the present study where 73%(61) of the respondents were male and 27%(23) were female. Hypotheses were tested using one way analysis of variance (ANOVA) and t-test at $p \leq 0.05$ level of significance. Scheffe test was used to trace the source of significance difference after significant F-ratios. An independent t-test established a significant difference on intrinsic motivations $t(82) = -2.777$ $p = .007$ between male and female participants. However, independent t-test did not establish significant difference at $p < .05$ on extrinsic and amotivation between male and female respondents. While evaluating motivation orientations of the respondents based on their age, ANOVA identified significant difference at $p < .05$ where Scheffe post hoc test established that the significant differences were between the respondents in age category 18-24 years and those in 25-34 years. A significant difference existed in extrinsic motivation as well as amotivation based on education level of the MKESC participants $F(3,80)=3.32$, $p = .024$ and $F(3,80)=3.17$, $p = .029$ respectively. Motivation was observed to differ significantly in all the three motivation categories (intrinsic, extrinsic and amotivation) based on the sponsorship status (self-sponsored, institution sponsored) of the respondents at $p < .05$. The study concluded that male and female participants in extreme sports have different intrinsic motivation orientations. Age influenced motivation orientation particularly extrinsic motivation of extreme sports of participants between 18 and 34 years. Education and sponsorship status of extreme sports significantly influenced extrinsic motivation of extreme sports participants. Findings of the study are useful in understanding demographic details, motivation orientation and motives of participants in extreme sports challenge in Kenya. This may facilitate the designing of programs that address specific needs of participants, form the basis for monitoring and evaluation of participants' satisfaction levels and provide reference material for extreme sports in Kenya. Future studies should evaluate motivation orientations of the participants before and after extreme sports participation.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Extreme sports entail activities that provide an alternative to the mainstream sports and values (Rinehart, 2000). It involves a combined individual extraordinary achievement and unmatched personal enjoyment (Rinehart & Sydnor, 2003). Extreme sports are also termed as; Free sports, Action sports or Adventure sports which are characterized by risk, danger, unconventional rules or techniques which differ from dominant sports (Bennette, Henson & Zhang, 2003; Gunnar, 2010; Immonen, Brymer, Orth *et al*., 2017). Extreme sports may originate from re-interpretation of conventional sports practice where a new type of practice is established giving rise to extreme practice of conventional sports (Tomlinson, 2005). Modern lifestyle and routine has led to loss of excitement, danger, stimulation and satisfaction with ordinary life where people seek "extreme activities" that provide higher stimulation and excitement (Palmer, 2002). Participation in extreme sports is a deliberate and voluntary risk one takes to perform at the edge where more clarity and personal limits is realized (Lynn, 1990; Lapton & Tulluch, 2000; Ferrell, Milovanovic, Lyng *et al*,. 2017).

The last two decades have witnessed global rise in the number of extreme events which reflects growth in participation and popularity of Extreme sports (Ostrewski, 2002; Wheaton, 2003; Liberman, 2004; Olivier, 2006). Modern Bungee jumping started from suspension bridge in Bristol- England in 1979 and spread to United States Golden Gate Bridge in San Francisco, California. In Africa, extreme sports of Bungee jumping is held in Victoria Falls in Zambezi River-Zambia and in Bloukrans River Bridge in South Africa and Sagana River in Kenya (McKay, 2014). Other extreme sports in Kenya

include; Sky Dive boogie in Diani, South coast Kenya, the '10 to 4', Mountain biking in Mt. Kenya, Paragliding in Kerio Valley (Tuko.co.ke, 2019), Wheelbarrow race in Hell's gate in Naivasha that involves teams in a single activity and Mt. Kenya Extreme Sports Challenge (MKESC) which is team based and involves series of extreme activities (Kenya School of Adventurer and Leadership, (KESAL, 2014).

Evolution and popularity of extreme sports has been influenced by development in technology, generation change, media coverage, modern lifestyle, sponsorship and mainstreaming of extreme sports to include diverse participation across different age categories (Health, 1997; Hochman 1999; Brokington, 2001; Kress, 2003; Lachowetz & Bennett, 2004; Park, 2004; Donnelly, 2006). According to Nicholls (1984), participants in achievement-related setting adopt task and ego orientations as a means of defining success. Task-oriented individuals define success based on self-referencing like mastering skills and exerting effort. Ego-oriented individuals determine success in reference to others in a social comparison process with focus on outperforming opponents (Nicholls, 1989; Papaioannou & McDonald, 1993; White & Duda, 1994).

A study on moral development and goal orientation in sports found that, motivation orientation is influenced by age, education level, type of sport and the form of participation such as coaching. Motivation orientation also determines the choice of sports, perceived success and satisfaction in achievement set-up (Proios, Doganis, Unierzyski *et al*., 2004). Participation in sports is affected by social related factors such as sponsorship, etiquette, sports provider, media, masculinity and sports subcultures (Anderson, 1999; Heirno, 2000; Thorpe 2007a; Thorpe, 2009a). Moreover, studies have shown that participants in extreme sports seek happiness, satisfaction, own personality

and validation besides setting social norms with a focus on fulfilling personal wishes, positive transformation by taking risk for self-improvement, emotional engagement and control, building resilience, life coping techniques and being in the natural environment (Nimmon, Stewart, McNamara *et al*., 2007; Kavcic, 2008; Brymer & Oades, 2009; MacIntyre, Walkin, Beckmann, *et al*., 2019). Therefore, motivation to participate in extreme sports includes but not limited to the following: high levels of excitement "adrenaline rush", thrill, challenge, risk, feeling of uniqueness, sense of psychological, physical and spiritual well-being, accomplishment, adventure, escape from routine of daily life, flow and aesthetic display of activities (Celsi, Rose & Leigh, 1993; Rinehart, 2000).

A study by Chin, Khoo and Low (2012) on differences in adolescent athletes' self-determination motivation and goal orientation in track and field shows that older participants are more task-oriented compared to younger participants. Secondly, male athletes are ego-oriented with higher rating in extrinsic motivation in competitive sports than female athletes. According to Xhakaza (2005), educated individuals have disposable income to cater for cost in sports compared to those in labourer's jobs while sponsorship of sports influences participation of athletes who associate with the corporate products and rewards (Apostolopoulou & Papadimitrious 2004; Kim, 2010). Therefore, age, gender, education and sponsorship are some of the reasons cited by earlier studies that affect participant motivation orientations in sports but these have not been navigated in any Kenyan extreme sport participation situation.

In Kenya, the Mt Kenya Extreme Sport Challenge started in 2011 is organized yearly between July and August whose theme is to conserve environment in Mt. Kenya. Since

2011 to 2014 a team comprised of five athletes of mixed or single gender competing as a unit with other teams while from 2015 a team comprised of three participants of mixed or single gender with age limit being 18 years and above, however, there is no category for professional and armature participants. Event categories include; Extreme Adventure Challenge (team challenge), Kenya School of Adventure and Leadership Bush race and Community Team Challenge (KESAL, 2012). The events attract both local and international participants in teams from diverse background since 2011 who are self or corporate sponsored. This study sought to establish the motivation orientation of these participants.

1.2 Statement of the Problem

The global growth in popularity and participation in extreme sports in the last two decades has led to development of new extreme sports activities (Nimmo, *et al*., 2007; Rauter & Doupona, 2011). Participation in sports is influenced by social related factors (gender roles, education, religion and parenting) and the surrounding different cultural orientations. Studies done in United States and Europe (Rinehart & Sydnor, 2003; Router & Doupona, 2011) indicate that participants in extreme sports are influenced by opportunities available to experience risk-taking, affiliation, aesthetic, fun and enjoyment. These studies were based on single and individual activities in a social and cultural setting specific to participants in the U.S and Europe. The findings would not be generalized to Kenyan extreme sports challenge that involves teams and a series of activities in diverse social and cultural setting. Changes in the number of participants in a team, participation categories and design of activities have been made to increase participation. In Kenya, studies on participation motivations carried out on dominant

sports report success in sports, talent, winning, personal development, self-actualization and belief as the major motives for participation in sports (Rintaugu, *et al*., 2012). However, there is paucity of local literature on motivation of participants in extreme sports events in Kenya. Motivation is a key determinant in sports participation (McDonald, *et al*., 2002). This study therefore sought to determine the motivation orientations of participants in Mt Kenya extreme sports challenge 2015 event.

1.3 Purpose of the Study

The purpose of this study was to establish motivation orientation of participants in Mt Kenya Extreme Sports Challenge.

1.4 Objectives of the Study

The study was guided by the following objectives

1. To determine motivation orientation of participants in Mt. Kenya Extreme Sports Challenge

2. To determine whether there are differences in the participation motivation of the participants in the Mt. Kenya Extreme Sports in terms of extrinsic, amotivation and intrinsic orientations.

3. To find out the differences in motivation orientation based on gender of the participants in the Mt. Kenya Extreme Sports.

4. To investigate the influence of age on motivation orientation of the participants in the Mt. Kenya Extreme Sports.

5. To find out the differences in motivation orientation in reference to the education level of participants in the Mt. Kenya Extreme Sports.

6. To find out the differences in motivation orientations between self-sponsored individual and corporate sponsored participants in the Mt. Kenya Extreme Sports.

1.5 Study Hypotheses

The study was guided by the following hypotheses:

Ho_1 There is no significant difference in the participation motivation of the participants in the Mt. Kenya Extreme Sports in terms of extrinsic, amotivation, and intrinsic orientations.

Ho_2 There is no significant difference on motivation orientations of male and female participants among participants in the Mt Kenya extreme sports challenge.

Ho_3 Age has no significant influence on motivation orientation of participants in Mt. Kenya Extreme Sport Challenge.

Ho_4 There is no significant difference in the motivation orientation of participants in Mt. Kenya Extreme Sports according to their education level.

Ho_5 There is no significant difference on motivation orientation between self-sponsored individual and corporate sponsored participants in Mt Kenya extreme sports challenge 2015.

1.6 Significance of the Study

The findings may contribute to the body of knowledge in the field of alternative sports, adventure and recreation. The results enable organizers to understand participants' motivation orientations and demographic details of participants in extreme sports in Kenya. This facilitates in appropriating the challenge levels and designing of activities that meet participants' motivation goals within the social factors in the Kenyan setting. Also, organizers may be able to package, market and attract participations in extreme sports event as a product in the tourism circuit destination in Kenya. Findings may further form the basis for evaluating satisfaction of participants and recommend further areas of research in the field of extreme sports in Kenya. Finally, the finding adds to literature on motivation orientation of extreme sports and those of dominant sports.

1.7 Delimitations of the Study

The study was delimited to Mt Kenya Extreme Sports Challenge 2015. The data collection for the study was delimited to the use of Sport Motivation Scale (SMS) questionnaire.

1.8 Limitations of the Study

The study was limited by inherent characteristics of participants such as previous participation in dominant sports and social related factors like culture that would have influenced motivation orientation of extreme sports participants in Kenya. It relied on participants' self-reported data which could contain bias. However, the participants were given appropriate guidelines on how to fill the questionnaire. They were also assured of confidentiality.

1.9 Assumptions of the Study

The study assumed that participation in extreme sports was induced by motivation factors and it was not through coercion. It assumed that motivation variables were measured using adapted and modified Sports Motivation Scale (SMS) questionnaire. The study also assumed participants would recall the experience of the MKESC 2015 event since the data was collected over a year later, 2016.

1.10 Theoretical Framework

This study was based on self-determination theory that proposes that humans have innate psychological needs that are fundamental for self-motivation and personality integrations. This includes a need for autonomy, relatedness and competence. Satisfaction of basic needs takes place in a social environment and leads to optimal function of the individual (Deci & Ryan, 1995; Deci & Vansteenkiste, 2004; Vallerand, 2004).Therefore, a sports environment that promotes satisfaction of the three basic needs leads to a more self-determined form of regulation.

Self-determination theory depicts three forms of regulations: intrinsic motivation, extrinsic motivations and amotivation. Intrinsic motivation involves engaging in activities based on interest/self-endorsed values. Weinberg and Gould (2003) argue that intrinsic motivation entails need for knowledge, accomplishment and experiencing stimulation. In sports, motivation for knowledge is attained by satisfaction derived from learnt activities. Motivation to accomplish is achieved by mastery of skills in sport while motivation to experience stimulation occurs when participation is driven by the ‘thrill’/excitement in the sports.

In extrinsic motivation, athletes engage in sports to gain attached benefits. This includes self-determined regulation (identified) or non-self-determined motivation (external and introjected) (Ryan & Deci, 2000; Weinberg & Gould, 2003). In sports, individuals with external regulation will participate to gain rewards, those with introjected regulation engage in activities to remain relevant while in identified regulation, participation will be based on personal choice and values. In amotivation, an athlete lacks the drive to engage in sports and has external locus of control (Ryan & Deci, 2000). Intrinsic motivations and identified regulations entail participation out of own initiative and address basic psychological need for autonomy (Ryan & Deci, 2000). The conceptual framework indicates individual have innate psychological needs that are satisfied in a social environment. Individual are driven in sports by intrinsic, extrinsic or amotivation reasons which vary based on social demographic factors such as gender, age, education level and sponsorship. Therefore sports activity that address the needs based gender, age, education level and sponsorship factor will lead to positive outcome, adherence and future engagement while activities not in line with participants needs based on demographic factors results to undesired outcome and dropout in future sports participation. Studies indicate that, an environment that supports autonomy in sports leads to self-determined engagement, higher self-esteem and adaptive behaviours in sports while a controlling environment thwarts satisfaction of basic needs of autonomy, relatedness and competence leading to dropout and low adherence in sports participation (Amorose, 2007; Balaguer, Castillo & Duda, 2008; Adie & Ntoumanis, 2012).

There was a need to determine participants' motivational-orientations and motives for participation in Mt Kenya extreme sports challenge to provide knowledge on current

motivation orientations. This study focused on self-determination theory (Figure 1.1) to explore motivation orientations and participants' motives in Mt Kenya extreme sports challenge with a focus on social-demographic factors of age, gender, level of education and sponsorship. Sports motivation construct was classified as intrinsic motivation to know (IMK), to accomplish (IMA), to experience stimulation (IMS), external regulation (EXT), introjected regulation (INT), identified regulation (IDE) and amotivation (AM) (Appendix D).

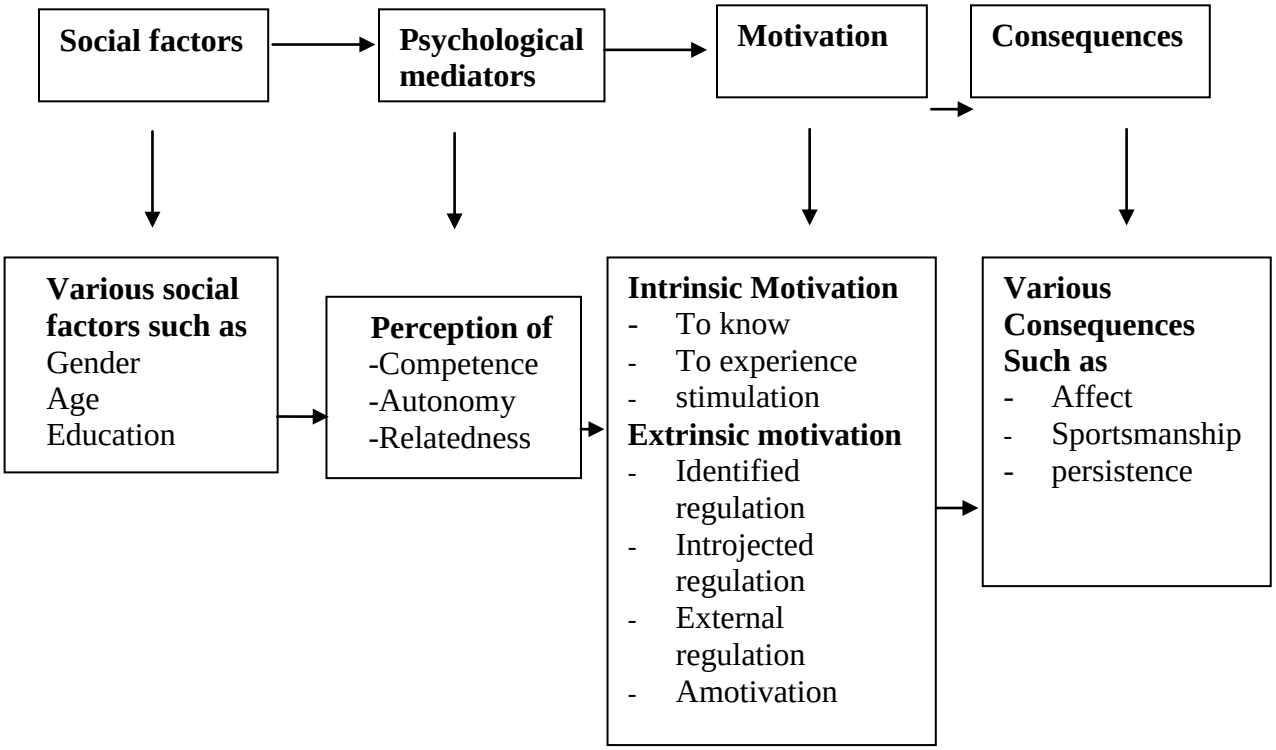

Figure 1 1: The Motivation Causal Sequence: From Social Factors to Outcomes; Adapted from Vallerand and Loiser (1999), pp. 145.

CHAPTER TWO: LITERATURE REVIEW

2.1 The History of Extreme Sports

Extreme sports originated from people's lifestyle and cultural practices that were learnt and progressively raised the execution levels beyond perceived risk limit. In 1999, skateboarding was raised above other single events in the history of action sport with execution of two and half times spinning in the air during summer X games (Grossman, 2008). The modern bungee jumping was practised by "land divers'' of Pentecostal Island in Vanuatu in 1950's, and it involved jumping from a wooden platform with vine tied at the ankle. Bungee jumping evolved athletes jumping from bridges, mobile cranes and hot air balloon in New Zealand. In Africa, it was installed in Bloukrans River between Eastern cap and Western cap in Tsitsikamma area of South Africans' Garden Route in 1970 and later commercialized in 1997 (Li, 2013).

Extreme sport has an evolving culture that combines physical skills and techniques of two or more mainstream sport. Consequently, this changes the nature of activities by accommodating style and creativity that raises competition level beyond perceived level of calculated risk (Bennett, R., Mousley, W., Kitchin, P. & Ali-Choudhury, R., 2007; Brymer & Gray, 2004). According to Grossman (2008), extreme sports provide athletes with opportunities to engage in alternative activities and creatively pursue personal motives beyond limitations of rules and regulations in the mainstream sports. Participants compete against self and progressively validate their ability level. However, previous studies on extreme sports such as skydiving (Lyng & Snow, 1986; Lyng, 1990), Building, Antenna, Span and Earth (B.A.S.E.) jumping (Ferrell *et al*., 2001; Allman, *et al*., 2009; Brymer & Oades, 2009), rafting and bungee jumping (Palmer, 2004; Wheaton, 2004;

Ozesen, 2007; Brymer, 2009b) focused on individual participation and competition in a single activity placing emphasis on surpassing personal achievement. Hence, there was need to investigate team participation carried out in the Mt Kenya extreme sports challenge.

2.2 Participation Motivation in Sports

Motivation has been referred to as the internal/external forces that lead to initiation, direction, intensity and persistence of behaviour (Vallerand, 2004). Psychological continuum model (Funk & James, 2001) indicates that participation in physical activities develops through the levels of awareness, attraction, attachment and allegiance. This entails gained knowledge about sports, choice of sport, to identified values and meaning of activities and to integration of sports to an athlete's way of life and continues to participate irrespective of other activities (Funk & James, 2006). Therefore, based on these studies (Funk & James, 2001; Vallerand, 2004) participation in extreme sports is determined by level of awareness, social-related factors, basic psychological needs and environmental factors.

According to Xhakaza (2005), participation in sports may be determined by interaction process such as: socialization into sports both psychological and social aspect that mould athletes' interest in sports, socialization through sports where individuals acquire values and knowledge from sport participation and socialization out of sports like undesirable experience that lead to dropout in sport. Participation in sports may also be influenced by socialization agents such as family which approves acceptable sport habits, school where sport is projected as either male or female domain, prevailing culture in schools that contribute to choice of sports and media presentation of female champions in sports

(Varpatoli, 1986; Engel, 1994; Khumalo, 1999). Participants in MKESC varied based on participants' socialization process in sports at personal and corporate level.

Generally, people engage in sports for several reasons. Casper, Gray and Stellino (2007) observed that in tennis sports, player continuous engagement was determined by the extent of individual investment, opportunities to participate, enjoyment and support from others. In another study (Hodge, Allen & Smellie, 2007)identified that masters sports participants had intrinsic motivation and were attracted by opportunities for affiliation, enjoyment and social recognition. The motive to participate in MKESC 2015 may therefore vary from one participant to the other given that participants were drawn from different socio-cultural, education, and economic background.

Studies on charity-affiliated sport events found that athletes were motivated by factors such as a need for 'involvement in the good cause', 'serious-mindedness' and a need for a healthy lifestyle (Bennett *et al*, 2007). According to Won, Park and Turner (2010), participants in charity health-related sports event were driven by philanthropic motives like offering support, family needs, group collaboration need, social affiliation, entertainment, sports activities and external benefits. Thus, in MKESC under the theme of conservation, the study sought to establish if it appealed and attracted participants who 'seriously' connected and identified with conservation, friendship, enjoyment as well as health and fitness reasons.

According to Duda (2001), participants in sport may perceive success in terms of task or ego orientations. Task oriented participants set targets anchored on learning and mastery while ego oriented individuals have objectives focused on outperforming others. Such

participation orientation in sports influences individual involvement in sports including extreme sports, the motivation could be intrinsic, extrinsic or amotivation.

Shafizadeh (2007) argues that motivation climate in sports and goal orientation influence individual engagement in sports based on what is perceived to be encouraged in an organization setting. Mastery-based climate promotes learning, improves individual skills and acknowledges effort while performance-based climate focuses on social comparison and acknowledges best performance (William, 2001). It can be said therefore, a sports climate that nurtures task mastery promotes enhanced effort towards learning and skills development which contribute to competence and a feeling of self-determination in sports leading to intrinsic motivation orientation. On the other hand, a sports climate that reinforces performance facilitates competition to win/outperform others, whereby lack of self-determination may lead to failure which will result to a feeling of incompetence and amotivation.

Several studies have shown that positive perception of individual competence and reinforcement by significant others lead to more effort, satisfaction and intrinsic motivation in sports. Individuals with high perceived competence are intrinsically motivated and tend to engage in more challenging task (Williams, 2001; Standage *et al*., 2003). Similarly, in MKESC, the participants who felt competent would be attracted to sports category perceived to be of higher challenge level. The participants were likely to select extreme challenge activities that were focusing on learning and acquiring new skills.

Shafizadeh (2007) further indicates that people are attracted to participate in a sport event where they can exercise choice from alternative activities, feeling of control and self-determination. In addition, an education set-up where participant goal orientation is thought-out, mastery climate is encouraged through individual improvement and positive feedback on perceived competence that contribute to enhanced motivation, effort and performance. Therefore, sports setting that promote mastery-based climate, address participant need for competence, choice of activities and self-determination leading to intrinsic motivation and persistence in sports.

While evaluating reasons for risk taking in extreme sports (Brymer, 2010), indicate that athletes are not solely driven by the "traditional risk-taking" that imply seeking for unhealthy thrills or danger. However, the desire to break-off from the risk-aversive tendencies that embody modern society pushes athletes to engage in extreme sports. Notably the desires to break-off risk tendencies surpass the fear of risk in participation in extreme sports. Brymer (2010) further asserts that athletes desire to confront risky task while acknowledging possibility of undesirable outcome, develop competence level with view of task at hand, enhance control and mitigate undesirable outcome form the basis of their participation in extreme sports.

A study on freedom in extreme sports reveals that individuals engage in extreme sport to pursue essential human values like freedom from restriction, freedom as ability to move through risky activity without link to 'safety'. According to Brymer and Schweitzer (2013) letting go control by embracing possible outcomes that may exceed human intervention, releasing fear by participating in sports and pushing beyond the limit of fear

to a feeling of elation elicit participation in extreme sports. The participants in extreme sports thus take the opportunity to envision, engage and experience sport beyond the rim of modern life (Brymer & Schweitzer, 2013).

Studies on motives for participation in extreme sports (Brymer & Oades, 2009; Allman *et al.*, 2009; Kerr & Mackenzie, 2012) show that motivation in extreme sports is multifaceted where athletes have similar motives that include: risky-taking, need to acquire new skills, desire to accomplish, adrenaline rush, need to belong, spiritual wellbeing, escape from boredom, exceeding personal limits and dealing with fear and social facilitation. Xhakaza (2005) adds that sports should create attractive environment that incorporate wide range of activities which allows individual choice of activity, experience and contribute towards enhancing athlete's vital life skills. Therefore, extreme sport participants are attracted to engage in sports event that provide opportunities through alternative sports activities that accommodates personal choice and responsibility, edge work, imparting learning experience, skills mastery, confronting danger to transcending fear and experiencing life beyond predictability that embody modern society setup while acknowledging possibility of unforeseen outcome beyond human effort.

Participation in sports may be based on satisfaction derived from activities, external rewards or lack of drive (Deci & Ryan, 1985a, 2002; Shank, 2009; Funk, 2012). Studies further demonstrate that extreme sports particpiants are inspired by opportunities to experience humility, courage, challenge current limits and realize new levels by embracing risk, emotional engagement, self-improvement and control, entertainment,

relaxation and aesthetic (Brymer & Oades, 2009; Rauter & Doupona, 2011; Immonen, *et al*., 2017). This study was set to assess motivation orientation of participants in Mt Kenya Extreme Sports Challenge 2015.

2.3 Factors Influencing Participation in Extreme Sports

There is a traditional perception that participants of extreme sports are risk takers and are individuals who are out to seek sensation because they lack connection to the natural world (Maclntyre et al., 2019). While this might be true, a relatively recent study by Brymer and Gray (2010) shows that participants of extreme sports are stimulated by behavioural and motivational benefits derived from the high risk activities. Generally, emotional experience is the core reason for engaging in extreme sports. During interviews with extreme sports participants, (Brymer & Gray, 2010) noted that participants suggested that the feelings of emotional connection to the natural world override the fear of participation and is among the major drive of engaging in extreme sports. Therefore, the experiences the extreme sports have on an individual can determine his or her motivation to engage in future.

Although there are no particular gender or sex that have been established prone to find extreme sports more appealing, a typical target audience exists along these lines (Angela, 2012). It is a common observation that majority of extreme sports participants are young especially late teens through their mid-thirties. Angela (2012) argues that during this age people tend to be in a period of their life suitable for adventure experimentation. In contrast Fletcher (2008) established that the age in which people are finding extreme sports appealing is even lower than what was previously thought. Children as young as

12 and 13 are choosing extreme sports such as snowboarding and BMX racing. Fletcher (2008), asserts that the thrill, pleasure, and culture associated with extreme sports make them appealing over traditional sports such as football or basketball.

Participants of extreme sports acknowledge presence of risk associated with the activities involved. In a qualitative study using extreme sports participants (Brymer, 2010) established that participation in extreme sports is not influenced much by risks and it is not about thrill and adrenaline. However, participants described the experience of deep sense of relaxation and mental emotional clarity as among the major drive towards extreme sports. When reasons for engaging in extreme sports are assessed from extreme sports participants perspective need for thrill or risk taking is not their major drive, instead the emotional experience seems to be the central motivation to engage in extreme adventure.

2.4 Social Demographic Variables and Participation Motivation in Sports

Participation in sports is determined by meta-motivational states that function in pairs where individuals reverse between the set pair based on environmental stimuli, frustration and satiation (Apter, 1982, 1989, 2001). A study on situational state balance and participation motivation among youth sports reveals that behaviour towards sports is determined by meta-motivational dominance that vary with participation levels, sport type and gender (Cogan & Brown, 1999, as cited by Sit, 2006). Therefore, understanding participants' psychological and demographic characteristic facilitates providers of adventure sports to appreciate individual motives and design activities that address specific underlying personal needs.

2.4.1 Gender and Motivation Orientations in Extreme Sports

Studies indicate that participation in sports is determined by the prevailing physiological factors such as skeletal and muscular system that affect mastery of physical skills. Psychological/social-cultural factors entail perception of sports in context of 'male' personality versus 'real' female being feminine and gender role orientation. This will influence female's participation in sport (Prakasa & Overman, 1984; Fasting, 1987; Engel, 1994; Santrock, 1995; Xhakaza, 2005). The European Commission (2014) reported that gender difference can be identified in the relation to what motivate people for engaging in sports. The commission identified that men are more likely to engage in sports to have fun and to be with friends, women are concerned with controlling their weight, counter effect of aging and improve their appearance.

Findings by Xhakaza (2005) show that female participation in sports is influenced by media projection of women performance in sport event, heightened awareness on health and fitness associated with engagement in sports. Findings have also asserted that females in South Africa are motivated to engage in sports by the need for enjoyment, to attain a healthy lifestyle, friendship, weight loss, to experience fulfilment of winning, to gain skills, to embrace available sports opportunities like facilities and career purpose. However, lack of drive, role models, sex roles at home, lack of parental support, social-economic status, low self-esteem and cultural factors limited girls participation in sports.

Moreover, studies indicate that female athletes engage in sports for intrinsic reasons like friendship/fun, while male participants engage in sports for ego-related factors like recognition (Gould *et al*., 1985; Chantel *et al*., 1996; Kilpatrick *et al*., 2005; Kolayis, Sari

& Celik, 2018). Findings by Bennett *et al*. (2007) show that participants in charity–affiliated sports engage based on their level of 'involvement with the sport', desire to interact socially and 'exhibitionism'/wish to be seen to take part in the event. Nonetheless, gender did not significantly influence participation motivation for fun, enjoyment and social interaction among male and female participants.

According to Khoivula (1995), participant gender schema tends to influence athletes thought process and determine how one deduces meaning from sport based on community interpretation of 'masculinity and 'femininity' in respective sports type. Therefore, motivation inclines towards participant 'cross-sex' disposition, and activity in tandem with gender schema leads to a more self-determined motivation, whereas activity perceived to be beyond one's ability based on gender schemer may lead to non-self-determined motivation orientation that results to amotivation.

Gregson and Colley (as cited in Xhakaza, 2005) indicate that participation in sports may be determined by athletes' desire to conform to society sex roles. Parent engagement in sport activities influence children's participation through socialization into sport leading to a corresponding gender schema development. A study on psychological and social influences of girls and young women's (aged 15-19 years) indicated that engagement in physical activity is driven by sports image, self-consciousness, family, friendship and group persuasion. However, personal attraction to social life takes an upper hand with advanced age among teenagers that comes with a gained sense of autonomy and ability to make choices (Coleman, Cox, & Roker, 2007). Therefore, participation motivation may

differ based on gender orientation, that is why this study embraced gender and how it influenced participation motivation in Mt Kenya extreme sports challenge 2015.

2.4.2 Age and Motivation Orientations in Extreme Sports

Studies on situational state balance and participation motivation (Apter, 2001; Sit & Lidner, 2006) indicate that youth in sports are in autic-alloic dyad where excitement, skills, fitness and social motives are the main factors for participation. Young adults in sports are more telic and mastery-oriented than non-participants (Lidner & Kerr, 1999, 2000, 2001). Furthermore, Kolayis, Sari and Celik (2018) show that as the athletes advance in age, winning is more important than friendship. Elite speed skaters are influenced by social/life opportunities, act of skating and perceived competence (Bakker *et al.*, 1993). Buckley (2018) observed that aging affect the participants' efficiency in performing or mastering an activity. This affects the participants' esteem which may influence their motivation orientations toward extreme sports.

Smoll, Smith and Cumming, (2007) reveals that coaches' intervention on motivation climate influences young athletes (10-14 years) participation motivation from ego-orientation towards mastery-orientation. Thus motivation climate emphasized by significant others in sports determines athlete motivation before, during and after sports competition. Therefore, participants' motivation may be informed by how the event is constituted and how success is measured in the view of significant others and reinforced behaviour.

Chin *et al.* (2012) state that inadequate and functional sports facilities hamper efforts to develop interest in sports among rural children and coaches leading to limited sports

opportunities and low intrinsic motivation compared to urban athletes who have sports facilities. In addition, studies indicate that older adolescent participants are task oriented than younger adolescents, whereas males are ego-oriented than females participants and focus on performing better than other athletes based on abilities in a competitive sports setup. Task-oriented athletes directed their effort towards enhancing individual skills, task mastery and personal competence (Duda *et al.,* 1995; Chi *et al.,* 2012). These studies indicate that age affects participation and motivation orientation in sports and may influence choice of sports category in Mt. Kenya extreme sports challenge and therefore, was considered a key component in the study.

2.4.3 Education Level and Motivation Orientations in Extreme Sports

Study by Rintaugu, and Nteere (2011) on motivation orientations of college athletes, indicates that interest in sports is founded on initial stage of socialization in sports. At college level, male and females differed according to the type of sports where males were driven more by skill development and females by aesthetic in sports. Schools where participation in sports is mandatory introduce sports among students and impart life-long skills, they promote fitness, nurture individual resilience through sports activities which incorporate social and environmental constrain that necessitate athletes to push beyond perceived personal limits and develop competences that are applicable in other spheres of life which further determine future participation in sports at competitive level (Xhakaza, 2005).

In South Africa, Digest as cited in Xhakaza, (2005) indicated that girls from low-income background are challenged in attaining education levels through various learning

institutions such as primary, secondary, post-secondary and tertiary levels where skills in physical education and sports are imparted while those in densely populated areas are characterized by unhealthy and insecure surrounding thus limiting girls' involvement in sports.

Cheboi, (2006) showed that inadequate and dismal recreational facilities in Kenyan learning institutions hamper quality education whereas a study by Gudo, Olel & Oanda (2011) established that, a double intake in public university in Kenya had a negative effect such as congestion in training facilities ranging from lecture halls and student-lecture ratio to sports facilities. It can be postulated that lack of recreation facilities, inadequate and congested sports facilities negatively affect skills development, training and participation in sports at the University level of education. This influences motivation for sports participation by student at the University level and their engagement in other spheres of competitive sports. Rintaugu, Mwangi, Litaba, *et al*., (2014) add that Kenya University athletes engage in sports for enjoyment where success is the main drive for persistence. Therefore, education promotes exposure to sports while sports climate in schools influences individuals' motivation orientations and sport engagement at advanced levels.

2.4.4 Sponsorship and Motivation Orientations in Extreme Sports

Sponsorship refers to the assistance given by a corporate or an individual in form of cash/ finance or in kind for the purpose of attaining commercial or individual goals (Meenaghan, 2004). Howard and Crompton as cited in Verner *et al*., (1998) show that sponsorship in sports is a two-way process where corporate institutions engage in funding

sports so as to gain higher visibility in the market place, whereas Kim (2010) reports that sport events provide opportunities for institutions to sponsor teams and market their brand to consumers with a focus on the effectiveness of sports ability to impart desired messages and influence projected outcomes such as improved financial position like investment and enhanced brand image. This indicates that sport events that address sponsor objectives may attract funding and further influence participants' motivation and perceived outstanding outcome such as winning that translate to extrinsic motivation.

According to Cho, Kang and Koh (2010), financial background and available sports opportunities determine individual's choice and participation in sport. Consequently, sponsorship constraint, lack of sports facility, exposure and acquisition of vital skills in sports that promote competence, autonomy and motivation determine engagement in sports at competitive level such as MKESC. Therefore, sponsorship provides funding and promotes large events while sponsors benefit by using participants or event to raise awareness of their brand or company. In countries where sponsors are readily available and willing to support, extreme sports engagement in these sports are likely to be high. A study on motivation for participating in charity-affiliated sports event (Bennett, *et al*., 2007) reveal that participants who are involved in charity sport or those driven by desire to support 'a good cause' and individuals in pursuit of healthy lifestyle are willing to pay a higher price and mobilize sponsorship for participation in sports events that are considered of higher status. Therefore, sports events perceived to be of higher status influence participant motivation and type of sponsorship.

According to the Office for Recreation and Sports as cited in Chin *et al*., (2012), rural athletes have a higher rating on ego orientation than urban athletes, a situation attributed to dissimilar sports competition opportunities. Thus, rural athletes' engagement in sports competitions is hindered by remoteness and inability to attract sponsorship to facilitate participation in sport. Therefore, participant orientation and participation in sports is influenced by type and scope of sponsorship. Thus sports competition that involves long distance hamper engagement of athletes in non-metropolitan regions, while higher participation in metropolitan regions is facilitated by sponsorship and closeness of sports facilities (Eimie, *et al*., 2007). This shows that, participants with constraint sponsorship would find it difficult to participate in sports event that require full sponsorship to cater for registration and logistic purposes. Therefore sports sponsorship influences participation and by extension athletes motivation in sports

Another study on professional niche sports sponsorship (Greenhalgh, 2010) show that sponsors of niche sports facilitate individual and team participation in sports to push their corporate objectives such as market and public awareness, greater company image, capital gain and perception of being connected with the target community. Although the study did not examine participants motivation based on sponsorship, availability of sponsor facilitates engagement in the niche sport. In another study by Mason (2005) it reported that action sports sponsorship provides a platform for participants to connect, interact and enhance working relations. Based on (Mason, 2005 and Greenhalgh, 2010) findings, sponsorship in extreme sports not only aim at motivating participants but also serve to promote the brand of the sponsor. Other studies have established that sponsorship in extreme sports and endorsement by elite athlete attracts generation Y

which play a significant role in influencing their motivation orientations (Apostolopoulou & Papadimitrious 2004; Cianfrone & Zhang, 2006; Sisk, 2010; Kim, 2010; Jager, 2012). These studies were based on corporate sponsorship where organizations facilitate participants to attain set institution objective whereas in MKESC entails both corporate and self-sponsored participants who engage in sport without a corporate brand. Therefore sponsorship enables sport events to take place and knowledge on motivation orientation of participants can design activities that address the needs of self-sponsored individual and corporate sponsored teams in MKESC.

2.5 Participation in Extreme Sports outside Kenya

In United States, Sports Good Manufacturers Association (2003) and Stotlar (2002) report a growth in extreme sports participation and a decline in spectatorship and participation in the dominant sports such as basketball. A study on motivation for Building, Antennas, Span and Earth (B.A.S.E) by Allman, *et al*., (2008), reveal that participants are motivated by the need to acquire new elite skills, the sense of belonging, gain of personal and spiritual wellbeing, sense of accomplishment, adrenaline rush, control and to overcome fear.

A study on perspective of sport-oriented public in Slovenia on extreme sports (Rauters & Topič, 2011), indicates that participants in extreme sports are motivated by entertainment, relaxation and attractiveness of the sports. Young participants prefer dangerous activities with more males engaging in extreme sports and team sports. Female participants on the hand prefer non-competitive recreation sports. The studies focused on motivation for individual and single activity extreme sport competition. Participation was based on

established subculture that was specific to Slovenian people. Individuals with control-oriented motivations such as socialization and escape may engage in sports for gains other than the sports itself (Wann, 1995; Trail & James, 2001).

A study done in Western Australia on the status of challenge/extreme and recreational activity in 11 sports showed that participants engage in extreme sports due to affiliation, socialization, fun, accomplishment, opportunity to improve skills , thrill, push to the limit, risk associated with the sports and the desire for distinctive lifestyle and social identity (Nimmon, *et al*., 2007). According to Mintel (2003) market research, 10% of the population had interest in lifestyle sports with majority being in the age bracket of 15-24 years males from higher social demographic status. Health (1997), investigating participation in bungee jumping and sky diving showed that membership increased by 10% annually while snowboarding grew by 51% between 1999 and 2000 with majority being male from generation Y (Yin, 2001).

The aforementioned studies involved individualized competition in a single activity and focused on individual achievement where competitions are based on founded subcultures that are specific to the participants. In Kenya, Mt Kenya extreme sports challenge is organized on theme of conservation (Save Mt Kenya) and mountain sports tourism with focus on teams' participation through a series of extreme activities. The event targets people from diverse background and demographic status, therefore the need to establish the motivation in Kenya setting.

2.6 The Mt. Kenya Extreme Sports Challenge

Mt. Kenya extreme sports event has been held at KESAL since years 2011 at an altitude between 9,200 and 1,600 feet above sea level. The competition entails sky marathon, jungle race and extreme adventure categories. Extreme adventure involved a team of three competing as a unit through a series of extreme sport activities that demanded endurance, teamwork, communication, courage, risk taking and tenacity. The activities undertaken included; navigation through designated checkpoints, rock climbing/abseil, high ropes course, the high tower system and wall climbing (KESAL, 2011/2012). Most of the MKESC participants are locals with a few internationals who are mainly tourists. Participants are amateurs and there are no training or experienced require to participate in the event. The minimum participation age for MKESC is 18 years. The team that normally comprise of five members is made up of both men and females. In 2014, the event attracted twenty two teams comprising five members where winning was based on a cumulative score. The event categories included extreme adventure challenge, KESAL Bush race and Community team challenge (KESAL/2014) while in 2015, the participants took part in the extreme adventure and KESAL Bush race that involved a team of three individuals with the event attracting 33 teams. With the event gaining popularity over the years, there was need to establish participation motivation for athletes in MKESC that entailed teams as a unit of competition.

2.7 Summary of Literature Review

The reviewed literature indicates risk as a core component in extreme sports activities and perhaps one of the primary cause of low participation of relatively old participant and high participation of generation Y. Extreme sports provide alternative activities that allow

participants to engage beyond limits of rules and regulations in the dominant sports (Grossman, 2008). Humans have innate psychological needs of competence, relatedness and autonomy that are key for self-motivation and personality integrations (Deci & ansteenkiste, 2004). Ryan and Deci (2000) argue that individuals with intrinsic motivation and self-determined regulation (identified and integrated) participate out of their own initiative for desired outcomes, achieve basic need for autonomy and attain higher performance, persistence and creativity.

Athletes' choice of sport, perceived success and satisfaction in achievement setting is determined by motivation orientation and situational state balance that is influenced by age, education, type of sports, culture, and motivation climate such as coaching (Markus & Kitayama, 1991; Vallerand, 2004).Therefore, participation in sports may be determined by motivation orientation and demographic factors. Literature reviewed also points out that motivations influence participation in extreme sports and athletes are attracted by opportunities for self-improvement, so as to feel in control, for entertainment, aesthetic execution of activities, need to acquire new skills, overcome fears, relaxation, need for affiliation, socialization; fun/enjoyment, accomplishment, crave for thrill, push to the limit, risk associated with the sports and the distinctive lifestyle and social identity (Health, 1997; Mintel, 2003; Nimmon, *et al*., 2007; Allman, *et al*., 2008; Grossman, 2008; Rauter & Topic, 2009; Rauter & Topič, 2011; Brymer & Schweitzer, 2013).

Motivation in sports is also influenced by social demographic factors such as gender, age, education, occupation and sponsorship (Chantel *et al*., 1996; Xhakaza 2005; Kilpatrick *et al*., 2005). These studies reviewed involved sports outside Kenya with different social

and cultural-related factors, different subcultures and were based on individual single activity and homogeneous groups from learning institutions/organization. Therefore, they were not a direct reflection of the Kenyan setting. This study sought to determine the social-demographic details and motivations of participants in the Kenyan set-up.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

The chapter focuses on the study design the research employed. The chapter further outlines the study variables that were assessed as well as the study area. The target population of the study, sampling technique and sample size calculation are also outlined in this chapter. The research instruments the study used to collect data and pre-testing of the same are discussed herein. The validity and reliability of the research instrument used in the study are elaborated in chapter three. The chapter also discusses the data collection processes and analysis including explanation of logistical and ethical considerations of the study.

3.2 Research Design

The study used descriptive research survey to assess motivation orientation and motives of participation in extreme sports during MKESC-2015 event. According to Mugenda and Mugenda (1999), descriptive research survey enables collection of data from a sample of population and determines the current status of a population in a given variable. Descriptive research survey enabled the researcher to collect quantifiable data, analyse and report findings on motivation -orientation of participants in MKESC.

3.3 Study Variables

Dependent variables were in three categories of motivation orientation; intrinsic, extrinsic and amotivation. The independent variables were age categories, gender that is male and female, level of education and type of sponsorship. Age category and gender were

measured at ordinal level where level of education and sponsorship were measured at nominal levels while the dependent variables of participation motivation were measured at interval level.

3.4 Study Area

The study was done in Kenya School of Adventure and Leadership (KESAL), located in the Northern slope of Mt Kenya at an altitude of 9200 feet above sea level in Meru County. The distance to the study location was approximately 260 kilometres driving from Nairobi– Nanyuki-Timau to Kisima road and then 19 kilometres from Kisima through Ntirimiti shopping centre to KESAL Base Camp (KESAL, 2011) KESAL is a public institution that was established in 1990 to provide experiential learning in Kenya. The institution provides services to government and private institutions as well as members of the public. It offers services such as leadership, team building and outdoor activities for example extreme sports challenge (KESAL, 2011). KESAL was selected for the current study due to its reputation in hosting and facilitating extreme sports in Kenya.

3.5 Target Population

Mt. Kenya extreme sports challenge-2015 involved teams as units of participation as either individual or corporate sponsored teams. The event attracted 33 teams comprising three individuals that totalled to 99 participants. The researcher obtained participants' contacts from KESAL which formed the target population of the study (MKESC/ 2015)

3.6 Sampling Techniques and Sample Size

Census method was used in the study where the inclusion criterion was based on participation in the MKESC-2015 and consent to engage in the study. Only team of participants who took part in the event and filled a consent form were involved in the study whereas those who declined consent were excluded in the study. Participants were categorized into individual and corporate sponsored teams. The researcher aimed to engage 100% (99) of participants as sample of the study where 84(85%) gave consent and participated in the study. Census survey gave all the participants a chance to be considered in the study (Israel, 1992) (Appedix E).

3.7 Research Instruments

The study utilized a self-reported questionnaire that had two instruments, a demographic questionnaire and sport motivation scale (SMS) questionnaire for motivation orientation in sports adopted from Pelletier *et al.,* (1995) (Appendix C). Demographic questionnaire entailed details of age, gender, education and sponsorship (Appendix B) while sport motivation scale questionnaire focused on the three motivation orientations of participants in MKESC. It had 28 items inventory that measured amotivation (AM), three extrinsic type of regulation (external-EXT, introjected regulation-INT and identified regulation-IDE) and the three forms of intrinsic motivation (motivation to know, accomplish and experience stimulation). The questionnaire was a likert scale that assesses how a participant agrees to a particular statement. It ranged from strongly disagree, disagree, uncertain, agree and strongly agree where scoring starts with 1 for strongly disagree to 5 for strongly agree. Sports motivation orientation construct was classified

into three areas and with a key for sports motivation scale; Amotivation, Extrinsic motivation and intrinsic motivation (Appendix C).

3.8 Pre-testing of Research Instrument

The questionnaire was pretested on 10 participants during the Hells' Gate Wheelbarrow Race event of 2015 which is extreme adventure sports event that entailed team as a unit of competition with similar or almost similar conditions. Each participant in the event has to push a wheelbarrow carrying another person and competes with the opponents. It involves going through several obstacles such as surprise pools of water and vast terrains. The aim of the event is to raise fund to educate girl child in Naivasha town.

The reason for this pre-test was to prevent bias in responses during the main data collection for the study. The 10 participants filled the questionnaire for the first time at the agreed location with the researcher and filled it again after two weeks. The Cronbach's alpha was used to test reliability of the questionnaire from the pre-test. A reliability index of 0.7 was realized and accepted for the study (Mugenda & Mugenda, 1999).

3.9 Validity and Reliability

Sport Motivation Scale (SMS) had a reliability coefficient index of 0.7 (Pelletier *et al*., 1995). A similar reliability for the scale was recorded during the pre-testing of research instrument during Hells' Gate wheelbarrow event and therefore, using this scale to measure motivating orientation of Mt Kenya extreme sport participants was appropriate. Content validity was applied in validating content in the instrument and experts in the

field of Sports Psychology at Kenyatta University assisted in assessing items in the research instrument in terms of relevance, clarity, wording and ease of use. Their feedback was incorporated in the final questionnaire that was administered to participants in the Mt Kenya Extreme Sports Challenge.

3.10 Data Collection Techniques

After acquiring all the research permits that is from Kenyatta University Ethical and Review Committee, The National Commission of Science and Technology and KESAL appendix H, I and K respectively, the researcher proceeded and obtained contact information, that is, telephone number, email and address of the people who participated in MKESC 2015 that was provided by KESAL. The researcher then contacted the individuals who participated in the event via a phone call or an email in the case where the phone call went unanswered or offline. Once the researcher got in touch with the MKESC 2015 participant, the researcher explained the purpose of the call as well as that of the study and requested whether the individual would like to take part in the study. Once the participant accepted, the researcher and participant agreed on one on one meeting, established a rapport, addressed their concerns, clarified items in the questionnaire and sought their consent to be engaged in the study by signing a consent form (appendix B). Once the participant signed the consent form, the researcher issued the questionnaire and encouraged participants to answer all the questions and collected the questionnaire back upon completion. The data was collected from October to November 2016 where participants recalled all activities and experience with ease.

3.11 Data Analysis

Descriptive statistics was used to analyse data using Statistical Package for Social Science (SPSS) window version 22.0. Data was organized into tables, means, percentages and standard deviations. Data was analysed based on the general motivation orientation (amotivation, extrinsic and intrinsic motivation) and the specific motivations (AM, INT, IDE, EXT, IMK, IMS, and IMA). One way analysis of variance (ANOVA) was used to analyse the difference between means of independent variables of age (18-24 years, 25-34 years and ≥35 years), education (primary to post-graduate). One way analysis of variance was used to established presence of significant difference for mean where there were more than two variables in this study that is, age categories and levels of education. Scheffe post hoc test was applied to trace the source of significance difference in case of significant F-ratios established in ANOVA analysis (Mugenda & Mugenda, 1999). Independent t-test was used to establish significant difference in motivation on respondents' motivation based on sponsorship status (self-sponsored and institution sponsored) as well as motivation based on gender (males and females) that had two variables. All hypotheses were tested at significant level of $p < 0.05$.

3.12 Logistical and Ethical Considerations

The researcher contacted participants and met them at an agreed upon place or station, once they agreed to participate in the study. A personal introduction was done and the purpose of the study explained. Confidentiality of participants was protected by ensuring that data collection did not entail information identifying participants and no response was linked to participants' identities. Participation was voluntary and did not attract

direct benefits to participants. However, the findings were availed to MKESC organizers to contribute towards design activities that focus on participant's motivation, optimize their experience and minimize risk.

The researcher sought authorization from Kenyatta University graduate school, research permit from Kenyatta University Ethical Review Committee (appendix H) and The National Commission of Science and Technology (appendix I) before commencing the study. A permission letter was sourced from KESAL who gave access to corporate and participants' contacts. Consent was also made to participants which sought their acceptance to be involved in the study (Appendix K). The researcher explained the purpose of the study to the participants.

3.13 Summary of Study Methodology

The study utilized a descriptive research design to examine motivation orientation of the participants of MKESC-2015 event. The dependent variables of the study were intrinsic, extrinsic and amotivation while the independent variables were age categories, gender, level of education and type of sponsorship. The study was conducted in KESAL located in Mount Kenya where the target population were participants of MKESC-2015 event. The study used a census method as sampling technique while data was collected using sport motivation scale (SMS) questionnaire adopted from Pelletier *et al.,* (1995). The SMS reliability of 0.7 was established during pre-testing while content validity of the research instrument was ascertained by experienced experts in the field of sport psychology at Kenyatta University.

The data was analyzed using SPSS window version 22.0. Descriptive statistics that is means, percentages, and standard deviation were first established. Then inferences to test study hypotheses were done using ANOVA where Scheffe post hoc was performed to trace the source of significant difference once ANOVA identified one. Independent t-test was also used to identify significant difference in motivation of participants in relation to sponsorship. The researcher requested for authorization to conduct the study from Kenyatta University graduate school, research permit from Kenyatta University Ethical Review Committee, The National Commission of Science and Technology, KESAL and consent from the participants before commencing the study.

CHAPTER FOUR: FINDINGS

4.0 Introduction

This chapter presents the demographic characteristics of respondents namely gender, age, education level and sponsorship who participated in 2015 Mt. Kenya extreme sports challenge. This chapter also layout the findings of the general motivation orientation which is classified into three broad categories, that is intrinsic motivation, extrinsic motivation and amotivation. The general motivation is further broken down into seven specific motivation namely IMK (intrinsic motivation to know), IMA (intrinsic motivation to accomplish), IMS (intrinsic motivation to experience stimulation); EXT (extrinsic motivation-external regulation), INT (extrinsic motivation-introjected), IDE (extrinsic motivation identified) and AM (amotivation) respectively. The difference on sport motivation factors was assessed based on gender, age category, level of education and type of sponsorship of the MKESC 2015 participants. All hypotheses of the study were tested at $p \leq 0.05$.

4.1 Demographic Characteristics of Participants

In reference to Mt. Kenya extreme sport challenge 2015 record, there were 99 participants in the event where 84 participants accepted to be respondents of the present study translating to 85% response rate. Out of 84 respondents, there were 61 (72.6%) male and 23 (27.4%) female participants in the study. Twenty five (29.8%) of the respondents were between age 18 and 24 years where majority 54(64.3%) were in the age 25 and 34 years category while those with age 35 years and above were 5(6%) as tabulated in Table 4. 1.

In relation to respondents' level of education, 17(20.2%) had secondary level education, 49(58.3%) had certificate/college level, 17(20.2%) had undergraduate/graduate level with 1(1.2%) participant had post graduate degree level. In terms sponsorship, 37(44%) were self-sponsored while 47(56%) were institution sponsored.

Table 4. 1 Demographic Information of MKESC 2015 Participants

A	Frequency	Percentage	Cumulative
Gender			
Male	61	72.6	27.4
Female	23	27.4	100
Age			
18-24 Years	25	29.8	29.8
25-34 Years	54	64.3	94
35 Years and aboveA	5	6	100
Education Level			
Secondary	17	20.2	20.2
College/certificate/diploma	49	58.3	78.6
Undergraduate/graduate	17	20.2	98.8
Post-graduate	1	1.2	100
Sponsorship Status			
Self-sponsored	37	44	44
Institution sponsored	47	56	100

4.2 Motivation Orientations of Participants of Mount Kenya Extreme Sports Challenge

The initial drive to participate in extreme sports was assessed based on three primary sport motivation categories that is, intrinsic motivation, extrinsic motivation and amotivation.

Table 4. 2: Descriptive Statistics of General Motivation

	N	Mean	Std. Deviation
Extrinsic	84	3.55	.578
Intrinsic	84	4.27	.408
Amotivation	84	1.62	.668

Descriptive statistics indicated that majority of MKESC 2015 participants were driven by intrinsic motivations with a mean of 4.27 ± .408. The external reasons to participate in MKESC 2015 were also noted to have a substantial influence toward participation in the event with a mean of 3.55 ± .578. However, amotivation was observed to have the least influence in the participation of MKESC 2015 with a mean of 1.62 ± .668.

Table 4. 3: One Way Analysis of Variance of General Motivation Orientation

Motivation Category		df	F	Sig.
Amotivation	Between Groups	1	.527	.470
	Within Groups	82		
	Total	83		
Intrinsic	Beteen Groups	1	7.712	.007
	Within Groups	82		
	Total	83		
Extrinsic	Between Groups	1	3.130	.081
	Within Groups	82		
	Total	83		

One way analysis of variance established significant difference in intrinsic motivation orientation of the MKESC 2015 participants with *p* value .007 (Table 4.3). The participants of MKESC 2015 were not established to be significantly motivated by extrinsic factors. The amotivation was also established to have no significant influence on

MKESC 2015 participation. The hypothesis there was no significant difference in the participation motivation of the participants in the Mt. Kenya Extreme Sports in relation to extrinsic and amotivation, orientations was rejected. However, the hypothesis there was no significant difference in the participation motivation of the participants in the Mt. Kenya Extreme Sports in relation to intrinsic motivation was accepted.

4.3 Gender and Motivation Orientation among Extreme Sport Participants

Motivation orientations of the respondents were assessed using sport motivation scale (SMS) adopted from Pelletier *et al*., (1995). The scale was categorized into three major components of motivation that is, intrinsic motivation, extrinsic motivation and amotivation. Each component was further categorized into particular type of motivation that relates to it. Intrinsic motivation consisted of intrinsic motivation to know (IMK), intrinsic motivation to accomplish (IMA) and intrinsic motivation to experience stimulation (IMS). Extrinsic motivation included extrinsic motivation identified (IDE), extrinsic motivation Introjected (INT) and extrinsic motivation external regulation (EXT). The amotivation (AM) did not have subcategories.

The study assessed the motivation behind male and female participants during MKESC 2015 based on three major motivation categories, intrinsic, extrinsic and amotivation. Results are presented in Table 4.4.

Table 4. 4: Descriptive statistics of Motivation orientations based on Gender

Motivation Category	Mean	SD
Intrinsic		
Males	4.35	.403
Females	4.08	.362
Extrinsic		
Males	3.61	.608
Females	3.37	.454
Amotivation		
Males	1.65	.713
Females	1.53	.535

The result indicates that, male participants were more intrinsically motivated with a mean of 4.35 ± .403 compared to female participants with a mean of 4.08 ± .362 during MKESC 2015. Male respondents were more extrinsically motivated with a mean 3.61 ± .608 compared to their female counterparts with a mean of 3.37 ± .453 during Mt Kenya extreme sport challenge. Male respondents also scored high on amotivation than female participants during Mt Kenya extreme sport challenge with a mean of 1.65 ± .713 and 1.53 ± .535 respectively as shown in Table 4.4.

To establish whether there were difference in the means of motivation orientations between male and female participants the independent t-test was performed as reported in Table 4.5.

Table 4. 5: Independent t-test on motivation between Male and Female Participants in the Mt. Kenya extreme sports challenge 2015

Motivation Category	T	Df	*P significant at .05*
Intrinsic	-2.777	82	.007
Extrinsic	-1.769	82	.081
Amotivation	-.726	82	.470

The results indicated a significant difference in intrinsic motivation between male and female respondents who participated in Mt. Kenya extreme sport challenge 2015, t (82) = -2.777 p = .007. In relation to intrinsic motivation the hypothesis that implied no significant difference in intrinsic motivation of male and female participants in the Mt. Kenya extreme sports challenge was rejected. However, there was no significant difference established in extrinsic motivation between male and female participants t (82) = -1.769 p = .081 (Table 4.5). In amotivation, there was no significant difference between male and female respondents who participated in MKESC 2015, t (82) = -.726 p = .47 as reported in Table 4 5.

4.3.1 Male and Female Participants in Relation to Specific Motivation Orientations

The study further evaluated motivation orientations of male and female participants' across the IMK, IMA, IMS, IDE, INT, EXT and AM motivation categories and results presented in Table 4.6.

Table 4. 6: Descriptive Statistics on Specific Motivation of Male and Female Participants in MKESC 2015

Specific Motivation	Gender	Mean	Standard deviation
Intrinsic motivation - to know (IMK)	Female	3.87	.553
	Male	4.37	.670
Intrinsic motivation - to accomplish (IMA)	Female	4.1	.451
	Male	4.28	.469
Intrinsic motivation - to experience simulation (IMS)	Female	4.27	.353
	Male	4.38	.510
Extrinsic motivation - identified (IDE)	Female	4.27	.398
	Male	4.35	.507
Extrinsic motivation - introjected (INT)	Female	3.15	.673
	Male	3.48	.799
Extrinsic motivation - external regulation (EXT)	Female	2.67	.759
	Male	3.01	.921
Amotivation (AM)	Female	1.53	.535
	Male	1.65	.713

The results reflected that the intrinsic motivation- to experience simulation (IMS) was the main reason for the male respondents to participate in MKESC 2015, mean 4.38 ± .510. Female respondents reported extrinsic motivation identified (IDE) as the major reason for engaging in MKESC 2015, mean 4.27 ± .398. Male respondents cited IMK as the second reason for participation in Mt. Kenya extreme sports challenge 4.37 ± .670 as female

respondents reported IMS 4.27 ± .352. IDE was recorded as the third reason for participation in Mt. Kenya extreme sports challenge by male respondents 4.35 ± .507 while female respondents indicated IMA as the third reason for their participation in the event 4.10 ± .451 (Table 4.6). IMA was reported as the fourth motivation drive among male respondents who participated in Mt. Kenya extreme sports challenge 4.28 ± .469 as their female counterpart cite IMK as their fourth motivation drive to participate in the Mt. Kenya extreme sport challenge 3.87 ± .553. The extrinsic motivation introjected (INT) was reported as the third last reason for participation in MKESC 2015 among male and female respondents with mean indices 3.48 ± .799 and 3.15 ± .673 respectively. Following INT was EXT motivation orientation with mean of 3.01 ± .921 and 2.67 ± .759 for male and female respectively (Table 6. 6). Amotivation was least reason reported in both male and female respondents as motive for participation in Mt. Kenya extreme sports challenge with males recording a mean of 1.65 ± .713 and females 1.53 ± .535 (Table 4.6).

In order to establish if there was significance difference for mean between males and females, independent t-test was used to analyse the results.

Table 4. 7: Independent t-test on Specific Motivations between Male and Females

Specific Motivation	T	Df	*P significant at .05*
IMK	-3.210	82	.002

The results signified that there was significant difference between male and female respondents who participated in Mt Kenya extreme sports challenge 2015 regarding intrinsic motivation to know (IMK) t (82) = -3.21 p = .002 (Table 4.7) where male

reported the highest mean. However, there was no significant difference identified across the other motivation categories, IMA, IMS, IDE, INT, EXT and AM between male and female respondents who participated in Mt. Kenya extreme sports challenge 2015, with their $p > .05$.The male participants recorded the highest mean score in all the specific motivations which was ascribed to their large number compared to the female counterparts 61 and 23 respectively as shown in Table 4.1.

4.4 Age and Motivation Orientation among Extreme Sports Participants

The present study also intended to establish whether motivation orientations of MKESC 2015 participants were influenced by the age of the respondents. The participant's age was categorized into those aged 18-24 years, 25-34 years and 35 years and above, Table 4.8.

Table 4. 8: Descriptive statistics of Motivation based on Age of the Respondents

Motivation Category	Age	N	mean	SD
Intrinsic	18-24 years	25	4.29	.296
	25-34 years	54	4.25	.450
	35 years and above	5	4.40	.477
Extrinsic	18-24 years	25	3.83	.483
	25-34 years	54	3.42	.586
	35 years and above	5	3.52	.524
Amotivation	18-24 years	25	1.77	.629
	25-34 years	54	1.55	.695
	35 years and above	5	1.65	.518

Data indicated that participants with 35 years and above mean of 4.4 ± .477 were more intrinsically motivated compared to respondents in the age categories of 18 to 24 years and 25 to 34 years. They were followed by respondents in age category between 18 to 24 years with a mean of 4.29 ± .3 whereas respondents between age categories of 25 to 34 years were less intrinsically motivated to participate in Mt. Kenya extreme sports challenge 2015.

Evaluating extrinsic motivation among the various age categories, respondents between 18 to 24 years reported a high mean 3.83 ± .483 closely followed by respondents with age 35 years and above with a mean of 3.52 ± .524 (Table 4.8). Respondents between age category of 25 to 34 years indicated lower extrinsic motivation with a mean of 3.42 ± .586 compared to the other age categories during the Mt. Kenya extreme sports challenge 2015. In terms of amotivation, respondents between age category of 18 to 24 years reported the highest mean of 1.77 ± .629 followed by those with 35 years and above with mean of 1.65 ± .518 while respondents between age category of 25 to 34 years reported the lowest mean of 1.55 ± .695 as reported in Table 4.8.

To establish if there were significant differences in mean based on age, one way analysis of variance was used to analyse the results (Table 4.9).

Table 4. 9: Independent t-test of Motivation based on Age of the Participants

Extrinsic Motivation	Df	F	*P significant at .05*
18-24 Years	82	4.640	.012
25-34 Years			

One way analysis of variance (ANOVA) established a significant difference at $p < .05$ in extrinsic motivation based on age of the respondents F (2, 81) = 4.640, $p = .012$ (Table 4.9). The post hoc comparison using Scheffes test indicated that the significance difference on extrinsic motivation was between the age category 18 to 24 years and 25 to 34 years respondents $p = .009$ (Table 4.9) where participants in the age category of 18 and 24 years had a higher mean 3.82 ± .483 in comparison with age category of 25 and 34 years with mean 3.42 ± .586. Therefore, the hypothesis, age does not significantly influence motivations orientation on participants in Mt. Kenya Extreme Sport Challenge was rejected.

4.4.1 Age and Specific Motivation Orientations among Extreme Sports Participants

The study assessed the motivation behind Mt. Kenya extreme sports 2015 participants involvement across the IMK, IMA, IMS, IDE, INT, EXT and AM motivation levels in relation to their age category of 18 to 24 years, 25 to 34 years and those aged 35 years and above (Table 4.10). The study established that the respondents in age category 18 to 24 years recorded the highest in intrinsic motivation to know (IMK) 4.55 ± .439. The respondents between age 25 to 34 years and those with 35 years and above reported intrinsic motivation to experience simulation (IMS) as their main reason for participation in extreme sport challenge 4.43 ± .502 and 4.5 ± .395 respectively as shown in Table

4.10. Extrinsic motivation identified (IDE) was mentioned as second motive for participation in extreme sport challenge among the respondents in age category 18 to 24 years and 25 to 34 years with mean of 4.4 ± .382 and 4.32 ± .506 respectively while those with age 35 years and above reported IMK as their second motive with a mean of 4.4 ± .454 as tabulated in Table 4.10.

Table 4. 10: Descriptive Statistics of Specific Motivation of Participants based on Age

Specific Motivations		N	Mean	Std. Deviation
Intrinsic motivation - to know (IMK)	18-24 years	25	4.55	.439
	25-34 years	54	4.07	.733
	35 years and above	5	4.4	.454
Intrinsic motivation - to accomplish (IMA)	18-24 years	25	4.18	.319
	25-34 years	54	4.25	.505
	35 years and above	5	4.3	.737
Intrinsic motivation - to experience simulation (IMS)	18-24 years	25	4.15	.361
	25-34 years	54	4.43	.502
	35 years and above	5	4.5	.395
Extrinsic motivation - identified (IDE)	18-24 years	25	4.4	.382
	25-34 years	54	4.32	.506
	35 years and above	5	4.05	.597
Extrinsic motivation - introjected (INT)	18-24 years	25	3.87	.578
	25-34 years	54	3.16	.746
	35 years and above	5	3.45	.991
Extrinsic motivation - external motivation (EXT)	18-24 years	25	3.21	.728
	25-34 years	54	2.77	.946
	35 years and above	5	3.05	.716
Amotivation (AM)	18-24 years	25	1.77	.629
	25-34 years	54	1.55	.695
	35 years and above	5	1.65	.518

Intrinsic motivation to accomplish (IMA) was the third motivation orientation cited by all the respondents across the three age categories, 18 to 24 years, with a mean of 4.18 ± .319; 25 to 34 years with a mean of 4.25 ± .505 and those in age 35 years and above, mean of 4.3 ± .737 (Table 4.10). The respondents in age category 18 to 24 years reported IMS as their fourth reason for participation in extreme sports challenge with a mean of

4.15 ± .361 while those in age category 25 to 34 years recorded IMK as their fourth reason with mean of 4.07 ± .733 (Table 10). Respondents in category of age 35 years and above cited IDE as the fourth motive for participating in extreme sport challenge with a mean of 4.05 ± .597. The extrinsic motivation introjected (INT) was recorded as fifth drive for participating in MKESC across the three age categories, 18 to 24 years, mean 3.87 ± .578; ≥35 years, mean 3.45 ± .991 and 25 to 34 years, mean 3.16 ± .746. EXT motivation was second last motive reported by respondents in across the three age categories of 18 to 24 years, mean 3.21 ± .728; ≥35 years, mean 3.05 ± .716 and 25 to 34 years, mean 2.77 ± .946 (Table 10). The study established that amotivation (AM) was the least cause for respondents to engage in extreme sport challenge across the three age category 18 to 24 years, mean 1.77 ± .629; ≥35 years, mean 1.65 ± .518 and 25 to 34 years, mean 1.55 ± .695 (Table 4.10).

To establish if there was significant difference of mean between various age categories, one way analysis of variance (ANOVA) was performed (Table 4.11)

Table 4. 11: ANOVA for Specific Motivation Orientation based on Age

Specific Motivation	Df	F	*P significant at .05*
IMK			
18-24 Years			
25-34 Years	81	4.796	.011
IMS			
18-24 Years			
25-34 Years	81	3.522	.034
INT			
18-24 Years			
25-34 Years	81	8.836	.005

The results indicated a significant difference at $p < .05$ between groups in the intrinsic motivation to know (IMK) F (2, 81) = 4.796, $p = .011$ (Table 4.11). Similarly, a significant difference was established between groups for intrinsic motivation to experience stimulation (IMS) F (2, 81) = 3.522, $p = .034$ and extrinsic motivation Introjected (INT) F (2, 81) = 8.386, $p < .05$ (Table 4.11). Scheffes post hoc test identified significant difference at $p<.05$ in IMK, IMS and INT motivation among 18 to 24 years and 25 to 34 years age categories where participants in age category of 18 to 24 years had the highest mean 4.55 ± .439 compared to those in age category of 25 to 34 years, mean 4.07 ± .733 in IMK. In IMS, participants with 25 to 34 years recorded the highest mean of 4.43 ± .502 compared to those in 18 to 24 years, mean 4.15 ± .361. In the INT participants in age category 18 to 24 years had the higher mean 3.87 ± .578 compared to their counterpart in age category 25 to 34 years 3.16 ± .746.

4.5 Education Level and Motivation among Extreme Sports Participants

The study assessed the respondents' motivation to participate in Mt. Kenya extreme sports challenge based on their level of education.

Table 4. 12: Descriptive Statistics of Participants Motivation based on Education

Motivation		N	Mean	Std. Deviation
Intrinsic	Secondary	17	4.20	.362
	College certificate/diploma	49	4.36	.427
	undergraduate/graduate	17	4.12	.348
	Post-graduate	1	3.83	0
Extrinsic	Secondary	17	3.49	.485
	College certificate/diploma	49	3.69	.636
	undergraduate/graduate	17	3.22	.303
	Post-graduate	1	3.08	0
Amotivation	Secondary	17	1.44	.410
	College certificate/diploma	49	1.8	.768
	undergraduate/graduate	17	1.32	.362
	Post-graduate	1	1	

It was established that respondents with college certificate/diploma education recorded high in intrinsic motivation compared to other level of education categories, mean 4.36 ± .423. Those with secondary education followed in intrinsic motivation with a mean of 4.2 ± .362 closely followed by undergraduate/graduate respondents 4.12 ± .348 while those with post-graduate education level reported a mean score of 3.83 as shown in Table 4.12. In relation to extrinsic motivation, respondents with college certificate/diploma education

reported a highest mean of 3.67 ± .636, followed by those with secondary education mean 3.49 ± .485 then undergraduate/graduate respondents, mean 3.22 ± .303 while those with post-graduate qualifications were the least extrinsically motivated to participate in extreme sport challenge with a mean of 3.08 as reported in Table 4.12. In terms of amotivation the respondents with college certificate/diploma education recorded the highest mean 1.8 ± .768 followed by those with secondary with a mean of 1.44 ± .41 while undergraduate/graduate and post-graduate respondents assumed the last position with a mean of 1.34 ± .362 and 1 respectively as shown in Table 4.12.

To establish whether there were differences in the means of motivation based on education level, one way analysis of variance (ANOVA) was used (Table 4.13).

Table 4. 13: ANOVA of Motivation based on Respondents' Education Level

Motivation Category	Df	F	*P significant at .05*
Extrinsic	80	3.319	.024
Amotivation	80	3.171	.029

ANOVA established a significant difference for means on the extrinsic motivation based on education level of the respondents F (3, 80) = 3.319, p = .024 (Table 4.13). A significant difference was also established at $p < .05$ for means on the amotivation based on the respondent education level F (3, 80) = 3.171, p = .029. Participants with college certificate/diploma level had higher mean of 3.69 ± .636 and 1.8 ± .768 in both extrinsic and amotivation respectively. In relation to extrinsic and Amotivation, the hypothesis there would be no significant difference in the motivation orientation and education level

in Mt. Kenya extreme sports was rejected. However ANOVA did not establish a significant difference between intrinsic motivation and education level of the respondents F (3, 80) =2.21, p = .093.

4.5.1 Education Level and Specific Motivation among Extreme Sports Participants

Respondents' motivation orientations based on educational level was assessed across the seven specific motivation categories IMK, IMA, IMS, IDE, INT, EXT and AM.

Table 4. 14: Descriptive Statistics of the Specific Motivation based on Respondents' Education Level

Specific Motivation		N	Mean	Std. Deviation
Intrinsic motivation - to know (IMK)	Secondary	17	4.41	.544
	College certificate/diploma	49	4.32	.669
	undergraduate/graduate	17	3.93	.571
	Post-graduate	1	2.25	.
Intrinsic motivation - to accomplish (IMA)	Secondary	17	4.06	.42
	College certificate/diploma	49	4.36	.454
	undergraduate/graduate	17	4.03	.467
	Post-graduate	1	4.50	.
Intrinsic motivation - to experience simulation (IMS)	Secondary	17	4.14	.416
	College certificate/diploma	49	4.40	.494
	undergraduate/graduate	17	4.40	.434
	Post-graduate	1	4.75	.
Extrinsic motivation - identified (IDE)	Secondary	17	4.15	.493
	College certificate/diploma	49	4.42	.431
	undergraduate/graduate	17	4.29	.532
	Post-graduate	1	3.50	.
Extrinsic motivation - introjected (INT)	Secondary	17	3.51	.622
	College certificate/diploma	49	3.54	.836
	undergraduate/graduate	17	2.87	.485
	Post-graduate	1	2.75	.
Extrinsic	Secondary	17	2.79	.730

motivation - external motivation (EXT)	College certificate/diploma	49	3.11	.993
	undergraduate/graduate	17	2.50	.538
	Post-graduate	1	3	.
Amotivation (AM)	Secondary	17	1.44	.410
	College certificate/diploma	49	1.8	.768
	undergraduate/graduate	17	1.32	.362
	Post-graduate	1	1	.

The results showed that respondents with secondary education were driven by intrinsic motivation to know (IMK) with a mean of 4.41 ± .544 compared to college certificate/diploma respondents whose motives were extrinsic motivation identified (IDE), mean 4.12 ± .431(Table 4.14). Respondents with undergraduate/graduate and post-graduate education cited intrinsic motivation to experience stimulation (IMS) as the primary purpose for participating in extreme sports challenge with a mean of 4.4 ± .434 and, mean 4.75 respectively. Respondents with secondary and undergraduate/graduate education identified extrinsic motivation identified (IDE) as their second motive for participating in extreme sports challenge with a mean score of 4.15 ± .493 and 4.29 ± .532 respectively (Table 4.14). College certificate/diploma respondents cited intrinsic motivation to experience stimulation (IMS) as second motive with a mean of 4.4 ± .494 while those with post-graduate education cited intrinsic motivation to accomplish (IMA) with a mean of 4.5 ± . as second reason for engaging in extreme sport challenge. Intrinsic motivation to accomplish (IMA) was identified as third motive for respondents with college certificate/diploma and undergraduate/graduate education to participate in extreme sport challenge with mean indices 4.36 ± .454 and 4.03 ± .467 respectively.

Respondents with secondary education noted intrinsic motivation to experience stimulation (IMS) as their third reason for participating in Mt. Kenya extreme sports with mean indices 4.14 ± .416 while post-graduate respondents mentioned extrinsic motivation identified (IDE) as their third reason for engaging in extreme sports with a mean of 3.5± . (Table 4.14). Intrinsic motivation to know (IMK) was fourth for participation in extreme sports by respondents with college/certificate/diploma and undergraduate/graduate education with mean of 4.32 ± .669 and 3.93 ± .571 respectively (Table 4.14). Respondents with secondary education listed intrinsic motivation to accomplish (IMA) as their fourth motive for participating in extreme sports with a mean of 4.06 ± .42 as post-graduate respondents reported extrinsic motivation Introjected (INT) with a mean of 2.75 ± . (Table 4. 14). Extrinsic motivation Introjected (INT) was, however, reported as the fifth reason for participating in extreme sports by respondents with secondary, mean indices 3.51 ± .622, college/certificate/diploma 3.54 ± .838 and undergraduate/graduate 2.87 ± .485 education levels while post-graduate respondents reported intrinsic motivation to know (IMK), mean 2.25 as their fifth motive for participating in extreme sports. Extrinsic motivation external regulation (EXT) was identified as the second last motive for respondents across all the education levels for participating in extreme sports (college/certificate/diploma 3.11 ± .993; secondary 2.79 ± .73; undergraduate/graduate 2.5 ± .538; post-graduate 3.0 ± .) (Table 4.14). Amotivation was recorded last reason for participating in extreme sports challenge by all the respondents in all the education levels (college/certificate/diploma 1.8 ± .768; secondary 1.44 ± .41; undergraduate/graduate 1.32 ± .362; post-graduate 1.0 ± .) (Table 4.14).

In order to establish if there was significant difference on the various specific motivations based on respondents' education levels, ANOVA was used (Table 4.15).

Table 4. 15: ANOVA for Specific Motivation based on Respondents' Education Level

Specific Motivation	Df	F	*P significant at .05*
IMK	80	3.137	.049
IMA	80	4.881	.01
INT	80	5.514	.006
EXT	80	3.294	.042
AM	80	4.288	.017

The results identified significant differences for means on specific motivations in relation to participant level of education on IMK F (2, 80) = 3.137 p = .049, IMA F (2, 80) = 4.881 p = .01, INT F (2, 80) = 5.514 p = .006, EXT F (2, 80) = 3.294 p = .042 and AM F (2, 80) = 4.288 p = .017 as shown in Table 4.15. Nonetheless, there was no significant differences established between specific motivations and respondents' education levels on IMS F(2, 80) = 2.095 p = .13 and IDE F(2, 80) = 2.236 p = .114 (Table 4.15).

Scheffes post hoc test identified significant difference at p<.05 in IMA between the college certificate/diploma and undergraduate/graduate respondents where college certificate/diploma education level had the highest mean 4.36 ± .454 (Table 4.14). In addition, a significant difference was established between the secondary and undergraduate/graduate respondents in INT at p =.043 with secondary education respondents scoring the highest mean 3.51±.622. Scheffes post hoc test also established a

significant difference between college certificate/diploma and undergraduate/graduate respondents in INT at p=.007 where respondents with college certificate/diploma education level had the highest mean 3.54 ± .836. Scheffes post hoc further identified significant difference between respondents with college certificate/diploma and undergraduate/graduate respondents in amotivation p=.035, respondents with college certificate/diploma education level had a higher mean1.8 ±.768 (Table 4.14).

4.6 Sponsorship and Motivation among Extreme Sports Participants

Motivation orientations based on the sponsorship status of the respondents were evaluated during the study and results presented on Table 4.16.

Table 4. 16: Means motivation and sponsorship

Motivation Category	Sponsorship Status	N	Mean	Std. Deviation
Intrinsic	Self-sponsored	37	4.11	.377
	Institution sponsored	47	4.4	.389
Extrinsic	Self-sponsored	37	3.2	.324
	Institution sponsored	47	3.82	.593
Amotivation	Self-sponsored	37	1.3	.428
	Institution sponsored	47	1.87	.716

The results reflected that institution sponsored respondents were more intrinsically motivated with mean of 4.4 ± .389 to participate in extreme sports in comparison to self-sponsored respondents with mean 4.11 ± .377. Similarly, institution sponsored respondents recorded a higher mean of 3.82 ± .593 than self-sponsored respondents with mean of 3.2 ± .324 in extrinsic motivation. Likewise, institutions sponsored individuals

were more amotivated with mean of 1.87 ± .716 to participate in extreme sports in comparison to self-sponsored individuals with mean 1.3 ± .428 as shown in Table 4.16.

The study further evaluated whether there was significant difference for mean in motivations based on sponsorship status of the respondents. The independent t-test identified significant differences at p< .05 among the respondents' intrinsic motivation and sponsorship status t (82) = -3.442 *p* =.001 (Table 4.17). Significant difference was also reported on extrinsic motivation and amotivation based on sponsorship status with p < .001 (t (82) = -5.654 *p* =.001, t (82) = -4.310 *p* =.001). The results lead to rejection of the hypothesis there would be no significant difference on motivations orientation between self-sponsored individual and corporate sponsored participants in Mt. Kenya extreme sports challenge 2015.

Table 4. 17: Independent t-test on motivation based on Sponsorship Status

Motivation Category	T	Df	*P significant at .05*
Intrinsic	-3.442	82	.001
Extrinsic	-5.654	82	.001
Amotivation	-4.310	82	.001

4.6.1 Sponsorship and Specific Motivation among Extreme Sports Participants

The study investigated the specific motivations IMK, IMA, IMS, IDE, INT, EXT and AM based on the sponsorship status of the respondents in relation to their participation in extreme sports (Table 4.18).

Table 4. 18: Descriptive Statistics of Specific Motivations and Sponsorship

Specific Motivation	Sponsorship Status	N	Mean	Std. Deviation
Intrinsic motivation - to know (IMK)	Self-sponsored	37	3.76	.565
	Institution sponsored	47	4.61	.505
Intrinsic motivation - to accomplish (IMA)	Self-sponsored	37	4.12	.459
	Institution sponsored	47	4.32	.462
Intrinsic motivation - to experience simulation (IMS)	Self-sponsored	37	4.45	.391
	Institution sponsored	47	4.28	.521
Extrinsic motivation - identified (IDE)	Self-sponsored	37	4.28	.476
	Institution sponsored	47	4.36	.483
Extrinsic motivation - introjected (INT)	Self-sponsored	37	2.85	.502
	Institution sponsored	47	3.81	.689
Extrinsic motivation - external motivation (EXT)	Self-sponsored	37	2.47	.603
	Institution sponsored	47	3.27	.923
Amotivation (AM)	Self-sponsored	37	1.3	.428
	Institution sponsored	47	1.87	.716

It was noted that intrinsic motivation to experience stimulation (IMS) was the main motive, with mean of 4.45 ± .391 for self-sponsored individuals participating in extreme sports. On the other hand, institution sponsored individuals indicated intrinsic motivation

to know (IMK) as the main motive with mean of 4.6 ± .505 for participating in extreme sports (Table 4.18). Extrinsic motivation identified (IDE) was recorded by both self and institution sponsored respondents as their next higher motive for participation in extreme sports with mean indices 4.28 ± .476 and 4.36 ± .483 respectively (Table 4.18). Intrinsic motivation to accomplish (IMA) came third as the motive for engaging in extreme sports both by self-sponsored (mean of 4.12 ± .459) and institution sponsored (mean of 4.32 ±.462) respondents. Self-sponsored individual indicated intrinsic motivation to know (IMK) as their fourth motive for participating in extreme sports with mean indices 3.76 ± .565 while institution sponsored respondents indicated intrinsic motivation to experience stimulation (IMS) as their fourth motive with a mean of 4.23 ± .521. Self and institution sponsored respondents acknowledged extrinsic motivation Introjected (INT) as their five motive for taking part in extreme sports with mean indices 2.85 ± .502 and 3.81 ± .689 respectively (Table 4.18). Extrinsic external regulation (EXT) was the sixth motive for participation by all respondents irrespective of sponsorship status (individual, mean 2.47 ± .603; institution sponsored, mean 3.27 ± .923) (Table 4.18). Amotivation was least reported motive for engaging in extreme sports by all the respondents (individual, mean 1.3 ± .423; institution sponsored, mean 1.87 ± .716).

To establish whether there were differences in mean of motivation and sponsorship an independent t-test was used in analysis as presented in Table 4.19.

Table 4. 19: T-test of the Specific Motivation of the Respondents based on Sponsorship

Specific Motivation	T	df	*p significant at .05*
IMK	-7.028	82	.001
INT	-7.138	82	.001
EXT	-4.547	82	.001
AM	-4.31	82	.001

The independent t-test established a significant mean difference between IMK and sponsorship status of the respondents t (82) = -7.208 p =.001 (Table 4.19), where institution sponsored participants had the highest mean of 4.4 ± .389 in comparison to self-sponsored participants with mean of 4.11 ± .377. Similarly, independent t-test established a significant difference between INT, EXT, AM and sponsorship status with p <.05. However, there was no significant difference for mean identified between motivation category IMS, IDE, IMA and sponsorship status of the respondents with their p > .05.

Results indicate significant difference in motivation orientation of participants in the Mt Kenya extreme sports challenge based on intrinsic motivation category. In addition engagement in MKESC is influenced by social demographic factors of gender, age, education level and sponsorship status of participants.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 Demographic Characteristics

The present study assessed 84 respondents where majority 61(72.6%) were males with 23(27.4%) females. The high number of the male respondents was in line with men exotic nature, risk takers and their need to explore the world unlike their female counterparts who are compassionate and protective (Brymer, 2010). A difference was noted in terms of age category of the respondents where majority 54 (64.3%) were between the age of 25 and 34 years. At this age the participants are filled with innate rush and thrill to engage in extreme sports and arguably they have disposable income (Lidner & Kerr, 1999). Similarly, participants between 18 and 24 years possess energy and they are also attracted to extreme risk sports, however, they are challenged to participate mainly due to lack of income presumably because they are in school or they have not secured a job (Lidner & Kerr, 1999). This significantly affected their participation in MKESC 2015 where they turned out to be 25(29.8%) out of all respondents. The respondents who were older than 35 years were 5(6%) this was characterized to the interest in sports which changes as an individual advances in age. While younger adolescents' fancy extreme sports for fun, friendship and socialization, old adolescents are attracted to extreme sports because they are task oriented, that is, the need to compete and demonstrate their skills (Duda *et* al., 1995; Chin et al., 2012).

Regarding respondents' level of education, majority 49(58.3%) had college certificate/diploma education this implied they were more competent in sport skill which were acquired at post-secondary training institutions offering certificates and diploma

levels. Therefore such participants are presumably active in their institution, have desire for fun and fitness (Lidner & Kerr, 1999; Xhakaza, 2005). There were 17 (20.2%) respondents with secondary and undergraduate/graduate education. This low number of respondent with secondary education level was suggested to be as a result of low emphasis on sports and physical education in schools, inadequate sporting skills and lack of involvement in sports after secondary level of education due to lack of sports facility and constraint sponsorship, which in turn impede their drive and ability to compete at a higher level. Similary, (Xhakaza, 2005) reported that schools where participation in sports are upheld student gain lifelong and sports skills applicable beyond secondary education level. In relation to low turnout of respondents with undergraduate education was attributed to low students engagement in sports during and after university level due to lack of sports opportunities, congested and constrained facilities following double intakes of students leading to a drop in adherence in sports and feeling of incompetence to participate in a more demanding extreme sport as highlighted by Cheboi, (2006) study that indicates inadequate recreational facilities in Kenya learning institution affected quality of education. In addition findings by Gudo (2011) showed that double intake had a negative impact on training facilities. There was only 1(1.2%) respondent who participated in extreme sports challenge with a post-graduate education. The dismal turnout of post-graduate respondents was attributed to changes in interest in sports that varies as an individual advances in age (Duda *et* al., 1995; Chin *et* al., 2012). Respondents' characteristics in relation to sponsorship status revealed that majority 47(56%) were sponsored by institutions. Evidently, the institution created an opportunity for the participants and presumably influenced their choice to engage in extreme sports.

The difference in the number of self-sponsored 37(44%) respondents in comparison to corporate sponsored respondents was due to sponsorship restrictions but their participation was driven by desire to experience stimulation and thrill extreme sports exude (Cornwell & Relyea, 2009).

5.2 Motivation Orientation among Extreme Sports Participants

The desire to participate in extreme sports often originate from internal need to develop individual competence level with a view of task at hand, enhance control and mitigate undesirable outcome (Brymer, 2010). This was consistent with the current study that established intrinsic motivation to have a significant difference at $p < .007$ which reflects that the major drive towards participation in MKESC 2015 was as result of internal reasons. Nonetheless, external factors such as desire to meet new people, acquire new skills and exceeding personal limits is also imperative in determining participation in extreme sports. This explains the substantial influence of extrinsic motivation observed among the MKESC 2015. Duda (2001) indicate that extreme sports participants may perceive success in terms of task or ego. The task oriented participants set target anchored on learning and mastery while ego oriented individuals' objective is to outperform others. Therefore, participant orientation in extreme sports together with the achieved results determines individual motivation in terms of extrinsic, intrinsic or amotivation. Although, the amotivation level among MKESC 2015 participants was low, it indicates a number of participants did not have positive perception of the event. William (2001) observed that positive perception of individual competence and reinforcement from significant others lead to more effort and satisfaction which in turn promote intrinsic motivation. Therefore, choice of activities, individual's self-

determination and need for competence determined the MKESC 2015 participants' motivation orientations.

5.3 Gender and Motivation Orientation of Mt Kenya Extreme Sport Challenge 2015 Participants

The study was consistent with self-determinant theory that presumes gender as a social-cultural factor that may influence perception of participation in extreme sports (Engel, 1994; Santrock, 1995; Xhakaza, 2005; Ganol, 2011; Folansky, 2017). The findings of this study demonstrated that male respondents had high level of intrinsic motivation compared to their female counterparts (Table 4). The male respondents' main purpose for participating in extreme sports challenge was intrinsic motivation to know (IMS) and intrinsic motivation to experience simulation (IMS). The slightly varying of mean indices between male and female in relation to intrinsic motivation was attributed to a high number of males compared to females respondents. A significant difference was established in intrinsic motivation between male and female respondents at $p < .05$ (Table 4). The results of the current study were in line with that of Chantel *et* al., (1996), Kilpatric *et* al., (2005), Rintaugu and Nteere, (2011) and Folansky, (2017) that indicated females participate in sports for intrinsic reasons as aesthetic in sport, friendship and fun while males were driven by need for skills development, recognition and competition.

In relation to extrinsic motivation male respondents were indicated to score higher than female respondents (Table 4), this was attributed to higher numbers of male participants than female participants which can arguably be due to participants gender schema as pointed out by Khoivula, (1995) that indicate community perception of sport in context of

'masculinity' and 'feminity' in a given sport influence participant thought process and what it means to take part in sport. However, the independent t-test did not establish a significant difference in this type of motivation based on gender (Table 4). These results differ from those of Chin *et* al., (2003) who pointed out that self-determination motivation and goals orientation on track and field athletes, males were more extrinsically oriented. The difference in respondents and nature of sport between the present study (non-athletes) with that of Chin et al., (2003) (track & field athletes) may have contributed to discrepancies observed in the results regarding extrinsic motivation.

Male and female respondents' motivation was also assessed in relation to specific motivations. Male respondents recorded relatively high mean in intrinsic motivation to experience stimulation (IMS) that is, they portray high desire in experiencing pleasure, excitement and emotions generated from extreme sports (Table 6). Contrarily, female respondents cited the need to meet new people, friendship, learn new things and make new relationship as main motive for participating in extreme sports that is extrinsic motivation (IDE). These results concur with Tsai *et al*., (2015) study that revealed Taiwanese female participants in extreme recreation sports were influenced by external motivations. However, Tsai *et al*., (2015) reported that male participation in extreme recreation sport did not significantly differ because of the score of Taiwanese athletes in international competitions.

Nonetheless, the results did not establish a significant difference on the motivation IMA, IMS, IDE, INT, EXT and AM between male and female respondents who participated in MKESC 2015 with $p > .05$ (Table 7). The results were attributed to high mean and close

standard deviation in intrinsic and extrinsic motivation orientations of both male and female participants as established in the study (Table 4). Kerr, Cecilia and Lindner (2004) when evaluating the motivation and level of risk in male and female recreational sport participation of Chinese students established almost similar findings where both male and female showed no significant overall differences in life metamotivational orientations. Generally, both male and female respondents cited intrinsic reasons for participating extreme sport challenge (Table 6). The findings of the present study were in congruent with other studies (Deci & Ryan, 1995; Weinberg & Gould, 2003) which indicated that people have intrinsic regulation that account for participation in sports out of individual interest/values to satisfy basic psychological needs for knowledge through activities and lessons derived from sports

A significant difference was, however, indicated in intrinsic motivation to know (IMK) between male and female respondents (Table 7) where male respondents recorded high mean scores compared to female respondents which was attributed to more male participants in MKESC 2015 (Table 6), implying male respondents were motivated by the need for pleasure in learning new sports and discovering their performance. These findings suggest that generally, in MKESC 2015 male athletes were driven to engage more in extreme sports by IMK as compared to female participants. This could be attributed to the nature of the sport setting such as the team being a unit of participation, unconventional rules that encompass risk, endurance, edged-competition, autonomy in execution and perception of extreme nature of MKESC.

This finding is consistent with other studies which indicate that participation in sports was influenced by psychological and social-cultural factors such as perception of sport in the context of ‘male’ versus ‘female’ personality and the gender role orientation (Engel, 1994; Santrock, 1995; Xhakaza, 2005; Ganol, 2011; Folansky, 2017). Additionally, men are more likely to engage in sport for fun, to be with friends or improve physical performance. Females on the other hand, their motive to engage in physical activities is often to control the body weight, counter aging effects and improve their physical appearance (European Commission, 2014). The commission further noted that gender difference could be noticed in relation to the setting where sports or other physical activities are practised. The findings of this study concurs with (European Commission, 2014) assertions as MKESC 2015 male participants tripled the number of female participants 73% and 27 % respectively (Table 1).

5.4 Age and Motivation Orientation among Extreme Sports Participants

As individual advances in age their motivation orientations toward extreme sports change (Bakker *et al*., 1993). Therefore, this study evaluated the influence of age on the motivation of extreme sports participants. The findings revealed that respondents who were 35 years and above were motivated by intrinsic reasons to participate in extreme sports in comparison to the other age categories of 18 to 24 and 25 to 34 years (Table 8). That is, respondents of age category 35 years and above engage in MKESC 2015 for excitement, thrill and find new friends among other internal reasons. These results contradict Korkutata (2016) study that reported as people age there is a decreasing effect on the participation in extreme sports by internal reasons. However, post hoc comparison using Scheffe test indicated that in extrinsic motivation between the age category 18-24

years and 25-34 years respondents differed significantly at $p < .05$ (Table 9). The results were attributed to changes in interest in extreme sports as people advance with age as observed by Korkutata (2016) study. It is also important to recognize the influence of achievement capabilities that can affect self-esteem, Buckley (2018) denotes that aging will more likely affect participant esteem which may influence their motivation orientations toward extreme sports. Therefore, the hypothesis, age does not significantly influence motivations orientation on participants in Mt. Kenya Extreme Sport Challenge was rejected.

The influence of age on participation of extreme sports based on specific motivations, IMK, IMA, IMS, IDE, INT, EXT and AM was established to have varying influence. The young (18-24 years) respondents indicated that they participated in extreme sports primarily for pleasure (IMK) while those in age category of 25 to 34 years as well as respondents with 35 years and above reported intrinsic motivation to experience stimulation (IMS) as their major reason for engaging in extreme sports (Table 10) evidently, age demonstrated an effect on the respondents' motive of participation in Mt Kenya extreme sports challenge 2015. The results of the current study further indicated that intrinsic motivations were primary determinants of respondents' participation in extreme sports challenge. These findings were similar to Brymer (2010) who reported that focus of extreme sport participants is not anchored on pursuit of 'contemporary risk' as a motivation but the innate rush and thrill that is derived from activities that are seen to be of higher risk level.

A significant difference was established in intrinsic motivation IMK, IMS in relation to age of the MKESC participants at $p < .05$ (Table 11). The results demonstrate that the respondents drive to engage in extreme sports was innate and was barely influenced by internal gains associated with intrinsic motivation. Additionally, ANOVA established a significant difference in extrinsic motivation INT in relation to the age of the respondents. The significant difference established in extrinsic motivation INT was alleged to occur due to the dynamic of the respondents that is, varying socio-economic background and age which influenced their motivation orientations to participate in the MKESC 2015 event.

Scheffe post hoc test identified significant difference at $p<.05$ in IMK, IMS and INT motivation between the age category of 18 to 24 years and 25 to 34 years (Table 11). The results were attributed to changes in interests in extreme sports as participants grow old. The findings of the present study were consistent with those of Hellandsig, (1998) and Bakker *et al*., (1993) which revealed that as participants advanced in age, participation in sports was based on social/life opportunities, winning and perceived competence in particular sport.

However, these results differ with findings of Lidner and Kerr, (1999, 2000, 2001) on sports participation and meta-motivational orientation, which showed that young adults were more telic and mastery-oriented. Nonetheless, this study was based on meta-motivational orientation that focused on youth sport participants and non-participants whereas the current study involved individuals in a team who actively participated in MKESC.

This study was consistent with findings of studies that participation was influenced by meta-motivational dominance which varied with sport type. Younger athletes are attracted by the need for excitement, skills, fitness and social motives like friendship while older athletes were inclined to winning which is an extrinsic motivation-external regulation (Cogan & Brown, 1999; Lidner & Kerr, 2001; Kolayis, Sari & Celik, 2018). The findings of the present study established that participation by youth was influenced by the need for knowledge, the need to experience stimulation and introjected-external motivation.

5.5 Education Level and Motivation among Extreme Sports Participants

The early stage of socialization that particularly happens at an early age of an individual particularly in school is imperative in developing interest in sports. Rintaugu and Nteere (2011) reported that the early stages in school act as a base for success in sports in future. Xhakaza (2005) observed that girls from low income families were challenged in accessing learning institutions where skills in physical education and other sports are imparted. This consequently limited such girls from participating in sports in future due to absence of skills, motivation as well as financial resources. The present study therefore, embarked on assessing the respondents' level of motivation to participate in extreme sports challenge based on their level of education.

It was noted that the respondents with college certificate/diploma education were more intrinsically motivated compared to other participants (Table 12). However, ANOVA established that extrinsic motivation significantly differed based on education level of the respondents at $p < .05$ (Table 13). This could have resulted from the high mean score for

participants with college/certificate/diploma education bearing to the fact they were the majority among all the participants 58% (Table 1). The findings denoted that a considerable number of MKESC participants were extrinsically motivated by gains such need to win, for prestige and regard by others, display sport ability and the need to meet people. In relation to amotivation, there was a significant difference based on participants' educational level. The significant difference in amotivation was related to a substantial number of participants who did not associate themselves with the MKESC 2015 event presumably because they were chosen to represent their institution for the challenge. As a result, the participants had no positive perception of the event hence lack the motivation in taking part in the challenge (Cho, Kang & Koh, 2010).

While evaluating specific motivation orientations of MKESC participants based on their education levels, the results pointed varying motives for participating in extreme sports. Respondents with secondary education reported intrinsic motivation IMK that is mainly pleasure for learning new techniques, discovering new performance strategies and participating in sport as major reason for participating in MKESC. Those with college certificate/diploma education indicated extrinsic motivation IDE which primarily comprise meeting people, learn new thing and develop oneself as main reason for engaging in MKESC (Table 14). The respondents with undergraduate/graduate and post-graduate education indicated intrinsic motivation IMS as their main motive to engage in MKESC. This implied that their participation was driven by desire for pleasure, excitement and intense emotions associated with extreme sports. The need to feel such desires by graduate and postgraduate respondents was related to the need to escape from work life or routine that could be boring or stressful. The varying motives for

participating in extreme sports in relation to education level were attributed to early stages of individual engagement in sports. Studies have established a link between early initiation in sports and motivation to participate in future by an individual. Rintaungu and Nteere, (2011) indicated that participation in sports and games in Kenyan education institutions are competitive-oriented. They noted that interest in sport originate from early stages of socialization into sport such in school, where further engagement in sports stems from earlier success in high school sports. Therefore, understanding the education background of the extreme sport participants would help designing activities that address participant needs, enhance positive experience, motivations, participation and adherence in extreme sports in future.

One way analysis of variance established significant difference on specific motivations IMK, IMA, INT EXT and AM at $p < .05$ based on education levels of the respondents (Table 15). Scheffe post hoc test identified significant difference at $p<.05$ in IMA and AM motivation between the college/certificate/diploma and undergraduate. This was attributed to high level in mean of college/certificate/diploma compared to undergraduate respondents. Noticeably, regardless of the education levels of the respondents' principal strive for participation in MKESC was intrinsic motivation to accomplish (IMA) such as desire for self-improvement to mastery of skills and intrinsic motivation to know (IMK) being pleasure for excitement, discovering new techniques and performance strategies. The findings were in tandem with other studies (Nimmon, *et al*., 2007; Kavcic, 2008; Brymer & Oades, 2009; Rauter & Doupona, 2011) that indicate, extreme sports athletes participate to challenge current limit, realize new levels of risk taking, attain self-improvement/control, positive transformation by taking risk and personal wishes.

The results of the study concurred to that of Xhakaza (2005) that showed, in learning institutions where participation in sports is emphasized; participants may develop competence skills and sport culture that influences future participation in competitive sports such as MKESC. Xhakaza (2005) further indicated that in high school where awareness on the benefit of sports is created by teachers, coaches and peers, influence participation in sports for perceived benefits like recognition by institution, healthy lifestyle, to feel independent, enhanced concentration and pursuit of sport career. This study showed that in terms of extrinsic motivation Introjected (INT), athletes engaged in sport in reference to significant others' expectation, peers opinions and financing institution.

Nevertheless, the significant difference established between AM and education level of the respondents (Table 15) was associated with individual diverse ways of perceiving competence among the MKESC participants. Participants motivation is bound to differ according to personal perception of competence and self-determination and feel of 'not cared for' by significant others (Palletier *et al*., 1995). As a result participants with different education levels may have varying perception on the same activity. As of this study the number of college certificate/diploma participants did not have positive perception of the MKESC 2015 event. However, the relatively high number in the amotivation of college certificate/diploma participants could also be ascribed to their significant numbers (58%) in comparison to other categories such as those with secondary, undergraduate/graduate and post graduate education level (Table 1).

5.6 Sponsorship and Motivation among Extreme Sports Participants

Sponsorship status of the MKESC respondents was observed to influence their motive to take part in extreme sports challenge. Institution sponsored respondents demonstrated a high mean score in all main motivation categories (intrinsic, extrinsic and amotivation) (Table 16). The high mean score in intrinsic and extrinsic motivation of institution sponsored participants was attributed to their relatively higher number 47(56%) in the study compared to self-sponsored individuals. Independent t-test identified significant differences across all the three type of motivations with sponsorship status at $p < .05$ (Table 17) this implied that institution sponsorship highly influences participation and motivation orientation of athletes in extreme sports. The type on sponsorship was subject to difference in motivation due to the influence of external factors in participation in extreme sports. These results showed that, facilitation of institution sponsored participants to engage in the MKESC 2015 where costs were catered for by their sponsors led to higher number of institution sponsored participants in comparison to self-sponsored individuals, who could not have participated without sponsorship due to financial cost associated with extreme sports. This finding is consistent with studies by Xhakaza (2005) and Mintel (2005) that revealed the economic status of an athlete would determine the choice and participation in sports where individuals with disposable income and flexible work schedules are able to cater for sport related expenses than those with challenged economic status. Although, Xhakaza (2005) and Mintel (2005) studies evaluated professional athletes, the current study respondents could be influenced by similar factors due to financial costs associated with the MKESC event.

In relation to specific motivations IMK, IMA, IMS, IDE, INT, EXT and AM, the findings indicated that self-sponsored respondents were mainly motivated to engage in extreme sports by intrinsic motivation to experience stimulation (IMS) that is primarily for pleasure, excitement and thrill associated with extreme sports. Institution sponsored respondents however, reported intrinsic motivation to know (IMK) that is mainly for knowledge as their main reason to participate in extreme sports (Table 18). These findings were inconsistent with Palletie *et* al (1995) assertions that athletes will engage in sports to explore, learn, experience pleasure derived from internalizing new skills that is intrinsic motivation to know (IMK) while others will be motivated by external reasons such as desire for beauty, shape and confidence of being in the best fitness state that is extrinsic motivation introjected (INT).

Outstandingly was the high score in amotivation (AM) for institution sponsored respondents compared to self-sponsored individuals (Table 18). This was attributed to individuals who participated based on either 'it's a sponsored' event, through persuasion by friends or nominated to represent the institution and not out of personal choice while others participants may have joined teams without insight of sport engagement level and individual competence. These could have led to miss-match between individual athlete expectations and experience in the event hence contributing to higher number of institution sponsored participants being amotivated in MKESC. These results are consistent with study by Deci and Ryan (2002) that indicates athletes may take up sports to gain rewards other than the sports itself like tangible items or avoid attached consequence while others may experience amotivation where they do not perceive positive reasons for participating in sport.

Independent t-test identified significant mean difference on specific motivation IMK, INT, EXT and AM based on sponsorship status of the MKESC respondents. The result indicating significant difference in intrinsic motivation IMK showed that, athlete motive for engaging, learning and execution of new skills in extreme sports was determined by ability to cater for cost associated with participation in sports. It was observed that motivations differed significantly regarding extrinsic motivations INT and EXT which depicts sponsorship effects regarding participation in extreme sports. Findings also showed that, in INT athletes participated due to pressure and expectation from peers and institutions; gains associated like to be in shape and self-validation through involvement. Extrinsic motivation EXT implied that participants were motivated by attached rewards in the sports such high regard by peers, prestige, ego and winning. Amotivated participants could be due to lack of positive perception and personal choice to engage and unfulfilled need through sports. It was evident that respondents were challenged to establish between their individual persuasions and external factors to participate in MKESC. Greenhalgh (2010) observed that sponsors of niche sports facilitate individuals and team sports to push their corporate objectives such as marketing and company image with little reference on participants' perception on the available sport. Sponsorship provides a platform for participants to connect, interact and enhance working relations while endorsements by elite athlete attract generation Y and influence their motivation orientations (Mason, 2005). The findings of the present study established that corporate sponsorship enabled more participation in extreme sports in comparison to self–sponsored athletes. However, the led more athletes inclined to external regulation such as extrinsic motivation INT, EXT and amotivation AM among institution sponsored athletes

compared to self-sponsored participant which may lead to lack of adherence and consistent participation where motivation would be based on rewards consequently affecting involvement in extreme sports in future.

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter draws conclusions and recommendations obtained from the findings on participant motivation and motivation orientation in MKESC based on gender, age, education and sponsorship.

6.1 Summary

The study established intrinsic motivation as the main contributing motive into the participation of MKESC 2015. Nonetheless, extrinsic motivation was also indicated to have a substantial influence in determining participation behaviours of MKESC 2015 participants. Amotivation least influenced the extreme sport participants of MKESC 2015. The hypothesis there was no significant difference in the participation motivation of the participants in the Mt. Kenya Extreme Sports in terms of intrinsic motivation was accepted. However, the hypothesis there was no significant difference in the participation motivation of the participants in the Mt. Kenya Extreme Sports in terms of extrinsic and amotivation, orientations was rejected.

The MKESC 2015 participants' motivation was multifaceted based on demographic factors of gender, age, education and sponsorship. Across gender, participants were influenced by intrinsic motivation-to experience simulation (IMS) like for excitement in MKESC where male participants had a higher mean on IMS than females' participants. When evaluating intrinsic motivation, the hypothesis there would be no significant difference on motivation orientations of male and female participants in the Mt Kenya

extreme sports challenge was rejected. However, in the cases of extrinsic and amotivation orientations between male and female respondents, the hypothesis there would be no significant difference on motivation orientations of male and female participants in the Mt Kenya extreme sports challenge was accepted. There was a significant difference on participation motivation in the age category of 18-24 years and age 25-34years where participation in MKESC was influenced by IMK, IMS and INT. This lead to rejection of the hypothesis, age does not significantly influence motivations orientation on participants in Mt. Kenya Extreme Sport Challenge

Secondly, there was a significant difference in sports motivation variable (IMK, IMA, INT and AM) and education level. Those with secondary level of education were mainly driven by IMK while participants with post-graduate education level were motivated by IMS and while those with college/diploma participated in MKESC for IMA. However, participants with college certificate/diploma had a higher average score on AM followed by those with secondary level of education. In relation to extrinsic and amotivation the hypothesis there would be no significant difference on motivations orientation and education levels of participants in Mt. Kenya Extreme Sports was rejected.

Thirdly, sponsorship was a key determinant for participation where corporate sponsorship brought on board more participants than individual sponsorship in the MKESC event. The results ascertained that there was a significant difference in IMK, INT, EXT and AM in corporate and individual sponsored participants. However, corporate sponsored participants tended to engage in extreme sports for IMK, INT, EXT and experience more AM than individual sponsored participants in MKESC.

6.2 Conclusion of Findings

Based on the findings of this study the following conclusions were made:

i. The intrinsic motivation was the primary reasons for participating in MKESC 2015. However, extrinsic motivation orientations also contribute substantially to the participation of extreme sports particularly the need to develop oneself and develop relationship with friends.

ii. Intrinsic motivation orientations to participate in extreme sports differ significantly between male and female participants. However, there was no significant difference in extrinsic motivation based on gender of the extreme sports participants. Additionally, male respondents were driven to extreme sports by intrinsic motivation IMS, that is, the desire to experience pleasure, excitement and emotions generated from extreme sports while female respondents' main motive to engage in extreme sports was extrinsic motivation IDE, that is, meet new people, develop relationship and learn new things.

iii. Age was observed to influence motivation of the participants in extreme sports by changing their participation motives in extreme sports as an individual age. Respondents with 35 years and above were influenced more by intrinsic motivations than any other age categories in the present study. Young participants 18-24 years, in MKESC primary drive were pleasure, IMK while those in 25-34 including those with 35 years and above IMS was their primary drive.

iv. Regarding education level and motivation, college/certificate/diploma respondents were more intrinsically motivated compared to other education categories. A significant difference existed in extrinsic motivation as well as amotivation based on education level of the respondents. The difference was alleged to MKESC participants who were influenced by external factors such as rewards, money and other people influence to participate in the event. Respondents with secondary education pointed out IMK, mainly pleasure of learning and discovery as reason for participating in MKESC while college/certificate/diploma respondents reported extrinsic motivation IDE which primarily comprise meeting people, learn new thing and develop oneself. Undergraduate/graduate and post-graduate respondents indicated IMS, mainly excitement as main drive for participating in MKESC. A significant difference was established between AM and education level of the respondents which was associated with individual diverge ways of perceiving competence among the MKESC participants.

v. Sponsorship status affected MKESC participants' motivations to engage in extreme sports. The institutional sponsored participants reported a relatively high mean scores in all the main motivation categories (intrinsic, extrinsic and amotivation) which was ascribed to a higher turnout 56% of institution sponsored compared to self-sponsored 44%. Motivation was observed to differ significantly in all the three motivation categories (intrinsic, extrinsic and amotivation) based on the sponsorship status of the respondents at $p < .05$. The type on sponsorship was subject to difference in motivation due to the influence of external factors in

participation in extreme sports. The findings further indicated that self-sponsored individuals were more intrinsically motivated by IMS compared to institution sponsored participants intrinsic motivation IMK. Motivations differed significantly regarding extrinsic motivations INT and EXT which depicts sponsorship effects regarding participation in extreme sports. It was evident that respondents were challenged to establish between their individual persuasions and external factors to participate in MKESC.

6.3 Recommendations for Practice and Policy

i. Based on the conclusions, intrinsic motivation was principal drive for the participants in MKESC 2015. This study therefore, recommends KESAL and other institutions in Kenya that facilitates extreme sports events to design activities in a method that captivate, resonate and appeal to desired needs. This would help in inducing intrinsic motivation which keep the participants interested in extreme sports in future.

ii. It would be in the best interest of extreme sports organizers to ensure they design activities that take into account on gender and balance between activities that aim at generating pleasure, excitement or emotions and those that maximizes socialization, meeting new people to learning new things for males and females respectively, as participants in respective gender were observed to be inspired by different motivation orientations.

iii. Age characteristic of the MKESC posed dynamic effects on motivation orientations of the participants. As individual age advances so were the motives of

participants of the extreme sports change. Mastering the trend regarding influence of age on the motivation in extreme sports would help institutions that provide these services to design market and attract clients through strategic planning based on rationale than assumptions.

iv. Sponsorship status of the MKESC participants amicably influenced their motivation orientations. Institution sponsored individuals were high in extrinsic motivation and amotivation compared to self-sponsored individuals. Designing activities that prompt intrinsic motivation would benefit the institution sponsored individuals. The participants need activities they can associate with, that triggers their emotions and promote mastery of skills rather than pure focus on winning and rewards. Nonetheless, a striking balance on the choice of the activities is required that are based on multi-factorial characteristics of the participants in the extreme sports.

v. KESAL and other institutions offering extreme sports need to develop policy guidelines with focus on client's education background in order to categorise between armature/professional extreme sports participants, remain innovative, nature a dynamic and a viable sports tourism destination that accommodates both mastery and performance oriented sports climate. Thus education background will influence design of activities on offer to promote participation, mitigate experience that lead to amotivation and dropout in extreme sports

5.4 Recommendations for Future Research

i. Future research should consider both pre-test and post-test to determine motivation orientations of participants before and after the event to establish the impact on participants and forecast the drive for future participation.

ii. Since this study focused on participants in MKESC that was designed on a team as a unit of participation, future studies may conduct a research that compares between motivation orientation of participants in team sports and individual participation in extreme sports

iii. This study on MKESC focused on sponsored participants, future studies may explore motivation for sponsors' institutions in extreme sports to establish their drive for funding and future participation as well as barriers to engaging in extreme sports based on social economic factors in Kenya.

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Stotlar, D.K. (2002). A decade of evolution: The sport Industry. *Sport Marketing Quarterly* 11(1), 55-58

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APPENDICES

APPENDIX A: LETTER FOR PERMISSION TO CONDUCT THE STUDY

Jumbe S. Jonah.
Kenyatta University
Recreation Management and Exercise Science
P.O. Box 43844
Nairobi.

To
…….
…….

Dear Sir/Madam,

RE: **REQUEST TO CONDUCT RESEARCH ON EXTREME SPORTS PARTICIPANTS**

I am a postgraduate student taking Masters' program in the Department of Recreation Management and Exercise Science at Kenyatta University. The research assesses motivation influencing participation in extreme sports in Kenya: A case of Mt Kenya Extreme Adventure Challenge 2015

In this regard, I kindly request to engage all participants in Mt. Kenya Extreme Sport Challenge-2015. The study will focus on motivation orientations of extreme sports participants that includes; Intrinsic motivation, extrinsic motivation and amotivation. Findings will be used for academic purpose.

Attached find a copy of the questionnaire that the participants should fill after the event

Thanking you in advance,

Yours Faithfully,

Jumble S. Jonah.

APPENDIX B: CONSENT FORM

Title of the Study: Motivation Orientation of Participants in Extreme Sports in Kenya: A case of the Mt. Kenya Extreme Adventure Challenge 2015.

Researcher: Jonah Sagaya Jumbe
Address: P.O Box 4o55-00506, Nairobi

Participant involvement requirements
The study will requires that I have been a participant in Mt Kenya Extreme Sports Challenge 2015 and I will be required to fill-in a questionnaire giving the required information. I am fully aware of the following aspects of the study:

Voluntary participation:
I understand that participation in the study is voluntary and as agreed with the researcher on venue and mode of the questionnaire as either a hard copy or an email. It will not be an offence to decline or withdrawal from study.

Liabilities:
That I voluntarily agree to participate in the study and therefore I relieve the researcher from any liability that is associated with the study.

Benefits of participation:
My engagement in the study will contribute to understanding the motivation of extreme sports participants in Kenya specifically the case of Mt Kenya Extreme Sports Challenge.

Confidentiality:
I understand that my contribution will be held in confidentiality. The study will require information revealing personal identities or link my response to my identity. The study will be used for research purposes including publications.
I certify that I have read and understood the above and answered question to the best of my knowledge. I willingly give my consent to participate in the research study.

I ……..has volunteered to participate in the above study conducted by the named researcher
Signature……..

APPENDIX C: DEMOGRAPHIC AND SPORT MOTIVATION SCALE (SMS) QUESTIONNAIRES FOR MT KENYA EXTREME SPORTS PARTICIPATION PARTICIPANTS

Introduction to the Respondents

This questionnaires aims to assess "motivation orientation of participants in extreme sports in Kenya: A case study of Mt Kenya extreme sports challenge". All information provided will be used for academic purpose and will be treated with utmost confidentiality. Your response to all questions is greatly appreciated.

Thank you

Jonah S. Jumbe.

SECTION A: Demographic Questionnaire for Mt. Kenya Extreme Sports Participation Participants

Please give the required information on the following items (from I to V).Tick appropriately in the brackets provided.

I) Gender. (Tick one)

Male ( )

Female ( )

II) Age (years) Tick one category

18-24 ( )	25-34 ( )	35 and above ( )

III) Highest education level (tick one)

Primary ( )	Secondary ( )	College-certificate/diploma ( )	undergraduate/graduate ( )	Post-graduate ( )

IV) Type of sponsorship

Individual sponsored team ( )

Institution sponsored team ( )

SECTION B: SPORT MOTIVATION SCALE (SMS) QUESTIONNAIRES FOR MT KENYA EXTREME SPORTS PARTICIPATION PARTICIPANTS

This section aims to determine the motivation orientation for participants in Mt Kenya extreme sports challenge 2015. Using the scale provided, please indicate to what extent each of the following items correspond to one of the reasons for which you participated in Mt Kenya Extreme Sports Challenge, 2015.

Strongly disagree(SD)	Disagree (D)	Uncertain (U)	Agree(A)	Strongly Agree (SA)
1	2	3	4	5

Why did you participate in Mt Kenya Extreme Sports Challenge?

		SD	D	U	A	SA
1	For the pleasure I feel in living exciting experiences.	1	2	3	4	5
2	For the pleasure it gives me to know more about the sport that I practice.	1	2	3	4	5
3	I used to have good reasons for doing sport, but now I am asking myself if I should continue doing it.	1	2	3	4	5
4	For the pleasure of discovering new training techniques	1	2	3	4	5
5	I don't know anymore; I have the impression of being incapable of succeeding in this sport.	1	2	3	4	5
6	Because it allows me to be well regarded by people that I know	1	2	3	4	5
7	Because, in my opinion, it is one of the best ways to meet people.	1	2	3	4	5
8	Because I feel a lot of personal satisfaction while mastering certain difficult training techniques.	1	2	3	4	5
9	Because it is absolutely necessary to do sports if one wants to be in shape.	1	2	3	4	5
10	For the prestige of being an athlete.	1	2	3	4	5
11	Because it is one of the best ways I have chosen to develop other aspects of myself.	1	2	3	4	5
12	For the pleasure I feel while improving some of my weak points.	1	2	3	4	5

13	For the excitement I feel when I am really involved in the activity.	1	2	3	4	5
14	Because I must do sports to feel good about myself.	1	2	3	4	5
15	For the satisfaction I experience while I am perfecting my abilities.	1	2	3	4	5
16	Because people around me think it is important to be in shape.	1	2	3	4	5
17	Because it is a good way to learn a lot of things which could be useful to me in other areas of my life.	1	2	3	4	5
18	For the intense emotions I feel doing a sport that I like.	1	2	3	4	5
19	It is not clear to me anymore; I don't really think my place is in sport.	1	2	3	4	5
20	For the pleasure that I feel while executing certain difficult movements.	1	2	3	4	5
21	Because I would feel bad if I was not taking time to do it.	1	2	3	4	5
22	To show others how good I am at my sport.	1	2	3	4	5
23	For the pleasure that I feel while learning training techniques that I have never tried before.	1	2	3	4	5
24	Because it is one of the best ways to maintain good relationships with my friends.	1	2	3	4	5
25	Because I like the feeling of being totally immersed in the activity	1	2	3	4	5
26	Because I must do sports regularly.	1	2	3	4	5
27	For the pleasure of discovering new performance strategies.	1	2	3	4	5
28	I often ask myself; I can't seem to achieve the goals that I set for myself.	1	2	3	4	5

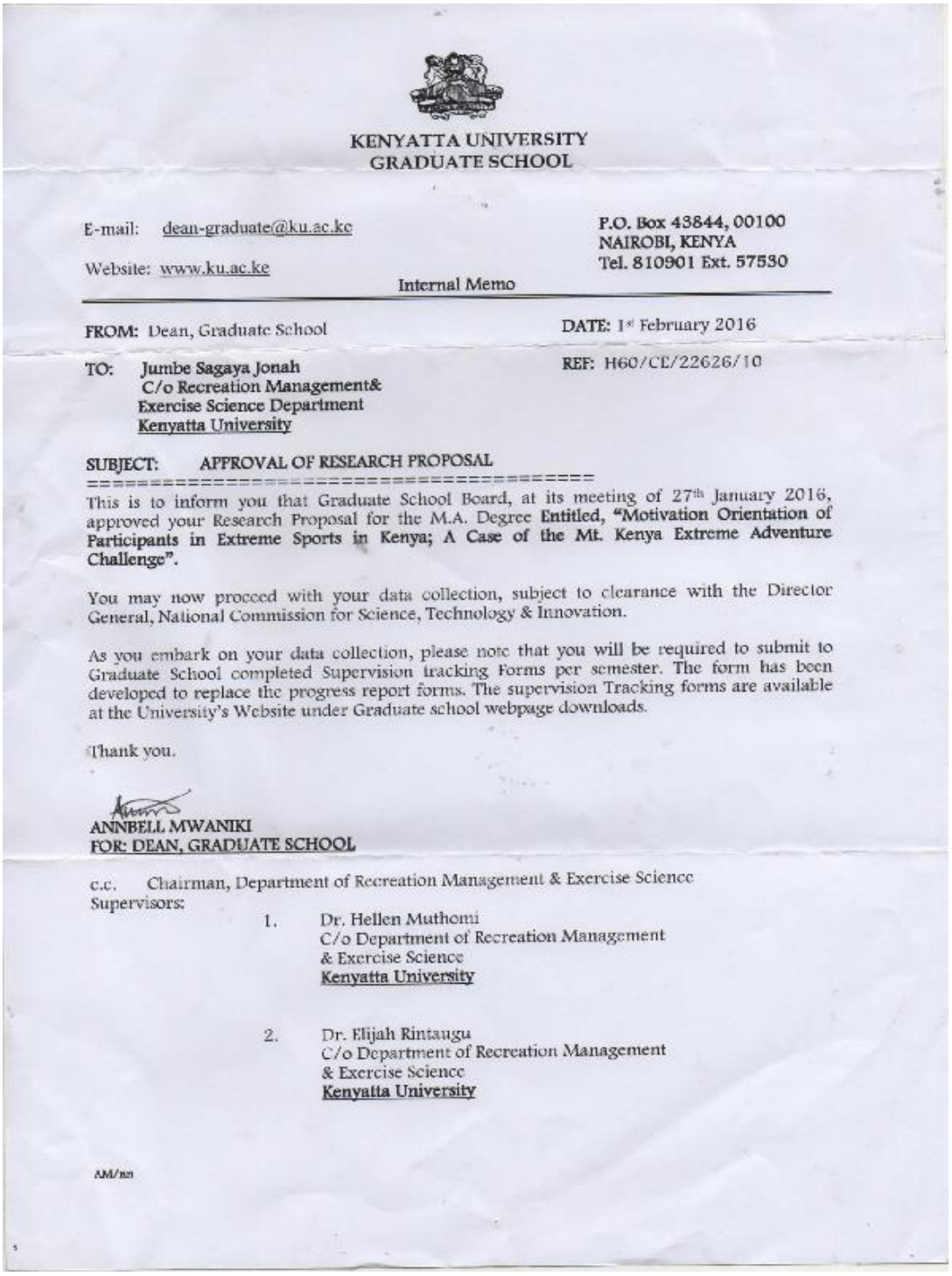
APPENDIX D: KEY FOR SPORTS MOTIVATION SCALE (28)

2	4	23	27	Intrinsic motivation - to know (IMK)
8	12	15	20	Intrinsic motivation – to accomplish (IMA)
1	13	18	25	Intrinsic motivation - to experience stimulation (IMS)
7	11	17	24	Extrinsic motivation – identified (IDE)
9	14	21	26	Extrinsic motivation – introjected (INT)
6	10	16	22	Extrinsic motivation – external regulation (EXT)
3	5	19	28	Amotivation (AM)

APPENDIX E: LIST OF CORPORATE INSTITUTION IN MKESC 2015

S/N	**Institution sponsorship**	Number of teams
1	KTN television	2
2	KBC television	3
3	Kenya Forest Service	2
4	KWS	2
5	NYS	3
6	KDF	2
7	Administration police	3
8	Meru Water and Sewerage Company	1
9	Athletics Kenya	2
	Self-sponsored individual	
1	Mt. Kenya university	2
2	Kenyatta University	2
3	Kenya Methodist University	1
4	Individual participants	10

APPENDIX F: AUTHORIZATION LETTER GRADUATE SCHOOL



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 57530

Internal Memo

FROM: Dean, Graduate School

DATE: 1st February 2016

REF: H60/CE/22626/10

TO: Jumbe Sagaya Jonah
C/o Recreation Management&
Exercise Science Department
Kenyatta University

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

This is to inform you that Graduate School Board, at its meeting of 27th January 2016, approved your Research Proposal for the M.A. Degree **Entitled, "Motivation Orientation of Participants in Extreme Sports in Kenya; A Case of the Mt. Kenya Extreme Adventure Challenge".**

You may now proceed with your data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision tracking Forms per semester. The form has been developed to replace the progress report forms. The supervision Tracking forms are available at the University's Website under Graduate school webpage downloads.

Thank you.

ANNBELL MWANIKI
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Department of Recreation Management & Exercise Science
Supervisors:

1. Dr. Hellen Muthomi
C/o Department of Recreation Management
& Exercise Science
Kenyatta University

2. Dr. Elijah Rintaugu
C/o Department of Recreation Management
& Exercise Science
Kenyatta University

AM/nn

APPENDIX G: LETTER OF INTRODUCTION TO NACOSTI

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: H60/CE/22626/10

DATE: 1st February 2016

The Director General,
National Commission for Science, Technology
& Innovation
P.O. Box 30623-00100,
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR JUMBE SAGAYA JONAH– REG. NO. H60/CE/22626/10

I write to introduce Mr. Jumbe Sagaya Jonah who is a Postgraduate Student of this University. He is registered for M.Sc degree programme in the **Department of Recreation Management & Exercise Science**

Mr. Jumbe intends to conduct research for an M.A. Proposal entitled, **"Motivation Orientation of Participants in Extreme Sports in Kenya: A Case of the Mt. Kenya Extreme Adventure Challenge".**

Any assistance given will be highly appreciated.

Yours faithfully,

MRS. LUCY N. MBAABU
FOR: DEAN, GRADUATE SCHOOL

ABJ/m

APPENDIX H: APPROVAL LETTER ETHICAL REVIEW

KENYATTA UNIVERSITY
ETHICS REVIEW COMMITTEE

Email: chairman.kuerc@ku.ac.ke
secretary.kuerc@ku.ac.ke
ercku2008@gmail.com
Website: www.ku.ac.ke

P. O. Box 43844 - 00100 Nairobi
Tel: 8710901/12
Fax: 8711242/8711575

Our Ref: KU/R/COMM/51/738

Date: 26th August, 2016

Jumbe Sagana Jonah
Kenyatta University
P.O. Box 43844 – 00100
NAIROBI

Dear Sagana

APPLICATION NUMBER **PKU/511/I604** – "MOTIVATION ORIENTATION OF PARTICIPANTS IN EXTREME SPORTS IN KENYA: A CASE OF THE MT. KENYA EXTREME ADVENTURE CHALLENGE" VERSION 2

1. IDENTIFICATION OF PROTOCOL
The application before the committee is with a research topic, **"Motivation Orientation of Participants in Extreme Sports in Kenya: A Case of the Mt. Kenya Extreme Adventure Challenge"** – Version 2.

2. APPLICANT
Jumbe Sagana Jonah, Department of Recreation Management & Exercise Science

3. SITE
Kenya School of Adventure & Leadership, Meru, Kenya

4. DECISION
The committee has considered the research protocol in accordance with the Kenyatta University Research Policy (section 7.2.1.3) and the Kenyatta University Ethics Review Committee Guidelines **AND APPROVED that the research may proceed for a period of ONE year from 26th August, 2016.**

5. ADVICE/CONDITIONS
i. Progress reports are submitted to the KU-ERC every six months and a full report is submitted at the end of the study.
ii. Serious and unexpected adverse events related to the conduct of the study are reported to this board immediately they occur.
iii. Notify the Kenyatta University Ethics Committee of any amendments to the protocol.
iv. Submit an electronic copy of the protocol to KUERC.

When replying, kindly quote the application number above.
f you accept the decision reached and advice and conditions given please sign in the space provided elow and return to KU-ERC a copy of the letter.

KENYATTA UNIVERSITY OFFICE OF THE CHAIRMAN 26 AUG 2016 ETHICS REVIEW COMMITTEE P.O. BOX 43844 - 00100 NAIROBI

DR. TITUS KAHIGA
CHAIRMAN ETHICS REVIEW COMMITTEE

JUMBE SAGANA JONAH ..... accept the advice given and will fulfill the conditions therein.

ignature..... Dated this day of.....1.9.1..... 2016.

c. Vice-Chancellor
DVC-Research Innovation and Outreach

APPENDIX I: RESEARCH AUTHORIZATION NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
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when replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/16/53504/9776**

Date: **17th August, 2016**

Jonah Sagaya Jumbe
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Motivation orientation of participants in extreme spots in Kenya; a case of the Mt. Kenya Extreme adventure challenge,"*** I am pleased to inform you that you have been authorized to undertake research in **Meru County** for the period ending **9th August, 2017.**

You are advised to report to **the County Commissioner and the County Director of Education, Meru County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Meru County.

The County Director of Education
Meru County.

APPENDIX J: RESEARCH AUTHORIZATION MINISTRY OF EDUCATION

REPUBLIC OF KENYA
MINISTRY OF EDUCATION
State Department of Basic Education

Email: cdemerucounty@gmail.com

When Replying please quote

COUNTY DIRECTOR OF EDUCATION OFFICE
MERU COUNTY
P.O. BOX 61
MERU

Ref: MRU/C/EDUC/11/1/200

26th September, 2016

TO WHOM IT MAY CONCERN

RE: RESERCH AUTHORIZATON - JONAH SAGAYA JUMBE

Reference is made to the letter Ref: No.NACOSTI/P/16/53504/9776 dated 17th August, 2016.

Authority is hereby granted to **Jonah Sagaya Jumbe** to carry out Research on "**Motivation orientation of participants in extreme spots, a case of the Mt. Kenya Extreme adventure challenges",** in Meru County for a period ending 9th August, 2017.

The authorities concerned are requested to give you support.

For: COUNTY DIRECTOR OF EDUCATION
COUNTY
P. O. Box 61 - 60200
Tel: 064 - 32372 MERU

Nkonge J.E.
For: COUNTY DIRECTOR OF EDUCATION
MERU

APPENDIX K: RESEARCH AUTHORIZATION MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT.

THE PRESIDENCY
MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT

Telegrams:
Telephone:
Email: ccmeru@yahoo.com
Fax:

COUNTY COMMISSIONER
MERU
P.O. BOX 703-60200
MERU.

When replying please quote

REF: ED.12/3/ (198)

26TH SEPTEMBER, 2016

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION – JONAH SAGAYA JUMBE

This is to inform you that **Jonah Sagaya Jumbe** has reported to this office as directed by the Commission for Science, Technology and Innovation and will be carrying out research on " **Motivation orientation of participants in extreme spots in Kenya ; a case of the Mt. Kenya Extreme adventure change".**

Since authority has been granted by the said Commission, and the above named student has reported to this office, he can embark on his research project for a period ending **August 2017**.

Kindly accord him any necessary assistance he may require.

MAINA GEORGE
FOR: COUNTY COMMISSIONER
MERU

APPENDIX L: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MR. JONAH SAGAYA JUMBE
of KENYATTA UNIVERSITY, 0-506
Nairobi,has been permitted to conduct
research in *Meru County*

on the topic: *"MOTIVATION ORIENTATION OF PARTICIPANTS IN EXTREME SPOTS IN KENYA; A CASE OF THE MT. KENYA EXTREME ADVENTURE CHALLENGE".*

for the period ending:
9th August,2017

Permit No : NACOSTI/P/16/53504/9776
Date Of Issue : 17th August,2016
Fee Recieved :ksh 1000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

CONDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officer will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2) hard copies and one (1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

HARAMBEE

REPUBLIC OF KENYA

NACOSTI

National Commission for Science, Technology and Innovation

RESEACH CLEARANCE PERMIT

Serial No.A 10665

CONDITIONS: see back page