



**CRITICAL FACTORS FOR THE SUCCESSFUL IMPLEMENTATION OF THE  
E-SPORT LEAGUE SYSTEM IN SELECTED COUNTRIES IN AFRICA**

Submitted in partial fulfilment of the requirements for the  
**CIES/FIFA/MANDELA EXECUTIVE PROGRAMME IN SPORT MANAGEMENT**  
at the Nelson Mandela University, South Africa.

## **DECLARATION**

In accordance with Rule G4.6.3, we the undersigned, Damilola Bello, Gareth Frederik Cortje, Casper Jangale, Daryll Roelf and Chipo Sabeta, hereby declare that the research contained in this document is the outcome of our own original independent work and investigation, except where otherwise stated. All sources are acknowledged and referenced. This work has not previously been accepted in substance or otherwise, for another qualification or submitted for assessment to another University. We further declare that all the applicable ethical guidelines in the conduct of the research were followed. This study is submitted to the Nelson Mandela University in fulfilment of the requirements for the CIES/FIFA Executive Programme in Sport Management.

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# CHAPTER 1

## SCOPE OF THE STUDY

### 1.1 INTRODUCTION

E-sports, otherwise known as Electronic sports or Competitive Gaming, have developed into a multi-faceted market segment in the sports industry. It is a phenomenon that has become a fundamental element in the modern digital youth culture (Wagner, 2006). According to Riddell (2016), e-sports is a revolution which has redefined gaming, helped shape what it means to be a millennial and is paving the way for future sports broadcasting and entertainment. Millennials make up the majority of esports demographics across the global e-sports markets. Bányai, Griffiths, Király and Demetrovics (2018) delineate that “e-sport is a new area in the gaming culture, and is starting to become one of the most essential and popular part of video game communities, especially among adolescents and emerging adults”. Whether using e-sport in a competitive manner, as a diversion to everyday life or for-profit business, it is inextricably part of the lives of a millennial.

The evolution of e-sports has tapped into the power of digital growth. Fans follow e-sports either through television, arenas or online, not unlike the consumption of traditional sports. E-sports is played on computers, smartphones or consoles, such as Xbox or PlayStation. The rise of e-sports in recent years has transformed the landscape into one that more closely resembles traditional sports. From this perspective, the trends, stars, culture and emotions are at the core of the e-sport business. Furthermore, the relationship between e-sports and traditional sports is ever increasing. Prominent celebrities and athletes from traditional sports, the Federation Internationale de Football Association (FIFA), the National Basketball Association (NBA) and leading professional football clubs are at the forefront of this collaboration by investing millions in competitive gaming organizations and teams.

This rapid growth is enhanced by leading international businesses that are venturing into the e-sports market, thus making their brands synonymous with the e-sports trend. In doing so, these multinationals are taking advantage of the significant commercial opportunities that e-sports brings to the sporting industry. Lee and Schoenstedt (2011) believe that technological advancement and digital media has a significant contribution

to the growth in e-sports consumption. This evolving market consists largely of publishers, games developers, investors, sponsors, sales and marketing teams, tournament organizers, content production companies, talent agencies, athletes, fans and legal practices. An esports betting market is developing because of the demand for betting on the outcome of e-sports games. In consequence, there is the perception that e-sports will be key in the future of sports betting. Above all, the global e-sports market requires strong, lateral thinking leadership with collective intelligence in sports, games, media and consumer behaviour. One of the leading debates regarding this relatively new phenomenon of e-sports is whether organized, competitive video gaming should be defined as a sport (Kane and Spradley, 2017). It is therefore important to delve into deeper market intelligence to secure continuous insights on e-sports.

It is against this backdrop that the implementation of e-sports leagues in selected countries in Africa has been explored. The present study seeks to make a contribution to this debate by comparing success factors of e-sports leagues in other countries with certain countries in Africa. It could therefore be argued that e-sports would transform the leadership and business approach to sports in these African countries.

## **1.2 BACKGROUND OF THE STUDY AND PROBLEM STATEMENT**

### **1.2.1 Defining E-sports**

E-sports refer to structured, computer-mediated, and competitive multiplayer-gaming with spectators (Freeman and Wohn, 2017). Wagner (2006) defines e-sports in terms of value system changes and cultural development, as “an area of sport activities in which people develop and train mental or physical abilities in the use of information and communication technologies”. Hamari and Sjöblom (2017) demarcate it as a form of sports where the primary aspects of the sport are facilitated by electronic systems; the input of players and teams as well as the output of the e-sports system are mediated by network of stakeholders comprised of a culture of team fandom and spectatorship, the industry of organizing professional-level play and the actual games. In other words, e-sports is a form of competitive video gaming with multiple players battling against each other usually in teams, often in matches that are streamed live to throngs of fans.

### **1.2.2 The origin of E-sports**

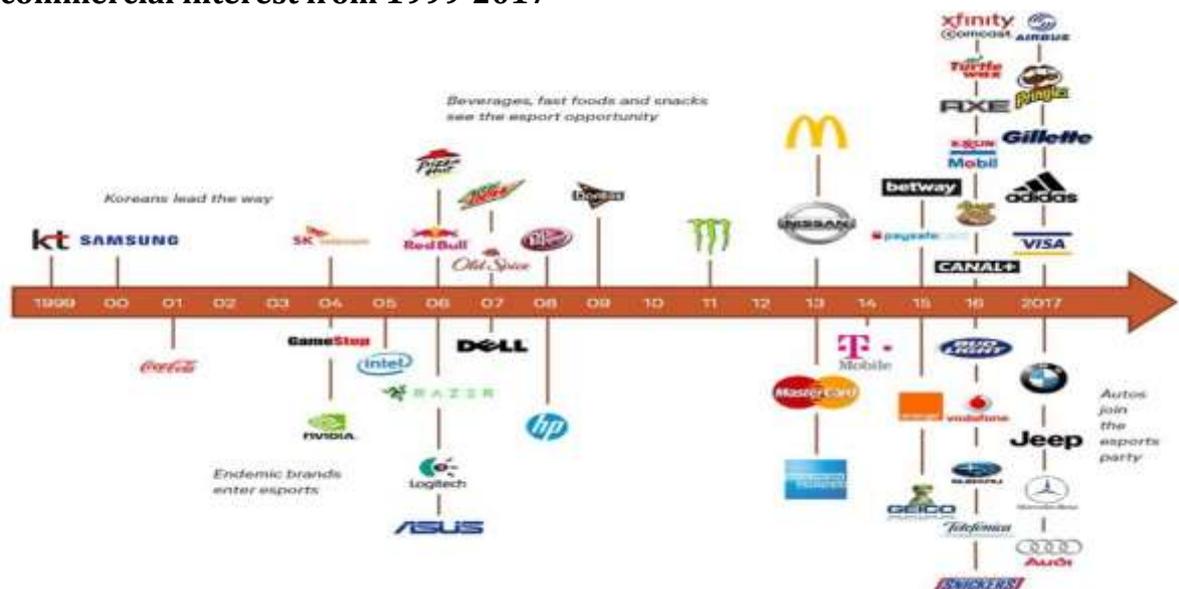
E-sports has evolved into a cultural phenomenon of global significance. Whilst gaming was largely limited to leisure pursuit in youth culture, e-sports has established itself in many countries as a business factor (Wagner, 2006). The increasing improvement of computer hardware and the expansion of digital media around the world have contributed to the burgeoning development of e-sports. Despite the fact that competitive gaming is regarded as a relatively new phenomenon in comparison to traditional sports, e-sports tournaments have existed for more than forty years. According to PricewaterhouseCoopers (2018), the first virtual encounter took place at Stanford University in 1972, referred to as Spacewar. On the contrary, Bjerke, Berg, Shariff, Anderson and Farid (2018) contest that South Korea is generally considered to be the birthplace of e-sports. They further argue that although it is difficult to pinpoint when the birth of e-sports occurred, there appears to be a significant acceleration of the sport around the year 2000. With Space Invaders, Atari laid the corner stone for the first major e-sports tournament in 1978. The advancement of networking and private internet connections resulted in the establishment of the first e-sports leagues towards the end of the 1990s. During the same period, the government of South Korea promoted the expansion of telecommunications and internet infrastructure, thus setting the course for e-sport. The Korean E-sports Association played a pioneering role in hosting the first World Cyber Games in 2000. It was during this time that the rise of broadband internet, video content and online services, increased the popularity of multiplayer competitive gaming. In 2003 the first "Electronic Sports World Cup" was played in Poitiers, France. As of 2010 onwards, e-sports events increased in prominence.

### **1.2.3 The growth of global E-sports**

E-sports is considered the fastest growing sport in the world. The competitive gaming economy generated an estimated 1.1 billion US dollars in revenue in 2019. Tencent Holdings Limited, the largest video gaming company in the world has significant exposure to esports. The aforementioned derived from two of its largest games, League of Legends and Honour of Kings, been amongst the most popular esports in the world. According to the Global Growth of E-sports Report of Newzoo (2019), with an increase of about 200 million US dollars in comparison to 2018, this will constitute a growth rate of 27% year-on-year. North America is expected to generate the most revenues,

accounting for 409 million US dollars. China is estimated to contribute 19% and South Korea 6%, with the rest of the world comprising the remaining 38% of the global e-sport revenue. Newzoo (2018) further forecasts that the global e-sports market is expected to reach 1.8 billion US dollars by 2022. This ballooning esports industry has stimulated increased interest from investors in the form of sponsorships, advertising, media rights and content licenses. Figure 1.1 below is illustrating the timeline of notable e-sport brand investments – growing commercial interest.

**Figure 1.1: The timeline of notable e-sport brand investments – growing commercial interest from 1999-2017**



Source: Berenberg research (2018). Esports: a game-changer

Newzoo (2018) also suggests that these investments from brands will constitute about 82% of the estimated industry growth, with a total spending of 897 million US dollars. In all, brand support will have nearly tripled since 2015. Sponsorship is the highest grossing e-sports revenue stream, contributing 456.7 million US dollars compared to 359.4 million US dollars in 2018. Consumer spending on tickets and merchandise is projected to grow to about 104 million US dollars, while revenues projections for game publishers point towards a 3% decrease. Bearing in mind of the insignificant increase in publisher fees from 105 million US dollars in 2017 to 116 million US dollars in 2018, Newzoo argue that e-sports is not a profitable business for game publishers. Media rights are the fastest growing revenue stream with game publisher fees remaining the slowest segment. Hovdestad (2018) explains that with an emphasis on technological advancement in the sports industry, multiplayer digital gaming could become a greater threat to traditional sporting activities. Then again, the growing popularity of e-sports

has led to owners of professional traditional sports teams to buy franchises and signing on e-sports stars to host their own tournaments. Furthermore, the total audience comprising of both enthusiasts and occasional viewers is expected to grow 15% to 454 million. Figure 1.2 below graphically depicts the global e-sports revenue streams for 2019, including year on year growth.

**Figure 1.2: Global E-Sport Market Report**



Source: Newzoo Global E-Sport Market Report (2019). The figures exclude revenues from betting, fantasy leagues, and similar cash-payment concepts, as well as revenues generated within games.

### 1.2.4 The wellbeing of athletes

The competitive digital gaming industry calls for great skill, agility and experience from an athlete to optimize his/her performance during gameplay. Therefore, similar to traditional sports, the physical health of e-sports athletes is an important success factor during a game. DiFrancisco-Donoghue, Balentine, Schmidt and Zwibel (2019) highlight e-sports athletes to be at risk of developing pain in the neck, back, wrist and hand. In addition, e-sports athletes are susceptible to eye fatigue, likely due to computer vision syndrome. DiFrancisco-Donoghue et al suggest that this occurs because of “increased demands on the eye, as a result of the lack of contrast and definition in pixel-generated computer images”. It could be argued that emphasis should be to discover innovative methods to enhance ergonomics, neurocognitive processing speed and reaction time of e-sports athletes. Furthermore, the commitment to protecting and enhancing the health, safety and welfare of all athletes is fundamental to the success of e-sports. Notwithstanding the fact that e-sports athletes neglect developing his/her physical fitness to attain longevity of a career, it is also noticeable that competitive gaming could have a negative impact on the psychological development of young people. As e-sports

continue to emerge and the competitive landscape becoming more thought-provoking, burnout of athletes has become synonymous with the industry (Jurkic, 2019). For this reason, sports psychology is a key element to ensure sustainable high performance of E-sports athletes. In other words, sports psychology is fundamental in helping an athlete to perform at his/her highest level, while ensuring optimal mental health and behavioural capabilities.

According to Anderson and Dill (2000), there is public and scientific concern surrounding violent media exposure in interactive video gaming. They further suggest that violent content in media can influence behavior of people in a predictable, anti-social manner. These include increased hostile attributions, aggressive cognitions, and aggressive behaviour. Osuagwu (2018) and Onyemaka, Igbokwe, Adekeye, and Agbu (2017) reveal that on-line gaming could result in addiction, which in turn has an adverse effect on positive social outcomes and academic performance of athletes. The United States and Europe governments encourage initiatives that highlight individual accomplishments (the personal persuasion to achieve goals and ambitions). In contrast, the Asian markets are maximizing moral values that bring about collective praising correctness of social relationships, inter-dependency and loyalty towards society. The pursuit of these social values to engender group cohesion and harmony is translated onto the team dynamics of multiplayer competitive gaming.

For this reason, PricewaterhouseCoopers (2018) highlights the intrinsic worth of communication to support social integration of young people in the course of the game. According to Lu (2016) e-sports has a positive influence on social solidarity among the young people. Radman Peša, Čičin-Šain and Blažević (2017) concur with this view that these social interactions between the players within e-sports can be satisfied through belonging to a team with other players of similar desires and needs. They further compare the nature of participating in e-sports to Maslow's hierarchy of needs, indicating that most of consumers within the industry strive to meet the need of belonging to a group. With reference to the aforementioned addition of e-sports amongst athletes, Osuagwu (2018) suggests greater regulation over the industry to ensure that vulnerable young people are prohibited from participating in tournaments.

It is therefore important for e-sports leadership to concentrate its efforts on developing strategic partnerships with health professionals to help mitigate and control the risks of e-sports related injuries. In other words, e-sports organizations should take advantage of the medical know-how available to address optimal performance and the well-being of athletes. This collaborative approach will help towards building e-sports into a sustainable industry with healthy competitors.

### **1.2.5 The legal implications of E-sports**

The e-sports ecosystem consists of the gamers, the teams, associations, the organisers of tournaments, the game developers and publishers, sponsors, the platform and the audience. Each participant has rights and obligations which flow from their involvement in the e-sport ecosystem. Similar to the traditional professional sports industry, each participant has rights and legal obligations which flow from their involvement in the e-sport ecosystem. The legal implications for e-sports and its participants that stems from these contracts refers to contractual implications, intellectual property implications, labour law issues, governance matters, betting and doping.

#### **1.2.5.1 Contracts**

The essence of entering into a valid contract is marked by the notion that in most countries “all (valid) commercial agreements are binding” (Magnusson, 2016). It creates enforceable rights and obligations on the parties to the contract. In terms of the different legal systems in the world, it is important for contracts to clearly define the applicable law(s) and jurisdiction. Therefore, the question emerges: How will e-sports deal with contractual claims in the different countries? Wee (2018) highlights that with the international nature of e-sports and the industry moving towards greater professionalism, better awareness should be placed on the consequences on these contractual obligations. In other words, each of the role-players in the e-sports ecosystem requires advice on negotiating, drafting and signing contracts. The vulnerable status of e sports players in terms of age and financial resources necessitate legal assistance with contracts. The effect of a valid contract is that parties cannot lawfully ignore the terms and conditions of the agreement without committing a breach and being exposed to possible litigation for damages. In other words,

professional players cannot leave their respective teams which they are contracted to without there being legal implications. Similarly, there are negative consequences if teams renege on the obligation to remunerate athletes. Wee (2018) further argues that the emphasis should be on the protection of the rights of the players. Hovdestad (2018) supports this view that players are currently not treated fairly in the e-sport industry. Players need to be certain about their contractual obligations to ensure that the carefully drafted agreement include mutual benefits, the duration of the contract is clear, whether it is exclusive or not and the terms of payment are stipulated. Additional factors when considering endorsement agreements for players are the territories in which the contracts operate and the morals clauses allowing for the termination or suspension of the contract (Pulman, 2016). In competitive e-sports a valid contract could be between the following parties:

- players and their teams
- teams and the tournament organisers
- tournament organisers and the game publishers or developers
- tournament organisers and the platform
- game publishers and the platform
- tournament organisers and the sponsors or
- teams and sponsors, and so forth.

The Overwatch League has recognised the persisting problems with contractual issues between players and organisations. As a result, the league mimicked certain legal aspects from traditional football in implementing a sports league system. Furthermore, the game developer, Blizzard endeavours to minimise contractual disputes. Therefore, the league is mandated to sanction signed contracts and implement transfer windows for player contracts (Wee, 2018).

#### 1.2.5.2 Intellectual property

Most of the problems pertaining to intellectual property in e-sports relate to copyrights. The intellectual property rights in e-sports involve content, characters and gameplay. According to Flaggert (2018) copyright is designed to protect the economic interests of an author of an expressive work, by securing that author the exclusive right to copy, distribute, publicly perform and otherwise exploit that work. Video games are eligible for copyright protection as audio-visual works”.

In the e-sports ecosystem the games developer/publisher holds the intellectual property rights. These entities can determine in what manner the video game is broadcast, streamed and utilised at in-person tournaments. It is clear that games publishers/developers are in a powerful position to control players, teams, leagues and broadcasting deals. The rapidly growing e-sports market is also coupled with increased tensions over intellectual property rights (Townley and Townley, 2018). Streamers on online platforms are broadcasting events without the necessary licences. The right to play a video game is usually governed by end-user licensing agreements entered into with tournament organisers. In the case of players choosing to stream their play and/or create videos they require the permission of the developer/publisher.

#### 1.2.5.3 Labour Law

The most important aspect with regards to labour law is whether the player is to be classified as an employee or an independent contractor. The issue of collective bargaining and athlete trade unions is also regarded as an emerging legal issue in e-sport. The majority of issues faced by players and teams within the e-sports community can all be solved through the creation of a collective bargaining agreement.” The World e-Sports Association (WESA) is the first pro gamer union set up for the benefit of the player not the league.

The Washington Post published on 21 May 2019 a lawsuit filed by Turner Tenney about his franchise taking 80 % of his sponsorship revenue, shining the spotlight on player welfare and the lack of basic protections which other employees are entitled to under the law. Ryan Morrison, an attorney, is quoted in the article as saying “There is no union. There is no players association. There is nothing protecting the players.” A similar sentiment is expressed by Jefferson (2016) that “a union will also ensure or at least have measures in place for player grievances such as not being compensated, delays in compensation, and ill player treatment when their own teams are the abusers”. Mergers and acquisitions also impact on the roster and professional leagues carry spots that are valuable and can be sold. Employees would be in stronger position, vis a vis independent contractors, should there be a take-over or merger. In a 2017 JLAS article, which considered emerging litigation in the realm of e-sports stated ‘Employment conditions....labour and collective bargaining and arbitration.... are

among several fronts, for which legal teams of e-sport stakeholder groups need to strategically prepare...”

### **1.2.6 Strategic leadership in E-sports**

Good leadership, stewardship and management of athletes are crucial to achieving successful e-sports leagues in Africa. The chronic shortages of foreign direct investors, advanced infrastructure and efficient access to cutting-edge technology are just a few of the reasons why Africa needs strong, lateral thinking leadership to address the multidimensional challenges of the e-sports market. Above and beyond, the leadership should develop a deeper understanding of the perceived value of e-sports, supporter engagement and behaviour, the support of esports-related products, services or merchandise and social media interaction relating to the sport. Furthermore, without management executing commercial marketing strategy to promote gaming and to maximize branding opportunities, the e-sports market will find it difficult to rise to the challenges of new digital technologies. Therefore the leadership should be capable of adapting to changes in the esports scene for the market to be successful. Using a collaborative approach, the e-sports organizations should be seeking venture capital from value-added investors that is willing to get the odds in favour of a growing-sports market in Africa. E-sports should also work with government and the community, forging the development and retention of strategic relationships. For e-sports to be effective in Africa, the leadership should effectively identify key revenue drivers and diagnose operational areas to propose innovative solutions aimed at organizational efficiency and stability. A challenge for e-sports leadership in Africa is how it will manage the complexities of the global acceleration of the e-sports audience.

## **1.3 OBJECTIVES OF THE RESEARCH**

### **1.3.1 Primary research objective**

The primary objective of this study is to contribute to the successful implementation of e-sports leagues in selected countries in Africa by problem identifying critical success factors that would impact such implementation.

### **1.3.2 Secondary research objectives**

In order to achieve the above-mentioned primary objective, the following research questions were formulated:

- i. What lessons could be learnt from e-sports in other countries with already established leagues?
- ii. What are the current perceptions among the people of selected countries in Africa about e-sports?
- iii. What are the key components that should be considered in the implementation of e- sports leagues in selected countries in Africa?
- iv. Do gender groups differ significantly with regard to perceptions of the success an e- sports league in selected countries in Africa?
- v. Do age groups differ significantly with regard to perceptions of the success an e- sports league in selected countries in Africa?
- vi. Do e-sports experience groups differ significantly with regard to perceptions of projected NHI success?
- vii. Do countries differ significantly with regard to perceptions of the success of an e- sports league in selected countries in Africa?
- viii. Do role groups differ significantly with regard to perceptions of the success an e- sports league in selected countries in Africa?

### **1.3.3 Research design objective**

To achieve the above-mentioned objectives, the following research design objectives will be pursued:

- A secondary literature review has been conducted to determine the various factors and challenges impacting on the implementation of e-sports leagues selected countries in Africa.
- A questionnaire was constructed based on the literature sources consulted above.
- A mail survey of a convenience sample of management, players and fans of e- sports institutions in cities of the selected countries will be conducted.
- The data were captured in Excel and the IBM SPSS Statistics 25 computer software program was used to analyze the data.
- The empirical results were recorded and interpreted.
- Conclusions were drawn and recommendations were made.

#### **1.4 INTENDED CONTRIBUTION OF THE STUDY**

E-sports in Africa are an appropriate topic of debate, considering it to be one of the fastest growing sports in the world. This ever-increasing popularity has rendered E-sports increasingly relevant for organizations to craft innovative business models in the sports industry. This study is important because the results could be used to influence and shape the development of E-sports globally. The study could also facilitate the development of strategies that could be used for successful implementation of E-sports leagues in Africa. The study allows the researchers to gain critical insight into the complex and challenging e-sports market in Africa. The study will contribute to the sports management body of knowledge which will cover new ground in terms of the evaluation and management of E-sports in developing economies.

#### **1.5 STRUCTURE OF THE STUDY**

The research includes the following chapters:

Chapter 1: An overview of the current state of global e-sports is presented, with the research objectives and scope of the study.

Chapter 2: Provides an overview of the nature, problems and challenges within the context of implementation of e-sports leagues in Africa.

Chapter 3: A literature review of e-sports in developed countries is presented to determine the critical factors that can be replicated for successful e-sports leagues in selected countries in Africa.

Chapter 4: The methodology of the study, the hypothesized relationships and analyses and interpretation of empirical results.

Chapter 5: Interpretation of descriptive and inferential statistical results

Chapter 6: Summary, conclusions and making specific recommendations for maximizing the effectiveness of implementation of e-sports leagues in Africa.

## **CHAPTER 2**

### **E-SPORTS IN AFRICA**

#### **2.1 INTRODUCTION**

All countries in Africa are facing challenges of addressing the course of action of e-sports and the financial difficulties of improving the quality thereof, regulating the cost drivers to function optimal, to allocating resources efficiently and bringing about equitable management of the sport. E-sports in Africa requires strategic investments in infrastructure and technology, consequently fostering innovative thinking and addressing its challenges and risk assessments in a comprehensive manner. Furthermore, influencing several stakeholders and extending across governments, it should engage effectively with the general public, thus bringing valuable contributions to addressing e-sports matters. Nevertheless, there is a dearth of empirical evidence on the subject on the African continent.

#### **2.2 SOUTH AFRICA**

The e-sports sector in South Africa is on the rise. This is characterised by a surge in the number of tournaments, prize pools are increasing and competition is becoming fiercer. Competitive gaming is now viewed by the South African Revenue Services as a profitable profession, with possible tax implications. In South Africa, e-sports was initially followed through on-line platforms, such as Twitch, YouTube, Facebook and Twitter. The South African broadcaster, DSTV are now presenting games to its television audiences through Ginx, the esports channel. However, viewership numbers are much less than the European or American streamer counterparts.

A major challenge that e-sports in South Africa is facing is that it remains a market segment which is largely unidentified or targeted by local business. Furthermore, the impact of disruptive information technologies and poor infrastructure in South Africa also impedes the sustainability of e-sports. The internet is not accessible to most people and mobile broadband services remain expensive for low-income users in South Africa. Then again, gaming in South Africa is perceived as a luxury and caters for the few privileged with disposable income. The core e-sports enthusiasts is between the ages of 18-24 year olds and are more concentrated in the most populated and urbanized areas. It could be argued that government focus on promoting grassroots

gaming so that all walks of life have equal opportunities to compete. To gain increasing levels of competitive intelligence in e-sports, South Africa should take advantage of its strategic relationships with the BRICS countries. South Africa acquires the expertise of China who possess the experience and in-depth understanding of the e-sport market. Furthermore, India is a leading information technology economy, thus gaining insight into cutting-edge intellectual capital. Using this collaborative approach, the South African government should prioritise support for e-sports by leveraging the diverse innovative ecosystem of both China and India. Bearing in mind the high level of unemployment, the South African government would rather put all its efforts in providing access to the basic needs of people in poverty stricken areas.

Because of the graphic-intensive nature of e-sports, stable transmission speed, bandwidth of fibre and low latency internet connections are critical to the success of competitive multiplayer computer gaming. The expensive cost of electronic communication in South Africa has hamstrung the progress of e-sports. However, the comprehensive rolling out of fibre optic allow more athletes to stream, thus boosting competitive multiplayer computer gaming. Inferior equipment also plays a restrictive role on the ability South Africans athletes to compete against international players. From a competitive gaming perspective, the lack of infrastructure is also exacerbated by a small amount of dedicated esports bars or gaming cafes in South Africa. In view of this, telecommunication companies can potentially benefit because e-sports provides an avenue to market their brands to the younger generation.

Mind Sports South Africa (MSSA), is mandated to regulate and promote e-sports in South Africa. MSSA is an affiliate of the International eSports Federation (IeSF) and the International Wargames Federation (IWF) to maintain strong corporate governance and risk management. The advent of regional, provincial and national e-sports tournaments at high school level has resulted in increased interest and media coverage. South Africa has participated in the E-Sports World Championships in 2013 in Romania, Seoul in 2015, Jakarta in 2016, Busan in 2017 and Kaohsiung in Taiwan in 2018. In view of this, e-sports in South Africa is at a tough crossroad as most athletes are playing the game for recreational purposes instead of pursuing it as a career.

### **2.3 NIGERIA**

Electronic sports in Nigeria have gained popularity in recent years. Notwithstanding the contraction of economic activity, there has been significant growth in the e-sports segment of the sporting industry (PricewaterhouseCoopers, 2017). The e-sports industry was valued at 41 million US dollars in 2016 and is expected to grow by 15.8% in 2022 (Osinubi, 2017). The factors that are having a positive influence on this growth are the large youth population, high internet penetration and increased accessibility of devices that are empowered by the internet. According to Savage (2018), the strong existing esports market is underpinned by the emergence of local games developers to design programs that is custom-made for the people of Nigeria. PricewaterhouseCoopers (2017) further highlights that the implementation of advanced digital content and technological innovations through online gaming multinationals is a factor worth mentioning that is stimulating growth in the industry. However, Savage (2018) believes that the entrance of these powerful conglomerates has reduced the footprint of competitive gaming in the sports industry. According to Fiorito (2011) language barriers, income per capita and dearth of innovation are amongst the issues that impedes the growth of competitive online gaming on the African continent. Furthermore, the local e-sports companies are experiencing marketing budgets constraints in comparison to rival multinationals. In addition, the popularity of traditional sports poses a challenge to the growth of e-sports. For this reason, Savage (2018) suggests strategic partnerships between local gaming companies and telecom groups to foster sustainability within the e-sports industry. Fiorito (2011) also mentions that games should be designed within the cultural values and behavioural patterns of the people of Africa to increase marketing of e-sports amongst young people.

The streamlining of this rapidly increasing e-sports industry by regulatory bodies, such as the Lagos State Lotteries Board and National Sports Lottery is giving the opportunity for further growth to ensure sustainable success in the e-sports industry. Ekwealor (2017) mentioned that although the e-sports industry is at its infant stage, the West African Gaming Expo (WAGE) created a stage for greater exposure of competitive gaming in the nation. The Nigeria Electronic Sports Competition organizes quarterly and yearly competitions that bring together professional gamers in Nigeria.

The objective of events such as Gametime 2017, iDevelop Creed and Investorum is to promote the gaming industry to reach global standards. The African Gaming League also showcase competitions to establish a community of online gaming enthusiasts, to differentiate e-sports from gambling, promoting participation and help overcome e-sport challenges. As a growing industry, with tournament set-ups becoming more sophisticated and media coverage broadening, there is an increased demand for monetization of teams, aggressive marketing, greater investment in education, the emergence of local developers and affordable online gaming to cater for low-income enthusiasts.

## **2.4 ZIMBABWE**

The adaptation of esports in Zimbabwe is relatively slow and casual in comparison to other parts of the world where it has increased in popularity. The people of Zimbabwe consider e-sports as a luxury because of the absence of disposable income amongst consumers. Nevertheless, cities like Harare and Bulawayo has seen the need to explore opportunities in this fledgling esports market. Whilst many play video games in a casual manner, there is a growing tendency amongst young Zimbabweans to become professional gamers through participating in esports tournaments. There is a change in the behaviour of enthusiasts, shifting from console gaming to computer gaming. Online gaming through smart phones has also drawn the attention of the e-sports community. However, one of the greatest challenges that e-sports in Zimbabwe is facing is the nonexistence of a statutory body to regulate multiplayer competitive gaming matters. Governmental policies are also lacking support for e-sports athletes. The Sports and Recreation Commission asserts that e-sports is not recognized as a sporting code in Zimbabwe. Furthermore, the Department of Public Health of Zimbabwe categorically state that the mere mentioning of e-sport as a form of sports is subversive.

With the above-mentioned in mind, the Zimbabwe Mind Sports Union was established in recent years to develop the best multiplayer competitive gamers, promote and organise competitive gaming in the nation, and to provide adequate gaming facilities. Competitive gaming is becoming more accessible to the broader community, especially in tertiary institutions. The strong will to shape the esports space in Zimbabwe allowed the Zimbabwe Mind Sports Union to hosts tournaments for the FIFA football simulator game in Bulawayo. Towards the end of 2017, the Zimbabwe Mind Sports Union were

granted a license by EA, known for developing gaming franchises like FIFA, Battlefield, Mass Effect and Need For Speed. Econet Media was forming a strategic alliance with the largest video gaming events company, ESL in a five-year deal to broaden online e-sports viewership. In 2017, e-sports Zimbabwe was given a license by Electronic Arts, one of the largest games developers and publishers in the world.

A lack of a proper platform for e-sports athletes, internet speed that does not meet competitive gaming requirements, the absence of central, convenient and affordable venues, and high cost of data are amongst the challenges faced by the e-sports community. There is also a dearth of venture capital from value-added investors that is willing to get the odds in favour of a lacklustre growing e-sports market. The contraction of economic activity and depreciation of the currency in Zimbabwe, has contributed to this dilemma of uncertainty amongst brands to enter the multiplayer competitive gaming market. The sponsorships of tournaments, teams and athletes are a prerequisite for the sustainable growth of e-sports in Zimbabwe. Moreover, the improvement of inadequate infrastructure is critical to cultivate an interest in e-sports amongst all walks of life. Nevertheless, it could be argued that this gap in the market creates an opportunity for internet providers, information technology software and hardware retailers to spread its revenue base. In the face of all these challenges, there is a desire for e-sports athletes in Zimbabwe to compete at an international level.

## **2.5 MALAWI**

Malawi has been lacking a competitive gaming framework that consist of team dynamics and spectatorship, an industry of organizing play at professional level and the actual game. Similar to Zimbabwe, Malawi is faced with a lack of support for esports from government, poor infrastructure that impedes the growth of the sport and deferred technological advancements to optimize internet speed. Malawi has a population of nearly 18 million people and little understand the essence of playing games using video or computer. This cultural issue further reduces the interest of people to engage in e-sport. Moreover, there is lack of a proper platform to encourage many players, to attracting new investments from high profile brands, media organisations and traditional sports right holders and for fans to enjoy the sport.

There is a misconception in Malawi that e-sports is sports games played on computers or consoles. The use of video or computer games for pleasure has existed in Malawi since the late 1980s. It was not until June 2013 when the first International FIFA Play Station Games were held in Blantyre. The organizers of the Games were aiming towards introducing the competitive aspect of gaming, a gap which was seen in the market. The National FIFA Football Championships was held in Lilongwe with over fifty players participating in this years' competition. The purpose of the event was to develop social players who could in future compete on the international stage. However, in the midst of these aforesaid challenges, the betting company, Premier Bet Malawi has seen an opportunity to leverage their entertainment expertise through esports. Cellular telephone companies are also seeking opportunities to exploit the slowly growing e-sports market in Malawi.

## **2.6 AN OVERVIEW OF INTERNET ACCESS IN THE SELECTED COUNTRIES**

According to the Inclusive Internet Index (2019), the cost of internet access relative to income and the level of competition in the market place ranked Nigeria 28<sup>th</sup>, South Africa 31<sup>st</sup> and Malawi 98<sup>th</sup>. Zimbabwe is apparently the most expensive country on the continent and the world at 75.20 US dollars per gigabyte. In terms of the quality and breadth of available infrastructure required for access and levels of internet usage, South Africa was 51<sup>st</sup>, Nigeria 65<sup>th</sup> and Malawi 98<sup>th</sup>. In South Africa the highest access was between the ages of 15-34 which accounted for about 64% of users. Furthermore, the split between male and female users were equal. Only 16.47% accessed the internet on a laptop with the vast majority doing so on a mobile phone. The cost of internet access relative to income per capita is 2.22 US dollars in Nigeria, for 7.19 US dollars SA and 3.59 US dollars in Malawi. Nigeria placed 47<sup>th</sup> on the relevance index, SA 80<sup>th</sup> and Malawi 94<sup>th</sup>. The current monthly income for Malawians is K29 900 or 40.96 US dollars while 1GB of data costs K5000 or 6.86 US dollars for 30 days and is therefore unaffordable. The capacity to access the internet, including skills, cultural acceptance and supporting policy ranked South Africa 4<sup>th</sup>, Nigeria 73<sup>rd</sup> and Malawi 78<sup>th</sup>. Internet cafes in Nigeria are on the decrease, whilst there is a dearth of information on Malawi and Zimbabwe.

Table 2.1 below illustrates the statistics of internet users in the selected countries in Africa in relation to the population.

**Table 2.1: Africa 2019 Population and Internet Users Statistics**

Selected countries	Population (2019 Est.)	Internet Users 31-Dec-2000	Internet Users 30-June-2019	Penetration (% Population)	Internet Growth % 2000 - 2019	Facebook subscribers 31-Dec-2018
South Africa	58,065,097	2,400,000	<b>32,615,165</b>	56.2 %	1,259 %	16,000,000
Nigeria	200,962,417	200,000	<b>123,486,615</b>	61.4 %	61,643 %	17,000,000
Zimbabwe	17,297,495	50,000	<b>8,400,000</b>	48.6 %	16,700 %	880,000
Malawi	19,718,743	15,000	<b>2,717,243</b>	13.8 %	18,015 %	720,000

Source: Adjusted from Africa 2019 Population and Internet Users Statistics. [www.internetworldstats.com](http://www.internetworldstats.com)

Africa Population numbers are mid-year 2019 estimates, based on data from the United Nations Population Division. Africa Internet Statistics for June 30, 2019, updated as of September 26, 2019. Africa Facebook subscribers are estimated in December 31, 2018.

## 2.7 CONCLUSION

This chapter provided a brief overview of some fundamental features of e-sports in selected countries in African. These include the challenges that Africa is facing for successful implementation of e-sports leagues. It is evident that an integrated approach should be followed for e-sports in Africa to be successful.

## **CHAPTER 3**

### **A LITERATURE REVIEW ON E-SPORTS IN DEVELOPED ECONOMIES**

#### **3.1 INTRODUCTION**

To better understand the potential impact of specific ups and downs that may occur in the African e-sports market, and to examine the feasibility of an e-sports league in the continent, the study has investigated e-sports in China and Japan. The industrialised economies provide an interesting model since they face financial pressures similar to those seen in Africa, but each nation has addressed those pressures in different ways. Each of these countries has established an e-sports model that conforms to its cultural and political norms. In discussing the different e-sports markets of selected modern, industrialised nations, it could be argued that there are sufficient similarities among these markets to make comparative analyses and case studies of individual systems worthwhile.

#### **3.2 CHINA**

China is the leading gaming market in the world in terms of revenue, with a strong focus towards e-sports. E-sports has synchronized with the cultural heritage of the Chinese population. A notable development in China is the consistent willingness of government to invest in e-sports activities. In 2003, the sports ministry brought e-sport in line with traditional sports by listing it as the ninety-ninth official sport in the republic (Kai-ling, 2006). The following year, in collaboration with All China Sports Federation, the sports ministry launched the China E-sports Games (Dongsheng, Xiaohang, and Daofeng, 2011). Furthermore, the first official mobile e-sports was funded by the Sports Ministry in collaboration with Datang Telecom Technology and Industry Group. In doing so, the government is developing a market that is leading the charge for local, community-based e-sports.

China emerged as a major player during the growth of e-sports in the late 1990s. According to Kai-ling (2006), the evolution of e-sports in China has shaped the science and technology industry, therefore contributing to the fastest growing economy in the world. Technological advancements are also leaning towards mobile e-sports consumption. An important development in e-sports is in what manner tournaments

were viewed. In 2016, the only way people could view e-Sports was through live online broadcasting. However, with an increase in e-sports clubs, the formation of e-sports towns, and the social acceptance of e-sports things over the past three years, fans are able to engage in offline watching (Dongsheng, Xiaohang, and Daofeng, 2011). The rapid growth of e-sports has resulted in 260 million consumers, which is equivalent to traditional sports e-sport industry when viewed through the lens of the market size (Lokhman, Karashchuk and Kornilova, 2018). Then again, Lu (2016) contests that China can make a significant contribution towards the future growth of the global e-sports market. With the initially perception of competitive gaming as a leisure pursuit or lifestyle ( Zang, Wu and Li ,2008) computer companies and video game websites has formed a strategic alliances with competition organisers (Kai-ling, 2006). The leadership of prominent cities is. E-sports academies, esports-themed hotels, theme parks, business centre and a hospital designed for esports players are amongst the innovative strategies to lure esports organizations to their respective city.

### **3.3 JAPAN**

Pike and Port (2018) report that Japan is the fastest-growing esports market in Asia, where over 80% of followers have only been following the sport for two years or less, with almost 40% following esports within the last year. However, Although Japan is a major game developer with popular games such as Nintendo, Sony and Capcom, the country has not advanced in the global e-sports market as expected. Government regulations of gambling and cultural issues are amongst the contributing factors that inhibit the growth of e-sports. The effect of these legislative problems that is besetting esports development was that revenue generated were only utilised to pay the costs of the event. Any surplus revenue should then be utilised for the next e-sports event. Similar to MSSA in South Africa, the Japan Esports Union has been criticised for its perceived top down approach and ignoring the gaming community. The Japan Esports Union contest this view, stating that it is popularising esports in Japan on multiple fronts, such as through aggressive public relations, attracting giant conglomerates companies and involving government to create awareness of e-sports.

In 2018, Japanese government embraces e-sports by releasing documents, stating that “it will work on creating an appropriate environment for the sound development of esports as a new growth area.”

E-sports game titles and tournaments are regulated by the Japan Esports Union through a vetting process to ensure fairness and healthy competition. The Japan Esports Union was formed to issue professional e-sports licence certification licences to players and teams. In this manner, the remuneration of athletes during competitions could be comparable to global earnings.

### **3.4 CONCLUSION**

The literature search was specifically based on using a comparative approach to studying models of e-sports that the researchers derived from other countries and how their markets have succeeded and failed. The purpose was a deliberate attempt to illustrate the practicalities of how selected countries in Africa can base its e-sports strategies on precedents that have been set on the international scene.

## **CHAPTER 4**

### **THE METHODOLOGY OF THE STUDY AND EMPIRICAL RESULTS**

#### **4.1 INTRODUCTION**

It is the opinion of Collis and Hussey (2009) that a researcher frequently has to conduct research into problems or phenomena about which few established models or theories exist. The success or failure of e-sports leagues in Africa is seen as relating to gaining new insights into such a phenomenon. In this scenario, according Collis and Hussey (2009), the researchers have to focus on gaining insight and familiarity with the subject area to generate new models or hypotheses by using exploratory studies. Such models or hypotheses can then be used for more rigorous investigation in subsequent research. For this reason a subsidiary objective would include determining priorities for future research and developing a new hypothesis on successful research implementation of e-sports leagues. Since the intention of the researchers was to perform such an exploratory comparative study concerning critical success factors for implementation of e-sports leagues in selected countries in Africa, the design for this study was adapted for this purpose.

The research was grounded on real practice and empirical research utilising experience and observation directed at determining how substantive the success of the e-sports leagues selected countries in Africa will be, and what can be done to increase the probability of effective implementation. It was critical to monitor any new developments of the implementation process of the e-sports leagues after this research project.

#### **4.2 RESEARCH APPROACH**

Collis and Hussey (2003) identify three different types of research approaches, namely exploratory, descriptive and analytical research. Exploratory studies investigate research problems or phenomena about which few established models or theories exist (Collis and Hussey, 2009). The e-sports market in Africa is such a phenomenon. Exploratory studies often reveal theories and hypotheses for future research. The present study is therefore an exploratory one. The present study is also

a descriptive one, as it tries to describe a phenomenon (e-sports leagues in Africa) as it is perceived by its stakeholders. The study tries to identify and obtain information on the characteristics of the e-sports. Finally, the study is also analytical, as it tries to analyze the relationship between perceptions about e-sports, on the one hand, and its projected success, on the other hand. For the purpose of this study, statistical testing of hypotheses was not performed.

### **4.3 RESEARCH PARADIGM**

The researchers considered the positivistic or quantitative paradigm to investigate the critical factors that would influence the successful implementation of e-sports leagues in selected countries in Africa. This approach was preferred to quantify the significance of the relationship among the variables identified in the observed responses, following the distribution of a measuring instrument through a mail survey questionnaire. The researchers followed the positivistic paradigm to avoid biasing the participants.

### **4.4 THE SAMPLE DESIGN**

The method of sampling used is non-probability purposive sampling (Chambers and Skinner, 2003). It was important for this study to consider a balanced sample of the e-sports population in order to avoid an unbiased subset of the population. For this reason, the population of relevance was made up of key stakeholders within the e-sports segment in selected countries in Africa. Particular focus has been on cities in South Africa, Nigeria, Zimbabwe and Malawi as the primary research area.

A sample of 250 organizer, player and team representatives from the e-sports segment listed below was drawn. This sample is representatives of the following segments, which are representative of the population:

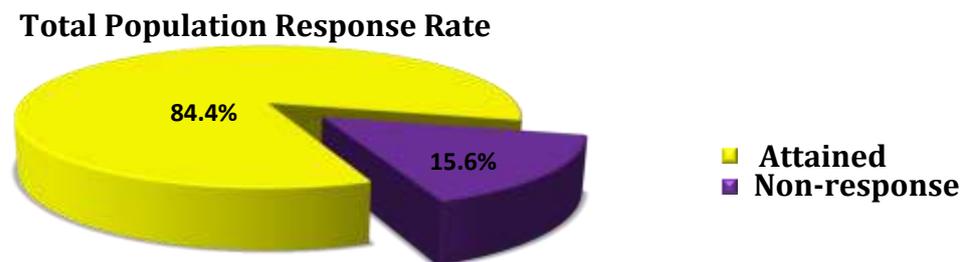
- Players who actively compete in online competitive gaming leagues or tournaments
- Manager-Leaders of e-sports organizations
- E-sport consumers-online population
- Attendants of live e-sports tournaments

For the purpose of this study, those who are not participants of e-sports were not considered in the sample design.

#### 4.5 RESPONSE RATE

In an effort to achieve an objective assessment on the perceptions that manager-leaders, players and fans hold about an African e-sports league, an empirical investigation was performed through a survey. The researchers distributed the self-constructed questionnaire either personally or electronically through e-mail to e-sports participants as outlined in sections 4.4, explaining the reason for the research. This convincing explanation for correct interpretation of the measuring instrument was well thought-out as key to a good response rate. With time as a scarce resource, the participants understood that responding to the survey was an important and meaningful utilization of their time. A special effort was made to cover e-sports participants in all geographical areas in the selected countries in Africa. Of the 250 questionnaires distributed to manager-leaders, players and fans in South Africa, Nigeria, Malawi and Zimbabwe, 211 usable ones were returned. This represented a response rate of 84.4% which is depicted graphically in Figure 4.1 below.

**Figure 4.1: Survey Questionnaire Response Rate**



The high response rate is fundamental to rendering the results of a survey legitimate. A high response rate attained will diminish the probability of response bias. The findings are considered more accurate when an investigation elicits responses from a large percentage of its target population. Possible reasons for ensuring the high response rate are the following:

- i. E-sports is a matter that is obviously related to the respondents. Their attitudes, opinions and perspectives concerning e-sports are indicative of strong identification with the subject.
- ii. Establishing a rapport with the participants particularly developed an interest on the success of an African e-sports league.
- iii. The researchers considered it important to telephonically follow up the initial invitation with individuals, motivating them to share information and respond to

the survey.

- iv. The participants had the assurance that the answers were not directed towards an individual participant, but rather used in combined statistical totals.
- v. A clearly defined explanation for understanding the questions increased the likelihood that the respondents were persuaded to participate in the survey.
- vi. The survey format was unambiguous and consistent, with the measuring instrument clear and concise.
- vii. The potential respondents were informed who was conducting the survey and what credentials the researchers holds.

#### **4.6 THE MEASURING INSTRUMENT**

The researchers explored and assessed the knowledge and opinions of participants in e-sports about the expected impact of the implementation of an e-sports league in selected countries in Africa on professional autonomy, management of athletes, financial implications, and effective stakeholder engagement. Understanding the perceptions of administrators, athletes and fans is important, because their acceptance of such tools is required for successful implementation.

Secondary literature and popular media reports on e-sports were consulted to construct a list of statements on the sport. These statements in the form of a questionnaire (Annexure1) included the perceived advantages and disadvantages of the envisaged e-sports league from e-sports representatives and the general views of the e-sports community about the sport. The purpose of the questionnaire is to solicit a deeper understanding of the knowledge and opinions of participants about the expected impact of an e-sports league in the selected countries in Africa. Furthermore, the quantitative information from the questionnaires was required to support or contest information gathered from the literature.

Extreme statements were initially avoided to prevent the participants from creating emotional blocks to certain questions. Stimulus equivalence is imperative in order to allow all the participants to understand the statements in the same manner. Double-barrelled and leading statements were avoided to reduce false positive responses. The statements were anchored to a Likert-type five-point scale ranging from (1) strongly

disagree to (5) strongly agree. The questionnaire also captured the demographic data of the respondents. These included age, gender, whether the respondent is a player, fan or administrator and experience in e-sports.

In this research there is a risk that documented information on the implementation of e-sports leagues in selected countries in Africa can be particularly prone to subjective positive bias. It would be argued that this could occur because it is frequently in the best interest of all involved to present a positive picture even if the outcomes of e-sports leagues in the aforementioned countries in Africa are actually not all that optimistic. It may well be a challenge to find a balanced opinion in the literature. A special effort has therefore been made to collect authoritative sources of information along with the more effortlessly available but conceivably more biased sources.

#### **4.6.1 Ethical issues**

The following actions have been taken to ensure the study was conducted in an ethical manner. Firstly, the Nelson Mandela University's ethical clearance process as entailed in the FORM E document of the Faculty of Health Sciences was undertaken to assess whether

- i. confidentiality and anonymity of the respondents are guaranteed.
- ii. the respondents are from a vulnerable category, such as school learners, higher- education students, medical patients and the mentally challenged.
- iii. special permission from an institution protecting the human rights of vulnerable groups must be sought.

Secondly, a covering letter was attached to the questionnaire which explains the aims of the study and which addresses issues of consent. The covering letter explained that

- i. the participation of the respondent is completely voluntary,
- ii. the respondent has the right to withdraw from the study at any time,
- iii. the respondent's completion of the questionnaire indicates verbal consent
- iv. the confidentiality and anonymity of the respondent are guaranteed.

#### 4.7 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Selected individual demographic data were collected to facilitate the classification of respondents. The information was also gathered to gain a better understanding of the geographic significance of the respondents' perceptions, their position within the e-sports segment and knowledge about e-sports in his/her own country. The demographical statistics were also aimed at getting educational information to determine the level of expertise in thee-sports market. Table 4.1 below summarizes the demographics of the participants. Overall the demographic data indicated that the survey had reached the intended population who were capable of providing rich and meaningful answers to the measuring instrument. In other words, the participants were representative of the originally selected sample.

**Table 4.1: Gender, Age, Role of Involvement, Time of Participation, And Geographic Dispersion**

Gender	Number of respondents	Percent
Male	159	75.4
Female	52	24.6
<b>Total</b>	<b>211</b>	<b>100.0</b>

Age Group	Number of respondents	Percent
18-29	138	65.4
30-39	45	21.3
40-49	18	8.5
50-59	4	1.9
60+	6	2.8
<b>Total</b>	<b>211</b>	<b>100.0</b>

Role of involvement	Number of respondents	Percent
Administrator	14	6.6
Player	70	33.2
Fan	127	60.2
<b>Total</b>	<b>211</b>	<b>100.0</b>

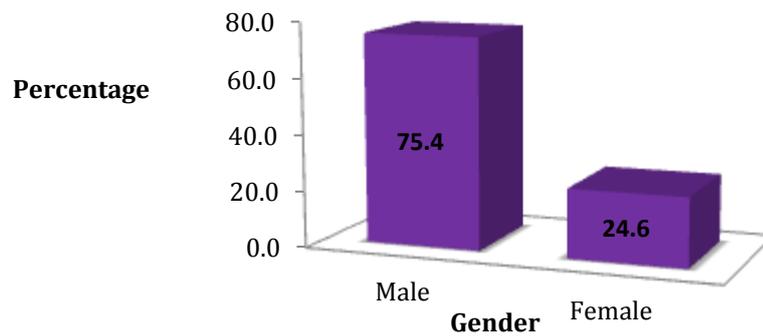
  

Time of participation	Number of respondents	Percent
Less than 5 years	182	86.3
5-9 years	19	9.0
10-15 years	10	4.7
<b>Total</b>	<b>211</b>	<b>100.0</b>

Geographic dispersion of the respondents	Number of respondents	Percent
South Africa	62	29.4
Nigeria	50	23.7
Malawi	50	23.7
Zimbabwe	49	23.2
<b>Total</b>	<b>211</b>	<b>100.0</b>

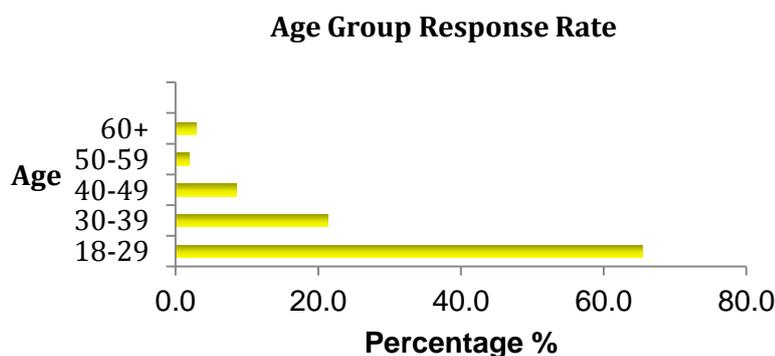
**Figure 4.2: Gender Response Rate**



As presented in Table 4.1 and Figure 4.2 above, the greater part of respondents were male (75.4%). This concurs with literature that e-sports is more popular amongst young, millennial males (Buckle and Mander, 2018). The researchers are of the opinion that the skewed gender composition could probably be attributed to the fact that although women are mostly given an equal opportunity, they are still less likely to participate in e-sports. Furthermore, there is a gender discrimination and masculine influence of power that still reigns over e-sports governance boards and the sporting industry.

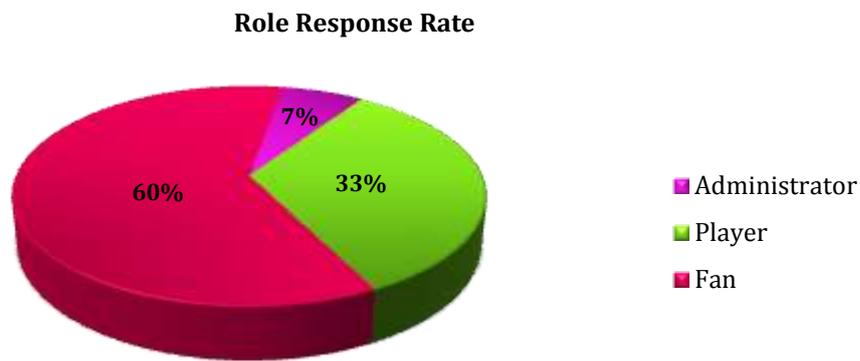
Figure 4.3 below graphically illustrates that insofar as age is concerned, adolescents and emerging adults make up the majority of esports demographics across the e-sports markets of selected countries. BtoBet (2018) agrees with the statistical data that the overwhelming majority of e-sports enthusiasts, both athletes and spectators alike, belong to the generation known as millennials. According to Buckle and Mander (2018), males aged 16-24 are around three times likely to be engaging with esports tournaments each month. It should also be noted that for ethical reasons athletes under the age of eighteen years old were not considered.

**Figure 4.3: Age Group Response Rate**



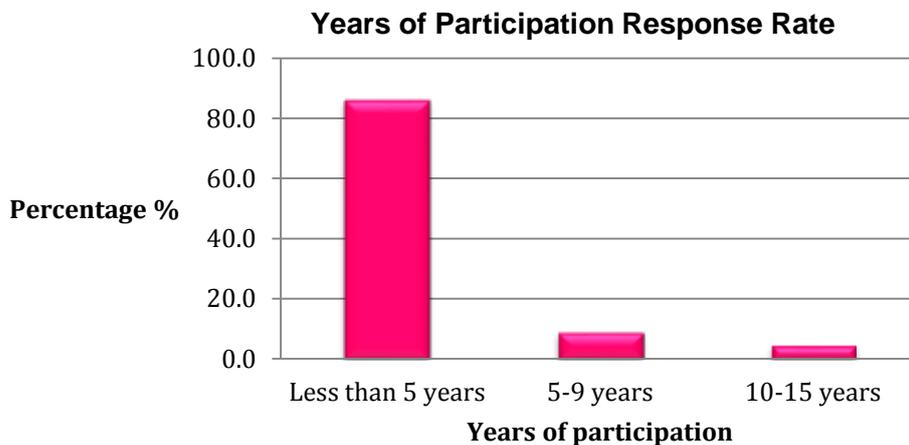
The prerequisite for participants was to be positioned either as administrators, players or fans of e-sports. All respondents were aligned with the criteria of being participants of e-sports. Table 4.1 and Figure 4.4 showed that a significant proportion of respondents are e-sports fans which accounted for 60% of the response rate.

**Figure 4.4: Role Response Rate**



The overwhelming majority of respondents are involved in e-sports for less than five years, as illustrated in figure 4.5. This could be attributed to the fact that e-sports in Africa is new phenomenon.

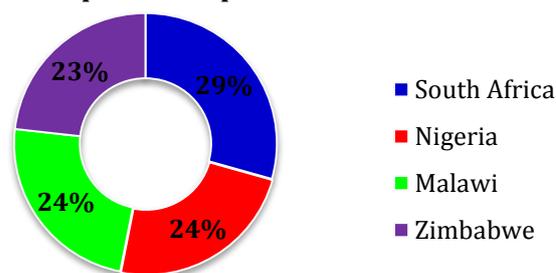
**Figure 4.5: Response Rate by Years of Participation**



**Figure 4.6: Geographic Dispersion Response Rate**

This study confirms in Figure 4.6 that the response rate amongst the selected countries is more or less equivalent. This even geographic dispersion of the respondents is because all the questionnaires were distributed in an equal manner to the different countries.

**Geographic dispersion response rate**



#### **4.8 DATA ANALYSIS**

The data were captured in Excel and the IBM SPSS Statistics 25 computer software program was used to analyze the data. The data analyses included exploratory factor analysis, calculation of Cronbach alphas, regression analysis, t-tests and calculation of means and percentages. Exploratory factor analysis and calculation of Cronbach alphas are associated with the validity and reliability of the data, while regression analysis is a statistical test for relationships between two or more variables. Mean scores indicate the average response on a question or statement of the respondents on whatever scale, while percentages indicate what fraction of the sample is associated with a specific response. T-tests are conducted to determine significant differences or otherwise between sample and population means, on the one hand, and between groups in samples, on the other hand.

#### **4.9 VALIDITY OF THE DATA**

Collis and Hussey (2009) define validity as the extent to which the research findings accurately reflect the phenomena under study. The underlying cause of low validity could result from inappropriate research procedures and inaccurate measurement. An exploratory factor analysis (EFA) was conducted to explore and identify underlying patterns in the observed responses. Principal components analysis was specified as the method of extraction and Varimax Raw with Kaiser Normalization as the rotation method used, a rotation converged in 18 iterations. After considering various options, ranging from ten to six factor solutions, it was concluded that extraction of nine factors is the most suitable for the data. This exploratory study is the first of its kind on e-sports in selected countries in Africa. While factor loadings of more than 0.400 were regarded as significant, double loadings were not discarded. Instead the bigger loading in case of double loadings was accepted as a measure of a construct. The most suitable empirical factor solution is reported in Table 4.2 below.

Table 4.2 Factor Loadings for a Sample of 211

Question Numbers	Factor 1 Projected e-sports success	Factor 2 Strategic Partnership	Factor 3 Requisite strategic leadership	Factor 4 Projected stakeholder benefits	Factor 5 E-sports awareness	Factor 6 Resource development	Factor 7 E-sports participation	Factor 8 Revenue generating	Factor 9 Cultural diversity
Q1	0.799	0.653	0.141	0.257	0.054	-0.104	0.044	0.15	0.175
Q2	0.158	0.222	-0.118	0.376	0.159	0.493	-0.275	0.33	0.055
Q3	0.685	0.127	0.175	-0.053	0.009	0.032	0.224	0.778	-0.13
Q4	0.678	-0.023	-0.084	0.056	0.059	0.298	0.691	-0.087	-0.233
Q5	0.654	0.287	-0.054	-0.512	-0.041	-0.073	0.485	0.059	-0.073
Q6	0.475	0.473	0.497	0.027	-0.098	0.168	-0.087	0.04	-0.073
Q7	0.713	0.113	0.415	0.123	-0.155	0.186	0.178	-0.494	-0.008
Q8	0.821	0.175	0.389	0.247	-0.415	0.387	0.101	0.005	0.336
Q9	0.683	0.5	-0.051	-0.083	-0.049	0.319	0.284	0.345	0.222
Q10	0.763	-0.038	0.071	-0.15	0.198	-0.147	0.655	0.295	0.04
Q11	-0.082	0.255	0.245	0.13	-0.165	0.056	-0.477	0.113	0.18
Q12	0.060	0.315	0.012	-0.101	0.04	0.204	-0.122	0.589	0.02
Q13	0.660	0.081	0.19	-0.011	-0.014	0.748	-0.016	-0.006	-0.078
Q14	0.191	0.499	0.42	0.339	-0.04	0.079	0.061	0.165	-0.251
Q15	0.536	0.297	0.3	0.256	0.039	-0.493	0.173	-0.037	-0.373
Q16	0.542	0.197	0.188	0.627	0.054	0.092	-0.051	-0.305	0.105
Q17	0.817	0.033	-0.126	0.276	0.087	0.037	-0.102	-0.09	0.615
Q18	0.762	0.406	-0.172	0.202	-0.102	-0.486	0.373	0.06	-0.132
Q19	-0.094	0.155	0.566	0.248	0.264	0.148	0.186	0.138	0.042
Q20	0.362	0.358	0.418	0.346	0.369	-0.033	0.143	0.022	0.111
Q21	-0.130	0.175	0.175	0.633	-0.076	-0.061	0.166	-0.055	0.141
Q22	0.028	0.315	-0.115	-0.096	0.372	-0.061	-0.079	0.155	0.575
Q23	0.056	0.691	0.031	0.037	-0.116	-0.242	0.121	0.036	0.226
Q24	0.284	0.639	0.218	-0.056	0.047	0.034	-0.125	-0.058	0.215
Q25	0.681	0.231	0.388	0.535	-0.272	0.129	-0.143	0.033	0.259
Q26	0.591	0.372	0.487	0.364	-0.037	-0.076	-0.159	0.315	-0.27
Q27	0.256	-0.076	0.259	0.219	0.08	0.584	0.242	0.288	-0.067
Q28	0.250	0.002	0.243	0.291	0.465	0.008	0.043	0.475	-0.097
Q29	0.372	0.572	0.202	-0.026	-0.013	0.334	-0.012	-0.008	-0.113
Q30	0.295	0.558	0.416	0.225	0.187	0.198	-0.189	0.13	-0.111
Q31	0.135	-0.002	0.039	-0.134	0.654	-0.026	0.036	0.059	-0.03
Q32	0.326	-0.161	-0.07	-0.384	0.58	0.131	0.056	0.153	0.027
Q33	0.349	-0.367	0.302	0.123	0.152	0.037	0.342	0.353	0.004
Q34	0.246	0.44	0.025	0.042	0.331	-0.078	-0.054	0.064	-0.217
Q35	-0.213	-0.002	0.339	0.376	0.319	0.103	0.155	0.355	-0.157
Q36	0.382	0.01	-0.197	0.16	0.64	0.055	0.104	0.121	0.077
Q37	0.155	0.275	0.196	-0.008	0.462	0.016	-0.306	-0.061	0.02
Q38	0.373	-0.022	0.732	0.209	-0.212	0.088	-0.228	0.034	0.086
Q39	0.558	0.05	0.802	-0.025	0.04	0.145	-0.073	0.011	-0.03
Q40	0.682	-0.02	0.311	0.046	-0.143	-0.16	-0.157	-0.197	0.587
Q41	0.755	0.217	-0.011	-0.056	0.671	-0.107	0.321	-0.135	0.141
Q42	0.311	-0.025	0.012	0.547	-0.081	0.068	-0.139	0.088	-0.036
Q43	0.834	0.74	-0.157	0.16	0.199	0.105	-0.075	0.025	-0.056
Q44	0.711	0.248	0.297	0.358	-0.199	0.624	0.185	-0.073	-0.128

**Table 4.2 Continue**

	Factor 1 Projected e-sports league success	Factor 2 Strategic Partnership	Factor 3 Requisite strategic leadership	Factor 4 Projected stakeholder benefits (specifically athletes)	Factor 5 E-sports awareness	Factor 6 Resource development	Factor 7 E-sports participation	Factor 8 Revenue generating	Factor 9 Cultural diversity
Eigen Value	9.907	7.972	4.233	3.302	2.539	2.356	1.9	1.766	1.595

Table 4.2 above elicited nine clear variables which were labelled after scrutinising the content of the measuring items which were measuring these variables. In other words, content and face validity of the data was established in labelling the variables. The nine variables were labelled as follows:

- Projected e-sports league success
- Strategic Partnership
- Requisite strategic leadership
- Projected benefits for stakeholders, (specifically athletes)
- Esports awareness
- Resource development
- Esports participation
- Revenue generating
- Cultural diversity

The eigenvalues of the factors computed are higher than 1.00, and are therefore considered worth analysing in contributing to the explanation of variances in the variables. The eigenvalue measures the amount of variation in the total sample accounted for by each factor. A factor's eigenvalue is calculated as the sum of its squared factor loadings for all the variables and is used to condense the variance in a correlation matrix (Cooper and Schindler, 2011). Projected E-Sports League Success is the factor with the most variance with an eigenvalue of 7.907.

Table 4.3 to Table 4.10 below depict the underlying patterns in the observed responses from 44 statements as it emerged from the exploratory factor analysis.

**Table 4.3 Variable: Projected E-Sports League Success**

QUESTION NUMBER	DESCRIPTION
Q1	I believe that E-sports should be recognized as a sport.
Q3	E-sports are a formal, organized competitive spectator sport in my country.
Q4	There are structures in place to expand the scope of the E-sports audience.
Q5	E-sports in my country are regulated by the World E-sports Association (WESA), E-sports Integrity Coalition or Professional E- sports Association.
Q6	E-sports organization developed regulations that prevent match manipulation, betting fraud and doping.
Q7	The E-sports governing body focuses on grassroots initiatives to foster future talent and increase the level of awareness of E-sports.
Q8	The governing body provides expertise and advice to players and clubs on issues such as player exploitation, addiction and helping players to improve their communication skills.
Q9	E-sports are promoted amongst diverse communities.
Q10	E-sports organizations strive to develop interest amongst young gamers about the world of E-sports.
Q13	The participation of women is representative of equal opportunity in E-sport.
Q15	Partnerships between E-sports governing bodies and corporates will address challenges with regard to investment in infrastructure.
Q16	Franchising will mobilize enough financial resources to support and strengthen E-sports at grassroots level.
Q17	The success of the e-sports in my country will depend on government involvement.
Q18	Resources such as finances, human resources, physical infrastructure and equipment will ensure the sustainability of E- sports in my country.
Q25	The governing body is helping to educate the masses, including parents, teachers, media and government around what E-sports is and its benefits.
Q26	Game developers and publishers are working with the gaming community to develop rules and regulations which are conducive to a better and safer E-sports ecosystem
Q39	E-sports growth is directly proportional to the technological advancement of a country.
Q40	For E-sports to be sustainable in Africa, developers need to design gaming programmes that are in synergy with the culture of the continent.
Q41	E-sports high school leagues will create a path for players to become professional gamers.
Q43	The live streaming E-sports events create an opportunity for potential sponsors to reach the generation Z and millennial-minded audience.
Q44	I support and promote E-sports in my country.

The above-mentioned 21 items (Table 4.3), which were drawn from the literature review, are indicators against which projected e-sports league success will be measured. The results of the questionnaire suggest that the proposed e-sports leagues in the selected countries in Africa will be successful if these items are achieved. Most of these items have a focus on good governance underpinning the importance of lateral thinking leadership. Sufficient financial resources, improvement of e-sports facilities and technological advances can dramatically shift the projected success of e-sports leagues. According to the exploratory factor analysis the involvement of government is considered as one of the items that could contribute to the success of the e-sports leagues in Africa. Cooperation through community involvement, business partnership and academic institutions to align resources could build a robust e-sports league in Africa. A critical element would be the involvement of a statutory body to regulate legal issues. In the African context, the projected e-sports league success will strongly be measured against favourable infrastructure outcomes.

**Table 4.4 Variable: Strategic Partnership**

QUESTION NUMBER	DESCRIPTION
Q1	I believe that E-sports should be recognized as a sport
Q9	E-sports are promoted amongst diverse communities
Q14	I believe that there is great opportunity to create a competitive E-sports environment that transcends geography, race, ethnicity, gender identity, sexual orientation, language, and religion
Q23	E-sports is of assistance to the psychological development of young people
Q24	Athletes integrate gaming into their lives while maintaining overall balance
Q29	E-sports are offering opportunities for leadership skill development
Q30	The development of institutional E-sports will create a strong sense of community
Q34	The development of effective E-sports organizational and corporate ties will help to guarantee success of leagues in Africa
Q43	The live streaming E-sports events create an opportunity for potential sponsors to reach the generation Z and millennial-minded audience

Table 4.4 shows items that identify Strategic Partnership as key to successful implementation of an e-sports league in selected African countries. Elements such as community participation, relationships with leading brands, fans and the athletes will be important to the sustainability of e-sports in Africa.

**Table 4.5 Variable: Requisite Strategic Leadership**

QUESTION NUMBER	DESCRIPTION
Q6	E-sports organizations developed regulations that prevent match manipulation, betting fraud and doping
Q19	I believe E-sports will help to increase audience reach and engagement in the sports industry
Q20	E-sports will reduce social polarization and ultimately improve the quality of life all E-sports athletes
Q26	Game developers and publishers are working with the gaming community to develop rules and regulations which are conducive to a better and safer E- sports ecosystem
Q38	Competitors can make a full living out of E-sports in my country
Q39	E-sports growth is directly proportional to the technological advancement of a country

Table 4.5 shows items that identify Requisite Strategic Leadership as an important factor for the implementation of an e-sports league. The development of competent leadership is key to address e-sports league challenges and promote a philosophy of sustainable success in the sports industry.

**Table 4.6 Variable: Projected Benefits for Stakeholders**

QUESTION NUMBER	DESCRIPTION
Q5	E-sports in my country are regulated by the World E-sports Association (WESA), E-sports Integrity Coalition or Professional E-sports Association
Q16	Franchising will mobilize enough financial resources to support and strengthen E-sports at grassroots level
Q21	E-sports will improve the social and economic welfare of all participants
Q25	The governing body is helping to educate the masses, including parents, teachers, media and government around what E-sports is and its benefits
Q42	Multigaming organizations that are running professional teams need to register with revenue authorities to declare their winnings and the withholding of tax on their athletes

Table 4.6 describes the variable projected benefits for stakeholders (more particularly the athletes. The factor analysis reveals that the involvement with e-sports plays a significant role in development of people. There are also financial benefits athletes who are under the control of a governing body.

**Table 4.7 Variable: Esports Awareness**

QUESTION NUMBER	DESCRIPTION
Q8	The governing body provides expertise and advice to players and clubs on issues such as player exploitation, addiction and helping players to improve their communication skills
Q31	E-sports enthusiasts are more concentrated in the most populated and urbanized areas
Q32	The main audience of E-sports are millennials
Q36	I believe that E-sports, when done in moderation, are a beneficial alternative to watching passive media, such as like television or using social media
Q37	To promote the E-sports culture, the owners of the games should initially organise various unstructured competition that will change into structured tournaments, involving sponsors, viewers and media attention
Q41	E-sports high school leagues will create a path for players to become professional gamers

Table 4.7 stresses the importance of transparency and effective communication about the practices of the e-sports. Consistent communication in a transparent manner will build confidence with all relevant stakeholders.

**Table 4.8 Variable: Resource Development**

QUESTION NUMBER	DESCRIPTION
Q2	The popularity of E-sports has skyrocketed at tertiary institutions
Q13	The participation of women is representative of equal opportunity in E-sport
Q15	Partnerships between E-sports governing bodies and corporates will address challenges with regard to investment in infrastructure
Q18	Resources such as finances, human resources, physical infrastructure and equipment will ensure the sustainability of E-sports in my country
Q27	I believe league infrastructure is creating meaningful opportunities for direct monetization
Q44	I support and promote E-sports in my country

Table 4.8 mentions the importance of proper infrastructure (Dedicated cafes), human investment capital and financial backing. This will lead to monetization by way of sponsorships which are the largest form of financing of the sport. This will promote the sports and provide educational opportunities at tertiary institutions. a transparent manner will build confidence with all relevant stakeholders.

**Table 4.9 Variable: Esports Participation**

QUESTION NUMBER	DESCRIPTION
Q4	There are structures in place to expand the scope of the E-sports audience,
Q10	E-sports organizations strive to develop interest amongst young gamers about the world of E-sports
Q11	E-sports enthusiasts in my country are high income earners

Table 4.9 focuses on the involvement of fans and young people to contribute to the success of Esports. The indicator is clear that Esports is only available to people who can afford to pay to play the sports. The counter balance is the age of the participant which is beneficial for development and growth of the sport, which in turn should provide sustain ability, coupled with the structures in place should lead to a growth in both the audience and participants.

**Table 4.10 Variable: Revenue Generating**

QUESTION NUMBER	DESCRIPTION
Q3	E-sports are a formal, organized competitive spectator sport in my country,
Q7	The E-sports governing body focuses on grassroots initiatives to foster future talent and increase the level of awareness of E-sports,
Q12	E-sports enthusiasts in my country have full time jobs,
Q28	I believe E-sports will drive direct revenue through established leagues,

Administrative capabilities and transparency of financial resources would be vital to the success of an e-sports league. These four items, illustrated in Table 4.10, are considered pertinent for the success of e-sports in Africa.

#### 4.10 RELIABILITY OF THE DATA

Quantitative research is highly dependent on the duplication of the instrument, therefore its dependence on reliability testing. According to Collis and Hussey (2009), the reliability of the questionnaire refers to the absence of differences in the results if the study is repeated. The reliability of the data collected with the measuring instruments used in the present study was assessed by calculating the alpha coefficients of the variables which emerged from the EFA. The Cronbach alpha is considered as one of the most effective approaches to reliability assessment, especially when participants respond to questions that are anchored on a Likert scale. According to Zikmund, Babin, Carr and Griffin (2010), a Cronbach alpha of above 0.80 is considered very good reliability, below 0.60 as poor, between 0.60 and 0.69 as fair and between 0.70 and 0.79 as good reliability. It could therefore be argued that the closer the coefficient alpha is to one, the higher the internal consistency reliability.

The Cronbach alpha coefficient, also termed the internal consistency reliability test is

calculated as follows:  $\alpha = \frac{N.r}{1+(N-1).r}$

Where  $\alpha$  = Cronbach's Alpha

N = the number of items;

r = the average of all (Pearson) correlation coefficients between the items.

**Table 4.11: The Cronbach Alphas of the Variables**

	Factor 1 Projected e-sports league success	Factor 2 Strategic Partnership	Factor 3 Requisite strategic leadership	Factor 4 Projected stakeholder benefits (specifically athletes)	Factor 5 E-sports awareness	Factor 6 Resource development	Factor 7 E-sports participation	Factor 8 Revenue generating	Factor 9 Cultural diversity
Cronbach Alpha	0.960	0.821	0.791	0.682	0.664	0.659	0.544	0.539	0.450

The Cronbach alphas of the variables mentioned above in Table 4.11 were calculated, which indicated that all the variables produced fair reliability coefficients of 0.60 and more, except for the following variables:

- i. E-sports participation ( $\alpha= 0.544$ ),
- ii. Revenue generating ( $\alpha= 0.539$ ) and
- iii. Cultural diversity ( $\alpha= 0.450$ ).

These three variables were excluded from the subsequent analyses. The individual items of these variables were however retained in the calculation of the descriptive statistics, because these responses are important in the context of this study.

#### **4.11 THE HYPOTHESISED RELATIONSHIPS**

Hypotheses were formulated on the proposed relationship between projected e-sports league success in Africa and the variables that might influence it. The independent variables were the Strategic Partnership, Requisite strategic leadership, Projected benefits for stakeholders, (specifically athletes), Esports awareness and Resource development. This analysis answers the secondary research question three (see section 1.3.2).

The following null and alternative hypotheses were formulated:

H01: There is no relationship between strategic partnership, and projected e-sports success

H1: There is a positive relationship between strategic partnership, and projected e-sports success

H02: There is no relationship between requisite strategic leadership and projected esports success

H2: There is a positive relationship between requisite strategic leadership and projected e-sports success

H03: There is no relationship between the projected benefits for stakeholders, (specifically athletes) and projected e-sports success

H3: There is a positive relationship between projected benefits for stakeholders, (specifically athletes) and the projected success of e-sports

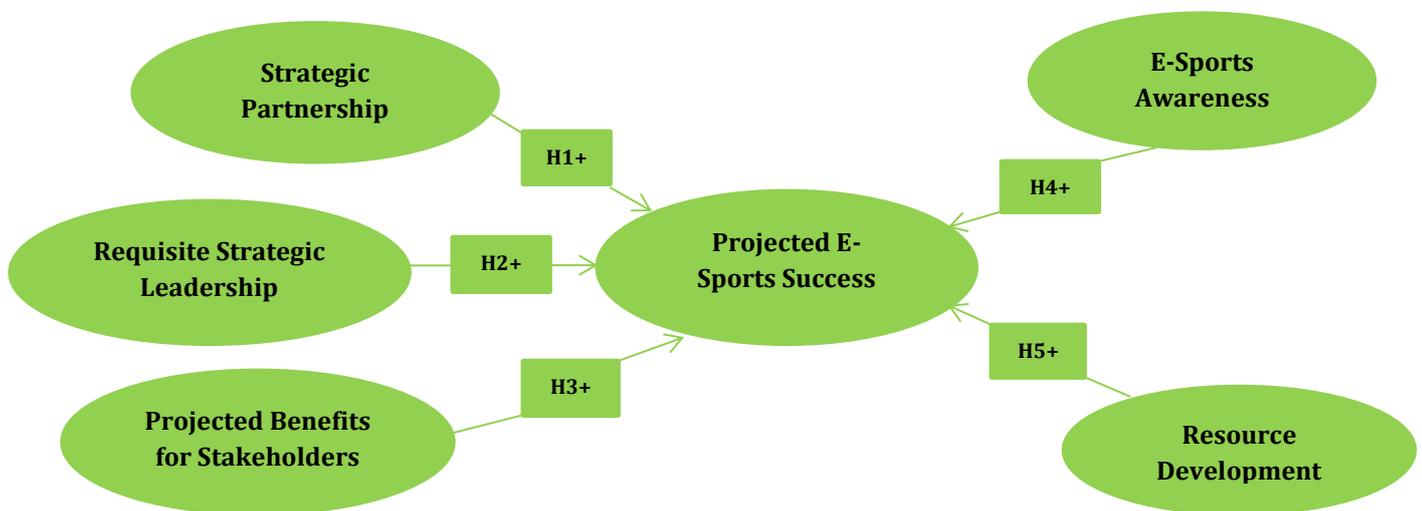
H04: There is no relationship between e-sports awareness, and projected e-sports success

H4: There is a positive relationship between e-sports awareness, and projected e-sports success

H05: There is no relationship between resource development and projected e-sports success

H5: There is a positive relationship between resource development and projected esports success.

**Figure 4.7 graphically depicts the hypothesized relationships**



#### **4.12 CONCLUSION**

In this chapter, the research methodology used to conduct this study was discussed. This included the research paradigms, sampling design and measuring instruments. Furthermore, the results with regard to the assessment of reliability and validity of the data were discussed. In the next chapter, the results of the descriptive statistics, t-tests and analysis of variance (ANOVA) will be discussed.

## CHAPTER 5

### EMPIRICAL RESULTS – DESCRIPTIVE STATISTICS, T-TESTS AND ANOVAS

#### 5.2 INTRODUCTION

In this chapter the discussion of the empirical results continues. The results include the descriptive statistics (response percentages, mean scores and standard deviation), t-tests and ANOVAs. These results reveal the perceptions of respondents on all the questionnaire statements, as well as whether differences exist in the perceptions of various demographic groups (age, gender, experience, and so forth).

#### 5.3 DESCRIPTIVE STATISTICS

The descriptive statistics were calculated to answer the secondary research question two (see section 1.3.2). The results of these analyses are reported in Table 5.1.

**Table 5.1: Differences between Gender Groups’ Perceptions of the Success an e-Sports League in Selected Countries in Africa**

Question Number	Description	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Deviation
Q1	I believe that E-sports should be recognised as a sport.	6.6	4.7	11.4	19	58.3	4.18	1.208
Q2	The popularity of E-sports has skyrocketed at tertiary institutions.	12.3	13.7	24.6	17.1	32.2	3.43	1.383
Q3	E-sports are a formal, organised competitive spectator sport in my country.	32.7	21.8	19.4	12.3	13.7	2.53	1.408
Q4	There are structures in place to expand the scope of the E-sports audience.	35.1	28	19.9	11.8	5.2	2.24	1.201
Q5	E-sports in my country are regulated by the World E-sports Association (WESA), E-sports Integrity Coalition or Professional E-sports Association.	44.5	14.7	24.6	9	7.1	2.19	1.289
Q6	E-sports organisations developed regulations that prevent match manipulation, betting fraud and doping.	5.7	14.7	39.8	22.7	17.1	3.31	1.093
Q7	The E-sports governing body focuses on grassroots initiatives to foster future talent and increase the level of awareness of E-sports.	32.9	13.8	26.7	11.4	15.2	2.62	1.43
Q8	The governing body provides expertise and advice to players and clubs on issues such as player exploitation, addiction and helping players to improve their communication skills.	21.3	22.7	19.9	11.8	24.2	2.95	1.474
Q9	E-sports are promoted amongst diverse communities.	7.1	21.8	27.5	20.9	22.7	3.3	1.239
Q10	E-sports organisations strive to develop interest amongst young gamers about the world of E-sports.	15.7	5.7	18.6	30.5	29.5	3.52	1.381
Q11	E-sports enthusiasts in my country are high income earners.	24.2	16.1	26.1	12.8	20.9	2.9	1.446
Q12	E-sports enthusiasts in my country have full time jobs.	24.6	19	21.3	13.3	21.8	2.89	1.476
Q13	The participation of women is representative of equal opportunity in E-sport.	26.1	18	33.6	7.1	15.2	2.67	1.342
Q14	I believe that there is great opportunity to create a competitive E-sports environment that transcends geography, race, ethnicity, gender identity, sexual orientation, language, and religion.	9	17.5	18	17.5	37.9	3.58	1.379
Q15	Partnerships between E-sports governing bodies and corporates will address challenges with regard to investment in infrastructure.	14.7	11.8	26.1	18.5	28.9	3.35	1.391
Q16	Franchising will mobilise enough financial resources to support and strengthen E-sports at grassroots level.	8.1	7.1	32.7	19	33.2	3.62	1.238
Q17	The success of the e-sports in my country will depend on government involvement.	11.8	10.4	19	32.2	26.5	3.51	1.307
Q18	Resources such as finances, human resources, physical infrastructure and equipment will ensure the sustainability of E-sports in my country.	18	2.8	14.2	27	37.9	3.64	1.462
Q19	I believe E-sports will help to increase audience reach and engagement in the sports industry.	7.1	14.2	23.2	21.8	33.6	3.61	1.277
Q20	E-sports will reduce social polarisation and ultimately improve the quality of life all E-sports athletes	7.1	10.9	21.8	20.4	39.8	3.75	1.279

Q21	E-sports will improve the social and economic welfare of all participants	9.5	13.3	27	19.9	30.3	3.48	1.303
Q22	E-sports have a positive effect on the physical health of athletes	19.9	20.4	17.1	21.3	21.3	3.04	1.44
Q23	E-sports is of assistance to the psychological development of young people	10.4	13.3	25.6	25.1	25.6	3.42	1.286
Q24	Athletes integrate gaming into their lives while maintaining overall balance	8.1	11.4	28.4	22.3	29.9	3.55	1.25
Q25	The governing body is helping to educate the masses, including parents, teachers, media and government around what E-sports is and its benefits.	30.8	14.2	21.8	10.4	22.7	2.8	1.536
Q26	Game developers and publishers are working with the gaming community to develop rules and regulations which are conducive to a better and safer E-sports ecosystem	10.9	19.4	27	16.6	26.1	3.27	1.331
Q27	I believe league infrastructure is creating meaningful opportunities for direct monetization.	19	13.3	30.3	17.1	20.4	3.07	1.372
Q28	I believe E-sports will drive direct revenue through established leagues.	6.6	9	17.5	33.2	33.6	3.78	1.195
Q29	E-sports are offering opportunities for leadership skill development.	12.3	16.1	27	17.5	27	3.31	1.35
Q30	The development of institutional E-sports will create a strong sense of community.	7.6	9	20.9	22.3	40.3	3.79	1.271
Q31	E-sports enthusiasts are more concentrated in the most populated and urbanized areas.	6.6	7.6	15.6	23.7	46.4	3.96	1.236
Q32	The main audience of E-sports are millennials.	12.3	5.7	18	23.7	40.3	3.74	1.364
Q33	I believe that the awareness of E-Sports can be understood to be at optimal level.	23.7	11.4	33.6	19	12.3	2.85	1.315
Q34	The development of effective E-sports organisational and corporate ties will help to guarantee success of leagues in Africa.	6.2	15.6	18	35.1	25.1	3.57	1.198
Q35	The increased usage of business aspects and its management tools will enhance the growth of E-sports.	13.7	7.6	31.3	27.5	19.9	3.32	1.265
Q36	I believe that E-sports, when done in moderation, are a beneficial alternative to watching passive media, such as like television or using social media.	9.5	5.2	17.5	28.4	39.3	3.83	1.268
Q37	To promote the E-sports culture, the owners of the games should initially organise various unstructured competition that will change into structured tournaments, involving sponsors, viewers and media attention.	2.4	3.3	19.9	20.4	54	4.2	1.024
Q38	Competitors can make a full living out of E-sports in my country.	22.9	12.9	27.6	8.1	28.6	3.07	1.508
Q39	E-sports growth is directly proportional to the technological advancement of a country.	6.2	16.1	20.4	15.6	41.7	3.71	1.32
Q40	For E-sports to be sustainable in Africa, developers need to design gaming programmes that are in synergy with the culture of the continent.	7.6	7.6	28.9	23.2	32.7	3.66	1.222
Q41	E-sports high school leagues will create a path for players to become professional gamers.	2.8	9	10.4	36	41.7	4.05	1.068
Q42	Multigaming organisations that are running professional teams need to register with revenue authorities to declare their winnings and the withholding of tax on their athletes.	10.9	8.1	21.3	23.2	36.5	3.66	1.333
Q43	The live streaming E-sports events create an opportunity for potential sponsors to reach the generation Z and millennial-minded audience.	7.1	6.6	18.5	26.5	41.2	3.88	1.223
Q44	I support and promote E-sports in my country.	14.4	17.7	17.7	10	40.2	3.44	1.509

## 5.4 T-TEST AND ANOVA RESULTS

T-tests and ANOVAs were conducted to determine if there were any significant differences amongst the various demographic groups regarding their perceptions about an e-sports league in the selected countries in Africa. These analyses answer the research questions four to eight (see section 1.3.2). The results are summarized in Tables 5.2 to 5.6.

- i. Do gender groups differ significantly with regard to perceptions of the success an e-sports league in selected countries in Africa?
- ii. Do age groups differ significantly with regard to perceptions of the success an e-sports league in selected countries in Africa?
- iii. Do e-sports experience groups differ significantly with regard to perceptions of projected NHI success?

iv. Do countries differ significantly with regard to perceptions of the success of an e-sports league in selected countries in Africa?

v. Do role groups differ significantly with regard to perceptions of the success an e-sports league in selected countries in Africa?

### 5.3.1 Two sample t-test results

To answer the research questions (i), (ii) and (iii), two-sample t-tests were conducted. The results are reported in Tables 5.2 and 5.4.

**Table 5.2: Differences between Gender Groups' Perceptions of the Success an e-Sports League in Selected Countries In Africa**

	Gender	N	Mean	Std. Deviation	F	p-value (variance)	t	df	p-value
<b>Strategic partnership</b>	Male	159	3.70	0.75	3.22	0.07	2.49	209.00	0.01
	Female	52	3.38	0.96					
<b>Requisite strategic leadership</b>	Male	159	3.59	0.86	0.91	0.34	3.89	209.00	<0.001
	Female	52	3.04	0.95					
<b>Projected benefits for stakeholder- (specifically athletes)</b>	Male	159	3.60	0.85	0.69	0.41	3.71	209.00	<0.001
	Female	52	3.09	0.90					
<b>Esports awareness</b>	Male	159	3.78	0.74	0.83	0.36	-0.97	209.00	0.33
	Female	52	3.89	0.82					
<b>Resource development</b>	Male	159	3.04	0.83	0.21	0.64	3.10	209.00	<0.001
	Female	52	2.62	0.85					
<b>Esports participation</b>	Male	159	2.88	1.01	3.31	0.07	-1.83	209.00	0.07
	Female	52	3.17	0.83					
<b>Revenue generating</b>	Male	159	3.21	0.88	0.13	0.72	1.92	209.00	0.06
	Female	52	2.94	0.91					

The empirical result for e-sports participation and revenue generating (p-value\* exceeding 0.05) show that the null hypothesis, that there is no significant difference between the gender groups with regard to their perceptions of e-sports league success in Africa, is supported. There is therefore no significant difference in the perceptions of the two gender groups in this regard.

The empirical results for requisite strategic leadership, projected benefits for stakeholders, (specifically athletes) and resource development (p-value\* < 0.001) show that the null hypothesis, that there is no significant difference between the gender groups with regard to their perceptions of projected NHI success, is rejected. There is therefore a significant difference in the perceptions of the gender groups in this regard.

The empirical results for strategic partnership and e-sports awareness (p-value\* < 0.05) show that the null hypothesis, that there is no significant difference between the gender groups with regard to their perceptions of projected NHI success, is rejected. There is therefore a significant difference in the perceptions of the gender groups in this regard.

**Table 5.3: Differences between Age Groups' Perceptions of the Success an e-Sports League in Selected Countries In Africa**

	Age	N	Mean	Std. Deviation	F	p-value (variance)	t	df	p-value
<b>Strategic partnership</b>	Younger than 30	138	3.66	0.83	0.00	0.97	0.99	209.00	0.33
	30 or older	73	3.54	0.78					
<b>Requisite strategic leadership</b>	Younger than 30	138	3.47	0.92	0.13	0.72	0.31	209.00	0.75
	30 or older	73	3.42	0.91					
<b>Projected benefits for stakeholders -(specifically athletes)</b>	Younger than 30	138	3.42	0.88	6.34	0.01	1.18	209.00	0.24
	30 or older	73	3.34	1.11					
<b>Esports awareness</b>	Younger than 30	138	3.90	0.86	0.89	0.35	-2.48	209.00	0.01
	30 or older	73	4.07	0.59					
<b>Resource development</b>	Younger than 30	138	3.37	0.85	0.11	0.74	6.92	209.00	<0.001
	30 or older	73	2.86	0.72					
<b>Esports participation</b>	Younger than 30	138	2.99	1.02	2.73	0.10	0.83	209.00	0.41
	30+	73	2.88	0.88					
<b>Revenue generating</b>	Younger than 30	138	3.01	1.09	0.15	0.69	-2.00	209.00	0.05
	30 or older	73	3.16	0.96					

The empirical result for strategic partnership, requisite strategic leadership, for projected benefits for stakeholders, (specifically athletes), e-sports participation and revenue generating (p-value exceeding 0.05) show that the null hypothesis, that there is no significant difference between the age groups with regard to their perceptions of e-sports league success in Africa, is supported. There is therefore no significant difference in the perceptions of the two age groups in this regard.

The empirical results resource development (p-value < 0.001) shows that the null hypothesis, that there is no significant difference between the age groups with regard to their perceptions of projected NHI success, is rejected. There is therefore a significant difference in the perceptions of the age groups in this regard.

The empirical results for e-sports awareness (p-value < 0.05) show that the null hypothesis, that there is no significant difference between the age groups with regard to their perceptions of projected NHI success, is rejected. There is therefore a significant difference in the perceptions of the age groups in this regard.

**Table 5.4: Differences between Experience Groups' Perceptions of the Success an e-Sports League in Selected Countries in Africa**

	Time	N	Mean	Std. Deviation	F	p-value (variance)	t	df	p-value
<b>Strategic partnership</b>	Less than 5 years	182	3.58	0.84	3.85	0.05	-1.63	209.00	0.11
	5 years or more	29	3.85	0.60					
<b>Requisite strategic leadership</b>	Less than 5 years	182	3.49	0.92	0.28	0.60	1.41	209.00	0.16
	5 years or more	29	3.23	0.86					
<b>Projected benefits for stakeholders -(specifically athletes)</b>	Less than 5 years	182	3.42	1.01	11.82	0.00	2.23	66.62	0.03
	5 years or more	29	3.23	0.60					
<b>Esports awareness</b>	Less than 5 years	182	3.93	0.80	1.91	0.17	-1.31	209.00	0.19
	5 years or more	29	4.11	0.60					
<b>Resource development</b>	Less than 5 years	182	3.14	0.84	7.84	0.01	-1.46	209.00	0.15
	5 years or more	29	3.52	0.77					
<b>Esports participation</b>	Less than 5 years	182	2.86	0.98	3.35	0.07	-3.45	209.00	<0.001
	5 years or more	29	3.52	0.69					
<b>Revenue generating</b>	Less than 5 years	182	3.06	1.08	9.26	0.00	-0.19	209.00	0.85
	5 years or more	29	3.11	0.78					

The empirical results for strategic partnership, requisite strategic leadership, e-sports awareness, resource development and revenue generating (p-value\* exceeding 0.05) show that the null hypothesis, that there is no significant difference between the experience groups with regard to their perceptions of e-sports league success in Africa, is supported. There is therefore no significant difference in the perceptions of the two experience groups in this regard. The empirical result for e-sports participation (p-value\* < 0.001) shows that the null hypothesis, that there is no significant difference between the experience groups with regard to their perceptions of projected NHI success, is rejected. There is therefore a significant difference in the perceptions of the experience groups in this regard. The empirical result for projected benefits for stakeholders (specifically athletes), (p-value\* < 0.05) shows that the null hypothesis, that there is no significant difference between the experience groups with regard to their perceptions of projected NHI success, is rejected. There is therefore a significant difference in the perceptions of the experience groups in this regard.

### 5.3.2 ANALYSIS OF VARIANCE (ANOVA) RESULTS

In order to answer the research questions (iv) to (v) above, ANOVAs were conducted. The results are reported in Tables 5.5 and 5.6.

**Table 5.5: Differences between Country Groups' Perceptions of the Success an e-Sports League in Selected Countries in Africa**

		Sum of Squares	df	Mean Square	F	p-value
<b>Strategic partnership</b>	Between Groups	24.19	3.00	8.06	14.56	<0.001
	Within Groups	114.62	207.00	0.55		
	Total	138.81	210.00			
<b>Requisite strategic leadership</b>		Statistica	df1	df2		p-value
	Welch	67.83	3.00	114.11		0.00
		Sum of Squares	df	Mean Square	F	Sig.
<b>Projected benefits for stakeholders - (specifically athletes)</b>	Between Groups	47.42	3.00	15.81	27.37	<0.001
	Within Groups	119.52	207.00	0.58		
	Total	166.94	210.00			
<b>Esports awareness</b>	Between Groups	14.80	3.00	4.93	9.50	<0.001
	Within Groups	107.42	207.00	0.52		
	Total	122.22	210.00			
<b>Resource development</b>	Between Groups	57.54	3.00	19.18	41.47	<0.001
	Within Groups	95.74	207.00	0.46		
	Total	153.29	210.00			
<b>Esports participation</b>	Between Groups	48.51	3.00	16.17	22.25	<0.001
	Within Groups	150.40	207.00	0.73		
	Total	198.90	210.00			
<b>Revenue generating</b>	Between Groups	3.34	3.00	1.11	1.40	0.24
	Within Groups	164.63	207.00	0.80		
	Total	167.98	210.00			

The empirical result for revenue generating (p-value exceeding 0.05) shows that the null hypothesis, that there is no significant difference between the country groups with regard to their perceptions of e-sports league success in Africa, is supported. There is therefore no significant difference in the perceptions of the two country groups in this regard.

The empirical results for strategic partnership, requisite strategic leadership, projected benefits for stakeholders (specifically athletes), e-sports awareness, resource development and e-sports participation (p-value\* < 0.001) show that the null hypothesis, that there is no significant difference between the country groups with regard to their perceptions of e-sports league success in Africa, is rejected. There is therefore a significant difference in the perceptions of the country groups in this regard.

**Table 5.6: Differences between Role Groups' Perceptions of the Success an e-Sports League in Selected Countries in Africa**

		Sum of Squares	df	Mean Square	F	p-value
<b>Strategic partnership</b>	Between Groups	7.87	2.00	3.93	6.25	<0.001
	Within Groups	130.94	208.00	0.63		
	Total	138.81	210.00			
<b>Requisite strategic leadership</b>	Between Groups	3.89	2.00	1.95	2.37	0.10
	Within Groups	171.04	208.00	0.82		
	Total	174.93	210.00			
<b>Projected benefits for stakeholders - (specifically athletes)</b>	Between Groups	3.80	2.00	1.90	2.43	0.09
	Within Groups	163.13	208.00	0.78		
	Total	166.94	210.00			
<b>Esports awareness</b>	Between Groups	0.82	2.00	0.41	0.70	0.50
	Within Groups	121.40	208.00	0.58		
	Total	122.22	210.00			
<b>Resource development</b>	Between Groups	6.47	2.00	3.23	4.58	0.01
	Within Groups	146.82	208.00	0.71		
	Total	153.29	210.00			
<b>Esports participation</b>	Between Groups	2.17	2.00	1.09	1.15	0.32
	Within Groups	196.73	208.00	0.95		
	Total	198.90	210.00			
<b>Revenue generating</b>	Between Groups	4.96	2.00	2.48	3.16	0.04
	Within Groups	163.02	208.00	0.78		
	Total	167.98	210.00			

The empirical results for requisite strategic leadership, projected benefits for stakeholders (specifically athletes), e-sports awareness and e-sports participation (p-value exceeding 0.05) show that the null hypothesis, that there is no significant difference between the role groups with regard to their perceptions of e-sports league success in Africa, is supported. There is therefore no significant difference in the perceptions of the two role groups in this regard.

The empirical results for resource development and revenue generating, (p-value\* < 0.05) shows that the null hypothesis, that there is no significant difference between the role groups with regard to their perceptions of e-sports league success in Africa, is rejected. There is therefore a significant difference in the perceptions of the two role groups in this regard.

The empirical result for strategic partnership (p-value\* < 0.001), show that the null hypothesis, that there is no significant difference between the role groups with regard to their perceptions of e-sports league success in Africa, is rejected. There is therefore a significant difference in the perceptions of the two role groups in this regard.

In summary: With the exception of e-sports participation and revenue generating, the two sample t-test reveals that there was a significant difference in the perceptions of the gender groups with regards to e-sports league success in Africa. Apart from resource development and e-sports awareness, the two-sample t-test reveals that there is no significant difference in the perceptions of the age groups with regards to e-sports league success in Africa. With the exception of projected benefits for stakeholders (specifically athletes) and e-sports participation, the two-sample t-test reveals that there is no significant difference in the perceptions of the experience groups with regards to e-sports league success in Africa. Apart from revenue generating, the ANOVA results reveal that there is a significant difference in the perceptions of the country groups with regard to their perceptions of e-sports league success in Africa. The ANOVA results for requisite strategic leadership, projected benefits for stakeholders (specifically athletes), e-sports awareness and e-sports participation reveal that there is no significant difference in the perceptions of the role groups in this regard. The ANOVA results for resource development, strategic partnership and revenue generating reveal that there is a significant difference in the perceptions of the role groups with regard their perceptions of e-sports league success in Africa.

## **5.4 CONCLUSION**

In Chapter 5, the results of the descriptive statistics, two-sample t-tests and ANOVAs were reported. The results seem to indicate the following: The descriptive statistics reveal that all the respondents strongly believe that E-sports should be recognised as a sport and that the respective countries are not under the control of an international E-sports governing body. A large number of respondents have the perception that the e-sports leadership has no strategic intent for grassroots initiatives to foster future talent and increase the level of awareness of the sport. A partnership-based approach seems a viable option to alleviate the burden of resource shortages and to the sustainability of an e-sports league. A consensus appears to exist amongst respondents that government could play an important role with regard to the success of e-sports leagues in the selective countries in Africa. In the next chapter the empirical results of Chapters 4 and 5 will be interpreted in terms of the managerial implications they present for whoever will manage the implementation of an e-sports league in the selected countries in Africa.

## **CHAPTER 6**

### **MANAGERIAL IMPLICATIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION**

The primary objective of this study was to contribute to the successful implementation of an e-sports league in selected African countries by identifying critical success factors that would impact such implementation. In order to achieve this objective, the study set out to do the following:

- Conduct a literature study to understand the nature, objectives, potential benefits and disadvantages of e-sports leagues in other countries ;
- Conduct a mail survey of a sample of athletes, fans and administrative representatives of e-sports in South Africa, Nigeria, Malawi and Zimbabwe;
- Analyse the data;
- Report, interpret and discuss the empirical results; and
- Draw conclusions and provide recommendations based on these conclusions.

#### **6.2 SUMMARY OF EMPIRICAL FINDINGS**

The empirical results of this study can be summarised as follows:

- There is a strong belief that consultation with all relevant stakeholders is imperative about the merits of an e-sports league in South Africa, Nigeria, Malawi and Zimbabwe.
- The results reveal that there is a significant difference in the perceptions of the country groups with regard to their perceptions of e-sports league success in Africa.
- There was a significant difference in the perceptions of the gender groups with regards to e-sports league success in Africa. The most important among the above-mentioned findings are discussed next in terms of the managerial implications they present. The limitations of the study are also highlighted and areas for future research are indicated.

#### **6.3 CONTRIBUTION OF THE STUDY**

Although the study is based on a relatively big sample, it cannot be claimed that the sample is representative of the entire-sports fraternity. The study has however identified seven important factors that would play a role in the success of an e-sports league when it is implemented. The study also highlighted general perceptions of

athletes, fans and administrators on the envisaged benefits and shortcomings of e-sports. This is an important contribution against the background of a lack of research done in Africa on esports. It is recommended that this study be replicated in the other countries in Africa, so that informed decisions and actions can be taken in the implementation of an e-sports league. It is further recommended that more rigorous statistical analyses be conducted in order to unearth information not highlighted in this study.

#### **6.4 RECOMMENDATIONS**

The design of custom-made programs for the people of Africa by game developers will underpin the emergence of a strong esports market. The Sports and Recreation Commission of Zimbabwe asserts that e-sports is not recognized as a sporting code. For this reason, the International eSports Federation (IeSF) and International Wargames Federation (IWF) could collaborate with Mind Sports South Africa (MSSA) to market e-sports in Zimbabwe.

Although e-sports has existed for more than forty years, competitive gaming is perceived as a relatively new phenomenon in most African countries. The IeSF should focus on grassroots initiatives to foster future talent and increase the level of awareness of e-sports on the African continent. It is important for the professional organisations to focus on the amateur aspects of the e-sports to be able to gel with the professional MGOs who are profit-driven.

E-sports governing bodies should be established in all leagues to help mitigate any negativity towards gaming, focussing on mental health awareness of players, anti-doping, gender issues and nutrition. An increased focus should be on the legal implications of e-sports in terms of contracts, intellectual property, labour law matters, governance matters, betting and doping. There is a need to develop regulations and policies about a duty of care towards players.

Copyright in e-sport: Looking at Esports worldwide, the majority of revenue is accrued through sponsorship and advertising, there is a need to protect the sports through copyright and trademarks. This will help the bodies responsible for the sports from ambush marketing as well as players rights. Trademarks can also help on brand protection.

E-sport in Africa is beset with what has been described as the usual problems: lag, the geographical distance to established events, the high cost of data and inferior gaming equipment. These impediments will eventually be overcome with the advent of new technology and increased money being invested in the sport.

For the researchers, however, the aspects of leadership, the development of the sport and the affordability of e-sport in Africa will have a greater and more long-lasting impact on both the sport and South African society.

E-sports in Africa requires governments to strategically invest in infrastructure and technology, consequently fostering innovative thinking and addressing its challenges and risk assessments in a comprehensive manner. Furthermore, influencing several stakeholders and extending across governments, it should engage effectively with the general public, thus bringing valuable contributions to addressing e-sports matters. Strategic business partnerships are important to address the financial constraints, regulating the cost drivers for optimal functioning of an e-sports league, allocating resources efficiently and bringing about equitable management of e-sports. E-sports cannot develop and grow without the involvement of sponsors and government. Sponsors will be needed for the establishment of the leagues through provision of financial and material support.

From a continent point of view, looking at the four countries under microscope, there is need to bridge the gap between older and younger generations in terms of awareness. Esports is regarded as a sport for millennials. There is need to raise much awareness on both older and young generations and also take advantage of the young generation as it grows older.

The fact that medals will be awarded for e-sports in the forthcoming 2022 Asian games and the prospects of e-sports being part of the 2024 Olympic games, it is important that teams under traditional sports embrace e-sports as part of their portfolio.

## ANNEXURE 1: COVERING LETTER FOR DATA COLLECTION



Dear Respondent

I am studying towards the FIFA/CIES Executive Programme in Sports Management at the Nelson Mandela University in Port Elizabeth, South Africa. I am conducting research on the perceptions that athletes, administrators and fans hold about E-sports in Africa. I believe that my study will make an important contribution to an increased understanding of the viability of E-sports leagues in Africa.

You are part of our selected sample of respondents whose views we seek on the abovementioned matter. We would therefore appreciate it if you could answer a few questions. It should not take more than fifteen minutes of your time and we want to thank you in advance for your co-operation.

There are no correct or incorrect answers. Please answer the questions as accurately as possible. For each statement, tick the number which best describes your experience or perception. For example, if you strongly agree with the statement, tick the number 5. If you strongly disagree with the statement, tick the number 1. **Tick only one answer for each statement and answer all questions please. We guarantee your complete confidentiality and anonymity.**

**Please note also that your participation in this study is entirely voluntary and that you have the right to withdraw from the study at any stage. Your participation in the study therefore indicates verbal consent.**

Thank you very much.

Gareth Cortje

Contact details: Email [drgareth.cortje@gmail.com](mailto:drgareth.cortje@gmail.com), cell: 078 617 1250.

To verify the authenticity of the study, please contact Buhlebethu Dumbu at +2741 504 3881 and [Buhlebethu.Dumbu@mandela.ac.za](mailto:Buhlebethu.Dumbu@mandela.ac.za) or Vernon Oosthuizen, Programme Manager at [Vernon.Oosthuizen@mandela.ac.za](mailto:Vernon.Oosthuizen@mandela.ac.za)

## ANNEXURE 2: MEASURING INSTRUMENT



### SECTION A

No	Statement	Strongly disagree — Strongly agree				
		1	2	3	4	5
1	I believe that E-sports should be recognised as a sport.	1	2	3	4	5
2	The popularity of E-sports has skyrocketed at tertiary institutions.	1	2	3	4	5
3	E-sports are a formal, organised competitive spectator sport in my country.	1	2	3	4	5
4	There are structures in place to expand the scope of the E-sports audience.	1	2	3	4	5
5	E-sports in my country are regulated by the World E-sports Association (WESA), E-sports Integrity Coalition or Professional E-sports Association.	1	2	3	4	5
6	E-sports organisations developed regulations that prevent match manipulation, betting fraud and doping.	1	2	3	4	5
7	The E-sports governing body focuses on grassroots initiatives to foster future talent and increase the level of awareness of E-sports.	1	2	3	4	5
8	The governing body provides expertise and advice to players and clubs on issues such as player exploitation, addiction and helping players to improve their communication skills.	1	2	3	4	5
9	E-sports are promoted amongst diverse communities.	1	2	3	4	5
10	E-sports organisations strive to develop interest amongst young gamers about the world of E-sports.	1	2	3	4	5
11	E-sports enthusiasts in my country are high income earners.	1	2	3	4	5
12	E-sports enthusiasts in my country have full time jobs.	1	2	3	4	5
13	The participation of women is representative of equal opportunity in E-sport.	1	2	3	4	5
14	I believe that there is great opportunity to create a competitive E-sports environment that transcends geography, race, ethnicity, gender identity, sexual orientation, language, and religion.	1	2	3	4	5
15	Partnerships between E-sports governing bodies and corporates will address challenges with regard to investment in infrastructure.	1	2	3	4	5
16	Franchising will mobilise enough financial resources to support and strengthen E-sports at grassroots level.	1	2	3	4	5
17	The success of the e-sports in my country will depend on government involvement.	1	2	3	4	5
18	Resources such as finances, human resources, physical infrastructure and equipment will ensure the sustainability of E-sports in my country.	1	2	3	4	5
19	I believe E-sports will help to increase audience reach and engagement in the sports industry.	1	2	3	4	5
20	E-sports will reduce social polarisation and ultimately improve the quality of life all E-sports athletes	1	2	3	4	5
21	E-sports will improve the social and economic welfare of all participants	1	2	3	4	5
22	E-sports have a positive effect on the physical health of athletes	1	2	3	4	5
23	E-sports is of assistance to the psychological development of young people	1	2	3	4	5

24	Athletes integrate gaming into their lives while maintaining overall balance	1	2	3	4	5
25	The governing body is helping to educate the masses, including parents, teachers, media and government around what E-sports is and its benefits.	1	2	3	4	5
26	Game developers and publishers are working with the gaming community to develop rules and regulations which are conducive to a better and safer E-sports ecosystem	1	2	3	4	5
27	I believe league infrastructure is creating meaningful opportunities for direct monetization.	1	2	3	4	5
28	I believe E-sports will drive direct revenue through established leagues.	1	2	3	4	5
29	E-sports are offering opportunities for leadership skill development.	1	2	3	4	5
30	The development of institutional E-sports will create a strong sense of community.	1	2	3	4	5
31	E-sports enthusiasts are more concentrated in the most populated and urbanized areas.	1	2	3	4	5
32	The main audience of E-sports are millennials.	1	2	3	4	5
33	I believe that the awareness of E-Sports can be understood to be at optimal level.	1	2	3	4	5
34	The development of effective E-sports organisational and corporate ties will help to guarantee success of leagues in Africa.	1	2	3	4	5
35	The increased usage of business aspects and its management tools will enhance the growth of E-sports.	1	2	3	4	5
36	I believe that E-sports, when done in moderation, are a beneficial alternative to watching passive media, such as like television or using social media.	1	2	3	4	5
37	To promote the E-sports culture, the owners of the games should initially organise various unstructured competition that will change into structured tournaments, involving sponsors, viewers and media attention.	1	2	3	4	5
38	Competitors can make a full living out of E-sports in my country.	1	2	3	4	5
39	E-sports growth is directly proportional to the technological advancement of a country.	1	2	3	4	5
40	For E-sports to be sustainable in Africa, developers need to design gaming programmes that are in synergy with the culture of the continent.	1	2	3	4	5
41	E-sports high school leagues will create a path for players to become professional gamers.	1	2	3	4	5
42	Multigaming organisations that are running professional teams need to register with revenue authorities to declare their winnings and the withholding of tax on their athletes.	1	2	3	4	5
43	The live streaming E-sports events create an opportunity for potential sponsors to reach the generation Z and millennial-minded audience.	1	2	3	4	5
44	I support and promote E-sports in my country.	1	2	3	4	5

**SECTION B**

**CLASSIFICATION DATA:**

Please make a cross (X) or enter the relevant information in the blocks provided.

GENDER:                      Male                            Female     

AGE GROUP:       18-29       30-39       40-49       50-59       60+

Please indicate whether you are an administrator, player or fan     

For how long have you been involved in E-Sports (in years?)

Less than 5 years       5 - 9       10 - 15

Please indicate in which country in the Africa you are living:     

**THANK YOU VERY MUCH FOR YOUR KIND CO-OPERATION!**

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