THE EFFECT OF POSITIVE PSYCHOLOGICAL CAPITAL AND NETWORKS ON THE SUCCESS OF START-UPS IN KENYA: A CASE OF START-UPS FOUNDERS IN USIU- AFRICA.

BY

VANESSA INAMAHONDA NKESHIMANA

UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

SPRING, 2018
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VANESSA INAMAHONDA NKESHIMANA

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UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

SPRING, 2018
STUDENT’S DECLARATION

I, the undersigned, declare that this research project is my original work and has not been submitted to any other college, institution or university other than the United States International University - Africa in Nairobi for academic credit.

Signed: ________________________  Date: ________________________

Vanessa Inamahonda Nkeshimana (ID 645167)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ________________________  Date: ________________________

Prof. Scott Bellows

Signed: ________________________  Date: ________________________

Dean, Chandaria School of Business
ABSTRACT

The wish of every start-up founder in Kenya is that their business succeeds and overcome all challenges that they might face. Nevertheless, few are able to survive up to five years and as a consequence, they are looking for tools to help them not to fail. Therefore, the general objective of this study was to measure the effect of Psychological Capital (PsyCap) and networks on the success of start-ups in Kenya. The study examined three specific objectives, which were to investigate the benefits of PsyCap for the success of Kenyan start-ups, to determine the importance of networking activities for any Kenyan start-up, and to identify the significance of network structure in the growth stage of Kenyan start-ups.

The research design was a descriptive study using quantitative data. In addition, the population of the study was 133 USIU-Africa entrepreneurs that were either students or members of the business incubator program. The study sample size was 45 entrepreneurs and the study sampling technique was a stratified random sampling. Furthermore, data collection was done through questionnaires and the data collected was entered into a computer application package (SPSS) to quantitatively analyze the data both in terms of descriptive statistics and inferential statistics. Moreover, the data was then presented using tables and pie charts for clarity and ease of understanding.

One of the findings of the study was that the relationship between PsyCap and start-ups’ success is not statistically significant since p=0.239. Moreover, the researcher also found that the relationship between networking activities and start-ups’ success is not statistically significant since p=0.546. Additionally, the study revealed that the relationship between the structure of entrepreneurial networks and start-ups’ success is not statistically significant because p>0.05.

The researcher concluded that PsyCap, networking activities and network structure are respectively not related to start-ups’ success. Therefore, there was need to investigate the effect of PsyCap and networks on the success of a firm rather than a start-up.

The recommendation of the study was further research to be done on a large sample size that might be more representative of all Kenyan entrepreneurs and other studies might need to focus on each dependent variable separately in order to truly know their significance.
ACKNOWLEDGEMENT

My special thanks and acknowledgement first go to Dr. Scott Bellows, my supervisor and Dr. Peter N. Kiriri, the Business Research Methods lecturer for their contributions and guidance throughout the process of writing this research project and proposal.

I would also like to acknowledge my family and friends for encouraging me along the way as well as my fellow students and thank God for each one of you!
DEDICATION

I dedicate this project to my husband, Cedric Cubahirro, who has been a constant encouragement during my studies. My mother, Spes Ntacorigira, who kept on emphasizing the importance of education especially when managing her own business. And last but not least, to Baby Neria Nishimwe, my daughter, for her wonderful smile that boosted me every day to do my best.
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**ABREVIATIONS AND ACRONYMS**

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<tr>
<td>ACSBE</td>
<td>Acadia Center for Social and Business Entrepreneurship</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
</tr>
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<td>MSE</td>
<td>Micro and Small Enterprises</td>
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<td>PSYCAP</td>
<td>Psychological Capital</td>
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<td>POB</td>
<td>Positive Organizational Behavior</td>
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<td>SME</td>
<td>Small and Medium Enterprise</td>
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<td>SPSS</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Entrepreneurship lies at the intersection of the individual and opportunity and entrepreneurs must negotiate among their personal resources and life demands as they develop their new ventures (Neck, Houghton, Sardeshmukh, Goldsby, and Godwin, 2013). In accordance with Hassan and Kamarulazizi (2015), the meaning of entrepreneurship is the capacity and willingness to develop, organize, and manage a business venture along with any of its risks in order to make a profit. They further argued that a small entrepreneurial business is one that is privately owned and operated, with a small number of employees and relatively low volume of sales whereas small entrepreneurial ventures are normally privately owned corporations, partnerships, or sole proprietorships. Over the past years, entrepreneurship has been the primary source of change and innovation. Entrepreneurship is the heart of the modern business, a force behind innovative businesses that characterize the modern economy (Mokaya, Namusonge, and Sikalieh, 2012). Moreover, entrepreneurship has many definitions, but from the perspective of a potential entrepreneur (a person who plans the commencement of one’s own business in the near future), two definitions are particularly important: entrepreneurship as an endeavor to commence one's own business as well as one’s survival on the market while actively conducting business activities (Staniewski and Awruk, 2015).

Generally, entrepreneurship is more and more popular in business schools, engineering schools, universities and educational institutions (Fayolle, 2013). According to Carree, Congregado, Golpe and Van Stel (2015), many economists and, especially in recent years, politicians have stressed the importance of entrepreneurship in achieving economic progress. Thus, it will imply that regions with high entrepreneurial activity will have high economic growth (Carree et al., 2015). In developing economies, in accordance with Novaczek and Stuart (2012), the impact of entrepreneurship and micro-enterprise can be huge in aggregate. Detailed surveys in five developing countries in Africa showed that micro and small enterprises (MSEs), with 10 or fewer workers involved 17–27% of the total population aged 15 to 65 years.
Soriano and Verdú (2015) pointed out that since the 1980s, small business owners and entrepreneurs have been receiving greater recognition as drivers of economic growth and that over the last two decades, extensive literature on the importance of small businesses in the economy has consistently shown that the creation of new businesses drives economic prosperity. Crane and Meyer (2012) also noted that a society’s cultural values, presence of role models and government policy can serve as an accelerator or inhibitor of entrepreneurial development within a nation. Further, N. Suntornpithug and P. Suntornpithug (2012) found that market-driven entrepreneurial activities will raise the success of entrepreneurs, resulting in overall national economic growth. Entrepreneurial activity is exciting and exhilarating, with entrepreneurs showing a great amount of engagement and passion in pursuit of their ideas (Hassan and Kamarulazizi, 2015). Nevertheless, many people aim to be entrepreneurs because they would like to be self-employed not for the passion and think that they will be rich after their first year in their own business. Obviously, self-employment and entrepreneurship are not synonymous (Carree et al., 2015).

One of the main problems of innovative businesses in this decade is sustainability as many enterprises fail to reach the stage of scaling up. Rank (2015) explained that surviving the first years after their foundation by realizing sustainable growth and economic success is probably the most demanding task for young start-up firms. He also emphasized that network embeddedness is especially important for companies during the phases of foundation and early growth.

Furthermore, there is a need to review our entrepreneurship education as Fayolle (2013) stated out and asked what are its appropriateness and relevance towards helping entrepreneurs running sustainable enterprise. Likewise, some enterprise or start-ups are managed in informal ways. Williams and Shalid (2014) defined an informal sector enterprise as a private unincorporated enterprise that is either unregistered or else small in terms of the number of employed persons. ‘Unincorporated’ meaning a production unit not constituted as a legal entity independent of the individual (or group of individuals) who owns it, and for which no complete set of accounts is kept (Williams and Shalid, 2014). Therefore, their definition helps in understanding the degree of formalization since it identified three component aspects of informality, namely: the unit is not constituted as a legal entity independent of the owner; no complete set of formal accounts is kept and it is not registered with the authorities for instance, tax purposes (Williams and Shalid,
Consequently, informal enterprise will not be sustainable and may fail in the short or long run.

Black and Gregersen (2014) found that brain barriers such as failure to see, failure to move, and failure to finish do not allow change in organizations. On the other hand, any entrepreneur should be able to see the opportunity, move and finish by creating value in starting new business. Tachibana (2013) defined an entrepreneur as an individual who (1) has established a private manufacturing business, (2) currently owns (or co-owns) and manages (or jointly manages) that manufacturing business, and (3) employs several wage workers other than family members in that manufacturing business. N. Suntornpithug and P. Suntornpithug (2012) also described an entrepreneur as any individual who is able to pursue market opportunities by establishing a new venture or innovative products and is willing to take risks to pursue such opportunities with confidence. St-Jean and Le-Lebel (2015) pointed out that it was generally assumed from the outset, and often implicitly, that entrepreneurs primarily go into business to generate profits. Nevertheless, they further explained that the reality of entrepreneurial motivation may be more diverse and entrepreneurs can offer many reasons to explain their decision to go into business. Hence, an entrepreneur may start its new venture based on a business idea to achieve an economical (making profits), a social (people), or environmental (planet) goal.

New businesses also called start-ups are developed on the basis of a new idea. The lifecycle of a company has different stages (Gikey, 2014): (1) start-up, (2) growth, (3) maturity, (4) decline or rebirth. Additionally, according to Blank and Dorf (2012), start-ups are not smaller version of large companies but they are temporary organization in search of a scalable, repeatable, profitable business model. Moreover, their founders are in need of proper guidance and training as well as mentors that can show them the way of success. Wong, Cheung and Venuvinod (2012) indicated that the creation of business incubation has been one of the tools adopted to foster high-technology entrepreneurial ventures in Hong Kong, which is expected to enhance the growth of companies. It can also reduce the risk of failure for small businesses being incubated by institutions such as a science park that provide the supportive environment needed by entrepreneurs during early stages (Wong et al., 2012).
In addition, Diochon, Menzies and Gasse (2012) argued that a better conceptual understanding of the gestation process of starting a business is needed since the proportion of individuals who attempt to start a business but give up or fail in their efforts is indeterminate. Likewise, firms that are less than five years old are known to be particularly vulnerable to failure (Diochon et al., 2012). Given the high mortality rate amongst new ventures, there has been a great deal of research effort directed at understanding the dynamics of small business start-ups and why some ventures survive and others fail during this period (LeBrasseur and Zinger, 2012). Crane and Meyer (2012) noted that a society’s cultural values, presence of role models and government policy can serve as an accelerator or inhibitor of entrepreneurial development within a nation. (Crane and Meyer, 2012)

Jensen and Luthans (2006) indicated that the creation and sustainability of new organizations or start-ups is viewed as critically important in today's global economy. Moreover, Luthans and Yousseff (2004) stated that positive psychological and leadership capabilities of start-ups founders are crucial for start-ups’ success and sustainable competitive advantage. Positive psychological capital (or simply PsyCap), communicating hope, optimism, and resiliency impact entrepreneurs’ development of authentic leadership capabilities and how one motivates, leads and influences others for the success of their start-ups (Jensen and Luthans, 2006).

Additionally, Aldrich and Reese (1991) specified that networking help founding entrepreneurs to expand their span of action, save time, and acquire access to resources and opportunities otherwise unavailable. Those resources and opportunities will enable the growth of the start-ups and will lead to its success. Likewise, one noticeable explanation for start-ups’ success unambiguously referred to network theory and investigated the personal networks of entrepreneurs and their effect on start-up performance (Birley, 1985). Witt (2004) also developed a hypothesis and stipulated that entrepreneurs with larger and more diverse networks get more support from this network and thus are more successful than entrepreneurs with smaller networks or less support from their network.

Therefore, this research will outline the effect of PsyCap, networking activities, and the structure of entrepreneurial networks on the success of start-ups, which will help to draw a better conceptual understanding of what needs to be done to avoid failure of start-ups.
The researcher believes that PsyCap, networking activities, and the structure of entrepreneurial networks are crucial and should assist start-ups founders on their road to success.

1.2 Statement of the Problem

Blank and Dorf (2012), stated that in the last 20th century, start-ups thought they knew the correct path for the start-up journey. However, many entrepreneurs fail every day because of using wrong tools and having a causal mindset instead of applying an effectual thinking. A start-up cannot be managed the same way as an established company. For instance, many start-ups founders use the same processes as existing companies when they are creating their business. These processes provided detailed business plans, checkpoints and goals for every step toward getting a product out the door and yet at the end of the day, even with all these processes, the embarrassing fact is that in companies large and small established corporate giants as well as new start-ups, more than nine of 10 new products fail (Blank and Dorf, 2012). After having a great idea, an entrepreneur will start a business and think that it will immediately generate profits. However, the reality is that many start-ups fail before even reaching their first anniversary and entrepreneurs learn on the practice rather than getting proper education on current challenges facing entrepreneurs. Thus, new tools and processes need to be established and taught to entrepreneurs to avoid failure.

In addition, the vision of any start-up should be understood by all the founders so that they can passionately present it to their important stakeholder that is their customers. Customers are not considered by the entrepreneur most of the time while developing products; yet if the customer does not like the product, the start-up will fail. Moreover, in Africa, we want to push the products to the customers without considering what they really need. Since all start-ups are looking towards making profit from their products, they should always develop them based on the customers’ preferences and the entrepreneur shall use his/her networks as a sample of its targeted market.

There are many barriers to the growth of start-ups into sustainable enterprises. A number of studies have been done on the meaning of entrepreneurship (Mokaya et al., 2012), on understanding the entrepreneur (Ray, 1993) for instance, on their identity (Stewart and Hoell, 2016) as well as entrepreneurship education (Farny, Frederiksen, Hannibal and Jones, 2016) among others, have been done in Kenya and all over the world before.
However, few of them have emphasized on start-ups and especially on what they need so as to succeed. In response, the researcher shall evaluate the effect of PsyCap on start-ups’ success and how to apply it in order to change the mindset of start-ups founders, teach them new tools and emphasize the importance of interacting with customers before developing any products for their start-ups with the emphasis on their networks.

1.3 General Objective

The general objective of this study was to examine the effect of PsyCap and networks on the success of start-ups in Kenya with a particular focus on Nairobi County.

1.4 Specific Objectives

The specific objectives of the study were:-

1.4.1. Investigate the benefits of PsyCap on the success of start-ups.
1.4.2. Determine the importance of networking activities on start-ups’ success.
1.4.3 Explore the structure of entrepreneurial networks on start-ups.

1.5 Importance of the Study

The development of a business idea leads to the creation of start-ups. Start-ups mainly solve a problem by creating value to the customers. There is a relation between the rate of employment and the increase of successful start-ups, for instance, the higher the successful start-ups, the higher the rate of employment. Hence, this study will benefit the below:-

1.5.1 Entrepreneurs

Any entrepreneur would like to know how their start-ups can be successful and being quoted among the few that have succeeded in business. Many entrepreneurs have in their mind the American dream of being a millionaire in a shorter time but starting a business is different and determination, commitment, hardworking, and working smart is required. Consequently, this study will help entrepreneurs to change their mindset, establish a clear vision for their start-ups, and learn to implement specific tools required for any start-up to succeed.
1.5.2 Researchers and Academicians

This study will assist researchers that would like to conduct research in the area of entrepreneurship or start-ups. Moreover, academicians and researchers might use the findings of this study as a source of reference for their works. It is also important to note that there has not been much research on start-ups, thus, it is crucial to undertake this research.

1.5.3. Investors

Investors either individual or companies partner with successful start-ups. This study will assist them by giving necessary data on why many start-ups founders in Nairobi with great idea have not been able to scale up their business.

1.5.4. Government of Kenya

The government of Kenya has put funds to help entrepreneurs especially young entrepreneurs through the UWEZO fund, for instance but even with easy finance access, many start-ups founders fail in their business. Therefore, this study will be an eye opener to the government that there are other factors that affect the success of start-ups. Moreover, it will also encourage the government to ease the process of licensing, for example and make policies that enhance the success of start-ups since their success will improve the country’s economy.

1.5.5. Employment Candidates

Many students graduate every year from different colleges or universities in Kenya and most of them are looking for a job. Nevertheless, there has been fewer job opportunities compared to the number of graduates. Hence, if many start-ups succeed, there will be a decrease in unemployment. This study will help the employment candidates to know that there is hope to get a job in start-ups and the effect of PsyCap and networks on the success of start-ups, if at all interested to start their own.

1.6 Scope of the Study

The study was conducted in Nairobi, Kenya on a selected sample of Kenyan start-ups founders who enrolled in the entrepreneurship program at the United States International University- Africa (USIU- Africa) and others who were part of the USIU- Africa incubation program. Moreover, the researcher initially wished to select randomly
founders of start-ups from various fields so that they can represent the target population. However, she anticipated that there might be limitation in accessing some of the successful entrepreneurs as well as unwillingness of the respondents to provide accurate and truthful information about their businesses. To prevent that limitation, the research was done at the USIU- Africa in Nairobi. The study population consisted of 133 entrepreneurs who were students under the entrepreneurship either as undergraduates or graduates or members of the USIU- Africa entrepreneurship incubation program. The time established to collect data was from May 2017 to July 2017.

1.7 Definition of Terms

1.7.1 Start-up

A start-up is not a smaller version of a large company but it is a temporary organization in search of a scalable, repeatable, profitable business model (Blank and Dorf, 2012). Furthermore, in accordance with Ries (2011), a start-up is a human institution designed to create a new product or service under conditions of extreme uncertainty.

1.7.2 Entrepreneurship

Entrepreneurship is the heart of the modern business – a force behind innovative businesses that characterize the modern economy (Mokaya et al., 2012). Staniewski and Awruk (2015) stated that entrepreneurship has many definitions, but from the perspective of a potential entrepreneur (a person who plans the commencement of one’s own business in the near future), two definitions are particularly important: entrepreneurship as an endeavor to commence one's own business as well as one’s survival on the market while actively conducting business activities.

1.7.3 Entrepreneurs

Tachibana (2013) defined an entrepreneur as an individual who (1) has established a private manufacturing business, (2) currently owns (or co-owns) and manages (or jointly manages) that manufacturing business, and (3) employs several wage workers other than family members in that manufacturing business. Moreover, entrepreneurs solve problems by creating value in starting new business.
1.7.4 Psychological Capital (PsyCap)

The psychological capital (PsyCap) is defined as an individual’s positive psychological state of development and is characterized by:

(1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (Luthans, Youssef, and Avolio, 2006b, p. 3). Dollwet and Reichard (2014) described PsyCap as a multidimensional construct referring to an individual’s positive psychological state of development characterized by optimism, resilience, self-efficacy, and hope.

1.8 Chapter Summary

The success of start-ups in Kenya is crucial as it affects the economic growth of the country. This chapter presented the various issues facing start-ups and why it is important to learn how to overcome them by emphasizing the importance of PsyCap, networking activities, and network’s structure. Literature review was conducted in line with the specific objectives of the study on the benefits of PsyCap, the importance of networking activities, and the significance of the structure of the entrepreneurial networks. Lastly, the subsequent chapter 3, 4 and 5 were based on the research methodology, data collection instrument and study discussion, conclusion, as well as recommendations respectively.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter will review the literature from previous studies published in order to understand the benefits of psychological capital (PsyCap), the significance of the network activities as well as the importance of the structure of the entrepreneurial activities in the success of any start-ups.

2.2 Benefits of Positive Psychological Capital

Since World War II, psychologists have focused on the maladaptive behaviors and weaknesses of individuals (e.g. depression, violence, or irrationality) and omitted positive aspects such as growth, contentment, optimism, and actualization of human potential (Hsu, Wang, Chen, and Dahlgaard-Park, 2014). In accordance with Badran and Youssef-Morgan (2015), positive psychology calls for a more balanced approach that considers human strengths and weaknesses. Hence, Şahin, Çubuk, and Uslu (2014) stated that positive psychology brought along an approach called the “positive organizational behavior” (POB) that intended to improve employee performance at work by concentrating on the strengths of the employees rather than uncovering their weaknesses, and measuring, developing and managing psychological elements beyond these strengths.

POB offers a scientific, integrative framework that can help measure, explain and develop positivity in the workplace, even amidst today’s predominant uncertainty and negativity (Badran and Youssef-Morgan, 2015). Furthermore, Luthans and Youssef (2004) introduced the theory of PsyCap and described it as a core psychological factor of positivity in general and POB criteria meeting states in particular, that goes beyond human and social capital to achieve a competitive advantage through investment or development of ‘who you are’. Moreover, according to Çavus and Gökçen (2015), the concept of positive psychological capital originates in “postmodern positive psychology” (Wyk, 2013) and includes the strengths and positive aspect of human behavior and they further pointed out that the terms psychological capital and positive psychological capital are used by various authors and sources synonymously. Accordingly, psychological capital characterizes one’s positive appraisal of the particular situation, the personal
resources available, and the probability of succeeding based on personal effort, and perseverance (Hsu et al. 2014).

Four psychological resources, which are optimism, resilience, self-efficacy, and hope (Şahin et al., 2014), have been identified as best fitting the inclusion criteria of being positive, theory-based, measurable, and developmental and performance related (Badran and Youssef-Morgan, 2015). Thus, psychological capital is described as an individual’s positive psychological state of development and is characterized by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (Luthans et al. 2006b, p. 3).

Additionally, in the study of Jensen and Luthans (2006), the constructs of optimism, resiliency, and hope were used to represent positive psychological capital, as each meet the positive organizational behavior criteria of being positive and strength-based, founded in theory and empirical research, measurable, state-like and open to development, and having a positive impact on work-related performance (Luthans, 2002a, 2002b). Therefore, in accordance with Rodriguez, Rafael, Garrido, Gomez, and Navarro (2010) psychological capital involves the entrepreneur’s conviction that he/she has the ability to start a venture and the capacity to recognize and utilize business opportunities. The researcher analyzed the literature review of the four constructs of psychological capital that is optimism, resilience, self-efficacy, and hope in this study.

2.2.1 Optimism

Jensen and Luthans (2006) stated that research on the impact of optimism on work/entrepreneurial performance is limited whereas the positive impact of optimism on academic, athletic, and political success has been well documented. Optimism is defined as the referring to the internal, permanent and generalized reasons when explaining the positive events that the individuals have experienced, and external, temporary, and situation-specific reasons when explaining the negative events (Şahin et al., 2014). They concluded that optimistic individuals may not be realistic in the questioning and determining stages of events and behaviors. Carver and Scheier (2002, p. 231) also noted
that optimists are people who believe good things to happen to them and pessimists are people who anticipate bad things to happen to them.

In accordance with Paul and Saha (2016), optimism is “power of positive thinking” and it is the faith that the future holds desirable outcomes irrespective of one’s personal ability to control those outcomes. Baluku, Kikooma, and Kibanja (2016) stated that optimists is associated to entrepreneurial entry and persistence as well as performance and that entrepreneurs are mostly optimistic as for example, they have the abilities to become successful entrepreneurs. Furthermore, Hmieleski and Baron (2009) mentioned that entrepreneurs particularly tend to have high dispositional optimism, which is trend to believe positive outcomes even when such expectations are not wisely justified. Even in the absence of capital resources, optimists have the enthusiasm to take the risk of seeking outside funding or to begin a venture with less wealth (De Meza and Southey 1996).

Moreover, Badran and Youssef-Morgan (2015) noted that optimism is particularly relevant for maintaining a positive outlook in a predominantly negative environment through buffering the impact of negative events while enhancing the impact of positive events. According to Storey (2011), the characteristic that most successful entrepreneurs are optimistic attracts optimistic people to business. Çavuş and Gökçen, 2015 pointed out that optimists distance themselves from depression and hopelessness. Hsu et al. (2014) suggested that when people have this positive expectancy, they will continue to put forth effort even in the face of much adversity. Optimistic people will be able to believe that everything will be good while in problems. Thus, overall optimism is linked with desirable characteristics such as happiness, achievement and health (Paul and Saha, 2016).

Hsu et al. (2014) explained that simply being optimistic is not enough, because people still need plans to reach goals and hence, when optimism is combined with hope, it is not just an unchecked daydream but is translated into goals with practical steps. Additionally, optimism has been associated with a broad range of positive performance outcomes, including innovative behavior (Michael, Hou, and Fan, 2011). We could say that an innovator has to be optimistic because they go through so many trials before achieving their innovation. Moreover, PsyCap optimism has been found to relate to self-awareness and effective leadership practices (Avolio and Luthans, 2006).
Accordingly, Hsu et al. (2014) indicated that those high in optimism will generally have a positive perspective, and when this is combined with high levels of efficacy and hope, they are likely to have the persistence to pursue several alternative pathways to their goals. Nevertheless, according to them, even higher levels of hope, efficacy, and optimism cannot guarantee perpetuated success, as setbacks always occur. Constant failure can be a block to certain people in achieving their goals and for that reason, Hsu et al. (2014) concluded that a bounce-back loop is so important because this loop can take people from a devastated state back to a normal psychological state.

### 2.2.2 Resiliency

With roots in clinical psychology, resiliency is defined as the capability of individuals to cope successfully in the face of significant change, adversity or risk (Jensen and Luthans, 2006). Luthans (2002) defines resilience as the positive psychological capacity to rebound, ‘to bounce back’ from adversity, uncertainty, conflict, failure or even positive change, progress, and increased responsibility. In general, according to Paul and Garg (2012), authors agree that resilience: (a) is a capacity that reflects in behavior; (b) deals with change; and (c) relates to overcoming some unwanted situation. As Coutu (2002, p. 4) indicated, the elements of resilience include ‘a staunch acceptance of reality; a deep belief, often buttressed by strongly held values, that life is meaningful; and an uncanny ability to improvise’.

Jensen and Luthans (2006) indicated that there has been little research dedicated on the impact of resiliency in the workplace, and even less focus on the resiliency of entrepreneurs and leaders. Nevertheless, in accordance with Paul and Saha (2016), resiliency is increasingly viewed not only as a desirable characteristic of humans in general, but also as an essential attribute of today’s employees, bosses (including start-ups founders) and organizations. Resilience can help organizations and their members survive, overcome, learn from and grow through challenges (Youssef and Luthans, 2005). Moreover, Luthans et al. (2005) found that resiliency is significantly related to employee performance; however, the link between an entrepreneur’s resilience levels and performance of his/her business needs to be investigated.

Zautra, Hall and Murray (2010) asserted that the personal characteristics, which led to healthy outcomes after a stressful situation determined the resilience processes. Additionally, Agnihotri, Krush, Trainor, and Krishnakumar (2014) pointed out that
resiliency offers the stimulus to look realistically at situations and thereby reduce the potential for stress and anxiety. The little evidence available acclaims that resiliency is an important resource for the entrepreneur when faced with adverse situations (Bullough, Renko, and Myatt, 2014) and when there is need to change plans (Trevelyan, 2008). According to Paul and Saha (2016), resilience is the difference between those who recover well after adversity and those who stay devastated and unable to move ahead. Moreover, Çavuş and Gökçen (2015) stated that resiliency allows people to optimistically look at the overwhelming situations. In the face of threats and setbacks, Baluku et al. (2016) explained that resilience enables individuals to keep moving towards the desired goal.

In psychology capital, resilience is more than just a reactive capacity; it also incorporates a proactive dimension that promotes proactive thinking in the absence of external threats (Hsu et al. 2014). Paul and Saha (2016) described that resiliency can be developed through enhancing the assets that a person possesses through education, training and nurturing social relationship. In accordance with Hsu et al. (2014), people who embody high levels of overall PsyCap can access more of its resources manifested through their cognitions, motivation, behavior, and social relationships and therefore, those individuals become more resilient to an adverse situation each time they effectively bounce back from a previous setback. Hence, according to Paul and Saha (2016), adaptation process can be enhanced through developing other positive capacities such as efficacy, hope and optimism.

2.2.3 Self-efficacy

Hsu et al. (2014) pointed out that self-efficacy is an important motivational concept that inspires individual goals, reactions, efforts, coping strategies and levels of persistence. People with high self-efficacy set high goals for themselves and put forth effort to accomplish these goals, welcome challenges, overcome obstacles and are highly self-motivated (Luthans, Youssef, and Avolio (2007b). Bandura (2006) also explained that self-efficacy is about feelings of “can” rather than “will”. Moreover, Mattingly and Lewandowski (2013) expounded that the characteristics self-efficacy depends on the specific perspective and can vary depending on the domain and situation, which shows that it is not a trait, and, hence, is flexible. Thus, once an action is taken, individuals with
high self-efficacy gain more confidence, which leads to more effort, perseverance and even higher levels of self-efficacy (Hsu et al. 2014).

Self-efficacy, or confidence, is “one’s belief about his or her ability to mobilize the motivation, cognitive resources, and courses of action necessary to execute a specific action within a given context” (Stajkovic and Luthans, 1998b, p. 66). Additionally, Maddux and Gosselin (2003) said that self-efficacy is individuals’ beliefs about their ability to use their competencies and what they are capable of accomplishing, although self-efficacy is not simply possessing competencies. People are more likely to seek out, expend greater effort in, and persevere in situations where they feel more efficacious (Daly and Thompson, 2017).

According to Paul and Saha (2016), in relationship to hope, it can be interpreted as the conviction and belief in one’s ability to (a) generate multiple pathways; (b) take actions towards the goal; and (c) ultimately be successful in goal attainment. Grounded in social cognitive theory, efficacy motivates the selection of challenging goals, and mobilizes the cognitive mechanisms of symbolizing, forethought, observation, self-regulation and self-reflection toward goal pursuit (Bandura, 2012). Even when actual role models are not present, “imaginal experiences,” in which a person can visualize him/herself succeeding in effectively dealing with tough situations and challenges, have been established to be effective alternatives, and to boost self-efficacy (Luthans and Youssef, 2004).

Furthermore, in relation to business venturing, confidence, or self-efficacy, is the most studied aspect of psychological capital and it has been found to positively impact entrepreneurial intentions and actions (Baluku et al., 2016). Luthans and Youssef (2004) proved that self-efficacy has considerable research backup as to its positive effect in organizational settings. Accordingly, Çavuş and Gökçen (2015) stated that people who are self-confident know how to develop their motivation and they choose challenging tasks to extend their performance and motivate themselves against the obstacles faced while working for accomplishing goals. Such psychological strength has been found to have a strong impact on performance of an enterprise (Prajapati and Biswas, 2011). We can further say that the same influence occurs via the three forms of self-efficacy identified by Barbosa, Gerhardt, and Kickul (2007): relationship self-efficacy, managerial self-efficacy, and tolerance self-efficacy.
Moreover, Culbertson, Smith, and Leiva (2011) recognized that these forms of efficacy are clearly necessary at different levels of enterprise development since Rasyid and Bangun (2015) indicated that self-efficacy is the conviction, or simply confidence, of an individual concerning his/her ability to successfully pursue goals by operating his/her motivation and other psychological resources through a projected course of action. Therefore, in accordance with Çavuş and Gökçen (2015), it can be said that high self-efficacy can influence motivation in both positive and negative sides and that an entrepreneur’s level of efficacy is a factor in his/her continuation or abandonment of his/her business or start-up (Baluku et al., 2016).

### 2.2.4 Hope

Çavuş and Gökçen (2015) specified that hope supports the desires of positive outcomes and gives the feeling of being good to make the dreams come true in human life. Şahin et al. (2014) further explained that individuals with high levels of hope, while having the essential motivation and the desire to achieve the objectives, may foresee the obstacles they may encounter and identify alternative routes that will take them to the purpose. According to Jensen and Luthans (2006), the most acknowledged definition of hope is of positive psychologist C. Rick Snyder (2000) that defined it as a blend of both an individual's determination to set forth and maintain effort toward goals (described as willpower, or agency) and the ability to discern alternative courses of action possible to reach those goals (described as way power or pathways thinking).

Hsu et al. (2014) described agency thinking as very important because motivated people will do their best to mobilize all of their resources to reach their goals and it becomes even more critical to have agency thinking when obstacles are encountered in pursuing a desired goal. Accordingly, Paul and Saha (2016) pointed out that people who are high in hope possess the mysterious ability to generate multiple pathways to accomplishing their goals and in addition, they remain highly motivated to attain success in the task at hand. Nevertheless, for low-hope individuals, pathway thinking is much more demanding because the primary path is not well articulated and alternative paths are not proactively established hence, they are more likely to disengage from their goals and their negative emotions and ruminations will prevent them from goal pursuits (Hsu et al. 2014).
Furthermore, Jensen and Luthans (2006) stated that hope, one of the component of PsyCap, is commonly used in everyday language, for instance, many entrepreneurs usually say; “let's hope for the best that our business succeeds”. The determination to achieve goals and the ability to come up with alternative ways to overcome obstacles are important for every entrepreneur to ensure persistence in the pursuit of goals and to improve entrepreneurial confidence and optimism (DiPietro, Welsh, Raven, and Severt, 2007). Indeed, entrepreneurs with higher psychological capital have lower levels of stress (Baron, Franklin, and Hmieleski, 2013) and hence according to Baluku et al. (2016), it indicates the importance of hope as a psychological resource in highly stressful entrepreneurial situations.

Hsu et al. (2014) believed that as high hopers can explore alternate routes and apply their determination to those routes, they are more likely to achieve success as well they are driven onward by their confidence in the future. Thus, entrepreneurs who score high on measures of hope are more likely to discover alternative ways to address business pressures and challenges and in order to be successful, an entrepreneur needs to remain positive about the possibility of succeeding, even during turbulent times (Baluku et al., 2016).

2.3. The Importance of Networking Activities on Start-ups’ Success

New businesses are found when motivated entrepreneurs acquire access to resources and find niches in opportunity structures (Aldrich and Reese, 1993). In accordance with Hansen (1995), entrepreneurs identify product or service ideas, access to markets, information, cash and other resources in their environments, and they gain access to these resources through exchange transactions with various members of their social networks. Moreover, Dubini and Aldrich (1991) suggest that a crucial determinant of the entrepreneur’s effectiveness is his or her commitment to thoughtful and deliberate networking. An entrepreneur that invests his or her time in networking has higher chance of succeeding in his business because for instance, when networking, one can present his/her products.

Faroque, Morrish and Ferdous (2017) further indicated that building and utilizing networking is considered one of the key success factors for entrepreneurs or founders of international new ventures to compete in international markets. Additionally, Dodd and Patra (2002) explained that it is difficult to see how venture creation is possible without
access to an effective set of network relationships. Hence, it is argued that new networks perform four important roles, which are the provision of access to new ideas and resources that underpin entrepreneurial activity, the achievement of credibility through the formation of alliances with established and reputable partners, the exchange of knowledge and the generation of collective learning as well as the achievement of entrepreneurial goals and enterprise growth (Johannisson, Alexanderson, Nowicki and Seneseth, 1994; Shaw and Conway, 2000; Witt, 2004; Jack, 2005).

Networking is seen as an essential mechanism for encouraging cooperative behavior, improving the efficiency of society by generating coordinated actions, and meeting common goals (Turkina and Thai, 2013). Moreover, Aldrich and Reese (1993) stated that networking allows founding entrepreneurs to enlarge their span of action, save time, and gain access to resources and opportunities otherwise unavailable. Dhanaraj and Parkhe (2006) also noted that hub firms coordinate network activities to guarantee the creation and extraction of value, without the benefit of hierarchical authority.

According to Witt (2004), a central person, for instance, within an information network, has many direct connections to other persons (‘connectedness’), can reach other members of the network quickly, i.e. needs to use few or no intermediate persons (‘closeness’), or is located on the information paths between other persons of the network frequently (‘betweenness’). Entrepreneurs obtain access to resources, otherwise unavailable to them, by developing, maintaining and extending their personal networks (Baron and Markman, 2000).

Harris, Rae, and Misner (2012) pointed out that networking permits businesses to access resources that might otherwise not be available to them and business owners rarely have all the skills and know-how needed to develop the firm, and finding people with the missing skills, and persuading them to contribute, is a critical aspect of their networking. Foley (2008) stated that it has enabled the participants to develop and make use of relationships with suppliers and other organizations. Accordingly, Witt (2004) also specified that networking aid the development of a firm’s credibility, expand the customer base and supplier contacts, highlight access to resources and available funding, encourage innovation and help develop strategic partnerships. Neergaard, Shaw and Carter (2005) also have demonstrated that networks contribute to marketing effectiveness in entrepreneurial organizations because networking is the entrepreneur’s innate
preference; entrepreneurs view the network as the best “fit” for the desired purpose; and a network provides the lowest cost option to market a service or product when there are limited resources available. Using networked relationships to do business, and maintaining and developing a dynamic network of contacts both within and outside the firm to support strategic growth is essential (Anderson, Drakopoulou-Dodd, and Jack, 2010; Hite, 2005).

2.3.1 Developing Networks

Entrepreneurs in the early stages of their activity develop their networks, to tackle resource dependencies in later stages (Sullivan and Ford, 2014). According to McAdam and Marlow (1998), network formation is itself a multi-stage process of gradual integration, tie routinization, durable integration and normal functioning of a network. Being in contact with a diverse set of individuals from the business community is important for entrepreneurs because it gives them access to information and other resources (Stephens, 2013).

Furthermore, McAdam and Marlow (2008) stated that each person with whom the entrepreneur is connected has their own personal networks, so for each encounter there is a range of contacts that can provide further opportunities. A personal network consists of actors with whom an entrepreneur has direct and/or indirect associations and may include partners, suppliers, customers, venture capitalists, bankers, distributors, trade associations and family members whom the entrepreneur meets on a regular basis, and from whom services, advice and moral support are received (Dubini and Aldrich, 1991).

Additionally, the informal personal network is centered round the focal entrepreneur, and includes those with whom they have strong and direct ties while formal networking activity reveals a more deliberate and controlled approach to managing relationship building (Hampton, McGowan and Cooper, 2011). As written by Harris et al. (2012), personal contact is still preferred by most small businesses but there is a growing interest in ICT-mediated communication to obtain information.

Harris et al. (2012) noted that smaller, tighter networks can be that they are less useful to their members as external contacts and opportunities are hard to access. Moreover, Martinez and Aldrich (2011) indicated that networks and alliances with other organizations provide entrepreneurs with a myriad of advantages and they further
mentioned that transnational entrepreneurs create firms that engage in regular contact with entities in foreign countries, making those firms dependent on these contacts for success. In accordance with Martinez and Aldrich (2011), contacts created through voluntary associations, such as industry organizations, civic clubs, networking events, breakfast clubs and chambers of commerce, help owners overcome the limitations of their original more identity-based networks. Furthermore, Wincent (2005) indicated that it can be valuable for the firm to pursue networking both in terms of width and depth with other firms in the SME network when engaging in corporate entrepreneurship to gain firm performance benefits.

According to McAdam and Marlow (2008), effective information networks enhance the entrepreneur’s environment thereby, improving the other networks and processes in which they engage. Formal entrepreneurial networks are socialization systems designed to create favorable social interaction conditions for helping entrepreneurs to become better practitioners (Kakavelakis, 2010). In accordance with Dodd and Patra (2002), entrepreneurial networks may be articulated through the mechanism of membership in formal organizations, through the links an entrepreneur develops with suppliers, distributors and customers, or through the utilization of social contacts, including acquaintances, friends, family and kin.

Nevertheless, Harris et al. (2012) pointed out that studies of networking have demonstrated that the most useful network member in helping a business owner is rarely a close friend or even a friend at all, but more likely to be the acquaintance of a friend, or the friend of an acquaintance. They further described that for many small businesses, the nature of their personal contact with customers represents their unique selling point, and they stress the importance of personal relationships in developing a customer base. Hence, according to Martinez and Aldrich (2011), the relationship between entrepreneurs and their customers is, in the end, a market transaction: goods or services exchanged for monetary compensation.

Additionally, the information seeking behavior undertaken by the entrepreneur initially is primarily a personal and social encounter where informal contacts dominate and at this stage, the information seeking behavior of the firm will be influenced by the particular personality, traits and attitudes of the entrepreneur (Johannisson, 2000). To sum up, Harris et al. (2012) stated that generally, there is a consensus in networking research that
a business owner who has a more open network with diverse connections (i.e. many weak ties and social connections) will have greater opportunities to develop a successful business than an individual with many connections within a single or closed network (highly interconnected networks). Entrepreneurs who use their diverse ties to discuss abstract ideas tend to generate and adopt radical innovations, whereas those who still have diverse ties but only monitor their behavior tend to imitate others, just like their counterparts with less diverse ties (Ruef, 2002).

2.3.2 Maintaining Networks

During the early stages of new firm creation, information networks represent an important resource for the entrepreneurial firm (Neergaard, 2005). Martinez and Aldrich (2011) noted that normal business transactions not only might make a founder’s network more diverse but also lead to potentially stronger relationships. Furthermore, Harris et al. (2012) explained that the internet has significantly expanded the global reach of networking, making geographical location far less important than before. According to Lechner and Dowling (2003), start-ups must skillfully establish their networks and maintain their business relationships in order to raise their reputation and to have access to information, financial means as well as other resources.

In addition, cultivating a more diverse personal network enables people to increase the possibility of including the “linchpins”, which are people who in some way cross over between two or more clusters or groups of individuals, allowing them to link groups of people together easily (Harris et al., 2012). Alongside the growth in company or industry-specific communities, they also noted that more generic online social networking (Facebook, LinkedIn) has become hugely popular and helped in developing and maintaining entrepreneur’s networks easily. For instance, in accordance with Pattison (2009), small businesses are using Facebook to find new customers, build online communities of fans, and dig into gold mines of demographic information.

Trust in maintaining any business networks is crucial and in accordance with Shaw (1997), its notion should not be seen as something which is optional, as mutual interdependence is at the heart of businesses, and businesses are built upon a myriad of often subtle agreements and obligations that transcend any legal stipulations. Tretyak and Popov (2009) also specified that network emerges when mutual trust and understanding are well-established among its participants, and they agree to work together. In addition
to this, the network ties are characterized by a varied degree of trust among related members, which in turn, invokes a sense of reciprocal obligation among them to assist each other in terms of access to information, opportunities, and resources (Tsai and Ghoshal, 1998). Likewise, firms in SME networks that have developed trust towards their partners within the SME network are more likely to turn to those firms than try to network with organizations outside the SME network (Wincent, 2015).

In addition, if networks are to be a valuable entrepreneurial asset for the entrepreneur and his or her venture, the entrepreneur needs to act to enhance the quality of these networks (Timmons, 2009). As stated by Hampton et al. (2011), the presence or absence of the dimensions of quality, which are centrality, density, diversity, and reachability within any network, will be reflected in the value of the information and advice gained from the members, and the speed with which it can be obtained. Thus, entrepreneurs need to maintain diverse and heterogeneous networks (Birley, Cromie, and Myers, 1991) to gain quality information to address opportunities and to achieve success (Aldrich, Elam, and Reese, 1997).

2.4. Network Structure

Gonzalez, Martins and Toledo (2014) described a network structure as a group of people that is officially accepted by the organization as experts in their fields. Moreover, Dodd and Patra (2002) specified that entrepreneurial networks can be defined as the sum total of relationships in which an entrepreneur participates, and which provide an important resource for his, or her, activities. The reason that networks are gradually studied is for their contribution to an enterprise performance and outcomes as they are noted to provide a variety of useful resources to the entrepreneurial experience (Hoang and Anconcic, 2003).

An entrepreneur’s networks include, what are known as, strong ties and weak ties. Strong ties are the ones with whom the entrepreneur is emotionally attached to, e.g. family members and friends (Elfring and Hulsink, 2007) whereas weak ties are the ones with whom the entrepreneur has some connection, but has infrequent or irregular contact (Elfring and Hulsink, 2007). According to Liu, Madhavan, and Sudharshan (2005), network structures characterized by multiple actors and plentiful knowledge sources affect the ways in which networks operate. Yang and Liu (2012) explained that since strategic networks are regarded as the repository of external resources, composed of
diverse resources, knowledge, capabilities, and cooperation chances, firms with a superior network structure obtain greater access to these resources or capabilities to complement their internal resources, improve their competitive advantages, and enhance firm performance. Harris et al. (2012) stated that a closed network will have virtually no structural holes; where one person links two separate but dense networks. They also specified that cultural networks can often be closed in nature to others outside the ethnic or cultural minority. Moreover, the structure of the business network may influence the usefulness of information and resources. Lay and Moore (2009) identify two types of business networks: collaborative and coordinated. They argued that collaborative networks are characterized by high complexity, focus on innovation and are organized around a hub whereas coordinated networks stress high volume, focus on efficiency and are organized around a concentrator.

Network theorists have long been fascinated by how people recognize new ideas and how ideas, once born, travel within and across organizations to become innovations (Leonardi and Bailey, 2017). Liu et al. (2005) pointed out that betweenness centrality measures the degree to which an actor lies between other actors (corresponding to potential control), while closeness centrality measures the degree to which an actor is close to others (corresponding to potential access). In addition, Barabasi (2002) classified networks and said that some are centralized, decentralized or distributed.

In accordance with him, in centralized networks, one company controls the activities and resources, in other words, the hub company decides which companies will be partners in the network while in a decentralized network, the hub company is not directly controlling each actor. A distributed network fails to have a clear structure, as activities are distributed to and carried out by partners who lack control over each other’s business operations (Barabasi, 2002). Structural networks models consider all relations in the network, rather than only the direct ties that a given actor may have and they acknowledge that the overall structure of the network, as well as a given actor’s position in it, influence that actor’s behavior and subsequent performance (Liu et al. 2005). Granovetter (1973) defined the strength of a tie as a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services, which characterize the tie.
A firm’s network structure is regarded as an indicator of the reservoir of all external resources and capabilities that controls the quality and quantity of access to external resources through network ties (Yang and Liu, 2012). Additionally, when talking of corporate entrepreneurs, Barr (1998, p.33) describes the network structure of social capital as one where structural holes allow for information and control benefits in that “the holes in a network are entrepreneurial opportunities that can add value, and persons rich in such opportunities are expected to be more successful than their peers”. The mechanism of a structural hole, the first element of network structure is that firms in a network with rich structural holes are able to take advantage of benefits arising out of controlling and brokering diverse resources and information among different unconnected groups across structural holes (Burt, 1992, 2001). Hence, Cruickshank and Rolland (2006) pointed out that a person prone to entrepreneurial behavior is one most likely to have a network rich in structural holes. Furthermore, Coleman (1988) proposed network closure as another element of network structure and by that firms could decrease the opportunism of alliance partners and increase the sharing mechanism among partners to obtain reliable resources early (Coleman, 1988, 1990).

According to Yang and Liu (2012), a firm with a superior network closure could have multiple and qualified access to external resources and information that assist it in cutting the costs of searching resources and making correct managerial decisions and investments, which in turn sustain consequential social capital and firm performance. Therefore, since a firm’s strategic network is the source of value-generating resources and capabilities, a firm could regard network structure as the conduit for accessing external resources, capabilities and information and exploit the contagion function to draw network members together and access needed resources and capabilities to promote its competitive conformity (Yang and Liu, 2012)

2.4.1. Size of an Entrepreneur’s Personal Network.

Effective networks are organized and structured to include everyone who has a contribution to make toward the organization goals, objectives and performance (Leithwood and Azah, 2016). A network size is the number of enterprises embraced in the network (Thorgren, Wincent, and Ormqvist, 2009). In the research study of Joudaki, Salehi, Jalili, and Knyazeva (2012), larger networks had higher efficiency, and lower modularity than those with smaller sizes and similar density. In the firms’ innovation
process, the larger their network sizes are, the more innovative its partners and the broader the links among firms are, thus fastens the knowledge flow within the network (Hislop, 2005; Choe, 2014). As a result, the network size is an important factor for the growth of firms, which will impact on their innovative performance (Baum, Calabrese, and Silverman, 2000; Lechner and Leyronas, 2007). Dodd and Patra (2002) pointed out that it is not simply the size of entrepreneurs' total social networks that is important in the process of founding new organizations and that the more appropriate measure is the size of the subset of people who are somehow involved with the entrepreneurs in founding the new organizations. Furthermore, McAdam and Marlow (1998) explained that the potential network partners are other individual persons, e.g. family members, friends, business partners, other founders, but also contact persons at institutions such as universities, large companies, and authorities.

Zaheer and Bell (2005) stated that some empirical studies shows that a superior network structure has significant implications for the enhancement of a firm’s performance, attributed to the context in which firms could acquire access to external resources through their network relationships and so integrate them with internal resources to generate additional benefits. In their study of networks, Provan and Milward (2001) described the changing impact of network size on network effects as follows: “Once a network becomes established, effectiveness is not contingent on simply attracting more and more members. Large networks have obvious political advantages, but they may not be particularly efficient mechanisms for service delivery. While newly established networks should be gaining members, mature networks may have a rate of network entry that only modestly exceeds the rate of exit, as peripheral agencies drop out as part of the process of network refinement, particularly as core members work to enhance service quality and become more efficient” (p. 418). Moreover, it is likely that the size of an entrepreneur’s network early in venture development may contribute to changes in entrepreneurs’ networks during later venture development phases and may assist entrepreneurs accumulate knowledge and other resources (Sullivan, 2015).

2.4.2 Network Diversity

Diversity refers to “the extent to which a system consists of uniquely different elements, the frequency distribution of these elements, and the degree of difference among the elements” (Stirling, 2007, p. 709). Jenssen and Greve (2002) also indicated that diversity
is defined by the background of the entrepreneurs, their education, occupation, or experiences, and by their ability to provide resources or other contacts. Accordingly, Burt (1992) argues that the diversity of an individual’s network allows for a more meaningful prediction of his or her social capital than the actual network size. In accordance with Grant and Baden-Fuller (2004), network diversity allows a company to rely on multiple different sources to access various skills and mobilize heterogeneous competences as well as to learn new knowledge. Indeed, highly effective networks are structured to include every member who has a contribution to make to network goals (Bell, Cordingley and Mitchell, 2006). Furthermore, Burt (2000) suggests that greater value is derived from a network with non-redundant contacts, and so an entrepreneur is better to expend energy cultivating contacts in virgin territory.

McAdam and Marlow (1998) stated that the “social network” indicates the ways in which people are connected through various social familiarities ranging from casual acquaintance to close familial bonds and they further specified that research in a number of academic fields has demonstrated that social networks operate on many levels, from families up to the level of nations, and play a critical role in determining the way problems are solved, organizations are run, and the degree to which individuals succeed in achieving their goals.

Similarly, Cruickshank and Rolland (2006) explained that entrepreneurs, especially those lacking business expertise or experience, use a supportive network of people, mainly family and friends, to offer affirmation and moral support, practical help and advice and they frequently provide finance to enable the enterprise to start-up and become established. Nonetheless, in accordance with them, it is essential to call on more expert advice for a start-up to be sustainable and grow, often through networks, learn to operate the business effectively, comply with government regulations, and maintain a cash flow while planning for tax and other contingencies. Additionally, social network diversity refers to the diversity among a social member’s network neighbors in aspects such as gender, age, education, and work experience (Jehn, Northcraft and Neale, 1999).

According to Kylver and Foley (2012), it is the composition of the social networks that to a certain degree determines which resources entrepreneurs can obtain from it. Simoni and Caiazza (2012) stated that interlocking directorates are social network generated by interpersonal ties between individuals that serve on multiple corporate boards and interact
on a regular basis, able to generate inter organizational ties. Therefore, the influence of networks on entrepreneurship stems from the resource base networks provide for exploiting business opportunities (Strobl and Kronenberg, 2016).

### 2.5 Start-ups’ Success

Start-ups’ success is one of the areas of entrepreneurship that has not been considered seriously by researchers (Chivukula, Raman, and Ramachandra, 2009). They further elaborated that researchers have neglected the study of start-ups for various reasons such as complexity in gathering reliable data, absence of a well-defined theory and inadequate financial. Furthermore, Schutjens and Wever (2000) pointed out that starting up a new business is one thing, having success is something different. Moreover, start-ups are defined as organizations created to search for a business model that is scalable, as the customer base should be easy to increase, resulting in a gain greater than the expenditure for customer acquisition, repeatable in time and profitable in terms of return on invested money (Blank and Dorf, 2012). Hence, establishing a business model for a new venture aims to explain differences in firm performance by achieving sustainable competitive advantages through a firm’s strategic market position (Spiegel, Abbassi, Zylka, Schlagwein, Fischbach and Schoder, 2016).

Small and medium-sized businesses and new business start-ups are usually credited a significant role in maintaining as well as creating a functional market economy, especially as a means of stimulating competition, creating jobs and promoting economic renewal (Kessler, 2007). Accordingly, policy makers believe that new businesses are not only a driving force of local economies, but also constitute a motor of change in several industry sectors (Peña, 2002). Watson, Hogarth- Scott, and Wilson (1998) further explained that the survival or success of new firms is more crucial to a regional economy than merely the presence of a large number of new firms. Different factors have been studied in several studies to expound the survival or failure of start-ups (Phillips et al., 1989; Shane, 2001).

In general, the small size and newness of start-ups causes a limited scope for investing in research and development processes (De Jong and Freel, 2010) and a lack of resources for structuring normal operative activities (Dahlander and Gann, 2010; Grimaldi, Quinto and Rippa, 2013). Indeed, smaller start-ups have fewer resources to cope with unforeseen events, they may have disadvantages in raising capital, and they may be in an unfavorable
position to recruit qualified labor (Preisendörfer, Bitz and Bezuidenhout, 2012). Therefore, Gruber and Henkel (2006) stated that the small size of start-ups entails both limited resources and numerous investment needs, including research development, organization building and market development.

Successful entrepreneurship is undoubtedly a complex phenomenon and both internal and external factors impact on business performance (Watson et al., 1998). For instance, having a solid network is considered as one of the key factors influencing the emergence and successful development of a start-up (Rothschild and Darr, 2005). Networks are critical for the survival and growth of a small firm because they can provide access to information, advice and influence, as well as resources held by others (Hoang and Antoncic, 2003). In addition, another factor linked to the success of start-ups is the legal status, with a difference being made between informal and formal businesses where informal (not officially registered) businesses are normally smaller than registered ones, and thus less favorable prospects of success can be expected of them (Preisendörfer et al., 2012). Although there would seem to be a general consensus regarding the importance of new business ventures in regional economic growth, this harmony weakens when it comes to identifying the factors that allow us to distinguish between successful and not so successful firms (Hormiga, Batista-Canino and Sánchez- Medina, 2011). Thus, the start-up rate is increasingly being seen as equally, if not more, important than the growth of existing firms (Gries and Naudé, 2009) and Wang (2006) found that in Taiwan, for example, production costs, capital costs and unemployment are significant determinants of start-up rates.

2.5.1 Founder’s Attributes and Intentions

Watson et al. (1998) specified that the influence of the founder in defining the business concept and mode of operation is of vital importance with small businesses and particularly new ventures. According to Schutjens and Wever (2000), American researchers, for example narrate the success of an enterprise to the type of entrepreneur. Naudé, Gries, Wood and Meintjies (2008) further stated that start-ups’ growth rates increase when nascent entrepreneurs are better educated and supported, which result in higher profit for the new venture. Most of the time, entrepreneurs start a new firm based on the industry knowledge acquired from a previous job, which is knowledge about customers, suppliers, industry regulation, subsidies and so on (Peña, 2002). Moreover,
when starting a new firm, some entrepreneurs work full-time while others are very cautious and also have a full-time job for safety (Schutjens and Wever, 2000). Consequently, in accordance with Schutjens and Wever (2000), the different attributes and personality traits of the entrepreneur will influence the success of the new venture.

Peña (2002) pointed out that the level of education, business experience and motivation of entrepreneurs establish important human capital elements at the moment of starting up a new venture. In accordance with Preisendörfer et al. (2012), though general human capital is considered as the general level of schooling, specific human capital in the context of entrepreneurship includes industry-specific experience (that is, prior experience in the industry of the new business) and self-employment experience (that is, prior self-employment episodes).

Kim, Aldrich, and Keister (2006, p. 9) recognize that educational achievement may act as a signal for the quality of human capital, as it provides specific skills needed in the new venture, raises the status of the recipient and acts as a sorting mechanism. These benefits of human capital are significant as mechanisms for reducing or overcoming frictions related to finance (educated entrepreneurs may find it easier to obtain credit), marketing (skilled entrepreneurs can better identify their market niche) and network forming (educated entrepreneurs may have higher social standing and hence, better networks) (Gries and Naude´, 2009).

From the perspective of an individual founder, the most appropriate definition of a successful start-up seems to be whether the goals set at the beginning could be achieved (Preisendörfer et al., 2012). Highly ambitious start-ups may come back to reality and, conversely, what started with modest aspirations may turn into a fast-growing venture. In addition, according to Chivukula et al. (2009), many studies considers five attributes of entrepreneurs, which include need for Achievement (nAch), Tolerance for Ambiguity (TFA), risk taking propensity, internal locus of control and type A behavior (Chivukula et al., 2009) but for the purpose of this research, we shall elaborate on need for Achievement, internal locus of control and risk taking propensity. In the relevant literature, a number of researchers have shown that entrepreneurs demonstrate stronger tendencies in this area than other professionals (Begley and Boyd,1986; Green, David, and Dent,1996) and that there are relationships between the strength of one’s need for achievement and business success, although such relationships are often certainly weak.
(Klandt, 1990; Langan-Fox and Roth, 1995). Some research findings confirm that people with a strong internal locus of control are more adept at dealing with the pressures of work situations, that they are more satisfied with their activities, and that they can cope with change more effectively (Frank, Lueger, and Korunka, 2007). Empirical findings show that entrepreneurs can be characterized in ideal terms by a medium level of risk propensity (Stewart, 1996; Gobel and Frese, 1999), and that their characteristics in this respect are generally higher than those of managers (Stewart Jr and Roth, 2001). Therefore, Frank et al. (2007) made a critical statement that the singular observation of entrepreneurs’ traits is usually not sufficient to explain decisions to pursue an entrepreneurial career or to explain success in entrepreneurship.

Furthermore, in the context of start-ups, some of the important tasks that entrepreneurs will embark upon are (1) Working intensely despite uncertainty and lack of capital and other resources; (2) Fending off retaliatory activities from rivals in the market place; (3) Dealing with informed investors (like venture capitalists, angel investors, etc.); (4) Transforming technological discoveries into marketable items; and (5) Identifying hospitable niches and strengthening their presence in the market place (Chivukula et al., 2009).

However, Lloyd-Ellis and Bernhardt (2000, p. 160) pointed out that the frequent complaints by entrepreneurs captured in surveys about lack of access to finance often masks technical and managerial inadequacies. Additionally, founders have the possibility to gain access to resources more cheaply by using their network contacts than if they were in a situation where they had to resort to market transactions (Battistella, De Toni and Pessot, 2017). Some studies of individual entrepreneurs in other empirical contexts have found that the founders’ social capital (i.e. their social networks and personal relationships) is helpful in identifying new business opportunities (Ardichvili, Cardozo and Ray, 2003; Bhagavatula, Elfring, Van Tilburg and Van de Bunt, 2010). Therefore, as Frank et al. (2007) mentioned that the explanatory approach of start-ups’ success based on founders’ personality traits has to be regarded critically for several reasons, it is essential to recognize that entrepreneurs’ attributes, social and human capital plays a role in the success of their start-ups.
2.5.2 Start-ups’ Development

Starting a new business means creating an innovative product or service and maybe seeking to create a new market in a context of extreme uncertainty and high-competitive pressure (Ries, 2011; Trimi and Berbegal-Mirabent, 2012). According to conventional wisdom, the first thing every founder must do is create a business plan, which is a static document that describes the size of an opportunity, the problem to be solved, and the solution that the new venture will provide (Blank, 2013). For instance, Hurst, MacDougall and Pelham (2008) stated that the Acadia Center for Social and Business Entrepreneurship (ACSBE), in Nova Scotia, Canada, helps entrepreneurs to develop their business idea from the start to the end where they write a business plan in order to launch their business. Though the Canadian Center offers entrepreneurial counseling and skill development programs using their three stages of exploration, evaluation and execution (Hurst et al., 2008), it is crucial to argue that rather than engaging in months of planning and research, entrepreneurs should accept that all they have on the first day is a series of untested hypotheses, basically, good guesses (Blank, 2013). Thus, instead of writing an intricate business plan, founders should summarize their hypotheses in a framework called a canvas business model, which is the first key principle in the lean method (Blank, 2013).

A canvas business model describes the rationale of how an organization creates, delivers, and captures value (Osterwalder and Pigneu, 2010, p.14). Likewise, George and Bock (2011, p. 99) described a business model as the design of organizational structures to enact a commercial opportunity and Spiegel et al. (2016) modestly summarize it as how organizations deliver value to their customers. Furthermore, Osterwalder and Pigneu (2010) believe a business model can best be described through nine basic building blocks that show the logic of how a company intends to make money. According to them, the nine blocks summarize the four main areas of a business: customers, offer, infrastructure, and financial viability. Additionally, Rytkonen and Nenonen (2013) explained that on the canvas business model, the ways of solving customers’ pain are analyzed by the entrepreneur under value proposition, customer relationships, channels and customer segments while cost structure and revenue streams looked at the financial side of the start-up. They further indicated that key partners, key activities, and key resources constitute the infrastructure part of the start-up.
Gudiksen, Poulsen, and Buur (2014) stated that using a canvas business model, when developing a start-up is important because it offers a simple, visual platform. Entrepreneurs will develop their business idea and check its viability more quickly. In the past, start-ups’ founders could spend much time and resources in writing a business plan. In accordance with Rytkonen and Nenonen (2013), the below figure relates the nine blocks and are numbered in the order of importance;

**Figure 2:1: Canvas Business Model (Rytkonen and Nenonen, 2013)**

Additionally, Kajanus, Iire, Eskelinen, Heinonen, and Hansen (2014) stated that the business model Canvas proposed by Osterwalder and Pigneur (2010) has become quite popular (especially among practitioners) and even become a de facto standard when formulating business models. Therefore, in accordance with Blank and Dorf (2012), the primary objective of a startup is to validate its business model hypotheses (and iterate and pivot until it does) and afterwards moves into execution.

### 2.5.3 Measures of Start-ups’ Success

Openness to external knowledge sources and creation of business relationships for innovation have been recognized as two crucial factors for overcoming such limitations in the early stages of a firm’s development (Carlsson and Corvello, 2011; Kask and Linton, 2013; Eftekhari and Bogers, 2015). Most literature favors two success indicators, namely
death versus survival, and employment growth (Brüderl, Preisendörfer and Ziegler, 2007: 91–93). Accordingly, Witt (2004) pointed out that a company-related success measure is the survival of a start-up company, its persistence in the market and given the date of foundation of a start-up in a sample of founded companies, researchers can easily find data for each sample firm if it still exists at the time of the enquiry. However, in accordance with Preisendörfer et al. (2012), survival is a minimal principle of start-ups’ success and the growth of employment may be misrepresentative though on average it is a valid approximation to success, since a business, which is not doing well will not hire employees.

In addition, Witt (2004) suggested that one of the first success measures is the completion of the idea and planning phase that is the founder has moved from idea development and business planning to business start-up. Indeed, this stage can be viewed as a big step because not so many people are able to convert their idea into a running and registered business. Furthermore, the outcomes of the exploration phase in the ACSBE program (Canada) are summarized as knowing what the entrepreneur wants to do and why, clarifying goals and values and creating a prioritized list of options and plans for achieving those goals (Hurst et al., 2008). Hence, the entrepreneur’s achievement of its personal and entrepreneurial goals can be also considered as another success measure. Nevertheless, Witt (2004) specified that founders may have very different expectations about their life as an entrepreneur and thus, reason to doubt that a satisfaction with performance index provides a good proxy for firm performance (Chandler and Hanks 1993). Therefore, the founders’ satisfaction depends on success criteria such as salary, increases in company value, but also on individual expectations and feelings (Witt, 2004).

Access to finance is often a decisive factor in the success of a small business start-ups (Evans and Jovanovic 1989, Banerjee and Newman 1993) and that is why financial start-up’ requirements, in some developed countries, are quite low so that entrepreneurs achieved them through their own savings, credit from family members and informal borrowing (Kim et al., 2006). Although formal bank finance for start-ups also seems to be largely limited to low-risk cases and where collateral is provided (Naudé, et al. 2008), the presence of venture capitalists firms and other entrepreneur’s fund has helped entrepreneurs in their hunt of financial resources. Thus, the availability of finances is vital for the success of a start-up.
Furthermore, Witt (2004) explained that start-ups’ growth rates are also an important success measure. He further stated that typical growth indicators are sales, the number of employees, or the balance sheet total. For instance, for any start-ups to make profit, it needs to sell their products or services to the customers. Hence, Schutjens and Wever (2000) indicated that frequently used operationalization of new firm success are profit, return on investment or a substantial income generation for the entrepreneurs and their families and other indicators used include value added, the growth of turnover, or the number of employees. Nevertheless, Witt (2004) said that the broad problem of all objective measures for start-ups’ success is that they depend on the founders’ intentions and aspiration.

2.6 Chapter Summary

This chapter has presented literature review based on the specific objectives of the study. Accordingly, the researcher examined the benefits of PsyCap, the importance of networking activities and the significance of network structure for the success of start-ups. Besides, she analyzed available literature on start-ups’ success. The next section introduces chapter three that presents the methodology and research design of the study, which guided the data collection and analysis throughout the whole research project process.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

Chapter three discusses the research methodology embraced in the assessment of the effect of psychological capital, networking activities and networks’ structure that lead to the success of start-ups in Kenya, using start-ups founders enrolled in the program of entrepreneurship in USIU both undergraduate and masters students. Accordingly, the research methodology undertakes analysis of the research design adopted, population of the study, the sampling technique used in picking the sample size and the methods considered for data collection, analysis, and data presentation.

3.2 Research Design

Cooper and Shindler (2014) define a research design as the roadmap, or blueprint a researcher utilizes as a guide for conducting a study. For this study, the researcher used a descriptive research design to assess the effect of psychological capital, networking activities and networks’ structure on the success of start-ups in Kenya. It enables the research to understand how these variables influence the population being studied. In accordance with Cox and Hassard (2010), a descriptive survey is one in which research data is collected without manipulation or changing anything in the study environment. Likewise, Cooper and Shindler (2014) claims that descriptive study attempts to answer to the questions who, what, when, where, and sometimes, how.

The researcher further use a quantitative methodology, which often answer questions related to how much, how often, how many, when, and who (Cooper and Shindler, 2014). This study tries to measure psychological capital, networking activities and the structure of the entrepreneur’s networks in order to determine their impact on the success of start-ups. Moreover, in conducting the assessment of the effect of psychological capital, networking activities and networks’ structure on the success of start-ups in Kenya, this study involves a cross-sectional descriptive research design, which is carried out once and represent a picture of one point in time and it shall be using questionnaire surveys.
3.3 Population and Sampling Design

3.3.1 Population

Cooper and Shindler (2014) defined a study population as the total collection of elements that a researcher wishes to make inference. They also pointed out that a study target population refers to people, events or records that contain desired information and can answer the measurement questions and then determine whether a sample or census is desired. Hence, the basic idea of doing sampling is to help a researcher choose elements in a population that will be a representation of the whole.

According to the 2017 records of the USIU-Africa registrar office, 133 entrepreneurs or aspiring entrepreneurs are pursuing the entrepreneurship program as either undergraduates or graduates students. Thus, the target population of this study was all the 133 entrepreneurs or aspiring entrepreneurs. Some of those entrepreneurs are going through the USIU-Africa incubation project. Furthermore, USIU- Africa incubation project is a 12 months entrepreneurship program with an emphasis on growing innovative technology driven ideas. In accordance with Mugenda and Mugenda (2003), a sample size of 30% of the target population is recommended. Therefore, with 52 respondents but with only 45 who filled correctly the questionnaire, the sample size of 45 is within the mentioned recommendation.

Table 3.1: Population

<table>
<thead>
<tr>
<th>Entrepreneurship Program</th>
<th>Population</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>59</td>
<td>44%</td>
</tr>
<tr>
<td>Graduate</td>
<td>54</td>
<td>41%</td>
</tr>
<tr>
<td>USIU Members of the Incubation Center</td>
<td>20</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>133</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

3.3.2 Sampling Design

Cox and Hassard (2010) outlines sampling design as the plan on how units or elements within a population will be picked as to form part of the study. Thus, a sampling design refers to the sampling frame for the study, the sampling technique used and the sample size embraced for the study.
3.3.2.1 Sampling Frame

According to Cooper and Shindler (2014), a sample frame is a list of all population that a researcher relies on to draw out a sample for a study. For a sample frame to be valid, it has to contain all elements that form the population for a researcher to be able to draw out a representative sample. For this study, the sampling frame was entrepreneurs who enrolled in the entrepreneurship program in USIU- Africa and are either undergraduates or graduates. The researcher adopted the sampling frame from USIU- Africa registrar office in Nairobi.

3.3.2.2 Sampling Technique

According to Cooper and Shindler (2014), a sample is a representative portion of the target population. The researcher used stratified random sampling technique for the study to produce data for analysis and comparison across the various strata covered within the sampling frame of the target population. Saunders, Lewis and Thornhill (2003) described stratified random sampling as the subdivision of the population into relevant and significant categories based on attributes that are unique to the population elements in that category. In accordance with Teddlie and Yu (2007), it combines stratified sampling with random sampling and mainly utilizes when researchers wants the sample to be representative of the population on some characteristic of interest (for example, in our study, level of education).

The researcher chose a stratified random sampling so as to increase the statistical efficiency of the sample and provide adequate data for analysis of the strata under investigation. The population was divided into two strata; undergraduates’ entrepreneurs and graduates’ entrepreneurs with homogenous characteristics.

3.3.2.3 Sample Size

A sample size is defined as the section of a unit, or element or individual which represents the entire population (Cooper and Shindler, 2014). They further vouched for a sample size of more than 10%-30% for studied in social science related subjects. The population of this study consisted of 133 entrepreneurs that were present in USIU- Africa. The researcher used a sample size of 34%, which was more than the percentage that Cooper and Shindler (2014) recommended and also yielded a manageable sample of the total population. The sample was computed as indicated in the following Table 3.2:
### Table 3.2: Distribution Table

<table>
<thead>
<tr>
<th>Entrepreneurship Program</th>
<th>Population</th>
<th>Sample Ratio</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>59</td>
<td>34%</td>
<td>20.06</td>
</tr>
<tr>
<td>Graduate</td>
<td>54</td>
<td>34%</td>
<td>18.36</td>
</tr>
<tr>
<td>USIU Members of the Incubation Center</td>
<td>20</td>
<td>34%</td>
<td>6.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>133</strong></td>
<td></td>
<td><strong>45.22</strong>*</td>
</tr>
</tbody>
</table>

*After rounding, the sample size of the study is 45 entrepreneurs.

### 3.4 Data Collection Methods

Cooper and Shindler (2014) described data as facts given by respondents for a study in a research environment in confirming the relationship among the research variables in a study whereas data collection is the systematic process that a researcher engages to document data. The primary data was collected from the target population of entrepreneurs under the USIU - Africa entrepreneurship program to address the specific objectives of the study. The data collection techniques for the study were self-administered questionnaires and shared to the respondents at the USIU-Africa Incubation center.

Self-administered questionnaires encourage the flexibility in submission of respondents “feedback, and confidentiality to generate high responses and guarantee data accuracy. According to Saunders, Lewis and Thornhill (2016) a questionnaire is a tool that has systematic questions and respondents of a study are requested to respond to. Cooper and Shindler (2014) pointed out that target questions reflects the investigative questions of a particular study and are either open-ended or closed questions. The questionnaire was developed from the specific objectives and had both open-ended and closed ended questions. Additionally, since we used Likert scale questions, we implemented the interval scale as the measurement scale of the study.
3.5 Research Procedures

The researcher started by seeking permission from the administration office of the USIU-Africa incubation center to conduct the study. After their approval, the researcher underwent a pre-test with the researcher’s supervisor, and four start-ups founders but who are not students at USIU- Africa. Denscombe (2010) defines pilot test as the initial test that is done to test the validity and reliability of a research instrument. Therefore, the researcher organized a pre-test to examine the accuracy, efficiency and validity of the data collection tool. The questionnaire was given to the pilot team of respondents to check on possible mistakes, ease of understanding, ability to generate required responses, time taken to complete the questionnaires. Moreover, the purpose and structure of the questionnaire will be explained to the respondents before being given the opportunity to respond to the questions.

After reviewing the pretest questionnaire, the researcher revised and amended some questions to make it more effective. Likewise, the revised questionnaire was administered to 52 entrepreneurs using drop-and-pick method but only 45 questionnaires were correctly filled. The adoption of short and simple questionnaires and the focus on anonymity and confidentiality was the motivation to have high response rates.

3.6 Data Analysis Methods

Mugenda (2008) stated that data analysis is the process of giving structure and meaning to the mass of information collected. Before entry is done, the collected data was checked for comprehensiveness and consistency. In addition, we used the Statistical Package for Social Sciences (SPSS) to undertake statistical analysis for descriptive statistics, which include frequency tables, percentages, mean, mode, and standard deviation. Similarly, inferential statistics included correlation and regression. Correlation analysis was utilized to establish strength and direction of relationship between variables and while regression was used to measure level of significance for the independent variables (PsyCap, networking activities, structure of the network: Discuss, structure of the network: commercial relationship, and structure of the network: contributed) and dependent variable (the success of start-ups).
3.7 Chapter Summary

This section of the project proposal described the methodology that was used in conducting the study. The research design was a descriptive study that was done on a population of 133 entrepreneurs with a sample size of 45, and the study sampling technique was a stratified random sampling. Moreover, the data collection methods were conducted using questionnaires, while data analysis was carried out with the aid of SPPS software tool. The next section will introduce chapter four of the study, which presented the results and findings of the study.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter looked into responses of the research in regards to our general objectives of the study and demographic information of respondents. The researcher was able to establish a response rate of 86.5 % which was adequate for data analysis and interpretation. Out of the 52 respondents, all were able to complete the questionnaire and return it in due time but only 45 of them properly answered it.

4.2 Demographic Information

4.2.1 Respondent Age Distribution

The figure below shows the age distribution of respondents; those between the ages of 18 to 24 were 60%, 25 to 34 were 35.56 %, and 35 to 44 were 4.449 %.

Figure 4.1: Respondent Age
4.2.2 Respondent Gender Distribution

The figure below shows the gender distribution of respondents; Male were 73.3% and Females were 26.7%.

![Figure 4.2: Respondent Gender](image)

4.2.3 Respondent Start-up Status Distribution

The below figure shows the start-up status distribution of respondents; Respondents who only have a business idea 28.9%, who are working on their business idea 31.1%, who launched their business but not yet profitable 33.3%, who achieved break-even 4.4% and who have business venture making profit 2.2%.
4.3 Descriptive Statistics

Table 4.1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PsyCap</td>
<td>4.4372</td>
<td>.56659</td>
<td>45</td>
</tr>
<tr>
<td>Networking Activities</td>
<td>1.8222</td>
<td>.54518</td>
<td>45</td>
</tr>
<tr>
<td>Structure of the Network : Network Size</td>
<td>2.0667</td>
<td>.68755</td>
<td>45</td>
</tr>
<tr>
<td>Structure of the Network: Commercial Relationship</td>
<td>2.6827</td>
<td>2.08282</td>
<td>45</td>
</tr>
<tr>
<td>Structure of the Network: Contributed</td>
<td>3.1556</td>
<td>.85162</td>
<td>45</td>
</tr>
<tr>
<td>Start-up Success</td>
<td>3.3666</td>
<td>.56912</td>
<td>45</td>
</tr>
</tbody>
</table>

The mean is a measure of central tendency, used to obtain the average of the statistical data. Accordingly, PsyCap, networking activities, structure of the network: network size, structure of the network: commercial relationship, structure of the network: contributed, and start-up success variable respectively resulted in the mean of 4.4372, 1.822, 2.0667,
2.6827, 3.1556, and 3.3366. Hence, they are the average values for the respective variables in the data set, along with the standard errors of the sample mean.

Moreover, the standard deviation is a measure of dispersion which measures how concentrated the data are around the mean. In accordance with Table 4.1, the standard deviation of PsyCap, networking activities, structure of the network: discuss, structure of the network: commercial relationship, structure of the network: contributed, and start-up success variable was respectively 0.56659, 0.54518, 0.68755, 2.08282, 0.85162, and 0.56912. Therefore, they do not deviate very far from the mean values for the respective variables because the values of the standard deviation are small; that is, the outliers in the sample data of 45 participants (N) are not greatly dispersed.

4.4 Correlations

Table 4.2: Correlation

<table>
<thead>
<tr>
<th>Correlations</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Gender</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.PsyCap</td>
<td>Pearson Correlation</td>
<td>.090</td>
<td>(.60)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.Networking Activities</td>
<td>Pearson Correlation</td>
<td>.059</td>
<td>.341*</td>
<td>(.66)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.Structure of the Network : Commercial Relationship</td>
<td>Pearson Correlation</td>
<td>-.102</td>
<td>.097</td>
<td>.239</td>
<td>.232</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.Start-up Success</td>
<td>Pearson Correlation</td>
<td>-.176</td>
<td>.190</td>
<td>-.009</td>
<td>.075</td>
<td>.108</td>
<td>.091</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

A Pearson correlation coefficient is a measure of linear dependence between two random variables that does not depend on units of measurement and is bounded between -1.0 and
+1.0 (Wooldridge, 2012). The correlation matrix is a symmetric table of all possible correlation coefficients between a set of variables. A positive correlation coefficient between two variables implies that the linear relationship is positive, i.e. slopes upward, while a negative correlation coefficient between two variables implies that the linear relationship is negative, i.e. slopes downward (Wooldridge, 2012). Correlation always is $-1 \leq r \leq 1$ and shows the strength of a relationship by how close it is to $-1$ or $1$ (Weiss, 2012). At the 95% level of confidence, the corresponding level of significance is 0.05 while 99% level of confidence tallies with 0.01 level of significance.

At the 0.05 level of significance, if $p \leq 0.05$, the Pearson correlation test is statistically significant. If $p > 0.05$, the Pearson correlation test is not statistically significant. Using the output in table 4.2, and the 0.05 level of significance, there is a positive correlation between PsyCap and gender, but it is not statistically significant; $r = 0.090; p = 0.556; N = 45$. There is a positive correlation between networking activities and gender, but it is not statistically significant; $r = 0.059; p = 0.700; N = 45$. The linear correlation between structure of the network: Network Size and gender variable is positive, but it is not statistically significant; $r = 0.237; p = 0.118; N = 44$. There is a negative correlation between structure of the network: commercial relationship and gender, but it is not statistically significant; $r = -0.102; p = 0.504; N = 45$. The linear correlation between structure of the network: Contributed and gender variable is positive, but it is not statistically significant; $r = 0.187; p = 0.219; N = 45$. There is a negative correlation between start-up success and gender, but it is not statistically significant; $r = -0.176; p = 0.248; N = 45$.

The correlation between networking activities and PsyCap variable is positive and statistically significant; $r = 0.341; p = 0.022; N = 45$. There is a positive correlation structure of the network: Network Size and PsyCap variable, but it is not statistically significant; $r = 0.284; p = 0.059; N = 45$. The correlation between the structure of the network: commercial relationship and PsyCap variable is positive, but it is not statistically significant; $r = 0.097; p = 0.528; N = 45$. There is a positive correlation structure of the network: Contributed and PsyCap variable, but it is not statistically significant since $r = 0.106, p = 0.489$ and $N = 45$. The correlation between the start-up success and PsyCap variable is positive, but it is not statistically significant; $r = 0.190; p = 0.212; N = 45$. 

45
There is a positive correlation between structure of the network: Network Size and networking activities and statistically significant; \( r = 0.396; p = 0.007; N = 45 \). The linear correlation between structure of the network: commercial relationship and networking activities variable is positive, but it is not statistically significant; \( r = 0.239; p = 0.113; N = 45 \). There is a negative correlation between structure of the network: contributed and networking activities, but it is not statistically significant; \( r = -0.135; p = 0.377; N = 45 \). The linear correlation between start-up success and networking activities variable is positive, but it is not statistically significant; \( r = 0.009; p = 0.955; N = 45 \).

The correlation between the structure of the network: Commercial relationship and the structure of the network: Network Size variable is positive but it is not statistically significant; \( r = 0.232; p = 0.125; N = 45 \). There is a positive correlation between the structure of the network: Contributed and the structure of the network: Network Size variable, but it is not statistically significant; \( r = 0.060; p = 0.698; N = 45 \). The correlation between start-up success and the structure of the network: Network Size variable is positive, but it is not statistically significant; \( r = 0.075; p = 0.623; N = 45 \).

There is a positive correlation between the structure of the network: contributed and the structure of the network: commercial relationship variable but it is not statistically significant; \( r = 0.135; p = 0.376; N = 45 \). The linear correlation between start-up success and the structure of the network: commercial relationship variable is positive, but it is not statistically significant; \( r = 0.108; p = 0.482; N = 45 \). In the same way, there is a positive correlation between start-up success and the structure of the network: contributed variables, but it is not statistically significant; \( r = 0.091; p = 0.550; N = 45 \).

### 4.5 Model Summary

**Table 4.3: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.238(^a)</td>
<td>.057</td>
<td>-.064</td>
<td>.58713</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), Structure of the network: Contributed, Structure of the network: Network Size, Structure of the network: Commercial Relationship, PsyCap, Networking Activities
The R-squared of the regression, sometimes called the coefficient of determination, is calculated using the formula:

$$R^2 = \frac{SSR}{SST} = 1 - \frac{SSE}{SST} \quad (i)$$

Where SSR is the sum of squares regression, SST is the sums of squares total and SSE (residual) is the sum of squares error. When equation (i) is substituted with the SST and SSE or with SST and SSR values provided in table 4.4, the result is:

$$R^2 = \frac{0.807}{14.251} = 0.057 \quad \text{or} \quad R^2 = 1 - \frac{13.444}{14.251} = 1 - 0.943 = 0.057 \quad (ii)$$

The correlation coefficient measures the strength of the linear relationship between two quantitative variables and the coefficient is usually denoted as “R”. The coefficient of determination, $R^2$ equals the square of the linear correlation coefficient, $R$. Thus, “R” is, simply put, the square root of the coefficient of determination. That is, from equation (ii) above, \( \sqrt{0.057} = 0.2387467277 \).

It is also the correlation between the observed and predicted values of the dependent variable.

Sometimes additional independent variables add no significant information to the regression model, which may cause $R^2$ to yield an inflated figure. The adjusted $R^2$ takes into consideration both the additional information each new independent variable brings to the regression model and the changed degrees of freedom. The adjusted $R^2$, when calculated, was found to be -0.064. This means that the fitted model explains approximately 6.4% of variations of the dependent variable, “Start-up success”.

The standard error of the estimate, denoted $Se$, is the standard deviation of the sampling distribution of the statistic (Greene, 2012). The standard error of the estimate indicates how much, on average, the predicted values of the response variable differ from the observed values of the response variable. The standard error of the estimate, according to Table 4:6 is 0.58713.
ANOVA

Table 4.4: Anova

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.807</td>
<td>5</td>
<td>.161</td>
<td>.468</td>
<td>.798</td>
</tr>
<tr>
<td>Residual</td>
<td>13.444</td>
<td>39</td>
<td>.345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14.251</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Start-up Success
b. Predictors: (Constant), Structure of the network: Contributed, Structure of the network: Network Size, Structure of the network: Commercial Relationship, PsyCap, Networking Activities

The analysis of variance test, better known as the ANOVA test, is a study of the decomposition of the total sum of squares (TSS) into two components: explained sum of squares (ESS) and residual sum of squares (RSS) from the regression viewpoint; TSS = ESS + RSS (Gujarati, 2008).

The null hypothesis here is that there is no difference among the means of the variables; H0=μ1 = μ2 = μ3 = 0. The alternative hypothesis is that not all μ's are equal.

Assuming that α is 0.05, if the p-value, denoted by “Sig.”, is less than or equal to α, i.e. if p≤ 0.05, we reject H0. Alternatively, if the F-value is greater than the F-tabulated value, we reject H0. On the other hand, if the p-value, denoted by “Sig.”, is greater than or equal to α, i.e. if p>0.05, we accept H0. Alternatively, if the F-value is less than the F-tabulated value, we accept H0.

The regression sum of squares measures the sample variation of the differences between the averages for each level. The residual sum of squares measures the sample variation of the variance within each level (Wooldridge, 2012). The regression mean square is calculated by dividing the regression sum of squares by the respective degrees of freedom, denoted by “df”, to get 0.161; and the residual mean square is calculated by dividing the residual sum of squares by the respective degrees of freedom, to get 0.345, as per table 4.4.

In the ANOVA situation, the F-value is a ratio of the treatment (regression) variance to the error (residual) variance (Black, 2010). It is denoted by F (5, 39) = 0.468. This value is compared to the critical F-value, 2.46. Since the F-value is less than the F-tabulated
value, we accept H0. The p-value, denoted by “Sig.”, is 0.798 and since it is greater than 0.05, we can accept the null hypothesis, and conclude that the means of the variables are not statistically significant; F (5, 39) = 0.468; p = 0.798.

### 4.6 Coefficients of Linear Regression Model

**Table 4.5: Linear Regression**

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficientsa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
</tr>
<tr>
<td></td>
<td>PsyCap</td>
</tr>
<tr>
<td></td>
<td>Networking Activities</td>
</tr>
<tr>
<td></td>
<td>Structure of the Network: Network Size</td>
</tr>
<tr>
<td></td>
<td>Structure of the Network: Commercial Relationship</td>
</tr>
<tr>
<td></td>
<td>Structure of the Network: Contributed</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Start-up Success

Using the table 4.5 above, we can develop the linear regression model:

\[ y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon \]

Where \( y \) is the dependent variable \( \beta_0 \) is the intercept, \( \beta_1, \beta_2, \) and \( \beta_3 \) are the parameters associated with their respective independent variables, and \( \varepsilon \) is the collective error term. When the model is substituted with the values provided in table 4.5, we are presented with the model:
Start-up Success = 2.454 + 0.204 PsyCap - 0.116 Network Activities + 0.030 Structure of the Network (I) + 0.028 Structure of the Network (II) + 0.026 Structure of the Network (III)

This means that for every unit increase in PsyCap, a 0.204 unit increase in start-up success is predicted, holding all other variables constant. Considering alpha (α) = 0.05, the coefficient for PsyCap (0.204) is not statistically significantly different from 0, because its p-value is 0.239, which is greater than 0.05. Furthermore, for every unit increase in networking activities independent variable, a 0.116 unit decrease in start-up success is predicted, holding all other variables constant. Thus, it means that networking activities and start-up success have an inverse relationship, or are inversely correlated. However, given that p = 0.546, the relationship is not significant since its value is greater than 0.05 assuming alpha (α) = 0.05. Accordingly, for every unit increase in structure of the network: Network Size, a 0.030 unit increase in start-up success is predicted, holding all other variables constant. Nevertheless, since p =0.838, the relationship is not significant. For every unit increase in structure of the network: Commercial Relationship, a 0.028 unit increase in start-up success is predicted, assuming all other variables are held constant but the relationship is not significant because p= 0.543. Finally, for every unit increase in structure of the network: Contributed, a 0.026 unit increase in start-up success is predicted, considering all other variables are held constant. Though, as p=0.810, the relationship is not significant.

The standard error terms are the terms other than the independent variables that affect the dependent variable, “identity” (Wooldridge, 2012). The standardized beta coefficients are the coefficients that are obtained if one standardized all of the variables in the regression, including the dependent and all independent variables, and ran the regression. By standardizing the variables before running the regression, all variables will be on the same scale, and one can compare the magnitude of the coefficients to see which one has more of an effect. Also, the larger betas are associated with the larger t-values and lower p-values. The columns labeled t and Sig. in the table above are the t-statistics and their associated two-tailed p-values used in testing whether a given coefficient is significantly different from zero.
4.7 Chapter Summary

This chapter presented the findings of the study as per the questionnaire. On the 45 questionnaires well filled, which represent 45 entrepreneurs enrolled in the program of entrepreneurship in USIU either as undergraduate or masters or member of the business incubation, descriptive statistics, correlation and regression was used to analyze the data. The next chapter presents the summary, discussion, conclusion and recommendations.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter five presents the discussion, conclusion and recommendations of the study, which are presented according to the research questions of the study. The summary will provide a description of the study, the discussion will be a presentation of the major findings and the conclusions will present the end of the study and make recommendation for further research.

5.2 Summary

The purpose of this study was to establish the effect of PsyCap, networking activities and the structure of entrepreneurial networks on the success of start-ups. Moreover, the specific objectives were as follows; to investigate the benefits of PsyCap for the success of start-ups, to determine the importance of networking activities of any start-up’s success, and to explore the structure of entrepreneurial networks in a successful start-up.

The research methodology used by the researcher in conducting the study was the descriptive design. The dependent variable in the study was start-up success and the independent variables were PsyCap, networking activities, and the structure of entrepreneurial networks respectively. The research was conducted at USIU- Africa with entrepreneurs who are undergraduates, graduates and members of the USIU- Africa business Incubator with a sample size of forty five (45). Primary data was collected with use of questionnaires and they were distributed and collected from the respondents. The data was analyzed using Statistical Program for Social Sciences (SPSS). Descriptive statistics, correlation and regression were also used in the study to interpret the data.

Based on the study’s findings, PsyCap was not correlated with the start-ups’ success. Moreover, the relationship between PsyCap and start-ups’ success was not statistically significant because p=0.239. Thus, there was no effect between PsyCap and the success of start-ups in this study.

Networking activities and start-ups’ success was not correlated. Furthermore, the relationship between networking activities and start-ups’ success was not statistically significant because p=0.546. Nevertheless, there is a positive relationship between
networking activities and PsyCap and it is statistically significant. Thus, this research revealed that networking activities does not influence the success of start-ups.

Another finding of this study was that network structure and start-ups’ success was not correlated. Additionally, the relationship between network structure and start-ups’ success was not statistically significant because p was respectively equally to 0.838, 0.543, and 0.810. However, the relationship between the structure of the network: Network Size and networking activities is positive and statistically significant. In brief, the structure of entrepreneurial networks was not related to the success of start-ups in this study.

Looking at the reliability of the variable networking and start-up success, they each have a figure, which is higher than 0.65. Thus, it tells us that there is a flow in the questions of each variable on the questionnaire. Additionally, we have also accepted the null hypothesis, which means that there is no difference among the means of the independent and dependent variables.

5.3 Discussion

5.3.1 The benefits of PsyCap on Start-ups’ Success

This research study revealed that the relationship between PsyCap and the start-up success variable is positive, but it is not statistically significant since $p = 0.239$ and according to Pearson’s Correlation, if $p > 0.05$, the test is not statistically significant. Furthermore, a positive correlation exists between PsyCap and gender, but it is not statistically significant since $p = 0.556$.

The result of this study on the relationship between PsyCap and the start-ups’ success does not concur with the findings of Baluku et al. (2016) that all five dimensions of psychological capital were positively related to entrepreneurial success. Thus, they suggested that entrepreneurs with higher psychological capital are more likely to succeed than others. In addition, in the study of Zhu and Feng (2015), a positive correlation was found between PsyCap and gender, but it was not statistically significant since $p = 0.169$, which corresponds to the findings of this research study.

Research on the effects of psychological capital on entrepreneurs’ success are limited while on the effects of psychological capital on start-ups are inexistent. Likewise, Jensen and Luthans (2006) pointed out, for instance, that research on the impact of optimism on
work/entrepreneurial performance is limited. Additionally, most studies focused on the relationship of psychological capital with the entrepreneurs or employees’ authentic leadership (Jensen and Luthans, 2006; Amunkete and Rothmann, 2015; Joo, Lim and Kim, 2016; Caza, Bagozzi, Woolley, Levy, and Caza, 2010). Jensen and Luthans (2006) primarily investigated on better understanding and applying the emerging concepts of positive psychological capital and authentic leadership to founding entrepreneurs within the context of newer, small businesses and found that a positive relationship between entrepreneurs’ positive psychological capital and their self-perception of authentic leadership. Their findings suggested that it is potentially important to recognize, develop, and leverage the positive psychological capital of entrepreneurs so that they can authentically lead their emerging organizations to desired and successful endings.

Moreover, in the study of Amunkete and Rothmann (2015), the results also showed that authentic leadership was positively associated with psychological capital and job satisfaction. In accordance with them, the more employees feel that their managers and supervisors display the qualities and characteristics of authentic leadership, the more they were hopeful, optimistic, confident and resilient as well as the higher the score on psychological capital, the more satisfied the employees are with their jobs and the lesser they are inclined to leave their organizations. Accordingly, Joo et al. (2016) stated that PsyCap was a strong predictor not only for work empowerment but also for work engagement.

In this study, it is also important to note that there is a positive correlation between networking activities and PsyCap and it is statistically significant. Indeed, when thinking at what an entrepreneur requires in order to achieve good networking activities, the researcher concluded the four components of PsyCap (Optimism, Resilience, Self-efficacy and Hope) are fundamental. Networking help any start-ups to thrive as it helps the development of a firm’s credibility, expand the customer base and supplier contacts, highlight access to resources and available funding, encourage innovation and help develop strategic partnerships (Witt, 2004). Consequently, in this study, positive PsyCap is not related to start-ups’ success but it is significantly correlated to networking activities.
5.3.2 The Importance of Networking Activities on Start-ups’ Success

The importance of networking is universally accepted in literature as a key attribute to business success and entrepreneurial activity (Foley, 2008). Nevertheless, the relationship between start-ups’ success and networking activities variable is not statistically significant since $p = 0.546$ and if $p > 0.05$, the test is not statistically significant though it is positive. These findings are similar to those of Aldrich and Reese (1993) that found no evidence that the amount of time invested in developing and maintaining network contacts affects business survival and performance. The researcher assumed that networking activities plays a big role in the success of start-ups. For example, networking capability was found not only to be central to the growth of firms in the hi-tech sector but also to play a similarly important role for firms in the low-tech sector (Mort and Weerawardena, 2006).

Indeed, according to McAdam and Marlow (2008), uncertainties, for instance associated with firm growth were reduced for entrepreneurs in a business incubator as they were able to consult their peers, using them as a sounding board for ideas and as a support mechanism when searching for business solutions. Nevertheless, the findings demonstrated that there is no relationship between the two and it might due in accordance with Aldrich and Reese (1993) to three possible factors that bear further analysis: 1) the many difficulties in measuring business performance; 2) the too-easy equating of personal networking with business networking; and 3) the gap between general measures of the immediate context in which networking is carried out.

Various studies on networking and entrepreneurship have been done and some have emphasized the importance and relation of networking while others minimize the significance. Martinez and Aldrich (2011) indicated that despite their undisputable value to entrepreneurs, strong ties carry two potential disadvantages i.e. they are limited in scope by nature as well as the associated cost of strong ties. For instance, strong ties require high levels of reciprocity, which means that entrepreneurs need to offer some sort of repayment, either economic or emotional or both, for the help that they receive (Martinez and Aldrich, 2011). In contrast, the chronology of the methodology used in the study of Hansen (1995) allowed significantly stronger interpretations about the relationship between pre-founding networking activities and subsequent new organization.
growth. Moreover, Ozgen and Baron (2007) found that social networks provide an important key to understanding entrepreneurship in general.

In addition, we established a positive significant correlation between networking activities and structure of the network: size of the network because \( p = 0.007 \), which is \( > 0.05 \). These findings proves that entrepreneurs need to discuss more and more with their peers, customers, families and others in order to have a feedback on their products. Hence, they must build and maintain networks and especially make sure that the size of their networks keeps on increasing as it will permit the growth of their start-ups. Accordingly, McAdam and Marlow (2008) stipulated that engaging in discussions with other entrepreneurs, for instance concerning problems, struggles and challenges revealed an element of commonality besides seems to promote a determination to persist with the start-up even when considerable problems were experienced. Thus, in accordance with them, sharing these problems gave a sense that difficulties were quite normal and manageable. Consequently, according to Soetanto (2017), examining the network characteristics, evidence materialized that entrepreneurs tended to count on their exploitative learning using strong ties in dealing with difficulties caused by external threats, which made the entrepreneurs closer to their close and trusted contacts, such as long-term business partners, family and friends.

5.3.3 The Structure of Entrepreneurial Networks on Start-ups’ Success

The researcher chose to analyze each components of the independent variable structure of entrepreneurial networks in order to generate better results for the study. Furthermore, measuring structural network properties is certainly among the most frequently chosen way of entrepreneurship research to make the network success hypothesis operational (Witt, 2004). However, the relationship between start-ups’ success and the structure of the network: Network Size variable is positive, but it is not statistically significant since \( p = 0.838 \) that means if \( p > 0.05 \), the test is not statistically significant. Moreover, there was a positive relationship between start-ups’ success and the structure of the network: commercial relationship as well as between start-ups’ success and the structure of the network: contributed variables but it is not statistically significant since their \( p \) are respectively equal to 0.543 and 0.810 (\( p = 0.543 \) and \( p = 0.810 \)). At the beginning of the study and with support of literature (Zaheer and Bell, 2005; Cruickshank and Rolland, 2006), it was assumed that the structure of the entrepreneurial plays a big role in the
success of a start-up. Nevertheless, the findings showed no relationship between the structure of entrepreneurial networks and start-ups’ success. We can further elaborate that an entrepreneur is not assured to succeed in business on the basis that he/she has only well-structured his/her networks. Other factors such as communication and leadership skills might need to be considered and as Aldrich and Reese (1993) stated that business survival is depending on many forces, only some are under an entrepreneur’s control.

Ostagaard and Birley (1996) found that both size of the commercial network and time spent developing supplier relationships were positively associated with performance of venture and precisely the apparent importance of developing investor relationships. Any business cannot grow with an unstructured supply chain or having bad relationships with its suppliers. Hence, entrepreneurs must keep and maintain a good relationship with their supplier in order to dream at a sustainable growth. Furthermore, the findings of Xie, Zuo, Zeng and Tam (2014) showed that the network sizes have a significant positive effect on firms’ innovation performance. Innovation is one of the key factors that lead to the success or great performance of a start-up. Therefore, it will be important to consider studying other variables that might be lead to the success of start-ups in future studies.

Martinez and Aldrich (2011) indicated that even though diversity provides advantages at the beginning of the entrepreneurial process, it seems to become more important as well as more common at later moments in the process of venture formation. In some studies such as Yang and Liu (2012), a network structure has a significantly positive impact on firm performance. Thus, it appears that we can suggest that the impact of network structure is related to the start-ups performance at each stage of growth rather than their overall success.

In addition, Leithwood and Azah (2016) specified that network size is worth further examination given the nature of productive collaboration. Furthermore, weak ties turn into more principal in the development of diverse networks because any entrepreneur can maintain a limited number of strong ties (Yang and Liu, 2012). Harris et al. (2012) also pointed out that generally, there is a consensus in networking research that a business owner who has a more open network with diverse connections (i.e. many weak ties and social connections) will have greater opportunities to develop a successful business than an individual with many connections within a single or closed network (highly interconnected networks). Consequently, further studies can concentrate on studying if
network size and diverse connections has a significant effect on the success of a start-up so that entrepreneurs are mainly advised to develop and maintain open networks. Likewise, it will be important to study the importance of network structure at each stage of the start-ups’ growth so that researchers are able to make effective and relevant conclusion on the relationship between network structure and start-ups’ development.

5.4 Conclusion

5.4.1 The benefits of PsyCap on start-ups’ success

Entrepreneurs are mostly perceived as optimistic, hopeful and resilient besides they must possess the characteristic of self- efficacy in order to succeed in their business. Starting a business is not easy and at the beginning of this study, it was assumed that PsyCap with its four components optimism, resiliency, self-efficacy, and hope lead an entrepreneur to the thriving of his/her business. However, the findings of this research showed that there is no relationship between PsyCap and start-ups’ success, which means that being optimistic, hopeful, self-confident and resilient does not guarantee an entrepreneur to succeed in his/her start-up. This outcome was a surprise to the researcher but after searching for the reason of the non-significant relationship, the researcher concluded that the cause could be the respondent’s age and status since 60% of respondents were between 18 and 24 years, thus very young and still students. Therefore, it brings another opportunity for further studies with more older and mature entrepreneurs.

5.4.2 The importance of networking activities on start-ups’ success

The findings of this study demonstrated that there is no relationship between networking activities and start-ups’ success, which the researcher thinks is due to the age of the respondents since 60% of the respondents are between 18 and 24 years old and are students. Moreover, another reason of the non-significant relationship between networking activities and start-ups’ success could be that developing and maintaining networks might not be the only characteristic that leads to the success of start-ups and the way you present yourself or your product might also play a big role to the thrive of start-ups. Hence, we will conclude that networking activities might be crucial to the growth of start-ups as it allows an entrepreneur to grow personally and helps in marketing his/her products and that other elements of networking activities needs to be looked at intensely.
However, for the purpose of this study, the researcher concluded that networking activities and start-ups’ success are not related.

5.4.3 The structure of entrepreneurial networks on start-ups’ success

In our study, we did not find any relationship between the structure of entrepreneurial networks and start-ups’ success. On the opinion of the researcher, she was not able to find a relationship because most of the respondents were very young and students and thus, cannot be considered as a true representation of all Kenyan entrepreneurs. Consequently, further studies needs to be undertaken and especially considering how difficult it is to measure the success of start-ups. Mostly, start-ups are determined successful on some basis such as their financial performance, supplier relationships or customer service. Therefore, in this study, the researcher concluded that there was no effect between network structure and start-ups’ success but there is an opportunity to study in the future the impact of network structure on financial performance, supplier relationships or customer relations in start-ups.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 The Benefits of PsyCap on Start-ups’ Success

Since there was no relationship between PsyCap and the success of start-ups in this study, the researcher recommends that further studies should separate the different domains of PsyCap. Optimism, resiliency, self-efficacy, and hope should be study separately and not the overall PsyCap as it was done in this research. Hence, it will aid to know the wide impact of each of the four components of PsyCap on start-ups and if each will have a relationship with start-ups’ success.

5.5.1.2 The Importance of Networking Activities on Start-ups’ Success

The results of the study indicates no relationship between networking activities and start-ups’ success and therefore, the researcher recommends future studies on the importance of strong and weak ties to the performance of start-ups. We also suggest that the effect of networking activities should be analyzed at the maturity of a start-up i.e. when it has become a company.
5.5.1.3 The Structure of Entrepreneurial Networks on Start-ups’ Success

In this study, the researcher indicates no relationship between network structure and start-ups’ success and thus, the researcher recommends future studies on the effect of the structure of entrepreneurial networks on the success of firms. Since firms are defined as established companies rather than new incorporated ones (start-ups), one might find a significant relationship between them.

5.5.2 Recommendations for Further Research

This research was restricted to USIU-Africa entrepreneurs that are either students or part of the incubation program, and hence, they might not represent entrepreneurs and aspiring entrepreneurs in Kenya. Future researchers could carry out the exploration of these relationships in studies with larger sample sizes.

In addition, further studies could extend and look at the effect of Psychological Capital and networks on the success of start-ups in Africa where many small and medium sized enterprises thrive. There are very few researches on the factors that lead start-ups to succeed in Africa and thus, it will help to understand the driving force of entrepreneurship in Africa and add to existing literature.
REFERENCES


Bell, M., Cordingley, P. , & Mitchell, H. (2006).*The Impact of Networks on Pupils, Practitioners, Organisations and the Communities They Serve*. Nottingham: National College for School Leadership


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APPENDICES

APPENDIX I: Letter of Introduction

P. O. Box 14628 – 00100, Nairobi, Kenya.
Tel: 0725151542
Email: vanessa.nkeshimana@gmail.com

May 12th, 2017

Dear Respondent,

I am Vanessa Inamahonda Nkeshimana from the United States International University-Africa’s Chandaria School of Business Administration and shall be conducting a research on effect of Psychological Capital (PsyCap) and networks on the success of start-ups for the award of an academic certificate by the school. The study seeks to discover how the entrepreneurial principles affect the success of start-ups.

You have been chosen as one of the respondents to this questionnaire because you are an entrepreneur who runs or aspires to run a start-up. In this regard, I kindly request you to fill the questionnaire. The response of the questions and any information will be strictly for academic research as well as the purpose and the information provided will be purely treated with confidence and anonymity. Results of the study will be vital for current and future students as well as researchers. Your assistance and support will be highly appreciated. If you would like a summary of the findings of the research, please do not hesitate to send an email to vanessa.nkeshimana@gmail.com or call on 0725 151 542.

Thank you in advance for taking time to fill the attached questionnaire.

Yours sincerely,

Vanessa Inamahonda Nkeshimana
APPENDIX II: Questionnaire

This questionnaire is designed to find out your assessment on the effect of psychological capital and networks on the success of start-ups in Kenya. All responses will be strictly confidential. Your anonymity will be preserved and all information is only intended for academic purpose of this study.

Thank you for taking time to participate in this survey. This will only take 10 minutes.

1. Age
   - 18 to 24
   - 25 to 34
   - 35 to 44
   - 45 to 54
   - 55 to 64
   - 65 to 74
   - 75 or older

2. Gender
   - Male
   - Female

3. Start-up Status
   - I only have a business idea.
   - I have started working on my business idea.
   - I have launched my business, but yet to make a profit.
   - I have achieved break-even.
   - My business venture is now profitable.

4. Education Level
   - Undergraduate
   - Graduate
   - Other (please specify)
5. Right now, I’m optimistic about my future

☐ Strongly Disagree  ☐ Disagree  ☐ Neutral  ☐ Agree  ☐ Strongly Agree

6. Kindly indicate how much these two statements apply or does not apply to you using the following Likert scale.

<table>
<thead>
<tr>
<th></th>
<th>Does not apply at all</th>
<th>Somehow does not apply</th>
<th>Somehow applies to me</th>
<th>Applies very strongly to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am regarded as an energetic person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I like to do new and difficult things</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Kindly indicate how you view these two statements on yourself.

<table>
<thead>
<tr>
<th></th>
<th>Definitely False</th>
<th>Usually False</th>
<th>Somehow False</th>
<th>Sometimes False</th>
<th>Sometimes True</th>
<th>Somehow True</th>
<th>Usually True</th>
<th>Definitely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can think of many ways to reach my current goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. At the present time, I am energetically pursuing my goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. In a typical week, how many hours do you spend developing contacts (meeting new people) with whom you can discuss business matters?

☐ Low (0 - 2.9)  ☐ Medium (3- 6.9)  ☐ High (7 or more)

9. In a typical week, how many hours do you spend maintaining contacts (talking to people you already know) about business matters?

☐ Low (0 – 1.4)  ☐ Medium (1.5 - 3.9)  ☐ High (4 or more)
10. From time to time, most people discuss important business matters or business plans with other people. Looking back over the past month, please estimate the number of people with whom you have discussed aspects of starting a new business or operating your current business.  

- Low (0 - 2.9)  
- Medium (3- 7.9)  
- High (8 or more)

11. How many of these people have a commercial relationship with your firm?  

12. To what extent have the people you talked to contributed to the aspects of contacts with new customers, market information, computer information, access to distribution channels, new contacts, advertising by word of mouth, general advice, product and service development as well as assistance in obtaining business loans or investors of your business?  

- Not all  
- To a very little extent  
- To a little extent  
- To a large extent  
- To a very large extent

13. Kindly indicate how much emphasis you place on the following in your start-up for decision-making purposes.

<table>
<thead>
<tr>
<th></th>
<th>No consideration</th>
<th>Slight emphasis</th>
<th>Some emphasis</th>
<th>Substantial emphasis</th>
<th>A great deal of emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sales Growth</td>
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<tr>
<td>2. Return on Sales</td>
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<tr>
<td>3. Cash flow</td>
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<tr>
<td>4. Investments</td>
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<tr>
<td>5. Net Profit</td>
<td></td>
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<tr>
<td>6. Return on Assets</td>
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<tr>
<td>7. Growth in Market Share</td>
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<tr>
<td>8. Growth in the net worth of the company.</td>
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</tbody>
</table>
14. Kindly indicate how satisfied or dissatisfied you are on the following.

<table>
<thead>
<tr>
<th></th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Firm’s Performance</td>
<td></td>
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<tr>
<td>on Sales Growth</td>
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<td>2. Firm’s Performance</td>
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<td>on Return on Sales</td>
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<td>3. Firm’s Performance</td>
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<td>on Cash flow</td>
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<td>4. Firm’s Performance</td>
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<td>on Investments</td>
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<td>5. Firm’s Performance</td>
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<td>on Net Profit</td>
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<td>6. Firm’s Performance</td>
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<td>on Return on Assets</td>
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<td>7. Firm’s Performance</td>
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<tr>
<td>on Growth in Market</td>
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<tr>
<td>Share</td>
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<tr>
<td>8. Firm’s Performance</td>
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<tr>
<td>on Growth in the net</td>
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<tr>
<td>worth of the company.</td>
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</tbody>
</table>

15. Subjectively compare the performance of your company, based on sales growth, return on sales, cash flow, return on investment, net profits, return on assets, growth in market share and in the net worth of the company to the performance of competitors you are aware of and that are at about the same age and stage of development.

☐ Somewhat lower  ☐ About the same  ☐ Moderately higher
☐ Significantly higher ☐ A great deal higher

-------THE END-------

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