

MOSHI CO-OPERATIVE UNIVERSITY

**DETERMINANTS OF YOUTH SELF-EMPLOYMENT IN
BUJUMBURA-MAIRIE, BURUNDI**

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BY


CALIXTE NINTUNZE

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF
BUSINESS MANAGEMENT OF THE MOSHI CO-OPERATIVE
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DECEMBER, 2023

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I, **Calixte Nintunze**, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other higher learning institution for a similar or any other academic award.

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CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by the Moshi Co-operative University a Dissertation titled '**Determinants of Youth Self-employment in Bujumbura-Mairie, Burundi**' in preparation for partial fulfilment of the requirements for the award of a degree of Master in Business Management of Moshi Co-operative University.

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LIST OF ABBREVIATIONS AND ACRONYMS

ABEJ	: Burundian Agency for Youth Employment
BIJE	: Youth Investment Bank
BNEP	: Burundian National Employment Plan
CVI	: Content Validity Index
EAC	: East African Community
GFI	: Goodness-of-Fit Index
IBM	: International Business Machines
ILO	: International Labour Organization
MLR	: Multiple Linear Regression
NEET	: Not in Education, Employment, or Training
NFI	: Normed Fit Index
NGOs	: Non-Governmental Organizations
OECD	: Organization Economic Cooperation and Development
PAEEJ	: Economic Empowerment and Youth Employment Programme
PLS	: Partial Least Square
RBV	: Resource Based View
SDG	: Sustainable Development Goals
SEM	: Structural Equation Model
SPSS	: Statistical Package for the Social Sciences
SRMR	: Standardized Root Mean Square Residual
Std. Dev.	: Standard Deviation
TPB	: Theory of Planned Behaviour
UNESCO	: United Nations Educational, Scientific, and Cultural Organization
UNICEF	: United Nations Children's Fund
USA	: United States of America
VIF	: Variance of Inflation Factor

ABSTRACT

In light of the growing global issue of youth unemployment and particularly in Burundi, this research assesses the determinants of youth self-employment in Bujumbura-Mairie. The study aims to explore the influence of demographic, socio-economic, and psychological factors on youth's pursuit of self-employment. Data were collected from 378 self-employed youth in Bujumbura-Mairie using disproportionate stratified and snowball sampling techniques. The study employed a cross-sectional research design, utilizing both questionnaires and interviews for data collection. Descriptive and inferential analyses were conducted, including Multiple Linear Regression (MLR) and Structural Equation Modelling (SEM), utilizing IBM SPSS 25 and SMART-PLS. Demographic analysis revealed that age ($\beta=0.288$, $P<0.001$), education ($\beta=0.007$, $P<0.05$), and skills ($\beta=0.009$, $P<0.05$) significantly influenced the decision to become self-employed. Socio-economic factors highlighted the importance of access to financial resources ($\beta=0.044$, $P<0.05$) and social networks ($\beta=0.238$, $P<0.001$), with the latter playing a substantial role in influencing self-employment decisions. Psychological factors emphasized the need for achievement ($\beta=0.897$, $t=59.832$, $p<0.001$) and entrepreneurial intention ($\beta=0.048$, $t=2.201$, $p<0.05$) as the driving forces behind youth self-employment. In light of these compelling findings, this research conclusively establishes that youth self-employment in Bujumbura-Mairie, Burundi, is significantly influenced by age, education, skills, financial resources, social networks, the need for achievement, and entrepreneurial intention. The study recommends a shift towards practical skill development in entrepreneurial education and mentorship programmes to address the creativity gap among youth. Additionally, it calls for improved access to financial resources through youth-friendly loan access points and advocacy for more inclusive loan policies. The establishment of local business hubs and community-driven initiatives can further support solo entrepreneurs. Collaborative efforts with government agencies to streamline loan processes and integrate financial literacy are essential.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Self-employment plays a crucial role in fostering economic growth at both the individual and societal levels. It not only supports individuals in their economic development by creating job opportunities and increasing income (Lesane & Akitunde, 2020), but also reduces income inequality per capita and stimulates overall economic growth (Tsvetkova, 2019). Additionally, Bruchell *et al.* (2019) highlight that self-employment and entrepreneurship programs are considered effective at addressing unemployment issues, fostering innovation, and promoting entrepreneurial economies (Chang *et al.*, 2022). Self-employment often emerges as a viable option for individuals who face disadvantages in the wage sector (Samoës *et al.*, 2016).

On a global scale, self-employed individuals constitute an average of 46.5% of the labour force, with only 12% of them residing in high-income economies (ILO, 2021). For instance, the self-employment rate in the European Union stands at a mere 15.27%, and it is even lower at 6.59% in the United States. In developed countries like the USA, research indicates that older individuals are more inclined towards self-employment - compared to their younger counterparts. This tendency is attributed to the experience and resource acquisition, including access to credit, that older individuals possess, while young people often struggle to accumulate the capital and managerial skills required to initiate businesses (Steven & Laurel, 2016). In Europe, a majority of young self-employed workers tend to have lower educational attainment (Eurostat, 2021).

In emerging economies, particularly China and India, self-employment stands as one of the primary sources of income for working individuals. According to a World Bank report (2023), 46% of the labour force are self-employed in China, and a striking 76.01% are self-employed in India. Miao (2015) argues that since China has shifted towards a market economy, self-employment has played a significant role in both labour market growth and overall economic development. The study also underscores self-employment's role in providing autonomy and independence. Similarly, research by Xia (2022) reveals that a substantial number of people in China choose self-employment in pursuit of increased income. In India, Tamvada (2022) argues that

higher levels of education reduce the likelihood of individuals opting for self-employment.

In Africa, self-employment rates vary across regions, with northern Africa recording the lowest levels compared to other regions. In Northern Africa, self-employment rates range from 25% to 48%. In contrast, Sub-Saharan Africa demonstrates a much higher reliance on self-employment, accounting for approximately 75% of the total labour force (ILO, 2022). Schoof (2006) conducted a study examining the key factors hindering youth entrepreneurship across various countries in Sub-Saharan Africa. The study identified access to start-up capital as the primary impediment to youth entrepreneurship.

In East Africa, Self-employment rates exceed 50% in all partner states except Kenya, which stands at 49.27% (OECD, 2021). South Sudan recorded the highest rate at 87.99% in 2020, followed by Burundi (85.8%), Tanzania (83.63.68%), the Democratic Republic of Congo (79.48%), Uganda (77.32%), and Rwanda (66.29%). Despite limited literature on self-employment in the East African Community, research by Mpakaniye (2017) in Rwanda highlights the multifaceted benefits of self-employment at both individual and societal levels. It allows youth to earn a livelihood, fulfil their family's needs, create job opportunities, elevate their socio-economic status, reduce government dependency, and increase government revenue. However, the study also identifies challenges that hinder youth from entering self-employment, including lack of capital, training, commitment, and creativity.

In Burundi, as in many developing countries, self-employment rates are notably high. Paradoxically, Burundian youth, constituting over 65% of the population (UNICEF 2020), face significant unemployment challenges. Since 2017, the youth unemployment rate has steadily increased, reaching 3.39% in 2021 (ILO, 2022). This trend can be attributed to the slow growth of the private sector and the inability of the public sector to provide jobs for all graduates (Adisco & Cordaid, 2019). Furthermore, youth often find themselves disadvantaged in the formal sector due to their lack of experience, exacerbating their economic woes. Despite government encouragement, including the insertion of entrepreneurial education in primary schools, the creation of the Youth Investment Bank (BIJ), and the Economic Empowerment and Youth Employment Programme (PAEEJ) for youth to pursue self-employment as a viable

solution, challenges persist, such as an inadequate education system and limited access to financial resources, hindering their successful venture creation.

Existing literature on self-employment has explored several determinants, including demographic, educational, and experiential factors. Demographic factors enable individuals to identify opportunities and gather necessary resources (Asonike, 2019). Education equips individuals with the ability to identify entrepreneurial opportunities (Tamvada, 2022). Experience is also a significant factor, with those with prior entrepreneurial experience having a higher likelihood of success (Benedicto, 2018). Additionally, socio-economic factors, including financial resource access, family, friends, and business networks, play a vital role in supporting new entrepreneurs by providing motivation, advice, and financial support (Liguori *et al.*, 2019). Notably, individuals from families with a self-employment background are more inclined towards self-employment (Mwita, 2019). Psychological characteristics such as creativity and risk aversion also influence decisions and behaviours related to self-employment (Ilori & Ayedun, 2022). Despite the growing body of literature on determinants of self-employment in developing countries (Tamvada, 2022), the existing research was conducted in other countries, including Ethiopia (Melak & Derbe, 2021), Tanzania (Mwita, 2019; Amina, 2017), Uganda, and Kenya (Baluku *et al.*, 2020), but none addressed the determinants of self-employment in the Burundian context.

1.2 Statement of the Problem

Both the private and public sectors in Burundi are falling short in creating ample job opportunities for unemployed youths. Consequently, over the past five years, there has been a steady increase in the youth unemployment rate: 2.98% in 2017, 3.02% in 2018, 3.06% in 2019, 3.25% in 2020, and 3.39% in 2021 (ILO, 2022). This rise in youth unemployment underscores the inability of young individuals to create their own jobs and bridge the employment gap in both the formal and informal sectors.

In response to this pressing issue, the government of Burundi has embarked on ambitious policy measures and interventions aimed at promoting self-employment among the youth. Noteworthy among these policies is the establishment of the Burundian Agency for Youth Employment (ABEJ) via Decree No. 100/92 dated May 31, 2010. The primary objective of ABEJ is to equip young individuals with the

requisite professional experience and skills through structured internships, thereby enabling them to meet formal job prerequisites and, potentially, become self-employed (Presidency of the Republic of Burundi, 2010). More recently, the inception of the Youth Investment Bank (BIJE) in 2020 has aimed to provide financial support to young entrepreneurs by offering low-interest credit facilities (BIJE, 2023). Additionally, the Economic Empowerment and Youth Employment Programme (PAEEJ), initiated in 2021, seeks to facilitate youth development through capacity-building initiatives and financial backing (PAEEJ, 2023). However, despite these governmental endeavours, young individuals continue to encounter challenges in establishing and sustaining their entrepreneurial ventures.

Furthermore, the issue of unemployment has garnered significant attention within academic discourse, with researchers consistently advocating self-employment as an efficacious means to combat unemployment and alleviate poverty (Yerrabati, 2022). Notably, while research on self-employment is on the rise (Sununu, 2022; Mwatsika, 2021; Shin & Kim, 2020; Otto *et al.*, 2019), a lacuna persists in comprehending the determinants of youth self-employment within the context of developing nations (Morrar, 2021). Furthermore, while some studies related to self-employment have been conducted in other parts of the world, including the UK (Francis & George, 2014), Ethiopia (Melak & Derbe, 2021), Tanzania (Mwita, 2019; Amina, 2017), Uganda, and Kenya (Baluku *et al.*, 2020), few of them specially examine the factors that drive youth into self-employment within both formal and informal sectors, as well as the challenges they encounter along the way.

Significantly, a conspicuous dearth of literature exists pertaining to self-employment and entrepreneurship within the distinctive Burundian context. Generalizing findings from research conducted in dissimilar sociological, economic, and political environments to Burundi's unique circumstances remains imprudent. Therefore, this study seeks to address this knowledge gap by investigating the determinants of youth self-employment in Burundi.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to assess factors that drive youth self-employment in Bujumbura-Mairie, Burundi.

1.3.2 Specific Objectives

The specific objectives are to:

- i) Determine the influence of demographic factors on self-employment entry in Bujumbura-Mairie;
- ii) Examine the role of socio-economic factors on youth self-employment in Bujumbura-Mairie;
- iii) Investigate the effect of psychological factors on youth self-employment in Bujumbura-Mairie.

1.4 Research Questions

This research was guided by the following questions:

- i) What demographic factors influence youth self-employment entry in Bujumbura-Mairie?
- ii) What role do socio-economic factors play in youth self-employment entry in Bujumbura-Mairie?
- iii) Which psychological factors influence youth self-employment entry in Bujumbura-Mairie?

1.5 Justification of the Study

The findings of this research are expected to make a novel contribution to the realization of various objectives at international, regional, sub-regional, and national levels. Job creation remains a top priority in both developed and developing countries.

At the international level, the research findings will contribute to the achievement of the 17 Sustainable Development Goals (SDGs). Notable among these are the 8th goal (Decent Work and Economic Growth), the 9th goal (Industry, Innovation, and Infrastructure), and the 10th goal (Reduced Inequalities). These goals emphasize job creation as a means to enhance living standards, foster sustainable economic growth, promote employment and income generation through innovation, and reduce income and other inequalities within and between countries.

At the sub-regional level, the research findings will support the realization of the East African Community Vision “2050.” This vision aligns with the overarching objective of the East African Industrialization Strategy (2012-2031), which aims to boost industrial production and productivity, expedite the structural transformation of EAC

economies, and facilitate sustainable wealth creation, improved incomes, and an enhanced standard of living for the community.

On the national front, the research findings will contribute to the Burundian National Employment Plan (2018-2027). The plan's overarching goal is to structurally transform the Burundian economy, fostering robust, sustainable, resilient, and inclusive growth, creating decent employment opportunities for all, and enhancing social well-being. Additionally, the research results are expected to offer valuable insights to Burundian policymakers, aiding in their efforts to combat youth unemployment and poverty. Moreover, the findings will shed light on the challenges that young Burundians face when embarking on their entrepreneurial endeavours, offering valuable guidance to those seeking to transition from unemployment to self-employment. Promotion of self-employment is envisioned as a means to alleviate unemployment, increase individual incomes within the self-employment sector, and bolster the contribution of self-employment to overall economic growth and development.

1.6 Organization of the Study

This study is structured into five chapters, each serving a distinct purpose. The first chapter, titled "Introduction," provides a comprehensive overview, encompassing the background of the study, research problem, the research objectives, the research questions, and the significance of the study. Moving on to the second chapter, referred to as the "Literature Review," it delves into key terms, establishes the theoretical framework, conducts an empirical review, and establishes the conceptual framework. The third chapter, designated "Research Methodology," outlines the research design, details the targeted population, specifies the types of data and data collection methods, discusses the sample size and sampling technique, and addresses the validity and reliability of the data, along with the data analysis process. The fourth chapter focuses on presenting the findings and facilitating discussions around them. Finally, the fifth chapter encapsulates the study, featuring a summary, conclusion, recommendations, and suggestions for potential areas of future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Operational Definitions

2.1.1. Demographic Factors

Demographic factors are factors that are used to define the characteristics of a person or a population. Dubey (2022) defines demographical factors as personal information that includes age, family income, and locality of stay. Omoush *et al.* (2023) define factors such as age, gender, and working experience as demographic variables. Regarding this study, education, age, experience, and skills are considered as demographic factors

2.1.1.1 Education

Education is a cumulative process of development of intellectual abilities, skills, and attitudes, all of which form our various outlooks and dispositions to action in life generally (Adesemowo & Sotonade, 2022). In the context of this study, education refers to the schooling or training obtained through academic institutions.

2.1.1.2 Age

This study adopted Alexander's (2013) definition of age, which defines it as the time that has passed since an individual's birth.

2.1.1.3 Experience

Experience refers to the collection of knowledge, competencies, emotions, and insights acquired by individuals through their direct participation in, or exposure to, a wide

range of activities, events, or circumstances over a period. It encompasses both practical skills and emotional wisdom, frequently stemming from personal interactions, observations, and engagement in a variety of life experiences. (Sinek, 2009; Gladwell, 2000). In this study, experience refers to knowledge and competencies that one has gained through their previous paid work.

2.1.1.4 Skills

Skills are specific, learned abilities or competencies that enable an individual to perform tasks, solve problems, or carry out activities effectively and efficiently (Vathanophas, 2007). In this study, skills refer to know-how that someone has acquired outside of school.

2.1.2 Socio-economic Factors

The term socio-economic condition/factors generally encompass two variables: social and economic conditions (Rahman *et al.*, 2023). Hossain *et al.* (2022) define “socio-economic” as a person’s relative place in society in terms of family money, political power, educational background, and professional prestige. In this study, socio-economic factors encompass family background, financial resources, and social networks

2.1.2.1 Family Background

Family background refers to the set of social, economic, cultural, and welfare characteristics of a family (Geske & Grinfelds, 2012). In this study, family background is defined as the employment or occupations of parents and other family members.

2.1.2.2 Social Networking

Social networks refer to any personal relationship such as family, friends, and business acquaintances connected with entrepreneurs through monetary transactions, shared knowledge and values, emotional ties, or blood ties (Matsuda, 2012). In this study, social networking means the self-employed people or entrepreneurs that someone is connected with, as well as his friends and family members.

2.1.3 Psychological Factors

Psychological factors refer to the processes that operate at the individual level and impact the mental state of the individual, thereby influencing behaviours (Upton, 2020).

This study adopted the same meaning, and by psychological factors, the researcher referred to the need for achievement, entrepreneurial intention, and risk aversion.

2.1.3.1 Achievement

Achievement motivation is the need for excellence and significant accomplishment, despite what rewards may be offered after the achievement has been met (Hsieh, 2011). In this study, need achievement indicates self-demonstration and personal economic growth.

2.1.4 Self-employment

Self-employment is defined as the employment of employers, workers who work for themselves, members of producers' co-operatives, and unpaid family workers (OECD, 2021). In this study, is defined as people who work for themselves, partners who work for themselves, or employed others but whose main source of income is from the business they run.

2.1.5 Youth

The term youth may adopt many different connotations basing on regions. However, for young people, legal status can also widely vary for different purposes. The United Nations (UN) defines a young person as someone whose age varies between 15 and 25 years old. The African Youth Charter argues that the term youth shall refer to every person whose age ranges from 15 to 35 years old. Thus, in this research, the term youth refers to someone whose age is between 18 and 35.

2.1.5 Self-employment and Entrepreneurship

Self-employment and entrepreneurship are often used interchangeably as concepts. However, these terms exhibit both disparities and similarities. On one hand, the distinction between self-employment and entrepreneurship lies in the organization of work (Szaban and Skrzek, 2018). Self-employed individuals may not necessarily create new ventures or pursue innovative business projects (Patel & Thatcher, 2014), whereas distinctive characteristics of entrepreneurs prominently include creativity and innovation. Baluku (2017) highlights that the focus of self-employment is to increase individuals' income, while entrepreneurship aims to create long-lasting new enterprises. Thus, a self-employed person can be considered as someone who owns a business; he can either work alone or employ others; an entrepreneur is someone who innovates or brings something new into the market (Degsew & Tegegne, 2021).

On the other hand, both entrepreneurs and self-employed individuals require a risk-taking attitude and entrepreneurial skills to work independently and achieve profitability (Szaban & Skrzek, 2018). Furthermore, entrepreneurs can be individuals who are either self-employed or business owners (Gorgievski and Stephan, 2016). Therefore, all entrepreneurs are self-employed individuals, while the reverse is not necessarily true (Rabbeh *et al.*, 2020). In the context of this study, these two terms are considered synonymous.

2.2 Theoretical Framework

This research drew guidance from the Resource-Based View (RBV) theory and the Theory of Planned Behaviour (TPB). The Resource-Based View theory, originally introduced by Birger Wernerfelt in 1984 and subsequently developed by Jay B. Barney in 1991, finds its roots in the field of strategic management. According to RBV theory, strategic resources are characterized by their value in cost reduction or enhancing customer value, rarity, that makes them difficult for competitors to access, and their complexity, which makes imitation or substitution challenging (Barney, 1991). RBV theory underscores the importance of these resources being unique and immobile, and it plays a pivotal role in explaining how resources contribute to an organization's growth (Kabue & Kilila, 2016).

Furthermore, RBV theory has gained significance beyond strategic management and has found relevance in fields like entrepreneurship. While some researchers have criticized RBV theory for the lack of precise definitions of resources across studies (Kellermans *et al.*, 2016), entrepreneurial research has applied RBV principles to understand the factors influencing individual and start-up performance (Khamis *et al.*, 2021). It emphasizes that founders' access to resources significantly predicts entrepreneurial opportunities and new venture growth (Alvarez & Busenitz, 2001). Resources, as defined by RBV researchers like Kellermans *et al.* (2016), encompass tangible and intangible assets such as human capital, financial capital, physical capital, and relationship capital, which enable firms to create products or services for success. Therefore, RBV theory intersects closely with human capital theory and social capital theory (Mealk & Derbe, 2021). This research incorporates these theories to complement RBV theory by focusing on specific resources rather than a broad range.

RBV theory aligns well with this research, bridging human capital theory and social network theory. Human capital theory emphasizes that human capital resources, including education, experience, and skills, drive the ability to recognize opportunities, access essential financial resources, and start a new business (Asonike, 2019). Social network theory highlights the importance of establishing connections to leverage opportunities with available resources (Struckell *et al.*, 2022). This research benefits from RBV theory because self-employment demands specific individual resources (Brieger & De Clercq, 2019). In the context of this study, RBV theory was employed to investigate strategic resources, conceptualized as demographic factors (education, experience, skills), and socio-economic factors (family background, financial capital, social network) that influence youth's entry into self-employment.

While resources remain significant predictors of self-employment (Thomas, 2009), focusing solely on resources as determinants of self-employment entry is insufficient. Self-employment is a multifaceted concept that includes psychological and entrepreneurial mindset components (Melak & Derbe, 2021). Therefore, there is a need to introduce an additional theory, the Theory of Planned Behaviour (TPB), a social-psychological theory introduced by Ajzen (1991). TPB posits that a higher intention to engage in a behaviour leads to the actual performance of that behaviour. It suggests that behavioural intentions are influenced by attitudes towards the behaviour, subjective norms, and perceived behavioural control (Tornikoski & Maalaoui, 2019; Ajzen, 1991). In the context of this research, TPB was employed to investigate whether youths' attitudes towards autonomy, achievement, risk aversion, and entrepreneurial intentions result in their pursuit of self-employment.

2.3 Empirical Review

2.3.1 Demographic Factors and Self-employment

Numerous researchers have explored the relationship between self-employment and demographic factors. Morrar *et al.* (2021) conducted an analysis of the determinants of youth self-employment entry in Palestine. The objective of the study was to investigate how demographic factors, including age, gender, and education, influence the likelihood of young adults in Palestine engaging in self-employment. A multinomial logistic model was employed for the analysis.

The findings of this research provided intriguing insights. It was observed that as individuals age, their likelihood of engaging in self-employment increases. However, the results deviate from the conventional understanding of a curvilinear relationship between age and self-employment. In terms of gender, the researcher revealed that young men are more inclined to pursue self-employment compared to young women. Additionally, there is a noteworthy negative impact of higher education levels on self-employment entry for both youth and the general population. Interestingly, these results align with the findings of Berggren and Olofsson (2021) in Sweden.

On the contrary, post-graduation training emerged as a significant factor influencing self-employment among highly educated youth. This demonstrates that educational attainment can still foster self-employment opportunities when complemented by specific training.

Furthermore, several researchers have explored similar demographic factors. For instance, Dvoulety' (2018) conducted a study assessing the determinants of self-employment in Europe, drawing from three waves of the European Survey on Working Conditions (2005, 2010, and 2015). The research found that job creation through self-employment was more prevalent among individuals in middle age who possessed significant experience and higher levels of education. Conversely, Sattar *et al.* (2019) investigated the determinants of self-employment in Pakistan. Their results highlighted an intriguing finding: individuals with primary education had an increased likelihood of engaging in self-employment. In a similar vein, Degsew and Tegegne (2021) undertook a study to analyse the factors influencing youth self-employment career choices in Ethiopia. Their overarching goal was to identify the characteristics that influence youth in their preference for various self-employment business options. Their findings revealed that both gender and training played pivotal roles in shaping the decisions of youth to opt for self-employment business alternatives.

As highlighted in the preceding discussion, the literature underscores the ongoing debate surrounding the influence of education and age on individuals' decisions to pursue self-employment. This research aims to make a meaningful contribution to this evolving discourse within the literature by conducting an in-depth examination of the demographic factors propelling young individuals into self-employment in Bujumbura-Mairie. Specifically, the study delves into the dimensions of age, education, experience,

and skills to shed light on the nuanced interplay of these factors. By doing so, the study addresses the research gap in understanding the precise roles these demographic elements play in motivating youth to embark on a self-employment journey in Bujumbura-Mairie.

2.3.2. Socio-economic Factors and Self-employment

Empirical literature has consistently displayed a keen interest in understanding the socio-economic factors that propel individuals towards self-employment. In a study by Mengesha (2020), which explored the determinants of entrepreneurial intention among graduate students in Ethiopia using an explanatory research design, it was revealed that a family business background exerted a positive influence on the entrepreneurial intentions of graduating students. Similar findings were reported by Mwita (2019) in Tanzania. Additionally, Faloye (2018) conducted research among fresh graduates in Nigeria, investigating the key determinants of entrepreneurship intentions and the connection between entrepreneurship attitudes and business ownership intentions. This study emphasized the significant impact of familial, peer, and mentor influences on entrepreneurial intention.

While research examining the impact of financial resources on self-employment remains limited, some studies have sought to elucidate the importance of financial access in initiating successful businesses. Matli and Ngoepe (2021) conducted research in South Africa, focusing on the life situations and experiences of individuals classified as NEET (Not in Education, Employment, or Training). Their findings revealed that the absence of financial support hampers at NEET individuals, perpetuating their vulnerability and hindering their efforts to transition out of this status. In the United Kingdom, Atherton and Wu (2018) analysed whether an entrepreneur's personal capital positively or negatively affected outcomes in self-employment. Their results indicated that entrepreneurs with higher levels of personal capital tended to enjoy higher incomes, whereas those with lower levels of personal capital were more likely to experience negative returns from self-employment, often perceiving it as self-exploitation.

Queiroz *et al.* (2020) devolved into the impact of local networks on the establishment of new businesses, such as food stalls and restaurants, within the Syrian community in Rio de Janeiro. Using exploratory research design and in-depth interviews, this study revealed that access to capital was closely tied to the importance of family networks

and the establishment of local support networks. Additionally, Linda (2009) found that social networks significantly influenced self-employment outcomes, with exceptions for individuals engaged in self-employment as a secondary job in China.

Despite the valuable insights garnered from these studies, a research gap becomes evident when considering the context of Bujumbura-Mairie, Burundi. While international studies provide a foundation, there remains a need to operate within the specific socio-cultural and economic landscape of Bujumbura-Mairie. This research can offer a more nuanced understanding of how these socio-economic factors interact in this unique setting and can inform the development of targeted policies and initiatives aimed at supporting and promoting youth self-employment in the region. Furthermore, while prior research has shed light on certain aspects, less is known about the role played by social networks in promoting young people's engagement in self-employment within the local context. Examining the influence and dynamics of socio-economic factors including access to financial resources, social network, and family background can provide crucial insights into the mechanisms driving youth towards entrepreneurial endeavours in Bujumbura-Mairie, filling a notable void in the existing literature.

2.3.3 Psychological Factors and Self-employment

Empirical literature extensively examines the relationship between psychological factors and self-employment. In a study by Tufa (2021), the influence of autonomy and entrepreneurial intention on self-employment was investigated within the context of technical educational education and training institutions in Ethiopia. Utilizing both explanatory and descriptive research designs, data were collected from 124 participants and analysed using descriptive and hierarchical regression analysis. The findings revealed that while the levels of autonomy and entrepreneurial intention were not notably high, they had a significant impact on self-employment.

Numerous scholars have explored the role of risk aversion in the entry into self-employment worldwide. Bachert and Sadrieh (2020) examined individuals' risk-taking propensities as a determinant of self-employment entry in Germany. Their findings indicated that as the risk-taking propensity increased, so did the likelihood of engaging in self-employment. Similarly, Gromova (2021) conducted a study in Russia, focusing on the labour market and considering the number of entrepreneurs, their quality, and

their motivation for choosing self-employment. The study revealed that risk preferences were positively correlated with the choice of entrepreneurial activity in a non-linear manner.

While the existing literature has produced a substantial body of research on self-employment, there is a notable gap concerning the concept of youth self-employment. Much of the extant literature on self-employment has centred on investigating the determinants of entrepreneurial intention, primarily utilizing students as the unit of analysis (Cera *et al.*, 2020; Mohammed, 2019). However, only a limited number of studies have used youths engaged in both formal and informal self-employment as the unit of analysis. Furthermore, to the best of the researcher's knowledge, there is a dearth of research dedicated to understanding the determinants of self-employment, specifically among the youth, within the context of Burundi. Consequently, this research endeavour aims to bridge this knowledge and contextual gap by investigating the determinants of youth self-employment in Bujumbura-Mairie, Burundi.

2.4. Conceptual Framework

Based on the theoretical framework and the empirical review, the author proposes the following conceptual framework model for the present study.

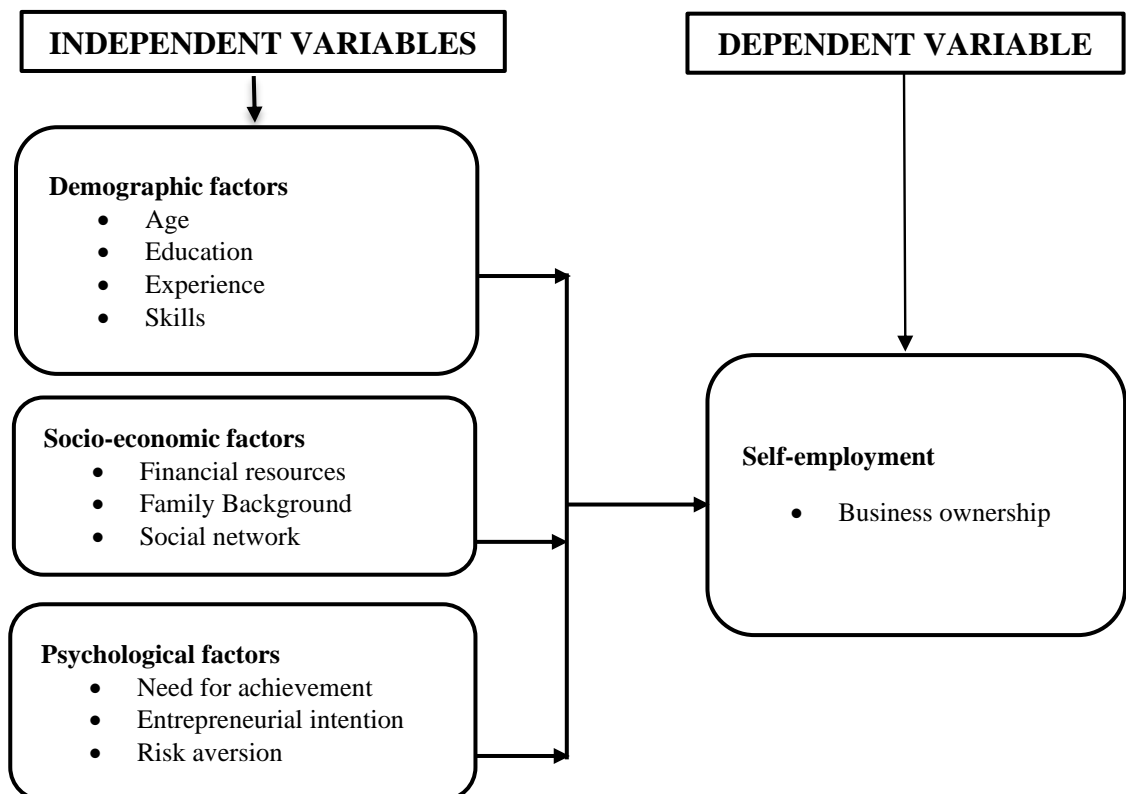


Figure 1: Conceptual Framework

Source: Author, 2023.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study utilized a cross-sectional survey design. This research design was chosen for its appropriateness in examining the relationship between independent variables (demographic, socio-economic, and psychological factors) and the dependent variable (self-employment) during a specific time frame as indicated by Jafari (2023). The data collection for this study spanned from June to July 2023. In this approach, variables were observed at a single point in time without exerting any influence on them, as explained by Kendra (2022). Consequently, cross-sectional survey design allowed the researcher to gather data through survey methods from a representative sample of the population in a one-time effort, following the methodology discussed by Christopher and Udoh (2020).

3.2 Geographical Coverage

This study was conducted in Bujumbura-Mairie, the economic capital of Burundi, located in the western part of the country along the northern coast of Lake Tanganyika. Bujumbura-Mairie was chosen as the focal point for two main reasons: it is the most populous and industrialized city in the country, as reported by UNESCO (2017), and it alone represents approximately 80% of all Small and Medium Enterprises (SEMs) and informal activities in Burundi, as noted by Pierre (2023). Consequently, it is evident that Bujumbura-Mairie has a significantly higher number of self-employed individuals compared to the other regions of Burundi.

3.3 Target Population of the Study

The study targeted young people between the ages of 18 and 35 who were involved in self-employment within both the formal and informal sectors in Bujumbura-Mairie, Burundi. The size of this population was inherently unknown since it comprises young individuals in both formal and informal sectors. This particular group was chosen for investigation due to its significant representation in the Burundian population, as noted by UNICIF (2020). Unfortunately, these young individuals often face socio-economic disadvantages and are underserved by society, as highlighted by Justina (2021). Consequently, they encounter challenges when seeking meaningful roles in society and engaging in economic activities.

3.4 Sample Size and Sampling Techniques

3.4.1 Sample Size

The study involved a sample size of 385 youths who were engaged in both formal and informal micro-economic activities. Since the exact size of the target population of youth in self-employment was unknown, the sample size was determined using the formula provided by Cochran (1997).

The formula for calculating the sample size for an unknown population is as follows:

$$S = (Z^2 * P * (1 - P)) / M^2$$

Where:

S = Sample size for unknown population

Z = Z-Score (1.96 determined on the Confidence level of 95 %.)

P = Population proportion (assumed to be 50% = 0.5)

M = Margin of Error 0.05

$$\text{Now, } S = \{1.96^2 \times 0.5 \times (1 - 0.5)\} / 0.05^2$$

$$S = 384.12$$

Therefore, the minimum sample size required for the study was 385.

3.4.2 Sampling Technique

In this research, a combination of probability and non-probability sampling methods was employed, specially, the use of disproportionate stratified and snowball sampling techniques. As described by Taherdoost (2016), stratified sampling is utilized when there is variability within the proportion. In this study, the population was divided into

subgroups based on factors like income, occupation, company size, and age. Subsequently, participants were selected based on their occupation.

For individuals engaged in selling boutiques (kiosks), a total of 43 respondents, equivalent to 11.2% of the total sample size, were selected. Mobile money agents dealing with electronic money contributed 104 respondents, constituting 27% of the sample size. The group involved in the business of clothing, shoes, and bags consisted of 99 respondents, making up 25.7% of the total sample size. Bar owners accounted for 18 respondents, representing 4.7% of the sample size. Individuals operating restaurants and cafeterias were represented by 30 respondents, making up 7.3% of the sample size. The soap manufacturing sector was represented by 4 respondents, comprising 1% of the sample. The stationery and photo studio business included 41 respondents, accounting for 10.6% of the sample size. Barbers and hairdressers were represented by 46 respondents, constituting 11.9% of the total.

Subsequently, the snowball sampling technique was employed to identify self-employed youths across various occupational sectors. As noted by Parker *et al.* (2019), snowball sampling's adaptability and networking aspects make it a valuable tool for recruiting research participants. The researcher initiated the process with a small group of initial contacts who were conveniently self-employed in either the formal or informal sector in Bujumbura-Mairie, Burundi. These initial participants were then asked to refer to additional potential participants, and this process continued until the estimated sample size was achieved.

Thus, the use of both stratified and snowball sampling methods enabled the researcher to gather sufficient and accurate data pertinent to this study.

Table 1: Disproportionate Stratified Random Sampling

SE career	Frequencies	Percentage
Boutique	43	11.2
Mobile money agent	104	27.0
Sell of clothes/shoes/bags	99	25.7
Bar	18	4.7
Restaurant/cafeteria	30	7.8
Soap factory	4	1.0
Stationery/photos studio	41	10.6
Barber men/hairdresser	46	11.9
Total	385	100.0

Source: Author, 2023

3.5 Data Collection

3.5.1 Types of Data

This study utilized both quantitative and qualitative data. Quantitative data were used to measure and analyse numerical aspects, facilitating a comprehensive understanding of the research subject. In contrast, qualitative data provided insights into the thoughts, feelings, attitudes, and behaviours in the context in which they occur.

3.5.2 Source of Data and Data Collection Tools

The study utilized primary data as the source of information, with youths being approached to provide data in the form of completed questionnaires and interviews.

3.6 Data Collection Methods

The study employed a survey method, utilizing a self-administered structured questionnaire with closed-ended questions to collect primary data from respondents. Initially, all the questions in the questionnaire were translated into the local language, “Kirundi,” which is the most widely spoken language in Burundi. This was done to eliminate language barriers and ensure the participation of all selected respondents. Subsequently, the researcher personally visited the respondents at their usual workplaces, distributed the questionnaires, and provided necessary assistance to respondents if they encountered any questions that puzzled them.

Despite administering 385 questionnaires, representing 100% of the same sample size, only 378 questionnaires were returned, accounting for 98.18% of the sample size. This discrepancy occurred because seven respondents, constituting 1.82%, began filling out the questionnaires but left them incomplete. However, as per Babbie (2004), return rates above 50% are considered acceptable for analysis and publication; 60% is considered good; and 70% is considered very good. Consequently, the return rate of 98.18% for the collected questionnaires was deemed very good for the study.

Table 2: Responses Rate

Questionnaires	Frequencies	Percentage
Administered	385	100
Completely filled	378	98.18
Half-filled	7	1.82

Source: Author, 2023

3.7 Interviews

After analysing the data obtained from questionnaires, the researcher gained a more comprehensive understanding of the research problem. This enabled to formulate specific questions for subsequent interviews. The researcher held high hopes that the insights gathered during these interviews would provide clarity on certain surprising findings from the questionnaires.

In this study, data collection was primarily accomplished through key informant interviews. These interviews involved individuals with a deep understanding of the dynamics within youth self-employment. This method relied on purposive sampling to gather valuable information. The key informant interviews aimed to tap into the firsthand knowledge of self-employed individuals, as their unique insights were expected to shed light on the root causes of challenges and suggest practical solutions.

Consequently, the interviews were conducted to 3 distinct groups of self-employed youths: successful business owners who have been operating their business for 5 years or more and employ 2 or more employees; partnership business owners; and solo employed individuals. Moreover, officers from governmental institutions empowering youth (PAEEJ). A total of 8 open-ended interviews were carried out, with 2 interviews conducted within each of the three groups. The overarching goal was to gain a comprehensive understanding of the factors influencing self-employed individuals across diverse backgrounds.

The interviews were instrumental in unravelling the intricacies of these entrepreneurs' experiences, helping researchers identify both the driving forces and the obstacles encountered by young entrepreneurs. Appendix 3 outlines the selected topics that guided the interview sessions. Each interview lasted approximately 30 minutes, resulting in a total of 2 hours and 40 min spent on data collection.

3.7 Validity and Reliability of Data

3.7.1 Data Validity

This study utilized the Content Validity Index (CVI) to assess how well the items (questions) in the questionnaire are related to self-employment. Content validity is crucial to validating assessment tools such as questionnaires (Yusoff, 2019). The item-CVI method was employed to compute the CVI. A panel of six experts in the fields of

economics and entrepreneurship was asked to assign scores to each item. Consequently, a rating scale ranging from 1 “not relevant” to 4 “highly relevant” was used to enable the experts to assess the items. Therefore, the CVI for each item was calculated as the proportion of experts in agreement (scoring 3 and 4) divided by the total number of experts. Given that the panel consisted of six experts, items with a CVI value of 0.83 and above were retained, in accordance with the recommendations of Polit and Beck (2006) and Polit *et al.* (2007). The results are presented in the table below.

Table 3: Item-CVI Results

Items	Expert1	Expert2	Expert3	Expert4	Expert5	Expert6	Agreed experts	CVI	Decision
Q1	3	4	3	3	4	4	6	1	Accept
Q2	1	4	4	4	4	4	5	0.83	Accept
Q3	4	4	4	4	4	4	6	1	Accept
Q4	3	3	4	4	3	3	6	1	Accept
Q5	4	4	4	4	4	4	6	1	Accept
Q6	4	4	4	4	4	4	6	1	Accept
Q7	4	4	4	1	4	4	5	0.83	Accept
Q8	3	4	3	4	3	3	6	1	Accept
Q9	4	4	4	4	4	1	5	0.83	Accept
Q10	4	4	4	4	4	4	6	1	Accept
Q11	4	4	3	3	4	3	6	1	Accept
Q12	4	4	4	4	4	4	6	1	Accept
Q13	3	4	3	3	4	4	6	1	Accept
Q14	1	1	2	4	2	4	1	0.16	Reject
Q15	4	4	4	4	4	4	6	1	Accept
Q16	4	4	4	4	4	4	6	1	Accept
Q17	1	4	1	3	1	1	2	0.33	Reject
Q18	4	4	4	1	4	4	5	0.83	Accept
Q19	4	4	4	4	4	4	6	1	Accept
Q20	4	4	4	4	4	4	6	1	Accept
Q21	1	1	2	2	1	2	1	0.16	Reject
Q22	2	2	1	1	2	4	6	1	Accept
Q23	1	3	4	3	1	1	3	0.5	Reject
Q24	4	4	4	4	4	4	6	1	Accept
Q25	1	1	1	1	1	1	0	0	Reject
Q26	4	4	4	4	4	4	6	1	Accept
Q27	1	4	1	1	3	1	2	0.33	Reject
Q28	4	4	4	4	4	4	6	1	Accept
Q29	4	4	4	4	4	4	6	1	Accept
Q30	4	4	4	4	4	4	6	1	Accept
Q31	4	4	4	4	4	4	6	1	Accept
Q32	4	4	4	4	4	4	6	1	Accept
Q33	4	4	4	4	4	4	6	1	Accept
Q34	4	4	4	4	4	4	6	1	Accept
Q35	1	2	3	1	2	1	1	0.16	Reject

Source: Author, 2023.

3.7.2 Data Reliability

The study employed the Cronbach's alpha test to assess the data's reliability scale and internal consistency of the questionnaires. Heggstad *et al.* (2019) assert that that Cronbach's alpha is primarily utilized in social and organizational sciences to assess internal consistency and reliability. Generally, an acceptable reliability level falls within the range of 0.6 to 0.7, while a value of 0.8 and above signifies a very high level (Roohafza *et al.*, 2021).

In this study, Cronbach's alpha was computed through a pilot study involving 50 respondents. Crosswell (2014) suggests that the pilot sample size should exceed the number of items in the questionnaire. Consequently, 50 questionnaires were distributed to 50 respondents to assess internal consistency before administering them to a larger sample size. The analysis of the pilot study revealed a Cronbach's alpha of 0.778, approximately 77.8% for objective one. For objective two, the pilot study yielded a Cronbach's alpha of 0.813, approximately 81.3%, and for objective three, the result showed a Cronbach's Alpha of 0.855, approximately 85.5%. These results indicate a high level of internal consistency in the questionnaire and strong data reliability, consistent with the criteria outlined by Roohafza *et al.* (2021).

Table 4: Result of Data Reliability Test

Variables	Cronbach Alpha	N of Items	N of respondents
Demographic factors	0.778	12	50
Socio-demographic factors	0.813	4	50
Psychological factors	0.855	6	50

Source: Author, 2023

3.8 Data Analysis

To assess the factors influencing self-employment among young individuals in Bujumbura-Mairie, the researcher employed Statistical Package for the Social Sciences (SPSS) IBM 25 software and SMART-PLS version 4 for the quantitative analysis of the data. This study utilized both descriptive and inferential methods to scrutinize the quantitative data. Descriptive statistical techniques, such as calculating mean values, standard deviations, and percentages, were employed. Additionally, inferential methods like multiple linear regression and structural equation Models were applied to transform the raw data into numerical data that can be scientifically interpreted (Amirdelfan *et al.*, 2020). The interpretation of means was based on a mean index

devised by Kalatya and Moronge (2017), where a mean ranging from 1.0 to 2.5 indicated disagreement, a mean of 2.6 to 3.4 suggested neutrality, and a mean falling between 3.5 and 5.0 indicated agreement.

3.8.1. Measurements

This section provides detailed information on how variables were measured and coded to be compatible with SPSS. Self-employment, which serves as the dependent variable, was operationalized using the statements: “I have the autonomy and independence to determine work methods and allocate resources as needed for my activities” and “I take full ownership of my work and its outcome,” aimed at capturing the concept of work ownership, which is an indicator of self-employment. Respondents were provided with a 5-point Likert scale, and their measurements, and responses were recorded on a scale from 1 to 5 (ranging from “strongly disagree” at 1 to “strongly disagree” at 5).

In the context of this study, the determinants of self-employment are categorized into three distinct groups: demographic factors, socio-economic factors, and psychological factors, which are considered independent variables.

Table 5: Measurement of Self-employment

Variables	Measurement	Coding
I have the autonomy and independence to determine work methods and allocate resources as needed for my activities	Ordinal	1=SD, 2=D, 3=N,4= A,5=SA
I take full ownership of my work and its outcome	Ordinal	1=SD, 2=D, 3=N,4= A,5=SA

Source: Author, 2023

3.8.1.1 Demographic factors measurements

In the context of this study, demographic factors were assessed through their respective indicators, including age, education, experience, and skills, each of which had distinct measurement methods.

Age was quantified in intervals, with self-employed youth asked to specify their age, which was then categorized into four intervals (1=between 18 and 20, 2=between 20 and 25, 3=between 25 and 30, and 4=between 30 and 35). Additionally, to gauge the influence of age on the decision to become self-employed, respondents were queried on their agreement or disagreement with the statement: “My age played a role in my

decision to become self-employed.” Their responses were recorded on an ordinal Likert scale ranging from 1 to 5, where 1 indicated “strongly disagree” and 5 indicated “strongly agree.”

Education was measured by assessing educational attainment, representing the level of education achieved. Self-employed individuals were asked to indicate their educational attainment (1=primary school, 2=secondary school, 3=Bachelor, 4=other). Furthermore, to evaluate the impact of educational attainment on the decision to become self-employed, respondents were also asked to express their agreement or disagreement with the statement: “My educational attainment influenced my decision to engage in self-employment.” Their responses were recorded on an ordinal Likert scale from 1 to 5, with 1 representing “strongly disagree,” and 5 representing “strongly agree.”

Experience was quantified in terms of years and was categorized into two groups: experience in the same field as their current self-employment or experience in a different field. To determine the number of years of experience, respondents were posed with the following questions: “Before engaging in self-employment, did you have any work experience in the same field as your current self-employment? Before engaging in self-employment, did you have any work experience in a different field from your current self-employment?” (1=yes, 0= otherwise). If yes, they were requested to indicate the number of years of working experience (1 = 1 year, 2= 2years, 3=3years, 4=4 years, 5=5years and above).

To gauge the impact of skills on their business operations, self-employed individuals were surveyed regarding the statement: “The success of my business is closely tied to my skills and know-how.” They were instructed to express their level of agreement or disagreement, which was then recorded on a five-point ordinal Likert scale, where 1 represented “strongly disagree” and 5 represented “strongly agree.” This assessment allowed the researcher to explore the spectrum from low skills to high skills in relation to their perceived influence on business success.

Table 6: Measurements of Demographic Factors

Variables	Measurements	Coding
Age	Interval	1=18-20, 2= 20-25,3= 25-30, 4=30-35

	Ordinal scale	1=SD, 2=D, 3=N,4= A,5=SA
Education attainment	Nominal/categorical	1=primary school 2=secondary school 3=Bachelor 4=other
Years of experience in the same field as the current career	Ordinal Nominal	1=SD, 2=D, 3=N,4= A,5=SA 0=no experience, 1=1 year, 2=2years, 3=3years, 4=4years, 5=5years and above
Years of experience in different field as the current career	Nominal	0=no experience, 1=1 year, 2=2years, 3=3years, 4=4years, 5=5years and above
Skills	Ordinal	1=SD, 2=D, 3=N,4= A,5= SA

Source: Author, 2023

3.8.1.2. Socio-economic factors measurement

In this study, socio-economic factors encompass financial resource access, social network, and family background. Financial resource access was assessed by having respondents indicate their level of agreement or disagreement with the statement: “I was able to gather enough financial resources to start the business.” Responses were recorded on an ordinal Likert scale ranging from 1 to 5, where 1 represented “strongly disagree,” and 5 represented “strongly agree.”

Social network was evaluated by having respondents express their agreement or disagreement with the following statements: “I knew three or more people who do the same job as mine, and the social network influenced me to become self-employed.” Similar to the previous factor, responses were recorded on an ordinal Likert scale from 1 to 5, where 1 indicated “strongly disagree,” and 5 indicated “strongly disagree”

Family background was measured by heaving respondents indicate their level of agreement with the statement: “I am involved in the same business as my family members.” Again, responses were recorded on an ordinal Likert scale from 1 to 5, with 1 representing “strongly disagree,” and 5 representing “strongly agree.”

Table 7: Measurement of Socio-economic Factors

Variables	Measurement	Coding
Financial Resource Access	Ordinal	1=SD, 2=D, 3=N,4= A,5=SA
Entrepreneurial Network	Ordinal	1=SD, 2=D, 3=N,4= A,5=SA
Family Background	Ordinal	1=SD, 2=D, 3=N,4= A,5=SA

Source: Author, 2023

3.8.1.3 Psychological Factors Measurements

In this study, psychological factors were represented by need for achievement, entrepreneurial intention, and risk aversion.

The need for achievement was assessed by having respondents indicate their level of agreement or disagreement with the following statements: “I enjoy taking on tasks that allow me to demonstrate my skills and abilities” and “I need to prove that I can economically succeed.” Responses were recorded on an ordinal Likert scale from 1 to 5, where 1 signified “strongly disagree” and 5 signified “strongly agree,” with 1 indicating a low need for achievement and 5 indicating a high need for achievement.

Entrepreneurial intention was gauged by having respondents express their agreement or disagreement with the statement: “I like exploring and creating new opportunities, and I am motivated to set and reach challenging goals.” Again, responses were recorded on an ordinal Likert scale from 1 to 5, with 1 indicating low entrepreneurial intention and 5 indicating high entrepreneurial intention.

Risk aversion was assessed by having respondents indicate their agreement or disagreement with the statement: “I tend to avoid situations where there is a significant risk of failure, and I feel uneasy when faced with uncertainty or financial risk.” Respondents were then asked to express their opinion using an ordinal Likert scale ranging from 1 to 5, where 1 represented “strongly disagree” and 5 represented “strongly agree.” Consequently, a rating of 1 indicated low risk aversion, while a rating of 5 indicated a higher degree of risk aversion.

Table 8: Measurements of Psychological Factors

Variables	Measurement	Coding
Need for achievement	Ordinal	1=SD, 2=D, 3=N,4= A,5= SA
Entrepreneurial Intention	Ordinal	1=SD, 2=D, 3=N,4= A,5= SA
Risk aversion	Ordinal	1=SD, 2=D, 3=N,4= A,5= SA

Source: Author, 2023

3.8.1.4. Measurement of other variables related to respondent and occupation profile

Within this study, some variables such as gender, marital status, and job legal status were observed in order to collect more information related to the profile of the respondent and the nature of the business in which youths are more interested. The

business legal status was also used to identify whether the young self-employed person is in the formal or informal sector.

Gender was measured as a nominal variable. The respondent was asked to indicate his gender (1=male, 0=otherwise). Marital status was also measured as a categorical variable. Self-employed young people were asked to indicate if they are single, married, divorced, widow, or widower (1=single, 2=married,3=divorced, 4=widow, 5=widow). The business legal status was measured as a nominal variable. Self-employed young people were asked to indicate if either their businesses are registered or not (1=registered,0=otherwise).

Table 9: Measurement of Other Variables Related to Respondent and Occupation profile

Variables	Measurement	Coding
Gender	Nominal	1=Male, 0=Otherwise
Marital status	Categorical	1=Single,2=Married, 3=Divorced, 4=Widow, 5=Widower
Business legal Status	Nominal	1=Registered, 2=Not registered

Source: Author, 2023

3.9 Models Specifications

3.9.1 Objective One Model Specification

To analyse the first objective, the researcher employed a Multiple Linear Regression (MLR) model. The model was chosen because it enables the examination of various independent variables, whether they are categorical or continuous, as demonstrated by Abdalla (2012). In the context of this study, MLR allowed the researcher to investigate the influence of age, unemployment, educational attainment, experience, and skills on the likelihood of individuals becoming self-employed. This model was particularly well-suited for this research, as the dependent variable (self-employment) was treated as continuous due to the application of a mean transformation.

The equation for objective one was:

$$\gamma = \beta_0 + \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \beta_4\chi_4 + \varepsilon_0 \quad (1)$$

Where:

γ =self-employment; β_0 : regression constant; χ_1 =age, χ_2 = education χ_3 =experience; χ_4 = skills; β_1 =coefficient of χ_1 ; β_2 =coefficient of χ_2 ; β_3 =coefficient of χ_3 ;

β_4 = coefficient of χ_4 ; ε_0 =error term.

3.9.1.1 Multiple Linear Regression Assumptions

Many statistical tests hinge on specific assumptions regarding the variables under analysis. When these assumptions are not satisfied, it can lead to unreliable outcomes, potentially causing Type I or Type II errors or an inaccurate assessment of significance and effect size (Ernst & Albers, 2017). To guard against this, the researcher assessed various assumptions of multiple linear regression, including linearity, multicollinearity, normality, and the independence of residuals.

3.9.1.2 Linear Relationship

The Multiple Linear Regression presupposes that a linear connection exists between the dependent variable and the predictor variables. Thus, in this study, the linear relationship between youth self-employment and demographic factors such as age, education attainment, prior experience, and skills was tested using the linearity test. The linearity test is intended to determine the relationship pattern between the independent variables and the dependent variable, whether is linear or not. The linearity test was determined using F test, and the data were processed using SPSS version 25 software. Below is the linearity test table.

Table 10: Linearity Test Results

		Sum of	df	Mean	F	sig
		Square		Square		
SE*Age	Combined	922.993	4	230.748	3387.335	0.000
	Linearity	922.826	1	922.826	13546.889	0.000
	Deviation from Linearity	.167	3	0.056	0.817	0.485
SE*Education attainment	Combined	288.988	4	72.247	40.867	0.000
	Linearity	229.018	1	229.018	129.545	0.000
	Deviation from Linearity	59.969	3	19.990		0.000
SE*Prior experience	Combined	38.904	4	9.726	3.989	0.004
	Linearity	36.429	1	36.429	14.940	0.000
	Deviation from Linearity	2.476	3	0.2483	0.338	0.798
SE*Skills	Combined	332.531	4	83.133	50.349	0.000
	Linearity	330.789	1	330.797	200.346	0.000
	Deviation from Linearity	1.733	3	0.578	0.350	0.789

Source: Author, 2023.

The table presented above summarizes the results of linearity tests conducted to examine the relationship between youth self-employment and various demographic factors. In accordance with Mutahhara (2021), the interpretation of these tests is as follows: if the p-value from the linearity test is 0.05 or less ($P \leq 0.05$), it suggests the presence of a linear pattern in the data; Conversely, if the p-value from the deviation from linearity test is 0.05 or less, it indicates a departure from linearity. Then, the findings indicate the following: the p-value from the linearity test is highly significant, below the 1% level of significance ($p < 0.001$), suggesting strong evidence in favour of a linear relationship; on the other hand, the p-value from the deviation from linearity test is consistently greater than 0.05 ($p > 0.05$), except in the case of education attainment, where it remains highly significant at the 1% level ($p < 0.001$) across all instances.

Thus, these results provide robust support for a linear relationship between youth self-employment and demographic factors, as indicated by the highly significant p-value from the linearity test ($p < 0.001$), while there is no substantial evidence to suggest significant deviation from linearity, as evident from the consistently greater than 0.005 p-values in the deviation from linearity tests. Therefore, we can conclude that a linear pattern exists between youth self-employment and these demographic factors.

3.9.1.3 Normality

The assumption of Linear Regression Model (MLR) stipulates that the residuals follow a normal distribution. As normality plays a crucial role in statistical analysis, various tests are available to assess it. However, one of the simplest and most straightforward ways to check for normality is by creating a histogram. Chambers *et al.* (1983) emphasized that graphical methods offer valuable tools for confirming or identifying deviations from assumptions.

In this study, we examined the normality assumption in multiple linear regressions using a histogram of residuals. As illustrated in figure 2, the histogram exhibits a bell-shaped curve. According to Keya and Imon (2018), data that forms a bell-shaped curve are considered to follow a normal distribution. Consequently, the results presented in figure 2 indicate that the assumption of normality for the variable of interest is reasonably satisfied, as the residual plot appears to follow a normal distribution.

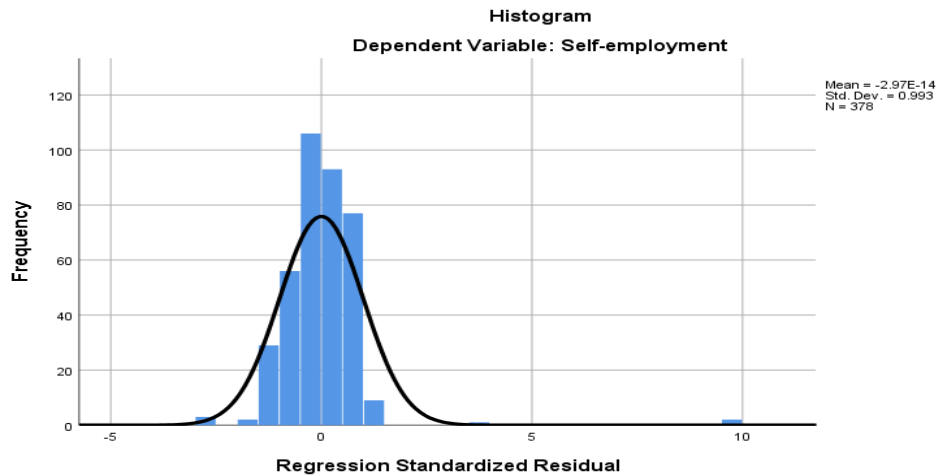


Figure 2: Normality histogram

3.9.1.4 Test for Multicollinearity

Multicollinearity in a multiple linear regression analysis arises when there are strong correlations not only between the independent variables and the dependent variable but also among the independent variables themselves (Naara, 2020). This phenomenon can lead to some variables in the study becoming statistically insignificant.

In the context of this study, we assess the presence of multicollinearity using two key metrics: tolerance and the Variance Inflation Factor (VIF). The VIF in a linear regression model quantifies how much the accuracy of regression estimates is comprised due to multicollinearity (Mark *et al.*, 2020). Typically, multicollinearity is identified when the tolerance value falls below 0.20 and the VIF value exceeds 5 within the regression model (Afundate and Alan, 2023).

In this particular analysis, the tolerance values range between 0.459 and 0.949, while the VIF values range from 1.053 to 2.180. Consequently, based on these statistics, it is reasonable to conclude that multicollinearity is not significant within the regression model.

Table 11: Multicollinearity test statistics

Variables	Tolerance	VIF
Age	0.459	2.180
Education attainment	0.710	1.409
Prior experience	0.687	1.456
Skills	0.656	1.525

Source: Author, 2023

3.9.1.5 Test for Independence of Residuals

One of the fundamental assumptions in linear regression is the independence of residuals. In the context of our study, we assessed this assumption by employing the Durbin-Watson statistic test. This statistic is instrumental in identifying autocorrelation within the residuals of a regression model. Autocorrelation manifests when the residuals exhibit patterns or correlations across different observations, indicating a lack of independence. The Durbin-Watson statistic test generates values that fall within the range of 0 to 4. Values close to 0 signify a strong positive correlation, while those near 4 suggest a negative autocorrelation. Values near 2, on the other hand, indicate no autocorrelation, as generally acknowledged (Alani & Alumini, 2023).

In this specific study, the findings represented in table 23 reveal a Durbin-Watson statistic test value of 1.592. This value suggests a positive correlation within the residuals, but it is not statistically significant. Typically, values between 1.5 and 2.5 are considered acceptable, indicating a relatively high degree of independence among residuals.

3.9.1.6 Overall Regression Analysis

The goodness of fit of the multiple regression model describes how well the regression fits the data points. It is measured using the square of the multiple correlation coefficient R^2 , also called the coefficient of multiple determination and the adjusted R^2 . The coefficient of determination is a statistical measure of how close the data fit the regression line; the adjusted R^2 is often preferred as a measure of regression model quality. It varies between 0 and 100%; closer to 100% is the value which indicates that the model explains all the variability of the response data around its mean.

The R^2 obtained in table 17 indicates that 96.6% of the total variation in self-employment can be explained by youths' age, education attainment, prior experience, and skills. The adjusted R^2 value in the study shows that 96.5% of the total variation of self-employment can be explained by the predictor variables used in the model. As the values of R^2 and adjusted R^2 are not very different, it appears that at least one of the predictor variables contributes information for the prediction of the response variable, i.e., self-employment. Thus, both values indicate that the model fits the data well.

Moreover, the regression model was tested for its overall ability to predict the response variable using an F-test or, equivalently, an analysis of variance (ANOVA) statistic [$F(5, 332) = 2094.741$], $p < 0.05$. It is observed that the p-value is 0.000, which also implies that the model estimated by the regression procedure is significant at α level of 0.05.

Table 12: Model Summary and Analysis of Variances of Youth Self-employment Data

Model Summary

Model	R	R Square	Adjusted R square	Std. Error of Estimate	R square change	F change	df1	df2	Sig change	Durbin-Watson
1	0.983	0.966	0.965	0.090	0.966	2094.741	5	372	0.000	1.592
ANOVA										
Model			Sum of Squares	df	Mean of Square	F	Sig			
1	Regression		85.111	5	17.022	2094.741	0.000			
	Residual		3.023	372	0.008					
	Total		88.133	377						

Source: Author, 2023.

3.9.2 Objective Two Model Specification

To address objective two, the researcher employed a Multiple Linear Regression (MLR) model. This choice of the MLR model was based on its capability to assess the relationship between variables, demonstrating the degree to which the independent variables impact the dependent variable's strength (Rebecca, 2020). Additionally, the dependent variable in this study was treated as continuous.

Within the scope of this research, the MLR model enabled us to scrutinize the impact of family background, financial access, and social networks on the likelihood of individuals pursuing self-employment. This selection of the model was opted for because the dependent variable, self-employment, was treated as continuous via a mean transformation.

The linear equation for objective two was:

$$\gamma = \beta_0 + \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \varepsilon_0 \quad (2)$$

Where:

γ =self-employment; β_0 =regression constant; χ_1 =financial access; χ_2 =family background; χ_3 =social network; β_1 =coefficient of χ_1 ; β_2 =coefficient of χ_2 ; β_3 =coefficient of χ_3 ; ε_0 =error term.

3.9.2.1 Multiple Linear Regression Assumptions

Many statistical tests hinge on specific assumptions regarding the variables under analysis. When these assumptions are not satisfied, it can lead to unreliable outcomes, potentially causing Type I or Type II errors or an inaccurate assessment of significance and effect size (Ernst & Albers, 2017). To guard against this, the researcher assessed various assumptions of multiple linear regression, including linearity, multicollinearity, normality, and the independence of residuals.

3.9.2.2 Linear Relationship of Socio-economic Factors and Self-employment

The Multiple Linear Regression presupposes that a linear connection exists between the dependent variable and the predictor variables. Thus, in this study, the linear relationship between youth self-employment and socio-economic factors such as financial resource access, social-network, and family background was tested using the linearity test. The linearity test is intended to determine the relationship pattern between the independent variables and the dependent variable, whether it is linear or not. The linearity test was determined using the F test, and the data were processed using SPSS version 25 software. Below is the linearity test table.

Table 13: Linearity Test Results of Social-economic Factors

ANOVA TEST

		Sum of Square	df	Mean Square	F	sig
SE*Financial Resource Access	Combined	5.336	4	1.334	6.009	0.000
	Linearity	4.264	1	4.264	19.211	0.000
	Deviation from Linearity	1.071	3	0.357	1.609	0.187
SE*Social Network	Combined	30.005	8	3.751	23.809	0.000
	Linearity	26.341	1	26.341	167.213	0.000
	Deviation from Linearity	3.664	7	0.523	3.323	0.002
SE*Family Background	Combined	28.149	4	7.037	43.760	0.000
	Linearity	21.936	1	21.936	136.406	0.000
	Deviation from Linearity	6.213	3	2.071	12.878	0.000

Source: Author, 2023

The table presented above summarizes the results of linearity tests conducted to examine the relationship between youth self-employment and various socio-economic factors. In accordance with Mutahhara (2021), the interpretation of these tests is as follows: if the p-value from the linearity test is 0.05 or less ($P \leq 0.05$), it suggests the presence of a linear pattern in the data; conversely, if the p-value from the deviation from the linearity test is 0.05 or less, it indicates a departure from linearity. Then, the findings indicate the following: the p-value from the linearity test is highly significant, below the 1% level of significance ($p < 0.001$), suggesting strong evidence in favour of a linear relationship; on the other hand, the p-value from the deviation from linearity test is consistently lesser than 0.05 ($p < 0.05$), except in the case of Financial Resource Access, suggesting that there is a departure from linearity in most of cases.

Thus, these results provide robust support for a linear relationship between youth self-employment and socio-economic factors, as indicated by the highly significant p-value from the linearity test ($p < 0.001$), while there is substantial evidence to suggest a significant deviation from linearity, as evident from the consistently lesser than 0.005 p-values in the deviation from linearity tests. Therefore, we can conclude that a linear pattern exists between youth self-employment and socio-economic factors.

3.9.2.3 Normality

The assumption of the Linear Regression Model (MLR) stipulates that the residuals follow a normal distribution. As normality plays a crucial role in statistical analysis, various tests are available to assess it. However, one of the simplest and most straightforward ways to check for normality is by creating a histogram. Chambers *et al.* (1983) emphasized that graphical methods offer valuable tools for confirming or identifying deviations from assumptions.

In this study, we examined the normality assumption in multiple linear regressions using a histogram of residuals. As illustrated in figure 3, the histogram exhibits a bell-shaped curve. According to Keya and Imon (2018), data that forms a bell-shaped curve are considered to follow a normal distribution. Consequently, the results presented in figure 3 indicate that the assumption of normality for the variable of interest is reasonably satisfied, as the residual plot appears to follow a normal distribution.

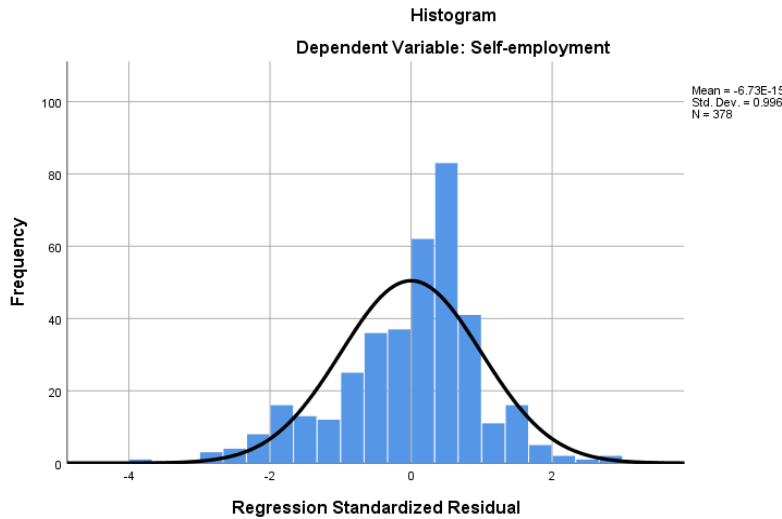


Figure 3: Normality Histogram of Social-Economic Factors

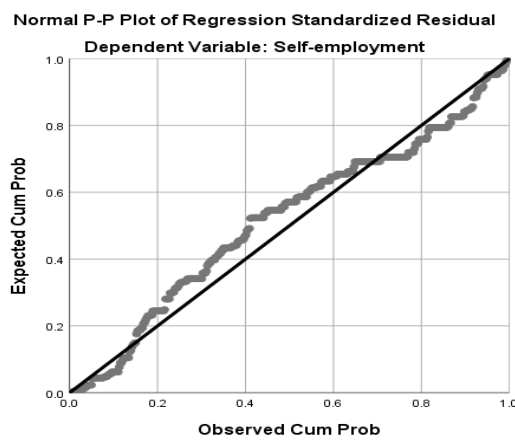


Figure 4: Normal P-P Plot of the Normality Test

3.9.2.4 Test for Multicollinearity of Socio-economic Factors

Multicollinearity in a Multiple Linear Regression analysis arises when there are strong correlations not only between the independent variables and the dependent variable but also among the independent variables themselves (Naara, 2020). This phenomenon can lead to some variables in the study becoming statistically insignificant.

In the context of this study, we assess the presence of multicollinearity using two key metrics: tolerance and the Variance Inflation Factor (VIF). The VIF in a linear regression model quantifies how much the accuracy of regression estimates is comprised due to multicollinearity (Mark *et al.*, 2020). Typically, multicollinearity is identified when the tolerance value falls below 0.20 and VIF value exceeds 5 within the regression model (Afundate & Alan, 2023).

In this particular analysis, the Tolerance values range between 0.839 and 0.931 (tolerance >0.20), while the VIF values range from 1.075 to 1.192 (VIF<5). Consequently, based on these statistics, it is reasonable to conclude that multicollinearity is not significant within the regression model.

Table 14: Multicollinearity Test Statistics

Variables	Tolerance	VIF
Financial Resource Access	0.931	1.075
Social Network	0.897	1.114
Family Background	0.839	1.192

Source: Author, 2023

3.9.2.5 Test for Independence of Residuals

One of the fundamental assumptions in the linear regression is independence of residuals. In the context of our study, we assessed this assumption by employing the Durbin-Watson statistic test. This statistic is instrumental in identifying autocorrelation within the residuals of a regression model. Autocorrelation manifests when the residuals exhibit patterns or correlations across different observations, indicating a lack of independence. The Durbin-Watson statistic test generates values that fall within the range of 0 to 4. Values close to 0 signify a strong positive correlation, while those near 4 suggest a negative autocorrelation. Values near 2, on the other hand, indicate no autocorrelation, as generally acknowledged (Alani & Alumini, 2023).

In this specific study, the findings represented in the Table 22 reveal a Durbin-Watson statistic test value of 2.073. This value suggests absence of auto-correlation. Typically, values between 1.5 and 2.5 are considered acceptable, indicating a relatively high degree of independence among residuals.

3.9.2.6 Goodness-of-fit

The goodness of fit of the multiple regression model describes how well the regression fits the data points. It is measured using the square of the multiple correlation coefficient R^2 , also called the coefficient of multiple determination, and the adjusted R^2 . The coefficient of determination is a statistical measure of how close the data fit the regression line, the adjusted R^2 is often preferred as a measure of regression model quality. It varies between 0 and 100%; closer to 100% is the value, which indicates that the model explains all the variability of the response data around its mean.

The R^2 obtained in Table 23 indicates that only 43.2% of the total variation in self-employment can be explained by youths' financial resource access, social network, and family background. The adjusted R^2 value in the study shows that 42.8% of the total variation in self-employment can be explained by the predictor variables used in the model. As the values of R^2 and adjusted R^2 are not very different, it appears that at least one of the predictor variables contributes information for the prediction of the response variable, i.e., self-employment. Thus, both values indicate that the model fits the data well.

Moreover, the regression model was tested for its overall ability to predict the response variable using an F-test or, equivalently, an analysis of variance (ANOVA) statistic [$F(5, 372) = 94.885$], $p < 0.05$. It is observed that the p-value is 0.000, which also implies that the model estimated by the regression procedure is significant at the α level of 0.05.

Table 15: Model Summary and Analysis of Variances of Youth Self-employment Data

Model Summary										
Model	R	R Square	Adjusted R square	Std. Error of Estimate	R square change	F change	df1	df2	Sig change	Durbin-Watson
1	0.657	0.432	0.428	0.366	0.432	94.885	3	374	0.000	2.073
ANOVA										
Model		Sum of Squares	df	Mean of Square	F	Sig				
1	Regression	38.089	5	12.696	94.885	0.000				
	Residual	50.044	372	0.134						
	Total	88.133	377							

Source: Author, 2023

3.9.3 Objective Three Model Specification

To address objective three, the researcher used the Partial Least Squares Structural Equation Modelling (PLS-SEM) method through the SMART-PLS software version 4. SMART-PLS is widely recognized as a valuable tool for conducting Structural Equation Modelling (SEM) research in the social sciences and has gained substantial popularity among researchers worldwide (Zaman *et al.*, 2021). SEM, classified as a second-generation multivariate analysis technique, is renowned for its capacity to assess theoretically supported linear and additive causal models (Statsoft, Ken, 2013).

The choice of this model held significance as it allowed the researcher to explore the relationships among various causal theoretical frameworks, encompassing multiple independent variables (exogenous variables) and the dependent variable (endogenous variables). Moreover, this model facilitated the examination of direct and moderating effects among various variables within complex models. This feature enhances the ability to comprehend attitudes, human perceptions, and behaviours within diverse contexts (Shaheen *et al.*, 2017). In the context of this research, the researcher utilized PLS SEM to assess the influence of entrepreneurial intention, risk attitude, and need for achievement on individuals' decisions to pursue self-employment.

The SEM equation was:

$$\gamma = \beta_0 + \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \beta_4\chi_4 + \varepsilon_0 \quad (3)$$

Where:

γ =self-employment; β_0 : regression constant; χ_1 =autonomy; χ_2 =achievement; χ_3 =entrepreneurial intension; χ_4 =Risk attitude; β_1 =coefficient of χ_1 ; β_2 =Coefficient of χ_2 ; β_3 =Coefficient of χ_3 ; β_4 = Coefficient of χ_4 ; ε_0 =error term.

3.9.3.1 PLS-SEM Path Diagram

In accordance with SEM principles, latent variables are categorized as either exogenous or endogenous. Exogenous latent variables have only outgoing arrows, indicating their role as independent variables (e.g., need for achievement, entrepreneurial intention, and risk aversion). Conversely, latent variables are considered endogenous when they have at least one incoming arrow, indicating their status as dependent variables (Jasinth, 2021), as is the case with self-employment in this study.

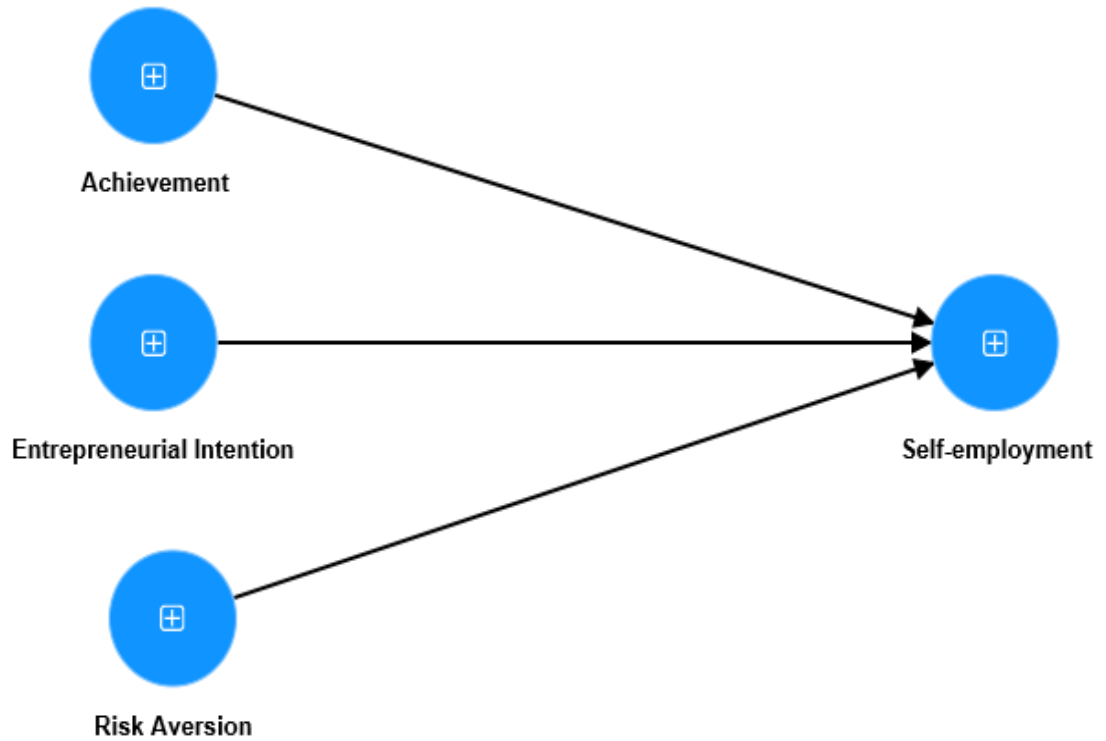


Figure 5: PLS-SEM path diagram

3.9.3.2 Assessment of the Outer Measurement Model

In this study, we conducted assessments of reliability and validity. As recommended by Hair and Lukas (2014), the researcher measured internal consistency using composite reliability. Hair *et al.* (2012) argued that composite reliability should be 7.0 or higher. Consequently, in this study, all indicators demonstrated composite reliability scores exceeding 7, as indicated in Table 16. This level of reliability is considered acceptable.

To establish convergent validity, the study utilized the Average Variance Extracted (AVE), which quantifies the correlation among indicators. According to Hair, Rischer, Sarstedt, and Ringle (2019), an AVE value of 0.5 or higher is deemed acceptable. In line with this criterion, all variables in this research exhibited AVE values exceeding 0.5, thus confirming the validity of the model (Table 16).

Table 16: Validity and Reliability

Variables	Composite reliability	Average variance extracted (AVE)
-----------	-----------------------	----------------------------------

Achievement	0.772	0.500
Entrepreneurial Intention	0.723	0.502
Risk aversion	0.871	0.503
Self-employment	0.852	0.744

Source: Author, 2023.

Additionally, another crucial aspect of validity testing involves assessing discriminant validity within the research. Discriminant validity helps to understand how well latent variables are represented by multiple indicators and analyses the extent to which these indicators and variables differ from one another. Discriminant validity can be assessed through various methods, including the Fornell and Lacker Criterion, cross-loading, and hetero-trait analysis (Ayaneh, 2021). To ensure discriminant validity, the study employed the Fornell and Lacker Criterion. According to Hair, Hult, Ringle, and Sarstedt (2014), this criterion involves comparing the square root of AVE with the correlations among latent variables. Importantly, in the findings, all diagonal values were found to be greater than the non-diagonal values as depicted in Table 26, thereby confirming the presence of discriminant validity.

Table 17: Discriminant Validity

Variables	Achievement	Entrepreneurial Intention	Risk aversion	Self-employment
Achievement	0.707			
Entrepreneurial Intention	0.2111	0.708		
Risk Aversion	0.006	0.010	0.709	
Self-employment	0.607	0.236	0.049	0.862

Source: Author, 2023

3.9.3.3 Evaluation of Model Quality and Fit

The structural model confirms the adequacy of the research model's quality. The multicollinearity test is used to examine whether there are significant inter-correlations among the independent components within the structural model. Afudante and Alan (2023) define multicollinearity as occurring when Variance Inflation Factor (VIF) value exceeds 5. The study's findings, as presented in Table 18, indicate that the VIF values for all variables are below 5. These results demonstrate the absence of multicollinearity in the data, signifying weak inter-correlations among the dependent variables.

Table 18: PLS-SEM Multicollinearity Test

Variables	VIF
AC1	1.000
AC2	1.000
RI1	1.000
RI2	1.000
RA1	1.000
RA2	1.000
OWN1	1.360
OWN2	1.360

Source: Author, 2023

Ebu and Ibrahim 2022) argue that a coefficient of determination (R^2) of at least 0.10 ensures a satisfactory model fit. The study's results reveal that the coefficient of determination (R^2) for self-employment is 0.827, indicating a strong fit. Furthermore, the coefficient of determination (R^2) value of 0.827 suggests that 82.7% of variability in youth self-employment can be explained by factors such as the need for achievement, entrepreneurial intention, and risk aversion.

In addition to this, PLS-Structural Equation Modelling employs a couple of indices to assess model fit, namely the Normed Fit Index (NFI) and Standardized Root Mean Square Residual (SRMR) (Henseler & Sarstedt, 2013). For a well-fitting model, Jessie (2021) and Kand & Ahn (2021) recommend that SRMR should be close to or below 0.08. Jasentha (2021) states that NFI should fall within the range of 0 to 1. Accordingly, the results presented in table 28 indicate a NFI of 0.665 and a SRMR of 0.072. Both indices confirm that the model fits well.

Table 19: PLS-SEM Goodness-of-Fit and Coefficient of Determination

Indices	Value
R^2	0.827
NFI	0.665
SRMR	0.072

Source: Author, 2023

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1. Profile of Respondents

4.1.1 Gender of Respondents

In the context of this study, there are noticeable gender disparities among young individuals engaged in self-employment, whether in formal or informal businesses in Bujumbura-Mairie. The survey findings clearly indicate a significant difference in participation, with young men being more actively involved in self-employment compared to their female counterparts. Out of the total sample size, 275 youths, constituting 72% of the sample, were men, while only 103 individuals, accounting for 27.2% were women (Table 21).

This observed gender gap can be attributed to several factors. Firstly, it aligns with the notion that young men often have a strong desire for autonomy and independence, motivating them to actively seek opportunities and seize any available prospects that come their way, more so than young women. Additionally, societal perceptions and

expectations may play a role, with traditional gender roles influencing the choices individuals make regarding career paths.

Furthermore, it's worth noting that men may have certain advantages when it comes to facing and enduring challenges, a trait that is closely linked to risk-taking. This increased capacity for risk-taking can facilitate men's access to start-up capital, potentially giving them an advantage in the realm of self-employment (Augustina & Pradesa, 2020).

4.1.2 Age of Respondents

Age represents a significant determinant of self-employment, as embarking on one's own business necessitates a certain level of maturity essential for positioning oneself and developing managerial skills. The findings presented in Table 21 show the age distribution among respondents, with 39.2% falling within the age category of 25-30; 26.2% in the 20-25 category; 24.3% within the 30-35 category; and 10.3% in the 18-20 category. This significant concentration in the 20-25 and 25-30 categories (65.4%) reveals that a substantial proportion of self-employed youths fall within the age range of 20 to 30, a phase where they transit from dependence on their parents to striving for economic independence.

It's noteworthy that in Burundi, the average age for secondary school and university graduation stands at 19 and 23, respectively. Typically, it takes nearly five additional years to secure one's first job, consequently, individuals in this age category are actively seeking employment opportunities, and when alternative avenues are scarce, they often turn to self-employment as a means of livelihood.

Moreover, previous studies have indicated that younger individuals tend to find intrapreneurial activities more appealing than their older counterparts. This preference can be attributed to various factors, including better health and a greater inclination for risk-taking (Abubakar *et al.*, 2014).

4.1.3 Marital Status of Respondents

The findings from the survey, as displayed in Table 21, reveal that the majority of self-employed youths are single, with 88.6% of the respondents being single, while the remaining 11.4% are married. Previous research has consistently shown that married

individuals often lean towards salaried or wage employment to ensure a sense of financial security and to cover family costs (Zuo & Bian, 2005).

4.1.4 Education Level of Respondents

The findings in Table 21 indicate that, during the survey period, a substantial portion of self-employed youths had varying levels of education. Specifically, 168 individuals (44.4% of the sample) held a secondary school degree, 142 (37.6%) possessed a bachelor's degree, and 68 (18%) had completed primary school. These findings suggest that the majority of self-employed youths (62.4%) had lower levels of education, aligning with empirical research indicating a preference for self-employment among individuals with limited educational attainment in developing countries (Tamvada *et al.*, 2021).

Furthermore, individuals with higher levels of education tend to favour salaried employment over self-employment. One possible explanation for this trend is that individuals with advanced educational credentials find more opportunities in salaried and wage sectors compared to those with lower educational attainment (Arthur & Hondo, 2022).

4.1.5. Years of Experience of Respondents

Table 20: Years of Experience of Respondents (n = 378)

Years of experience		N	Percentage
No experience at all		222	57.36
Previous experience in the same field as the current career	1	4	1.05
	2	18	4.8
	3	29	7.7
	4	21	5.6
	≥5	43	11.4
	Total	115	29.45
Previous experience in a different career as the current career	1	6	1.5
	2	10	2.6
	3	14	3.7
	4	9	2.4
	≥5	12	3.2
	Total	51	13.17

Source: Author, 2023

The survey findings presented in Table 20 reveal that the majority of self-employed youth lack prior work experience. Specifically, 222 respondents, constituting approximately 57.39% of the sample size, initiated their own businesses without any

prior work experience, in contrast to 165 respondents, making up 42.64% of the participants, who had worked for someone else previously.

Furthermore, the survey findings reveal that several youths with prior work experience had actually worked in the same field as their current self-employment career before embarking on their entrepreneurial journeys. 115 respondents, representing about 29.46% of the sample, fall into this category, with a significant subset of them, 43 respondents, or 11.4% of the sample, having worked in the same field for five years or more. It is worth noting that other details regarding the distribution of youths' work experience are less significant, as the majority of them fall below the 10% mark.

Table 21: Profile of Respondents (n = 378)

Items	Frequencies	Percentages
Gender		
Male	275	72.8
Female	103	27.2
Age		
18-20	39	10.3
20-25	99	26.2
25-30	148	39.2
30-35	92	24.3
Marital Status		
Single	335	88.6
Married	43	11.4
Education level		
Primary school	68	18
Secondary school	168	44.4
Bachelor	142	37.6

Source: Author, 2023

4.2. Profile of Respondents' Businesses

4.2.1 Legal Status of the Business

Table 22: Legal Status of the Business (n = 378)

Legal Status	N	Percentage
Registered	302	79.9
Not registered	76	20.1

Total 378 100

Source: Author, 2023

Out of the 378 respondents surveyed, 302 individuals, constituting a significant majority at 79.9% of the sample size confirmed that their businesses were indeed registered. This indicates that the majority of self-employed individuals are operating legally, or in other words, they are functioning within the formal sector.

Conversely, 76 respondents, representing 20.1 of the total sample, indicated that their businesses were not registered. This suggests that they are engaged in informal economic activities, operating without formal registration.

4.2.2 Self-employment Status

Table 23: Self-employment Status of the Business (n = 378)

Self-employment Status	N	Percentage
Solo workers	330	87.3
With employees	48	12.7
Total	378	100

Source: Author, 2023

The findings indicate that the majority of respondents (87.3%) identified as solo self-employed, while only 12.7% had employees. Moreover, around 90% of self-employed individuals affirmed that they enjoy full autonomy and independence in determining work methods and allocating resources for their activities, demonstrating complete ownership over their work (Table 24). This suggests that a substantial number of entrepreneurs operate independently, lacking a co-operative culture. This limitation, in turn, can impact their access to capital and ideas as they embark on their business ventures.

Table 24: Descriptive analysis of self-employment (n = 378)

Statements	SD %	D %	N %	A %	SA %	Mean	Std. Dev
I have the autonomy and independence to determine work methods and allocate resources as needed for my activities	6.5	1.9	3.1	67.5	21	1.28	1.920
I take full ownership of my work and its outcome	2.89	3.2	1.01	57.3	35.6	2.27	1.735

Source: Author, 2023.

4.3 Descriptive Analysis of Demographic Factors

4.3.1 Age

The findings indicate that, on average, respondents expressed a neutral stance (Mean = 3.29, Std. Dev = 1.594) regarding the effect of age on their decision to join self-employment, based on the mean index established by Kalatya and Moronge (2017). Specifically, 34.9% strongly agreed, 22.2% strongly disagreed, 18.5% agreed, 14.8% disagreed, and 9.5 remained neutral (Table 26).

The findings indicate that a substantial number of self-employed young individuals feel that their age influenced their choice to pursue self-employment. The fact that a significant majority of respondents fall into the strongly agree and agree categories (53.4%) strongly supports the idea that many individuals see their age as a contributing factor in their decision to opt for self-employment.

An interviewee emphasized this point, stating,

“...My age played a key role when I decided to become self-employed, as it requires a certain maturity in order to be able to make some decisions...” (10 July, 2023).

Another interviewee echoed a similar sentiment, saying,

“.... The more age increases, the greater the need for economic independence....” (6 July, 2023).

Previous research has also explored the impact of age on decisions related to self-employment. For example, Morrar (2020) aimed to examine the influence of micro-level socio-economic, demographic, and geographic factors on the likelihood of young adults entering self-employment in Palestine. His findings align with the findings of the current study, indicating that the likelihood of self-employment increases with age. This may be attributed to the growing capability to access financial resources and the skills required to start and run a business as individual age grows.

4.3.2 Education attainment

The findings revealed that, on average, respondents held a neutral stance (Mean = 3.39, Std. Dev = 1.652) regarding the influence of education attainment on their decision to engage in self-employment, as measured by the mean index developed by Kalatya and Moronge (2017). Specifically, 42.6% strongly agreed, 22.5% strongly disagreed,

13.2% agreed, 14.0% disagreed, and 7.7% remained neutral. These findings suggest that a significant proportion of self-employed youth believe that their educational attainment played a role in their decision to pursue self-employment, with a notable majority falling into the strongly agree and agree categories (55.8%) (Table 26).

Interviews with respondents supported this notion, highlighting that their education equipped them with valuable skills to support their daily work. For instance, interviewee 1, involved in soap production, mentioned,

“...The secondary degree that I hold motivated me to enter the field of soap production, aligning with my educational background” (July 12, 2023).

However, to gain a more in-depth understanding of the impact of educational attainment, a crosstabulation analysis was conducted, examining the relationship between respondents’ educational levels and their agreement with the statement “My education attainment helped me to engage in self-employment.”

Table 25: Analysis of Education Attainment and Self-Employment Engagement

			My education attainment helped me to engage into self-employment					
			SD	D	N	A	SA	Total
Education attainment	Primary school	count	18	8	4	6	32	68
		%within education attainment of respondents	26.5%	11.8%	5.9%	8.8%	47.1%	100%
	Secondary school	count	34	25	11	23	75	168
		%within education attainment of respondents	20.2%	14.9%	6.5%	13.7%	44.6%	100%
	Bachelor	count	33	20	14	21	54	142
		%within education attainment of respondents	23.2%	14.1%	9.9%	14.8%	38.0%	100%
Total		count	85	53	29	50	161	378
		%within education attainment of respondents	22.5%	14.0%	7.7%	13.2%	42.6%	100%

Source: Author, 2023.

These findings reveal that respondents with different levels of education had varying agreement rates. Specifically, 47.1% of those with primary education agreed, 44.6% of those with secondary education agreed, and 38.0% of those with a bachelor's degree agreed.

On one hand, this suggests that individuals with lower educational attainment (primary and secondary school) are more inclined to engage in self-employment compared to those with higher educational qualifications (a bachelor's degree). It underscores the idea that self-employment often requires fundamental skills that individuals acquire through their schooling, aligning with the findings of Firdisa (2022).

On the other hand, these findings imply that a significant number of young people, whether they have lower education levels (primary and secondary school) or higher education credentials (bachelor's degrees), are choosing self-employment over traditional salaried jobs. Several factors could contribute to this trend, including the limited growth rate in the private sector, which is the primary source of job opportunities in Burundi, and the government's capacity constraints in providing employment opportunities for recent graduates. Additionally, government campaigns promoting youth entrepreneurship might be influencing this choice. However, there is currently no concrete evidence to substantiate these hypotheses.

Nevertheless, these findings both corroborate and contradict previous empirical research. On one hand, they contradict the findings of Morrar (2021) and Tamvada (2022), who found that an increase in education level is associated with a decreased likelihood of self-employment entry for both young individuals and the overall population. On the other hand, these findings align with the findings of Francis and George (2008). Their research explored the link between support for higher education and the acquisition of relevant skills, suggesting that individuals from higher education institutions were likely to pursue self-employment.

4.3.3 Prior experience

According to the findings presented in table 26, on average, respondents held a neutral stance (Mean = 2.78, Std. Dev = 1,606) regarding the contribution of prior experience to their decision to engage into self-employment, as measured by the mean index

developed by Kalatya and Moronge (2017). Specifically, 30.2% strongly disagreed, 26.2% strongly agreed, 25.7% disagreed, 11.1% agreed, and 6.9% remained neutral.

These findings suggest that a significant proportion of youth who are self-employed hold the belief that prior experience didn't influence their decision to become self-employed. A high percentage of respondents fall into the strongly disagree and disagree categories (55.9%). These findings diverge from previous research especially the one by Suzan and Danijela (2018), which remarked that previous work experiences had positively affects the probability of becoming self-employed. An explanation that seems to fit better in this situation might be the fact that many participants had a low level of education, thus disadvantaged in the wage sector or the scarcity of institutions from which these young people could gain experience.

4.3.4 Skills

The findings in Table 26 reveal that, on average, respondents showed agreement that their skills influenced their decision to join self-employment (Mean = 3.54, Std. Dev = 1.565), as assessed by the mean index developed by Kalatya and Moronge (2017). Specifically, 43.7%, strongly agreed, 16.9% strongly disagreed, 7.7% remained neutral, and 16.4% agreed.

These findings suggest that a significant proportion of youth who are self-employed hold the belief that skills gained out of school motivated them to become self-employed. The mean score of 3.54 shows that, on average, respondents are in agreement with the statement. The fact that a substantial majority of respondents, totalling 70.3%, fall into the strongly agree and agree categories emphasizes the idea that many individuals see skills and know-how as a significant contributing factor to their decision to pursue self-employment. Consequently, these findings point to the prevalence of high skills among young people engaged in self-employment. This finding goes in the same direction as the findings of Alemayehu (2014) and Thompson (2007), who highlighted that individuals with more diversified talents are more likely to engage themselves into self-employment. These findings align with the research conducted by kabashi (2023) and Szaban (2018), who remarked that skills are indispensable in order to start a new business successfully.

Table 26: Descriptive analysis of Demographic Factors (n = 378)

Statements	SD	D	N	A	SA	Mean	Std.
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	%	%	%	%	%		Dev
My age contributed to my decision to become self-employed	22.2	14.5	9.5	18.5	34.9	3.39	1.652
My education helped me to engage in self-employment	22.5	14.0	7.7	13.2	42.6	3.39	1.652
My previous experience has pushed me to start my own business	30.2	25.7	6.9	11.1	26.2	2.78	1.606
The success of my business is closely tied to my skills and know how	16.9	15.3	7.7	16.4	43.7	3.54	1.565

Source: Author, 2023

4.4 Inferential Analysis of Demographic Factors

Table 27 displays the estimated parameters of multiple linear regression model of youths' self-employment against demographic factors. The coefficient (β_0) is 0.728 and p-value is 0.000, this means that even though all predictors were not considered, 0.728 youths will still engage themselves in self-employment. Moreover, it can be observed that age was statistically significant (P-value = 0.000) at 95% confidence interval; its coefficient (β) = 0.288, which implies that age has a positive influence on youths' decisions to become self-employed. Then, when the age of young people increased by 1 unit, youths' self-employment was expected to increase by 0.288. These findings go in the same stream as the findings of Morrar *et al.* (2021), who found that there is a significant influence of age on the decision to become self-employed.

Furthermore, education attainment displayed a positive and statistically significant impact on youth self-employment ($\beta = 0.007$, $p = 0.009$). As its coefficient (β) = 0.009, it highlights that if a young people education level increased by 1 unit, self-employment increases by 0.009. These findings are in line with the findings of Dvouelety (2018), who found that education attainment has a positive and significant impact on the decision to become self-employed. However, these findings diverge from Sattar *et al.* (2019), who found out that the more education attainment increases, the more the intention to become self-employed decreases. Furthermore, these findings are supported by the theory of human capital, which emphasizes that education helps individuals to identify opportunities and go for them (Asonike, 2019).

Youth's prior experience showed a positive influence on their self-employment but it was not statistically significant ($\beta = 0.001$, $p = 0.711$). As the p value is greater than

0.05, it implies that, according to this study, it has no effect on youths' engagement in self-employment.

Finally, skills displayed a positive and statistically significant impact on youth self-employment ($\beta = 0.009$, $p = 0.017$). As its coefficient (β) = 0.009, it highlights that if a young person's skills increase by 1 unit, self-employment increases by 0.009. These findings go in the same stream as the findings of Ike (2023), who found out that skills acquisition significantly impacts youth empowerment and consequently youth self-employment.

Table 27: Multiple Linear Regression Analysis and Parameter Estimation of Youth Self-employment

Parameters	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.728	0.023		32.312	0.000
Age	0.288	0.004	0.949	66.952	0.000
Edu. Attainment	0.007	0.003	0.030	2.609	0.009
Prior experience	0.001	0.003	0.004	0.371	0.711
Skills	0.009	0.004	0.028	2.391	0.017

a. Dependent variable: Self-employment

Source: Author, 2023

4.5 Descriptive and Inferential Analysis of Socio-economic Factors as Determinants of Youth Self-employment

4.5.1 Description of Socio-economic Factors

4.5.1.1 Financial Resources Access

The findings in Table 28 suggest that, on average, respondents disagreed with the idea that they were able to gather enough resources to start their own ventures (Mean = 1.82, Std. Dev = 1.390), as assessed by the mean index developed by Kalatya and Moronge (2017). Specifically, 68.5% strongly disagreed, 11.4% strongly agreed, 8.5% disagreed, 4.5% agreed, and 7.1% remained neutral.

These findings indicate that a significant proportion of self-employed youth believe that they encountered challenges due to a lack of sufficient capital when they started their own businesses. The mean score of 1.82 reflects that, on average, respondents tend to disagree with the statement. The relatively high percentage of respondents in the strongly disagree and disagree categories (77%) further reinforces the idea that many individuals did not have access to adequate capital when starting their businesses.

For instance, interviewee 3 shared his experience, stating,

“...Starting a business is something I planned for over time. During this planning phase, I work hard to gather the resources needed to cover initial startup costs...When I finally decided to go into business, my capital was still inadequate, but I push forward with determination and a hopeful outlook, aiming for a successful outcome....” (24 July, 2023).

This statement aligns with the findings, indicating that youth engage in self-employment not solely because they have access to financial resources but because of their dedication and determination. This perspective also sheds light on why many young people initiate small businesses and face challenges in terms of business performance.

Moreover, when asked why they don't consider taking loans to bridge the gap in personal capital, another interviewee expressed,

“...Besides not knowing the rules and regulations to access a loan from public and private institutions (banks), I would prefer taking a loan to ensure the growth of my business rather than starting a business...” (18 July, 2023).

Additionally, apart from the lack of awareness about loan requirements, many young individuals are engaged in solo employment, which can also be an obstacle when seeking loans or support from public institutions such as PAEEJ and BIJ. These institutions tend to favour youth associations and co-operatives.

Findings of this research go in the same direction as previous studies, especially Matli and Ngoepe (2021), who found out that a lack of financial resources obstructs young people from joining self-employment.

4.5.1.2 Social network

This study aimed to examine the role of social networks in influencing young individuals' decisions to pursue self-employment. To explore self-employment, youths were asked to express their agreement or disagreement with a set of statements: “I knew

3 or more people who do the same job as mine before joining self-employment” and “The social network influenced me to become self-employed.”

The findings presented in Table 28 suggest that, for the first statement, on average, respondents held a neutral stance (Mean = 3.29, Std. Dev = 1.597), as measured by the mean index developed by Kalatya and Moronge (2017). Specifically, 34.9% strongly agreed, 22.5 strongly disagreed, 18.5 agreed, and 9.5 were neutral.

These findings suggest that a significant proportion of self-employed youth had connections with other self-employed individuals before venturing into self-employment. The mean score of 3.29 indicates that, on average, respondents were neutral about the statement. The relatively high percentage of respondents in the strongly agree and agree categories (53.4%) further reinforces the notion that individuals who are self-employed might have been motivated by interactions with other self-employed individuals.

The importance of social networks in influencing young individuals’ decisions to pursue self-employment is emphasized by the findings of the second statement, where respondents were asked if their connections influenced their decision to become self-employed. The findings indicate that the majority of self-employed people agreed with this statement, at 58.2%. Moreover, on the average, the respondents also agreed (Mean = 3.50, Std. Dev = 1.557).

These findings suggest that a considerable number of self-employed individuals were motivated by their social networks to pursue self-employment, highlighting the impact of being subjected to subjective norms. Some interviewees provided insights into their motivations when asked why they chose their specific line of work over others:

“...I chose this business because I saw others making profit in this kind of business and affordable for me...” (6 July, 2023); “....at least I could find a mentor who has experience in this business...” (11 July, 2023).

These findings confirm that a majority of people engage in businesses they are familiar with or can find someone to guide them.

The findings of this study align with the findings of Quieroz *et al.* (2021), who established that social networks play a significant role in influencing young people to pursue self-employment. Moreover, these findings are consistent with the theory of planned behaviour, which highlights the importance of subjective norms in influencing the decision to pursue self-employment, as the majority of self-employed youths attested that their networking influenced their decision to become self-employed.

4.5.1.3 Family Background

To gauge the influence of family background on the decision of young individuals to pursue self-employment, self-employed people were asked to indicate their agreement or disagreement with the statement, “I do the same business as my family members”. The findings as presented in Table 28, suggest that, on average, respondents disagreed with this statement (Mean = 2.72, Std. Dev = 1.537), as assessed by the mean index developed by Kalatya and Moronge (2017). Specifically, 28.6% strongly disagreed, 28.3% disagreed, 22.0 strongly agreed, 13.2 agreed, and 7.9% remained neutral.

These findings imply that a significant proportion of self-employed youth choose a different path from their family background when it comes to their career pursuits. The mean score of 2.72 indicates that, on average, respondents hold a neutral stance regarding the statement. The relatively high percentage of respondents in the strongly disagree and disagree categories (56.9%) further underscores the idea that individuals who are self-employed often diverge from the businesses pursued by their family members.

Table 28: Descriptive Analysis of Socio-Economic Factors

Statements	SD %	D %	N %	A %	SA %	Mean	Std. Dev
I was able to gather enough resources to start my own business	68.5	8.5	7.1	4.5	11.4	1.82	1.390
I knew 3 or more people who do the same business as mine before joining self-employment	22.5	14.6	9.5	18.5	34.9	3.29	1.957
My social network influenced me to become self-employed	16.9	15.9	9.0	16.4	41.8	3.50	1.557
I do the same business as my family members	28.6	28.3	7.9	13.2	22.0	2.72	1.537

Source: Field, 2023

4.5.2 Inferential Analysis of Social Economic Factors

Table 29 displays the estimated parameters of a multiple linear regression model of youths' self-employment against socio-economic factors. The coefficient (β_0) is 1.383 and p-value is 0.000, this means that even though all predictors were not considered, 1.383 youths will still engage themselves in self-employment. It can be observed that financial resource access showed a positive and statistically significant influence on youths' self-employment ($\beta = 0.044$, $p = 0.002$), and when the access to financial resources of young people increased by 1 unit, youths' self-employment was expected to increase by 0.044. These findings go in the same stream as the findings of Amrutrao (2023), who found that there is a significant influence of access to resources in order to start one's venture. Moreover, these findings correlate with the resource-based view theory, which states that it important to access resources in order to start a new venture.

Moreover, social networks also showed a positive and statistically significant influence on youths' self-employment ($\beta = 0.238$, $p = 0.000$). As its coefficient (β) = 0.238, it indicates that if youth social network increased by 1 unit, youths' engagement in self-employment increased by 0.238. The same findings were also found by Quieroz *et al.* (2021), who found out that social networks play a significant to influencing young people to become self-employed. Moreover, these findings align with the socio-networking theory which emphasizes the importance of establishing relationships in order to start one's business.

Furthermore, family background displayed a negative but statistically significant impact on youth self-employment ($\beta = -0.103$, $p = 0.000$). As its coefficient (β) = -0.103, it highlights that when there is an increase of one unit in family background factors, youth self-employment tends to decrease by approximately 0.103.

Table 29: Multiple Linear Regression Analysis and Parameter Estimation of Youth Self-employment

Parameters	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.383	0.084		16.458	0.000
FRA	0.044	0.014	0.126	3.117	0.002
SN	0.238	0.022	0.441	10.712	0.000
FB	-0.103	0.13	-0.328	-7.707	0.000

a. Dependent variable: Self-employment

Note: SE-Self-employment, FRA-Financial Resource Access, SN-Social Network, FB-Family Background

Source: Author, 2023

4.6 Descriptive and Inferential Analysis of Psychological Factors as Determinants of Youth Self-employment

4.6.1 Descriptive Analysis of Psychological Factors

4.6.1.1 Need for Achievement

To examine the role played by the need for achievement in motivating young individuals to engage in self-employment, self-employed youths were requested to indicate their agreement or disagreement with the following statements “I enjoy taking on tasks that allow me to demonstrate my skills and abilities” and “I need to prove that I can economically succeed.”

The findings presented in table 30 showed that on average, respondents were neutral with the first statement (Mean = 2.98, Std. Dev = 1.601), as determined by the mean index developed by Kalatya and Moronge (2017). Specifically, 28% strongly agreed, 27.5% strongly disagreed, 17.5% agreed, 16.1% disagreed, and 10.8% were neutral. Moreover, for the second statement, on average, respondents held a neutral position (Mean = 2.71, Std. Dev = 1.546). Additionally, 29.6% strongly agreed, 27.2% agreed, 21.7% strongly disagreed, 14.3% disagreed and 7.1% were neutral.

In both statements, the majority of respondents displayed agreement (45.5% and 56.8%, respectively). This suggests that a significant number of young people entered self-employment driven by the desire to achieve economic success and demonstrate their skills and abilities. Therefore, it can be inferred that a majority of self-employed individuals possess a strong need for achievement, which ultimately motivates them to pursue self-employment.

4.6.1.2 Entrepreneurial Intention

The desire to create or innovate something can serve as a powerful motivator for individuals to establish their own businesses and pursue their goals. To assess the significance of entrepreneurial intention in driving young people to become self-employed, the researcher asked self-employed individuals to express their agreement or disagreement with the following statements: “I like exploring and creating new opportunities” and “I am motivated to set and reach challenging goals in my life.’

The findings presented in Table 30 revealed that, on average, respondents held a neutral stance with the first statement (Mean=2.15, Std. Dev=1.623) as determined by the mean index developed by Kalatya and Moronge (2017). Specifically, 62.7% strongly disagreed, 17.7% strongly agreed, 9.3% agreed, 5.6 were neutral, and 4.8% disagreed. Moreover, for the second statement, on average, respondents also maintained a neutral position (Mean = 2.14, Std. Dev = 1.575). In both statements, the majority of respondents disagreed (67.5% and 66.6%, respectively).

These findings indicate that many young self-employed individuals possess a low entrepreneurial attitude. This goes in the same stream as the result found in Section 4.4.1.2. where it was identified that many young people choose self-employment primarily due to subjective norms rather than a strong entrepreneurial drive. Consequently, this could explain the paradox of a high rate of self-employment coexisting with low GDP growth in Burundi.

4.6.1.3 Risk Aversion

An individual's ability to take risks plays a crucial role in determining their readiness to embark on self-employment. To assess the significance of risk aversion in motivating young individuals to pursue self-employment, self-employed individuals were asked to indicate their agreement or disagreement with the following: "I tend to avoid situations where there is a significant risk of failure" and "I feel uneasy when faced with uncertainty or financial risk".

The findings presented in Table 30 indicated that on average, respondents held a neutral position with the first statement (Mean = 2.24, Std. Dev = 1.493), as determined by the mean index developed by Kalatya and Moronge (2017). Specifically, 49.5% strongly disagreed, 16.4% strongly disagreed, 13.5% strongly agreed, 12.2% disagreed, and 8.5 remained neutral. Additionally, for the second statement, on average, respondents also maintained a neutral stance (Mean = 2.85, Std. Dev = 3.193). In this case, 43.9% strongly disagreed, 26.5% strongly agreed, 140.0% agreed, 8.2 disagreed and 7.1% were neutral. In both statements, the majority of respondents agreed (65.9% and 52.1%, respectively).

These findings highlight that many young individuals who are self-employed are reluctant to venture into riskier businesses, which may explain the low level of youth engagement in entrepreneurial activities.

Table 30: Descriptive Analysis of Psychological Factors (n = 378)

Statements	SD %	D %	N %	A %	SA %	Mean	Std. Dev
I enjoy taking on tasks that allow me to demonstrate my skills and abilities (AC1)	28	17.5	10.8	16.1	27.5	2.98	1.601
I need to prove that I can economically succeed (AC2)	29.6	27.2	7.1	14.3	21.7	2.71	1.546
I like exploring and exploring and creating new opportunities (EI1)	62.7	4.8	5.6	9.3	17.7	2.15	1.623
I am motivated to set and reach challenging goals in my life (EI2)	60.8	5.8	7.7	10.1	15.6	2.14	1.575
I tend to avoid situations where there is a significant risk of failure (RA1)	49.5	16.4	8.5	12.2	13.5	2.24	1.493
I feel uneasy when faced with uncertainty or financial risk (RA2)	43.9	8.2	7.1	14.0	26.1	2.71	1.724

Source: Author, 2023

4.6.2 Inferential Analysis of Demographic Factors

The outcomes of the direct relationships between constructs, as depicted in Table 31, highlight some significant findings. Firstly, youths' need for economic achievement exhibits a strong and statistically significant positive influence on youths' engagement in self-employment ($\beta = 0.897$, $t = 59.832$, $p < 0.001$). In simpler terms, this means that for every 1 unit increase in youths' need for achievement, we anticipate a 0.897 increase in their likelihood to engage in self-employment. These findings align with the research by Pergelova *et al.* (2023), which suggests a link between independence and the pursuit of fulfilment, personal growth, and well-being through self-employment.

Additionally, youth entrepreneurial intention also demonstrates a positive and statistically significant impact on their engagement in self-employment ($\beta = 0.048$, $t = 2.201$, $p < 0.05$). This implies that a 1 unit increase in youths' entrepreneurial intention leads to a 0.048 increase in their propensity to engage in self-employment. In essence, the more motivated young individuals are to start their own businesses, the greater the number of people entering self-employment, consequently creating employment opportunities for those who may have struggled to initiate their own ventures. These findings align with Castillo and Fischer's (2019) research, which underscores the

pivotal role of entrepreneurial intention in motivating individuals, including those with disabilities, to choose self-employment as a career path.

Furthermore, both of these findings find support in the Theory of Planned Behaviour (TPB), which states that intention towards a particular behaviour strongly predicts the actual engagement in that behaviour. In this context, the intention to pursue economic achievement and entrepreneurship propels young people towards self-employment as a means of achieving economic independence and showcasing their capabilities.

Table 31: PLS-SEM Results

Paths	Coefficient (β)	t-value	p-value
Achievement -> Self-employment	0.897	59.832	0.000
Entrepreneurial Intention -> Self-employment	0.048	2.201	0.028
Risk Aversion -> Self-employment	0.055	1.828	0.068

Source: Author, 2023.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

In this comprehensive study exploring the dynamics of youth self-employment, the descriptive analysis of respondents' profiles revealed that the majority of participants were men (72.8%), and the majority of them (53.4%) were between 25 and 30 years old. In addition, a huge number of respondents were single (88.6%), and it was highlighted that a great number of them had low educational attainment (52.4%). Moreover, the findings proved that a great number of youths (57.36%) had no previous experience when they joined self-employment, and their businesses were recognized by the government, which ensured that they were working formally (79.9%).

Addressing the first research question, the researcher examined age, education, prior experience, and skills as demographic factors influencing self-employment. Descriptive findings indicated that age (51.4%), education (55.8%) and skills (70.3%) significantly influenced the decision to become self-employed of participants. Multiple

linear regression demonstrated that age ($\beta=0.288$, $p<0.001$), education attainment ($\beta=0.007$, $p < 0.05$) and skills ($\beta = 0.009$, $p <0.05$) positively and significantly influenced youth self-employment, while prior experience ($\beta = 0.001$, $p > 0.05$) was not statistically significant.

For the second research question concerning socio-economic factors, the descriptive analysis revealed that 77% of young individuals lacked adequate financial resources for starting businesses, and 53.4% acknowledged the significant role of social networks in their entrepreneurial journey. Furthermore, 56.9% of participants reported not engaging in the same business as their family members. Multiple linear regression indicated that financial resource access ($\beta=0.044$, $p<0.05$) and social network ($\beta=0.238$, $p<0.001$) positively and significantly correlated with self-employment, while family background ($\beta=-0.103$, $p<0.001$) exhibited a negative yet significant influence.

Finally, the third research question explored psychological factors, including the need for achievement, entrepreneurial intention, and risk aversion. Descriptive findings highlighted that economic achievement (45%) and self-demonstration (56.8%) were motivating factors for self-employment. However, a majority displayed lower entrepreneurial intention (67.5%) and high-risk aversion (65.9%). The PLS Structural Equation Model revealed that the need for achievement ($\beta=0.897$, $t=59.832$, $p<0.001$) and entrepreneurial intention ($\beta=0.048$, $t=2.201$, $p<0.05$) positively correlated with self-employment, while risk aversion ($\beta=0.055$, $t=1.828$, $p >0.05$) were not statistically significant.

5.2. Conclusion

The study concludes that several demographic factors, including age, education, and skills, are critical determinants of youth self-employment. In addition, youths with low education levels and diverse skill sets are more likely to embark on self-employment ventures. Intriguingly, the study also concludes that many young entrepreneurs in Bujumbura-Mairie initiated their ventures without prior experience, suggesting a culture of openness to self-employment among the youth. Moreover, it is notable that a substantial portion of self-employed youths opted for formal business operations, indicating a commendable recognition of the importance of regulatory compliance and government acknowledgement in their self-employment endeavours.

Furthermore, socio-economic factors emerged as another influential category in determining youth self-employment. Access to financial resources and social networks played a substantial role. The lack of sufficient financial resources was found to be a significant obstacle to self-employment. Conversely, the influence of family background on self-employment was somewhat paradoxical, with some instances of family support facilitating self-employment endeavours while others hindered them. These complex socio-economic dynamics underline the importance of tailored support mechanisms for aspiring young entrepreneurs.

The study highlighted the prominence of psychological factors in the decision-making process of youth self-employment. The need for achievement emerged as a prominent driving force behind self-employment, emphasizing the aspirational nature of young self-employed people in Bujumbura-Mairie. However, it is noteworthy that factors such as entrepreneurial intention and risk aversion did not exhibit significant influence, suggesting that while the desire to achieve is a compelling motivator, other psychological factors play a more nuanced role in self-employment decisions.

5.3 Recommendations

The study identified the determinants that drive self-employment among youth in Bujumbura-Mairie. Thus, here are the recommendations aiming to ultimately foster a thriving entrepreneurial ecosystem and mitigate youth unemployment in Burundi.

To begin with, the study revealed that age, education attainment, and skills (know-how) significantly affect youth self-employment on one hand but it also showed that youth lack entrepreneurial intention on the other hand. Therefore, though entrepreneurial education has been introduced in the educational curriculum, the Ministry of National Education and Scientific Research should consider shifting the focus of entrepreneurial education from theoretical knowledge to practical skills. Emphasize hands-on training, workshops, and real-world problem-solving exercises that equip youth with tangible skills applicable to self-employment. Encourage creativity and innovation within educational curricula.

The Ministry of National Education and Scientific Research should implement educational programmes in schools that focus on financial literacy and self-reliance

from an early age. These programmes can teach young individuals about managing money, setting financial goals, and exploring entrepreneurial opportunities. Furthermore, government institutions such as the Ministry of Youth and Sports, the National Employment Agency, the Youth Investment Bank, and Youth Development Centres, along with stakeholders including local chambers of commerce, business associations, and Non-Governmental Organizations (NGOs) that champion youth entrepreneurship, should actively promote self-employment opportunities and their associated advantages to young individuals of all age groups by hosting informative workshops and advertisements.

Moreover, the study highlighted that access to financial resources has a significant positive impact on youth self-employment on one hand, but also revealed that youths lack awareness of raising funds from private and public institutions. Funds or loan providers should often organize workshops and seminars to provide comprehensive information about available loans, eligibility criteria, and application processes. These institutions should also collaborate with relevant authorities to advocate for changes in loan policies that address the needs of solo entrepreneurs. Lobby for more flexible eligibility criteria and terms that accommodate individuals engaged in solo businesses. This may include tax incentives, reduced bureaucracy for business registration, and grants or subsidies for youth-led startups. Engage with policymakers to ensure that the regulatory environment is conducive to entrepreneurial growth.

Nevertheless, the findings indicated that social networks have a significant correlation with youth self-employment. Therefore, youths would create peer networks or associations for solo entrepreneurs. These networks can facilitate information sharing, collective advocacy, and opportunities for joint ventures or collaborations to meet the co-operative-centric loan requirements and improve the performance of their businesses. Moreover, the government and other stakeholders should establish mentorship programmes that connect experienced entrepreneurs with both young self-employed individuals and those who have failed to join self-employment. These mentorship relationships can provide valuable guidance, industry insights, and emotional support, helping young entrepreneurs navigate the challenges of starting and running a business. From an early age, families and society at large should foster a mindset of financial independence and self-belief in individuals. Encouraging self-

reliance should start in childhood and emphasize personal capabilities over relying entirely on external support for livelihood.

Finally, this study also found that need for achievement significantly motivates youth to join self-employment. Thus, youth should dream and plan for further self-demonstration and economic achievement rather than just flee unemployment. This would allow them to create not only a business for themselves but also a big business that would create jobs for others and contribute to the increment of the national GDP. Youths should develop a spirit of taking risks and daring to try a new venture rather than copying their peers' businesses.

Self-employed youths should actively seek information on loan eligibility criteria from financial institutions like banks or government-backed youth empowerment initiatives such as PAEEJ to grow their businesses. Additionally, considering collaborative efforts by pooling resources with peers in the same industry can be a strategic approach, fostering the potential for larger-scale businesses. By exploring these avenues, self-employed youths can not only expand their enterprises but also make a more significant impact on society as a whole.

5.4 Limitations and Area for Future Research

This study is of great importance in shedding light on the factors influencing youth self-employment in Bujumbura-Mairie. However, it is crucial to recognize its significant limitations. The study primarily focused on identifying the driving factors behind youth self-employment, but it did not address the performance of youth-owned businesses or the factors affecting it. Therefore, there is an urgent need for research that delves into the determinants of youth-owned businesses' performance. Furthermore, this study omitted consideration of moderating factors, such as environmental influences. This emphasizes the need for further research that takes these moderating variables into account. Lastly, the study solely relied on primary data sources. Future studies should consider adopting a mixed-methods approach to provide a more comprehensive perspective.

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APPENDICES

Appendix i : Questionnaire

QUESTIONNAIRE

Email : abdicaxte@gmail.com

Phone Numbers: +25768031413/+255753179569

My name is Calixte Nintunze,

I am conducting a survey on the topic “Determinants of Youth Self-employment in Bujumbura-Mairie, Burundi” for the partial fulfilment of Master’s in Business Management of Moshi co-operative university in Tanzania. Your participation is useful not only for academic purpose but also for the whole community especially young people who are unemployed and desire to change their status by becoming self-employed. It shall also be useful to policy makers.

This survey will ensure confidentiality of any information that shall be provided.

Kindly take part in this survey by answering the following question!

Degree of ranking:

1= strongly disagree

2= disagree

3= neutral

4= agree

5= strongly agree

Instructions: Kindly select your answer by checking/ticking in the appropriate box

PERSONAL CHARACTERISTICS OF RESPONDENTS

1. What is your gender? Male [] Female []
2. What is your age? 15-20 [] 20-25 [] 25-30 [] 30-35 []
3. What is your education attainment? Primary school [] High school [] Bachelor [] Other []
4. What is your marital status? Single [] Married [] Divorced [] Widow [] widower []
5. Before engaging in self-employment, did you have any work experience in the same field as your current self-employment? Yes [] No []. If yes, indicate the number of years of working experience
6. Before engaging self-employment, did you have any work experience in a different field from your current self-employment? Yes [] No []. If yes, indicate the number of years of working experience

DESCRIPTION OF SELF-EMPLOYMENT STATUS

1. In which economic activity are you engaged in?

Boutique (Miscellaneous)		Stationary/photo studio	
Mobile money agent		Cabinetmaker	
Sell cloths/shoes/bags		Embroidery welder	
Bar		Soap factory	
Restaurant		Baker (bread)	
Taximen (motorcycle, vehicle)		Barber man/hairdresser	

2. Are you self-employed with employees Yes [] No []

If yes, how many.....

3. Have you registered your business? Yes [] No []

4. To which extent do you agree with the following statements?

Statements	1	2	3	4	5
I have the autonomy and independence to determine the methods of work and allocate resources as needed in my activities					
I take full ownership of my work and its outcome.					

A. DEMOGRAPHICAL FACTORS

To which extent do you agree with the following statements?

Statements	1	2	3	4	5
------------	---	---	---	---	---

My age contributed to deciding to become self-employed					
My job is related to my education background.					
I became self-employed because I could not find an alternative job					
Previous experience influenced my decision to become self-employed.					

B. SOCIO-ECONOMIC FACTORS

To which extent do you agree with the following statements?

Statements	1	2	3	4	5
I was able to gather enough resources to start my business					
I Knew 2 or more self-employed individuals before I join self-employment					
The socio-network influenced to join self-employment					
I do the same business as my family members (parents, brother, uncle, aunt) or friends.					

C. PSYCHOLOGICAL FACTORS

To what extent do you agree with the following statements?

I am self-employed because:

Statements	1	2	3	4	5
I enjoy taking on tasks that allow me to demonstrate my skills and abilities					
I need to prove that I can economically succeed					
I like exploring and creating opportunities					
I am motivated to set and reach challenging goals in my life					
I tend to avoid situations where there is a significant risk failure					
I feel uneasy when faced with uncertainty or financial risk					

Appendix II: Content Validity Study

DETERMINANTS OF YOUTH SELF-EMPLOYMENT IN BUJUMBURA-MAIRIE BURUNDI: A content Validity study

Dear Experts,

This inventory contains 5 domains and 32 items (questions) related to determinants of self-employment. I need your expert judgement on the degree of relevance of each question to the measured domains. Your review should be based on the definition and relevant terminologies that are provided to you. If there is any recommended question, provide it.

Please be as objective and constructive as possible in your review and use the following rating scale:

Degree of relevance:

- 1= the item is not relevant to the measured domain
- 2= the item is somewhat relevant to measured domain
- 3= the item is quite relevant to the measured domain
- 4= the item is highly relevant to measured domain

Domain1: PERSONAL CHARACTERISTICS OF RESPONDENTS				
Definitions: These are characteristics which will help me to understand features of the respondents				
Tested Items	Relevance			
	1	2	3	4
1. What is your gender				
2. What is your age				
3. What is your education attainment?				
4. What is your marital status?				

5. Before engaging in self-employment, did you have any work experience in the same field as your current self-employment?				
6. Before engaging self-employment, did you have any work experience in a different field from your current self-employment?				

Domain2: DESCRIPTION OF SELF-EMPLOYMENT STATUS

Definitions: These are the information which will allow me to know the self-employment status

Item Tested	Relevance			
	1	2	3	4

7. In which economic activity are you engaged in?				
8. Are you self-employed with employees?				
9. Have you registered your business?				
10. I have the autonomy and independence to determine the methods of work and allocate resources as needed in my activities				
11. I take full ownership of my work and its outcome.				
Domain 3: DEMOGRAPHICAL FACTORS				
Definition: Regarding this study, demographical factors refer to age, education, experience, and skills				
Items to be tested	Relevance			
	1	2	3	4
12. My age contributed to deciding to become self-employed.				
13. My job occupation is related to my education background.				
14. Lack of training and skills obstructed my journey toward self-employment.				
15. The previous experience influenced my decision to become self-employed.				
16. I became self-employed because I could not find an alternative job				
Domain 4: SOCIO-ECONOMIC FACTORS				
Definitions: Regarding this study socio-demographic factors refers to family background, financial resources, and social network (entrepreneurial network).				
Items to be tested	Relevance			
	1	2	3	4
17. I had enough financial resources when I became self-employed.				
18. I was able to gather enough resources to start my business				
19. I Knew 2 or more self-employed individuals before I join self-employment				
20. The socio-network influenced to join self-employment				
21. I am from a family with business background				
22. I obtained a family financial support in order to start the business.				
23. Family and friends encouraged me to become self-employed.				
24. I do the same business as my family members (parents, brother, uncle, aunt) or friends.				

Domain 5: PSYCHOLOGICAL FACTORS
--

Definitions: These are motivations that push youth into self-employment. Regarding this study, psychological factors refer to need for autonomy, need for achievement, entrepreneurial intention, and risk aversion.				
Items to be tested	Relevance			
	1	2	3	4
25. I need to meet the challenge				
26. I enjoy taking on tasks that allow me to demonstrate my skills and abilities				
27. I need personal economic growth				
28. I need to prove that I can economically succeed				
29. I like exploring and creating opportunities				
30. I am motivated to set and reach challenging goals in my life				
31. I tend to avoid situations where there is a significant risk failure				
32. I feel uneasy when faced with uncertainty or financial risk				
33. I am self-employed because I can invest in a question mark business.				
34. I am self-employed because I like exploring and create new business opportunities.				
35. I am self-employed because I can invest in a question mark business.				

Appendix III: Key Informants Interview Guide

1. How significant is a person's age when it comes to making the decision to become self-employed?
2. How did your education contribute to your ability to become self-employed?
3. Do you believe that educational attainment plays a major role in encouraging individuals to start their own businesses?
4. How did you secure the start-up capital necessary to launch and operate your own venture?
5. What motivated you to choose this particular type business over other options?
6. Based on your observations of friends in the same industry, do you feel adequately informed about access to loans
7. What challenges do young people encounter on their path to self-employment?
8. What is your perspective on the persisting issue of youth failing to establish their own businesses? What could be underlying reasons for this phenomenon?

THANK YOU!

Appendix IV: Research permit



UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

MOSHI CO-OPERATIVE UNIVERSITY (MoCU)
CHUO KIKUU CHA USHIRIKA MOSHI



OFFICE OF THE VICE CHANCELLOR

06 Sokoine Road, 25121 Mfumuni,
P. O. Box 474, Moshi, Tanzania, Tel: +255 272751833.
Email: vc@mocu.ac.tz, Website: www.mocu.ac.tz

In reply, indicate:

Ref. No.: MoCU/MBM/HD/263/21

Date: 09th June, 2023

To Whom It May Concern

RE: CALIXTE NINTUNZE

Please refer to the above heading.

I am writing to introduce **Mr. Calixte Nintunze** who is a bonafide student pursuing Master's of Business Management (MBM) at Moshi Co-operative University in Tanzania

As part of the requirements for his studies, the named candidate is planning to undertake a research project titled "**Determinants of Youth Self-Employment in Burundi**"

Any assistance accorded to him will be highly appreciated. Please do not hesitate to contact the undersigned for any information you may require.


Sincerely,

Prof. Alfred S. Sife
VICE CHANCELLOR

Appendix V: Research permit

REPUBLIQUE DU BURUNDI

Bujumbura, le 20/6/2023



Ministère de l'Education Nationale
et de la Recherche Scientifique
Commission Nationale de la Science, la Technologie et l'Innovation

N.Ref. :610/CNSTI/SEP/...../2023 ¹⁸⁷

TO WHOM IT MAY CONCERN

Dear Sir/Madam,


This letter confirms that **Mr Calixe NINTUNZE, a Master's Student at Moshi Co-operative University, Tanzania**, will be conducting his research work in Burundi in the framework of his Master's programme with the permission (**Validity**: Six months) of the National Commission for Science, Technology and Innovation, Burundi.

The research proposal is entitled "**Determinants of Youth Self-employment in Burundi**".


In respect of this research, the candidate is due to collect relevant data from a number of selected sites.

Therefore, we would be grateful if you could facilitate **Mr Calixte NINTUNZE** access to any relevant documentation at your disposal. Of course, the researcher abides to behave and act in full accordance with the laws and rules governing access to public archives and or any particular laws and rules governing academic research at your institution.

Sincerely,

Prof. Tatién MASHARABU, 

PERMANENT EXECUTIVE SECRETARY



Commission Nationale de la Science, la Technologie et l'Innovation
B.P. 1990 Bujumbura - Burundi 38 Avenue du Cinquantenaire, Kigobe Sud
www.cnsti.bi info@cnsti.bi

Appendix VI: Plagiarism report



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PROF. DR. CALIXTE S. MUKUNDA
DEPARTMENT OF POLITICAL SCIENCE AND
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**FROM UNEMPLOYMENT TO SELF-EMPLOYMENT: INVESTIGATING
SOCIO-ECONOMIC FACTORS DRIVING YOUTH INTO SELF-
EMPLOYMENT IN BUJUMBURA-MAIRIE, BURUNDI**

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Abstract

This research investigates the factors driving youth self-employment in Bujumbura-Mairie, Burundi, in response to the challenge of rising youth unemployment. The study, carried out with 378 self-employed youth in Bujumbura-Mairie, employed a combination of sampling techniques, first, disproportionate stratified and then snowball sampling. Descriptive analysis and Multiple Linear Regression were used to analyze data through IBM SPSS 25 software. The analysis underscores the significance of two main factors: access to financial resources ($\beta=0.044$, $P<0.05$) and social networks ($\beta=0.238$, $P<0.001$). Social networks, in particular, wield substantial influence on the youth's decision to pursue self-employment. Notably, family background emerges as a significant but negative factor ($\beta= -0.103$, $P<0.001$) impacting self-employment. The findings lead to the conclusion that access to financial resources and robust social networks have a positive effect on youth self-employment. However, family background exerts a negative influence. Accordingly, the study proposes several recommendations which include enhancing access to financial resources through youth-friendly loan access points, advocating for more inclusive loan policies, and establishing local business hubs and community-driven initiatives to support solo entrepreneurs. Collaborative efforts with government agencies are deemed essential for streamlining loan processes and integrating financial literacy. Lastly, the study suggests encouraging financial independence among youth within families and society at large from a younger age.

Keywords: *Self- Employment, Unemployment, Financial resource access, Social Network, Youth and family background.*

1.0 INTRODUCTION

Self-employment plays a significant role in driving economic growth at both individual and societal level. It supports an individual's economic development by providing job opportunities and income increment (Lesane & Akintunde, 2020). Tsvetkova (2019) states that self-employment decreases income gap per-capita and stimulates economic growth. Yerrabati (2021) argues that in developing countries, self-employment decreases poverty. Furthermore, Burchell *et al.* (2019) pinpoint that self-employment and entrepreneurship programs are considered as means of solving unemployment problems. Self-employment creates both spirit of innovation and the development of entrepreneurial economy (Chang *et al.*, 2022). Self-employment also appears like a solution for people who are disadvantaged in the wage sector (Samoës *et al.*, 2016).

At the global level, individuals who are in self-employment represent an average of 46.5% of the labour force and only 12% of people who work independently are in high-income economies (ILO, 2021). For instance, the self-employment rate in European Union is only 15.27 %, and 6.59 % in the United States. In emerging countries particularly China and India, Self-employment is one of many working people's main income sources. According to World Bank report (2023), 46% of employed people are self-employed in China and 76.01 % of employed people are self-employed in India. In Africa, northern Africa presents the lowest level of self-employment compared to other remaining regions. In Northern Africa, the self-employment rate varies between 25% and 48% of the total individuals who are employed. In Sub-Saharan Africa, self-employment accounts for around 75% of the total labour force (ILO, 2022). In East Africa, the self-employment rate is above 50% in all partner states except Kenya which has 49.27 %. South-Soudan was at its peak at 87.99 % in 2020, followed by Burundi (85.8%), Tanzania (83.68 %), Democratic Republic of Congo (79.48 %), Uganda (77.32%), and Rwanda (66.29) (OECD, 2021).

In Burundi, just like in other developing countries, there is a higher self-employment rate. Controversially, Burundian youth which represent more than 65% of the Burundian population (UNICEF, 2020) encounter an important unemployment challenge. Since 2017, youth unemployment rate has been increasing significantly; in 2017, youth unemployment rate was 2.98%, in 2018 was 3.02%, in 2019 was 3.06%, in 2020 was 3.25, and in 2021 was 3.39% (ILO, 2022). The raise of youth unemployment rate can be justified by the low growth of private sector and the

incapacity of the public sector to provide jobs to all graduates (Adisco & Cordaid, 2019). Moreover, youth are disadvantaged in the formal sector because of lack of experience which worsen their economic situation.

In response, the government of Burundi has implemented ambitious policies and interventions to push youth into self-employment. To mention some policies, the government of Burundi through decree No. 100/92 of 31 May 2010 established the Burundian Agency for Youth Employment (ABEJ) whose main purpose is to equip youth with professional experience and skills through internships that would allow them to meet formal job requirements and create their jobs (Presidency of the Republic of Burundi, 2010). Recently, Youth Investment Bank (BIJE) dedicated to financing development projects initiated by youth by granting them credits at low interest was also established (BIJE, 2023). Moreover, Economic Empowerment and Youth Employment Programme (PAEEJ) was established in 2021 in order to accompany youth through capacity building and provide financial support to them (PAEEJ, 2023). However, despite the efforts made by the government, youths still fail to create jobs.

Furthermore, the unemployment problem has also been a major concern in academia, researchers have proved that self-employment is one of the best ways to fight against unemployment and reduce poverty (Yerrabati, 2022). Although some studies related to self-employment have been conducted in other parts of the world including the UK (Francis & George, 2014); Ethiopia (Melak & Derbe, 2021); Tanzania (Mwita, 2019; Amani, 2017), Uganda and Kenya (Baluku *et al.*, 2020) few of them focus on factors that drive youth self-employment into formal and informal sectors and challenges that they face on their way. Nevertheless, to the best of the researcher's knowledge, basic literature devoted to self-employment and entrepreneurship is still missing in Burundi. The findings of conducted research cannot be generalized in the Burundian context because of sociological, economic, and political environmental differences. Therefore, this study aims to fill this knowledge and contextual gap by investigating socio-economic determinants of youth self-employment Burundi. This study was guided by the following research questions: What socio-economic factors that influence youth self-employment.

2.0 LITERATURE REVIEW

2.1. Theoretical Framework

2.1.1 Resource Based View Theory

This research was guided by the Resource-Based View (RBV) theory. The RBV theory, initially proposed by Birger Wernerfelt in 1984 and subsequently developed and refined by Jay B. Barney in 1991, primarily emerges within the field of strategic management. RBV theory is predicated on the assumption that strategic resources possess certain key attributes. These resources are considered valuable, capable of reducing costs or enhancing customer value, rare in a way that competitors cannot easily acquire similar resources to erode their value, and difficult to imitate or substitute, thereby allowing organizations to maintain a competitive advantage (Barney, 1991). Central to the principles of RBV theory is the requirement that these resources must be both heterogeneous and immobile. This theory illuminates the pivotal role played by resources in an organization's growth (Kabue & Kilika, 2016).

Furthermore, RBV theory extends its influence beyond strategic management into various fields, including entrepreneurship. However, this expansion is not without criticism. Researchers, like Kellermans *et al.* (2016), point out that the definition and characterization of resources within RBV theory can be ambiguous, inconsistent, and even contradictory across different studies. Notably, the challenge arises from the alignment between entrepreneurship and RBV theory, as both share a unit of analysis centered on "resources." Despite this critique, entrepreneurial research garners valuable insights from the resource-based view to better understand the factors influencing the performance of individuals and startups (Khamis *et al.*, 2021).

The resource-based theory underscores the significance of founders' access to resources as a key predictor of entrepreneurial opportunities and the growth of new ventures (Alvarez & Busenitz, 2001). Researchers like Kellermans *et al.* (2016) define resources as tangible or intangible assets, encompassing human capital, financial capital, physical capital, and relationship capital. These resources facilitate a firm's ability to create products or services in its pursuit of success. Consequently, RBV theory exhibits a strong linkage with Human Capital Theory, Social Capital Theory, and Social Networking Theory (Melak & Derbe, 2021). Therefore, this research draws from the aforementioned theories to complement RBV theory. These complementary theories offer a more focused perspective on specific resources, providing a more nuanced

understanding of their roles, as compared to the broad treatment of resources within RBV theory.

2.1.2 Empirical Review

Empirical literature has consistently displayed a keen interest in understanding the socio-economic factors that propel individuals toward self-employment. In a study by Mengesha (2020), which explored the determinants of entrepreneurial intention among graduate students in Ethiopia using an explanatory research design, it was revealed that a family business background exerted a positive influence on the entrepreneurial intentions of graduating students. Similar findings were reported by Mwita (2019) in Tanzania. Additionally, Faloye (2018) conducted research among fresh graduates in Nigeria, investigating the key determinants of entrepreneurship intentions and the connection between entrepreneurship attitudes and business ownership intentions. This study emphasized the significant impact of familial, peer, and mentor influence on entrepreneurial intention.

While research examining the impact of financial resources on self-employment remains limited, some studies have sought to elucidate the importance of financial access in initiating successful businesses. Matli and Ngoepe (2021) conducted research in South Africa, focusing on the life situations and experiences of individuals classified as NEET (Not in Education, Employment, or Training). Their findings revealed that the absence of financial support hampers any NEET individuals, perpetuating their vulnerability and hindering their efforts to transition out of this status. In the United Kingdom, Atherton and Wu (2018) analysed whether an entrepreneur's personal capital positively or negatively affected outcomes in self-employment. Their results indicated that entrepreneurs with higher levels of personal capital tended to enjoy higher incomes, whereas those with lower levels of personal capital were more likely to experience negative returns from self-employment, often perceiving it as self-exploitation.

Queiroz *et al.* (2020) devolved into the impact of local networks on the establishment of new businesses, such as food stalls and restaurants, within the Syrian community in Rio de Janeiro. Using exploratory research design and in-depth interviews, this study revealed that access to capital was closely tied to the importance of family networks and the establishment of local support networks. Additionally, Linda (2009) found that

social networks significantly influenced self-employment outcomes, with exceptions for individuals engaged in self-employment as a secondary job in China.

Despite the valuable insights garnered from these studies, a research gap becomes evident when considering the context of Bujumbura-Mairie, Burundi. While international studies provide a foundation, there remains a need for operate within the specific socio-cultural and economic landscape of Bujumbura-Mairie. This research can offer a more nuanced understanding of how these socio-economic factors interact in this unique setting and can inform the development of targeted policies and initiatives aimed at supporting and promoting youth self-employment in the region. Furthermore, while prior research has shed light on certain aspects, less is known about the role played by social networks in promoting young people’s engagement in self-employment within the local context. Examining the influence and dynamics of socio-economic factors including access to financial resources, social network, and family background can provide crucial insights into the mechanisms driving youth toward entrepreneurial endeavours in Bujumbura-Mairie, filling a notable void in the existing literature.

H₁: Financial resource access has a positive impact on youth self-employment in Bujumbura-Mairie, Burundi

H₂: Social network has a positive impact on youth self-employment.

H₃: Family background has a positive impact on youth self-employment.

2.1.3 Conceptual framework

Based on theoretical framework

and the empirical review, the author proposes the following conceptual framework model for the present study.

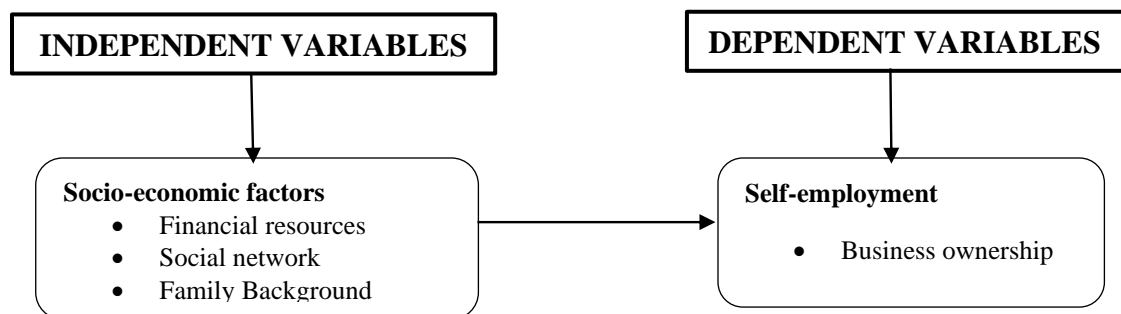


Figure 1: Conceptual Framework

Source: Author, 2023.

3.0 RESEARCH METHODOLOGY

This study was conducted in Bujumbura-Mairie, Burundi. Bujumbura-Mairie was selected as it holds almost 80% of small and medium enterprises including formal and informal sectors of Burundi as noted by Pierre (2023). A cross-sectional research design was used. The study used both probability and non-probability sampling techniques, respectively disproportionate stratified and snowballing sampling techniques. In the disproportionate sampling technique, the population was divided into subgroups according to their occupations. Then the snowball sampling technique was used in order to identify those who are self-employed among youths who are engaged in different occupations. Accordingly, a sample size of 385 respondents was selected using Cochran's formula as the population is unknown.

From the sampled respondents, primary data were collected from youth who are aged between 18 and 35 years old, and who are self-employed in formal and informal sectors using close-ended questionnaires. Key informant interviews were used. 6 youths who have been self-employed for more than 5 years were selected, 2 who employ 2 or more employees, 2 who work in a partnership business and 2 who are in solo employment. The study employed descriptive analysis to provide a detailed overview of the demographic and relevant characteristics of the survey respondents. In addition, a combination of descriptive and inferential analyses, including percentages and Multiple Linear Regression (MLR), was conducted to analyze the participants' responses. IBM SPSS software version 25 was used for this analysis. MLR was chosen as it allowed to treat the dependent variable (self-employment) as a continuous variable, achieved through a mean transformation. Furthermore, researchers utilized a 5-point Likert scale to gauge various variables, with responses ranging from '1' for 'strongly disagree' to '5' for 'strongly agree'.

The linear equation was:

$$\gamma = \beta_0 + \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \varepsilon_0 \quad (1)$$

Where:

γ =self-employment; β_0 =Regression Constant; χ_1 =financial access; χ_2 =Family background; χ_3 =Social network; β_1 =Coefficient of χ_1 ; β_2 =Coefficient of χ_2 ; β_3 =Coefficient of χ_3 ; ε_0 =The Error Term.

Table 1: Measurement of variables

Variables	Variable operationalization	Measurement	Coding
Financial Access	Resource Being able to gather enough or required capital to start a business	ordinal	1=SD, 2=D, 3=N,4=A,5=SA
Entrepreneurial Network	self-employed people or entrepreneurs that someone is connected with as well as his friends, and family members	ordinal	1=SD, 2=D, 3=N,4=A,5=SA
Family Background	employment or occupations of parents and other family members	ordinal	1=SD, 2=D, 3=N,4=A,5=SA
Self-employment	Business ownership	ordinal	1=SD, 2=D, 3=N,4=A,5=SA

Source: Author, 2023

4.0 RESULTS AND DISCUSSION

4.1 Profile of Respondents and Legal statement of the Business

4.1.1 Profile of Respondents

Gender participation among youths who are self-employed in both formal and informal businesses in Bujumbura-Mairie reveals significant disparities. Findings from the survey reveal that young men are more actively involved in self-employment compared to young women. Out of the sample size, 275 youths (72.8%) were men, while only 103 (27.2%) were women. This observed gender gap can be attributed to the notion that young men often have a strong desire for autonomy and independence, motivating them to actively seek opportunities and seize any available prospects that come their way, more so than young women. Societal perceptions and expectations may also play a role, with traditional gender roles influencing the career choices individuals make.

Furthermore, the results show that the majority of respondents fall into the age category of 25-30 (39.2%), a phase where youth transition from dependence on their parents to striving for economic independence. Regarding the marital status of the respondents, the survey indicates that the majority of self-employed youths are single, with 88.6% of the respondents being single and 11.4% being married. This difference can be explained by the fact that married individuals often lean towards salaried or wage employment to ensure a sense of financial security and to cover family cost. The survey findings also reveal that during the survey period, out of the sample size, 168 individuals (44.4%) had a secondary school education, 142 (37.6%) held bachelor's degrees, and 68 (18%) had completed only primary school. These results indicate that a significant majority of self-employed youths (62.4%) possess a lower level of education. This highlights the importance of skills acquired through formal education

in establishing one's business. Furthermore, it suggests that individuals with lower educational attainment are more inclined to pursue self-employment compared to those with higher levels of education.

Table 2: Profile of respondents

Items	F	Percentages
Gender		
Male	275	72.8
Female	103	27.2
Age		
18-20	39	10.3
20-25	99	26.2
25-30	148	39.2
30-35	92	24.3
Marital Status		
Single	335	88.6
Married	43	11.4
Education level		
Primary school	68	18
Secondary school	168	44.4
Bachelor	142	37.6

4.1.2 Legal status of the business

This study is dealing with youths who are self-employed in both formal and informal businesses. In order to know that a business is formal or informal the researcher asked respondents if their business is either registered or not. 302 respondents (79.9% of the sample size) confirmed that their businesses were registered which means that the majority of self-employed people are working legally in other term they are working formally. 76 respondents corresponding to 20.1% said that their businesses are not registered meaning that they are working informally.

Table 3: Legal status of the business

Legal Status	N	Percentage
Registered	302	79.9
Not registered	76	20.1
Total	378	100

Source: Author, 2023.

4.2 Descriptive analysis of Socio-demographic Factors Determinants of Youth Self-employment

The findings from descriptive analysis reveal that a substantial portion of self-employed youth faced challenges at the outset of their businesses, primarily due to a lack of sufficient capital (77%). Additionally, interviews conducted during the study

underscored that a majority of young people are unaware of the rules and regulations governing access to loans from both public and private institutions, including banks.

Furthermore, the research brings to light the significance of social connections in self-employment, as a significant number of self-employed individuals have relationships with peers who are also engaged in self-employment and entrepreneurial ventures (53.4%). These findings highlight the role of social norms in influencing career choices among young people, often resulting in a lack of creativity and innovation in their entrepreneurial pursuits, as many tend to follow the paths of their peers.

Lastly, the study indicates that a higher percentage of self-employed individuals opt for career paths distinct from those of their family members (56.9%). Interviews revealed that a majority of family members of self-employed youth are employed in salaried positions, making it challenging for young people to secure similar jobs, despite being encouraged to excel academically in order to compete for the limited salaried positions available.

Table4: Descriptive Analysis of Socio-Economic Factors

Statements	SD %	D %	N %	A %	SA %
I was able to gather enough resources to start my own business	68.5	8.5	7.1	4.5	11.4
I knew 3 or more people who do the same business as mine before joining self-employment	22.5	14.6	9.5	18.5	34.9
I do the same business as my family members	28.6	28.3	7.9	13.2	22.0

Source: Field, 2023

4.3 Inferential Analysis of Socio-economic Factors as Determinants of Youth Self-employment

4.3.2 Multiple Linear Regression Assumptions

4.3.2.1 Normality of Data

The normality assumption of multiple linear regression was checked using probability plot or histogram of residuals. The literature attested that graphical methods are significant tools for identifying deviation from the assumption of normal distribution (Chambers *et al.* 1983). Beleke (2020) states that the histogram which display a bell-shaped curve show that the data follow a normal distribution. As illustrated in figure 2, the results show a bell-shaped curve which show that the residual plot appears to follow a normal distribution.

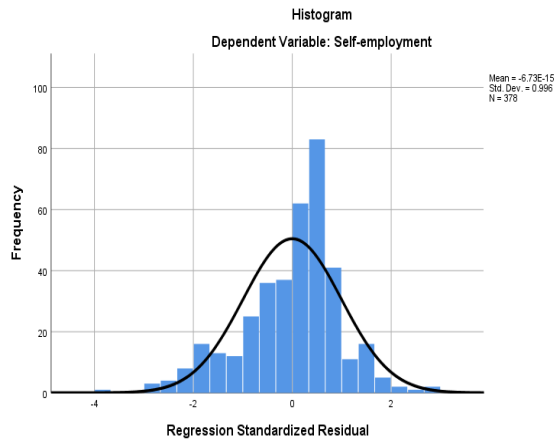


Figure2: Normality of data

4.3.1.2 Linearity of Data

The linearity assumptions are checked by p-p plot of standardized residuals. Thus, normal P-P plot of regression standardized residual show that normal probability plot for the residual is appropriately straight line. The figure 3 indicated that the regression model is approximately on the straight line and it indicates the dependent variable (Self-employment) and independents variables represent a linear relationship.



Figure 3: Normal P-P plot of normality test.

4.3.1.3 Test for multicollinearity socio-economic factors

Multicollinearity in a Multiple linear regression analysis arises when there are strong correlations not only between the independent variables and the dependent variable but also among independent variables themselves (Naara, 2020). This phenomenon can lead to some variables in the study becoming statistically insignificant.

In the context of this study, we assess the presence of multicollinearity using two key metrics: Tolerance and the Variance Inflation Factor (VIF). The VIF in a Linear Regression model quantifies how much the accuracy of regression estimates is comprised due to multicollinearity (Mark *et al.*, 2020). Typically, multicollinearity is identified when the Tolerance value falls below 0.20 and VIF value exceeds 5 within the regression model (Afundate and Alan, 2023).

In this particular analysis, the Tolerance values range between 0.839 and 0.931 (Tolerance >0.20), while the VIF values range from 1.075 to 1.192 (VIF<5). Consequently, based on these statistics, it is reasonable to conclude that multicollinearity is not a significant within the regression model.

Table 5: Multicollinearity test statistics

Variables	Tolerance	VIF
Financial Resource Access	0.931	1.075
Social Network	0.897	1.114
Family Background	0.839	1.192

Source: Author, 2023

4.3.1.4 Test for independence of Residuals

One of the fundamental assumptions in the linear regression is independence of residuals. In the context of our study, we assessed this assumption by employing the Durbin-Watson statistic test. The Durbin-Watson statistic test generates values that fall within the range of 0 to 4. Values close to 0 signify strong positive correlation, while those near 4 suggest negative autocorrelation. Values near 2, on the other hand, indicate no autocorrelation, as generally acknowledged (Alani & Alumini, 2023). In this specific study, the findings represented in the table 7 reveal a Durbin-Watson statistic test value of 2.073. This value suggests absence of auto-correlation. Typically, values between 1.5 and 2.5 are considered acceptable, indicating a relatively high degree of independence among residuals.

4.3.3 Pearson's Product Moment correlation Coefficient

To ascertain the relationships between variables, a correlation analysis was conducted. The findings illustrated in Figure 2 depict a normal distribution of data, leading to the utilization of a bivariate Pearson correlation test. This test statistic serves as a measure of the statistical association between two continuous variables.

The table 6 below presents the results of the Pearson correlation coefficient analysis. It is evident from the data that a substantial and weak positive association exists between financial resource access and the propensity of youths to engage in self-employment ($r = 0.220$, $p = 0.000$). This indicates strong evidence supporting the idea that financial resource access plays a pivotal role in motivating young individuals to pursue self-employment. Thus, the first hypothesis (H_1) is accepted. Additionally, there is a statistically significant but strong positive correlation between social-network and self-employment ($r = 0.54$, $p = 0.000$), suggesting that the social network of young people exerts pressure on them to consider self-employment as an option. Therefore, the second hypothesis (H_2) is accepted. In addition, there is a strong negative correlation between family background and youth decision to become self-employed ($r = -0.499$, $p = 0.000$). This indicates that the family background does not play a significant impact on youths' decision to become self-employed in this study. Then, the first hypothesis (H_1) is rejected accepted.

Table 6: Correlation analysis of socio-economic factors

Variables	SE	FRA	SN	FB	
SE	Pearson Correlation Sig.(2-tailed) N	1 378			
FRA	Pearson Correlation Sig. (2-tailed) N	0.220** 0.000 378	1		
SN	Pearson Correlation Sig. (2-tailed) N	0.547** 0.000 378	0.023 0.661 378	1 378	
FB	Pearson Correlation Sig. (2-tailed) N	-0.499** 0.000 378	-0.256** 0.000 378	-0.315** 0.000 378	1

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

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

Note: SE-Self-employment, FRA-Financial Resource Access, SN-Social Network, FB-Family Background

4.3.4 Multiple Linear Regression analysis of social-economic factors

The multiple linear regression is a widely used method within social science research and practice. Though the MLR doesn't enable to make causal inferences, it enables to investigate how a set of explanatory variables is associated with a response variable of interest (*Mark et al., 2020*). Regarding this study it allowed to look upon the influence of Socio-economic factors such as financial resource access, social network, and family

background, towards motivating youth to become self-employed in Bujumbura-Mairie, Burundi.

4.3.4.1 Goodness-of-fit

The R^2 obtained in table 7 indicates that only 43.2% of the total variation of self-employment can be explained by youths' financial resource access, social network, and family background. The adjusted R^2 value in the study shows that 42.8% of the total variation of self-employment can be explained by the predictor variables used in the model. As the values of R^2 and adjusted R^2 are not very different, it appears that at least one of the predictor variables contributes information for the prediction of the response variable, i.e Self-employment. Thus, both values indicate that the model fits the data well.

Moreover, the regression model was tested for the overall ability to predict the response variable using an F-test or equivalently by an analysis of variance (ANOVA) statistics [F (5, 372) = 94.885], $p < 0.05$. It is observed that the p-value is 0.000 which also implies that the model estimated by the regression procedure is significant at α level of 0.05

Table 7: Model summary and analysis of variances of youth self-employment data

Model Summary										
Model	R	R Square	Adjusted R square	Std. Error of Estimate	R square change	F change	df1	df2	Sig change	Durbin-Watson
1	0.657	0.432	0.428	0.366	0.432	94.885	3	374	0.000	2.073
ANOVA										
Model			Sum of Squares	df	Mean of Square	F	Sig			
1	Regression		38.089	5	12.696	94.885	0.000			
	Residual		50.044	372	0.134					
	Total		88.133	377						

4.3.3.2 Individual regressors coefficient estimation

Table 8 below displays the estimated parameters of multiple linear regression model of youths' self-employment against Socio-economic factors. The coefficient (β_0) is 1.383, $p=0.000$ this means that even though all predictors were not considered, 1.383 youths will still engage themselves into self-employment. It can be observed that financial resource access showed a positive and statistically significant influence on youths' self-employment ($\beta = 0.044$, $p=0.002$), then when the access to financial resources of young

people increased by 1 unit, youths' self-employment is expected to increase by 0.044. These findings go in the same stream as the findings of Amrutrao (2023) who found that there is a significant influence of access to resources in order to start one's venture. Moreover, these findings correlate with the Resource Based View theory which states that it is important to access resources in order to start a new venture.

Moreover, social network also showed a positive and statistically significant influence on youths' self-employment ($\beta = 0.238$, $p=0.000$). As its coefficient ($\beta = 0.238$), it indicates that if youth social network increased by 1 unit, youths' engagement into self-employment increases by 0.238. The same results were also found by Quieroz *et al.* (2021) who found out that social network plays a significant to influencing young people to become self-employed. Moreover, these results align with the socio-networking theory which emphasize on the importance of establishing relationship in order to start one's business.

Furthermore, Family background displayed a negative but statistically significant impact on youth self-employment ($\beta = -0.103$, $p=0.000$). As its coefficient ($\beta = -0.103$), it highlights that when there is an increase of one unit in family background factors, youth self-employment tends to decrease by approximately 0.103.

Table 8: Multiple linear regression analysis and parameter estimation of youth self-employment.

Parameters	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.383	0.084		16.458	0.000
Financial_Resource_Access	0.044	0.014	0.126	3.117	0.002
Social Network	0.238	0.022	0.441	10.712	0.000
Family Background	-0.103	0.13	-0.328	-7.707	0.000

a. Dependent variable: Self-employment

5.0 Conclusion and Recommendations

This research delved into the socio-economic determinants of youth self-employment in Bujumbura-Mairie, Burundi, against the backdrop of rising youth unemployment worldwide.

We addressed a pivotal research question which is the following: the impact of socio-economic factors on youth self-employment.

The study highlighted that access to financial resources has a positive significant impact on youth self-employment on one hand but also the study revealed that youths lack awareness of raising funds from private and public institutions. Fund or loan providers should often organize workshops and seminars to provide comprehensive information about available loans, eligibility criteria, and application processes. These institutions should also collaborate with relevant authorities to advocate for changes in loan policies that address the needs of solo entrepreneurs. Lobby for more flexible eligibility criteria and terms that accommodate individuals engaged in solo businesses.

Nevertheless, the findings indicated that social network has a significant correlation with youth self-employment. Therefore, youths would create peer networks or associations for solo entrepreneurs. These networks can facilitate information sharing, collective advocacy, and opportunities for joint ventures or collaborations to meet the co-operative-centric loan requirements and improve the performance of their businesses. Lastly, from an early age, families and society at large should foster a mindset of financial independence and self-belief in individuals. Encouraging self-reliance should start in childhood and emphasize personal capabilities over relying entirely on external support for livelihood.

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