

**THE INFLUENCE OF SYNERGY ON PERFORMANCE OF PUBLIC  
PRIVATE PARTNERSHIP IN KENYA: A CASE STUDY OF THE AFYA  
ELIMU FUND**

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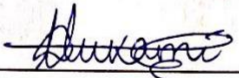
**A Project Research Submitted in Partial Fulfilment of the Requirements for the  
Award of the Degree of Master of Business Administration Degree in the School  
of Business of Africa Nazarene University**

**SEPTEMBER, 2020**

**DECLARATION**

I declare that this applied research project is my original work and that it has not been presented in any other University for academic credit

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**SUPERVISOR'S DECLARATION**

This applied research project is submitted for examination with my/our approval as the University Supervisor (s)

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## **DEDICATION**

This work is dedicated to my precious children Tugi, Wema and Zuri. You give me a reason to be better. To J, my partner and best friend, thank you for the unwavering love and support. To my parents Peter & Jeane (RIP), thank you for encouraging me to pursue new knowledge, and to never stop learning. To my siblings Anne, Christine, Terry and Joe, thank you for believing in me, and for reassuring me throughout this MBA journey.

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## ABSTRACT

Public private partnerships (PPP) are pursued to leverage knowledge, resources, and capabilities to achieve public goals. Despite its strategic role in enhancing optimal benefits of PPPs, synergy is a developing concept in most of the PPPs in developing economies, Kenya included which largely remains untested coupled with lack of models to be benchmarked with. The study investigated the influence of synergy on performance of public private partnerships in Kenya: a case study of the Afya Elimu Fund. The study's three specific objectives included: to establish the influence of resource complementarity on performance of a PPP in Kenya; to determine the influence of communication on performance of a PPP in Kenya; and to evaluate the effect of leadership on performance of a PPP in Kenya. The study employed a descriptive research design. The target population was 200 staff from from the Afya Elimu Fund partners that include MOH, MOE, Intrahealth, FUNZOKenya, HELB and Kenya Healthcare Federation. From the target population of 200 staff, the study sample size was 126 respondents who were sampled using stratified sampling technique. Data collection was done using a semi-structured questionnaire. Cronbach's Alpha Coefficient was computed from the pilot study data to ascertain the reliability of the data collection instrument. On the other hand, validity of research instruments was achieved using PPP expert opinion to ensure content and construct validity. To analyse quantitative data, descriptive statistics (frequencies, percentages, mean and standard deviation) and inferential statics (regression analysis) were used. while content analysis was used to analyse qualitative data. From the findings, the study established that synergy had a significant influence on the performance of public private partnerships in Kenya. In addition, resource complementarity as a synergy construct contributes the most to performance of a PPP followed by communication and leadership respectively. Finally, the most significant synergy construct influencing performance of a PPP is resource complementarity, communication and leadership respectively. The study recommends that the management of the respective partners in a PPP should invest more in complementing both financial and human resources. The management of a PPP should also review communications protocols that are in place to address communication challenges that exist amongst partners. Furthermore, the leaders in the PPP should be regularly trained on emerging leadership skills to enhance their efficiency as the leaders of the PPP. Lastly, it is recommended that other studies be done to establish which are the other synergy elements that influence performance of a PPP.

## DEFINITION OF TERMS

<b>Public Private Partnerships (PPP):</b>	refers to the arrangement between the government and private companies where the private firm perform a public function and is compensated for the same.
<b>Synergy</b>	is the ability of two or more business units or companies to generate greater value working together than they would apart.
<b>Resource complementarity</b>	refer to integrating of resources to create competitive edge for the firm.
<b>Communication</b>	refers to sharing of information between individuals and organizations related to work they are executing. The communication takes different directions such as top-down, bottom-up and horizontal
<b>Leadership</b>	refer to the act of offering direction to one's team in executing the designated tasks
<b>Afya Elimu Fund</b>	refer to PPP between the Higher Education Loans Board (HELB), Intrahealth International, the USAID funded FUNZOKenya project and the Kenya Healthcare Federation, with the joint participation of the Ministries of Education and Health

**LIST OF ABBREVIATIONS**

<b>AEF</b>	Afya Elimu Fund
<b>AMREF</b>	African Medical and Research Foundation
<b>CSR</b>	Corporate Social Responsibility
<b>HELB</b>	Higher Education Loans Board
<b>MBA</b>	Master of Business Administration
<b>MOE</b>	Ministry of Education
<b>MOH</b>	Ministry of Health
<b>NGOs</b>	Non – Governmental Organisations
<b>PPPs</b>	Public - Private Partnerships
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>USAID</b>	United States Agency for International Development

## **CHAPTER ONE: INTRODUCTION AND BACKGROUND OF THE STUDY**

### **1.1 Introduction**

In this section of the study, the background information is provided to lay the foundation of the problem being investigated. Other important components of the chapter including statement of the problem and objectives of the study, among others are also presented.

### **1.2 Background of the Study**

Lee, Lee, and Garrett (2019) defines synergy as the systematic process whereby business units of diverse, complex background will generate greater value through working as one system than working as separate entities. Harris (2014) contends that synergy represents a dynamic process that involves adaptation and learning and creates an integrated solution entailing joint action by many in which the total effect is greater than the sum of the effects when acting independently, does not signify compromise and facilitates the release of team energies.

On the other hand, public private partnership (PPP) is an agreement between a procuring entity (Government agencies) and a private party under which the private party undertakes to perform a public function or provide a service on behalf of the procuring entity (Younus, Al-Alusi, Ahmad & Obaidat, 2019). The private party is compensated from a public fund, charges or fees collected by the private party from users or customers of a service provided to them or a combination of such compensation and such charges or fees (Public Procurement and Disposal Regulations, 2009). Forrer, Kee, Newcomer and Boyer (2010) stated that government see PPPs as a way of bringing in the special technical expertise, funding, innovation,

or management know-how from the private sector to address complex public policy problems. Osmanli (2014) notes that successful PPPs require a careful balance between public benefit and private gain. According to OECD (2015) partnership refers to an arrangement with mutual commitment and accountability based on an equal relationship between donors and recipients and requires developing countries to exercise leadership, which must be respected by donor countries. A synergistic partnership ensures that partners optimize on resources available to achieve the PPP goals efficiently and achieving high quality products than if they worked independently (Wagner, Schramm-Klein & Steinmann, 2016).

PPPs are popular in managing and financing of infrastructure in many nations. The uptake in PPPs by governments especially in developing countries is attributed to increasing pressure from their citizens, civil society organizations, and the media to provide sufficient infrastructure services such as transportation, energy and communications. Confronted with limited funds but growing demand for infrastructure services, governments in both developed and developing countries have begun to view PPPs to expedite critical infrastructure that may otherwise not be built (World Bank, 2016).

According to Jacky *et al.*, (2011) need for public sector efficiency in service delivery in Africa coupled with lack of finances to implement extensive projects contributes to government use of PPPs. However, use of PPP is restricted by: inadequate legal and regulatory framework; lack of technical skills to execute PPPs; poor investor assessment of risk, Africa's limited participation in global trade and investment, small market size, limited infrastructure and limited financial markets (African Development Bank, 2013).

In Kenya, PPPs have mainly been implemented to meet the Millennium Development Goals. The gazettelement and enactment into law of the PPP Act 2013 regulates the use of PPPs. A PPP Unit in Kenya communicate the PPP Policy, develop PPP practice and ensures sustainable delivery of the PPP projects (Government of Kenya, 2015).

### **1.2.1 Afya Elimu Fund**

The Afya Elimu Fund is a PPP between the Higher Education Loans Board (HELB), Intrahealth International, the USAID funded FUNZOKenya project and the Kenya Healthcare Federation, with the joint participation of the Ministries of Education and Health (GoK, 2015). The PPP seeks to provide financial assistance to support pre-service training for students in nursing, clinical medicine, laboratory services, nutrition and health records information technology. The fund attaches a high premium to the underserved and severely affected areas of the country (GoK, 2015).

### **1.3 Statement of the Problem**

Public private partnerships are pursued to leverage knowledge, resources, and capabilities to achieve public goals. PPPs seeks to create synergistic results by combining the expertise and resources of the private partner with the administrative and political power of the government. PPPs remain very beneficial to the recipient nations in terms of access to financial resources, human capital, technology and intellectual property, market access, cutting-edge business practices, and other expertise (World Bank, 2015; ADB, 2016; IMF, 2014). The Government of Kenya is, committed to providing an enabling environment for public private partnerships by having a strong political will, robust legal and institutional framework, as well as strengthening public sector capabilities to effectively and successfully implement PPP

projects. These PPPs have achieved mixed fortunes where some were very positively impactful to quality of life of the targeted populace while others led to loss of public resources and litigations. To avert some of the negative outcomes of the PPPs, the government recently developed the policy to guide the PPPs. It is yet to be established the implication of synergy has on the outcomes of the PPPs being implemented in Kenya (Kautzman, 2018).

A number of empirical studies have been conducted on PPPs and synergy. For instance, Bundi (2015); Eduardo *et al.* (2013) and Forre *et al.* (2010) noted that despite its strategic role in enhancing optimal benefits of PPPs, synergy is an evolving concept to most of PPPs in developing economies which largely remains untested coupled with lack of models to be benchmarked with. In additions, both local and global empirical studies such as Lee, Lee, and Garrett, (2019); Younus, Al-Alusi, Ahmad & Obaidat, (2019) and Ogada, Achoki & Njuguna (2016) failed to link synergy with PPP outcomes. Hence the knowledge gap on the influence of synergy on performance of PPPs in Kenya. This study, therefore, seeks to determine the influence of synergy on performance of PPPs in Kenya, a case study of the Afya Elimu Fund.

#### **1.4 Purpose of the Study**

The study purpose was to establish the influence of synergy on performance of public private partnerships in Kenya, a case study of the Afya Elimu Fund.

#### **1.5 Objectives of the Study**

The study was guided by the following specific objectives.



- i. To establish the influence of resource complementarity on performance of PPP in Kenya
- ii. To determine the influence of communication on performance of PPP in Kenya
- iii. To evaluate the effect of leadership on performance of PPP in Kenya

### **1.6 Research Questions**

- i. What is the influence of resource complementarity on performance of PPP in Kenya?
- ii. What is the influence of communication on performance of PPP in Kenya?
- iii. What is the effect of leadership on performance of PPP in Kenya?

### **1.7 Significance of the Study**

From the study results, the government as the regulator and policy maker will gain useful insights on the role of synergy in ensuring PPP success. By identifying the challenges impending synergy implementation, the government will have useful data for decision making towards the review of the PPP Act 2013.

The study will also establish useful data that can inform the decision making of the management of the private firms planning to enter into PPP. The results will offer them useful insights on possible challenges and strategies that can help them optimize synergy in PPP. The study will act as useful resource materials to future researchers in the field of PPP therefore will add to the body of knowledge on PPP by creating a deeper understanding on the role of synergy in enhancing PPP.

### **1.8 Scope of the Study**

The study focused on influence of synergy on performance of public private partnerships. The study was a case study of Afya Elimu Fund. The areas that the study looked at include influence of resource complementarity, communication and leadership on performance of PPP. The staff involved in implementing Afya Elimu Fund drawn from Ministry of Health and Education, Intrahealth International, FUNZOKenya Project, Higher Education Loans Board, Kenya Healthcare Federation will be the study respondents. The study was undertaken for approximately three months.

### **1.9 Delimitation of the Study**

The study sought data from the management staff of Afya Elimu Fund partners and not the beneficiary of the PPP. The management staff were the target population since they are in charge of implementing the PPP and ensuring that synergy is maintained. The independent variable of the study was performance of PPP while the independent variables were resource complementarity, communication and leadership. The study was undertaken using descriptive research design which allowed for collection of complementary data that was easily validated. Funding of the study and time also affected the study.

### **1.10 Limitations of the Study**

The generalization of the research findings did not show the uniqueness of the PPP that the study is focussing on since majority of the PPPs in Kenya focus on infrastructure development while the current PPP is in education. The use of descriptive research design faced the risk of non-response as participation by the

respondents is voluntary. To mitigate on this the researcher made follow up calls and emails to the participants and this led to a higher rate of responses received. At the same time, given that the PPP is being implemented by several partners, data collection was likely to face logistical challenges as different entities may have differing policies on information disclosure. This was addressed by sending a formal request to the organizations to allow for researcher to collect data from their organization. The fact that PPP in education is new in Kenya, the study could suffer from lack of secondary information. Similarly, descriptive studies sometimes suffer from socially friendly responses given that participation is voluntary.

### **1.11 Assumptions of the Study**

The researcher assumed that the respondents were honest, cooperative, factual (objective) and trustworthy in their response to the research instruments.

### **1.12 Theoretical Framework**

The study was guided by agency theory developed by Stephen rose. The agency theory is a management approach whereby an individual or entity (the agent) acts on behalf of another entity (the principal) in advancing the principal's goals and agenda (Harris, 2014). The agent therefore advances both the principals' interests and his own interests in the partnership. A balance of these interests should be merged to arrive at the corporate objectives of the organization through the agent because he/she oversees the vast resources of the organization (Raffi & Maddedu, 2010).

Laffont and Mattiford (2012) contend that this agency theory is so crucial in Strategic Management since the actions chosen by the agent affects several other parties. The agent's role in strategic formulation and the overall strategic management process

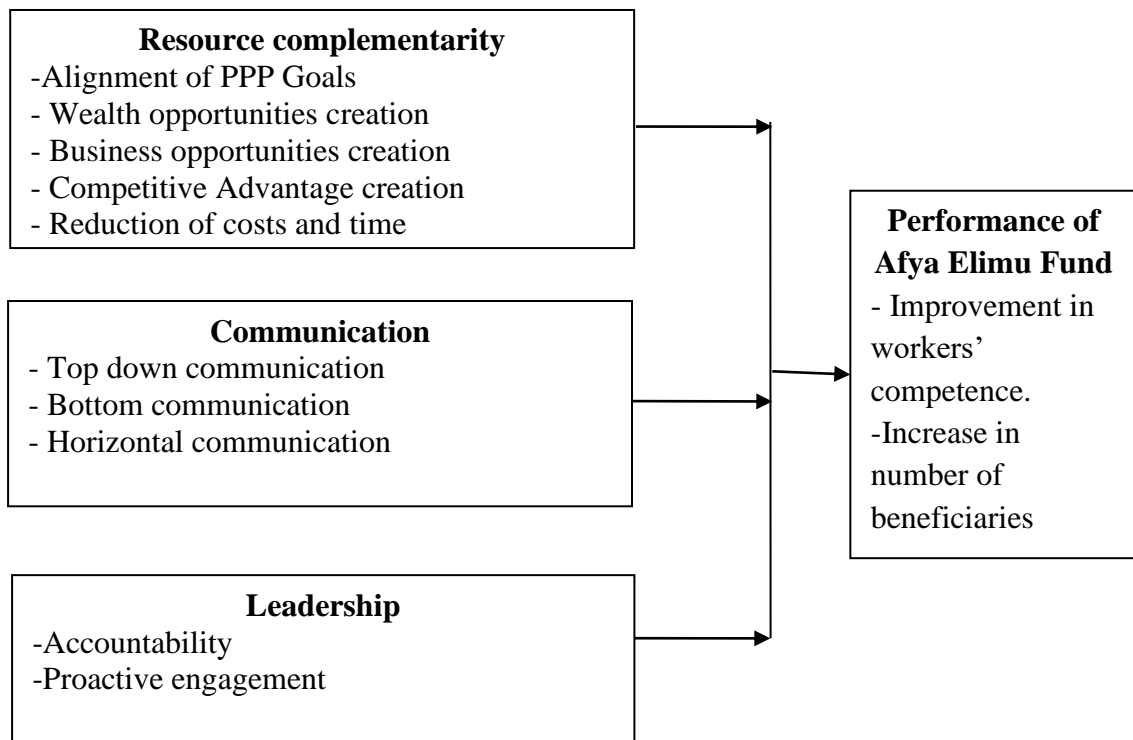
cannot therefore be underestimated. The agency theory holds the view that there should be proper synergy between the management and its stakeholders in order to work towards a common goal (Otungu *et al.*, 2011).

Mattifford (2012) criticise the theory because it only describes the relationship between a principal and its agent and allows for deception and misappropriation of funds by the agents. This constitutes a perfect example of the moral hazard problems that are an endemic feature of principal-agent complexities (Ogada, Achoki & Njuguna, 2016).

The theory is relevant in this study given that it explains the relationship between the agent in this case the private sector players and the principal who is the government. Given the differing goals of the government and the private sector players implementing the PPP, the theory proposes that the two should seek to create synergy so that each parties' interests are satisfactorily met.

### **1.13 Conceptual Framework**

Conceptual Framework is a hypothesized model identifying the model under study and the relationship between the dependent and independent variables (Black, Hair, Babin & Anderson, 2010). The goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them (Tromp, 2012). This is presented in Figure 1.1



**Figure 1.1 Conceptual Framework**

**Source: Researcher (2019)**

On the basis of the large body of literature review, the conceptual model is designed to explore on the influence of synergy on performance of public private partnerships in Kenya, a case study of the Afya Elimu Fund. The model has got two groups of variables which include dependent and independent variables. In this study synergy explained in terms of resource complementarity, communication and leadership can be thought of as an umbrella concept that is the independent variable. The success of a PPP forms the dependent variable and was measured using change in workers' capacity and number of beneficiaries. The success of Afya Elimu Fund is influenced by several factors that constitute the independent variables. The independent variables included resource complementarity, communication and leadership to create synergy as indicated in figure 1.1.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter covers empirical studies in relation to the three study objectives which include influence of resource complementarity, communication and leadership on the success of a PPP. The chapter is further present the theory that best describes synergy in PPP and is concluded by a sub-section on knowledge gap.

### **2.2 Review of Literature**

This section provides empirical studies that on the; influence of resource complementarity on performance of PPP; the influence of communication on performance of PPP and the effect of leadership on performance of PPP.

#### **2.2.1 Resource Complementarity and Performance of PPPs**

Synergy brings together two organisations in long term partnerships for mutual benefits. However, these organizations are disparate with distinctly different goals. Thus, to ensure the successful operations of such partnerships, the process of goal setting and negotiations to set mutually beneficial or symbiotic goals and the process of collaborative negotiation based on altruistic empathy to resolve as many of the differences as possible are important in project finance deal (Younus, Al-Alusi, Ahmad & Obaidat, 2019).

Kanter (2014) noted that collaboration plays a key role in negotiation in PPPs because it makes the project sponsors aware of the importance of synergy in partnership. It has been found that it allows the partnership to accomplish goals which will not have been possible if working as individuals. Collaborative negotiation in PPPs therefore serves

a core function in the model of the project finance decisions. It acts as the conduit through which the three parameters impact the project finance decisions. The decisions eventually prescribe the operational and financial structures of PPPs. By collaboratively harnessing the capital and expertise among the project sponsors, PPP arrangements provide the opportunities to optimize the results, increase value and maximize efficiency.

Phillips, Scott and Levitt (2014) contended that public sector views PPPs can lead to significant fiscal, economic and social benefits for the community. In an increasingly difficult environment for the public sector to raise funds to provide public goods and services to the community, the public sector considers that PPPs can bundle financial resources, know-how and expertise to address the needs of society. However, to effectively appraise infrastructure projects, specific criteria are needed to evaluate the public-sector goals in relation to the desirability, economic and fiscal impacts of the development opportunities.

Bennett, James and Grohmann (2010) emphasized that joint venture between the public and private sectors can be an efficient way to capitalize on their respective strengths. Arising from these synergistic opportunities, Bennett *et al.* (2010) further argued that the public and private sectors' goals do not have to be identical to pursue collaborative advantages in PPPs. Their respective goals must be complementary, and this can lead to common or shared outcomes. The public sector recognizes that the private sector resources can infuse innovation and quality to public services. Realizing the potential and capabilities of the private sector provide strong incentives for the public sector to form partnership with the private sector to undertake project finance.

Stilwell and Jordan (2014) contended that apart from the opportunities of risk sharing between the public and private sectors, PPPs can provide better value for money and earlier project delivery than if left alone to the public sector. Therefore, PPPs can provide cost effective service delivery. It can also increase innovation, efficiency and customer focus. These attributes enhance the project benefits to the public sector when using PPPs in the development of large-scale infrastructure projects (Goldsmith, 2007; Savas, 2010).

The primacy of public sector involvement in PPPs is to align economic development with strategic goals. These include business expansion and job creation. Such economic vitality is necessary for economic and social prosperity. It can also allow the creation of synergistic opportunity that helps to attract other private sector developments (Phillips *et al.*, 2014). In addition, PPPs in developing countries are especially seen to be attractive because of its ability to achieve the transfer of technological knowledge to local enterprises (Bing, Akintoye, Edwards & Hardcastle, 2015). This is achieved by partnering with private sector with the desired technological expertise from more developed nations (Trim, 2011). Synergy in PPP enable most of objectives to be achieved, which otherwise will not be possible to accomplish by any one partner acting alone (Brown & Ryan, 2013). Public and private sectors can therefore collaborate to create mutually beneficial partnerships to develop projects for the community (Bundi, 2015).

Xu Jiang, Sali Li and Jiang (2017) did a study on resource complementarity and alliance performance in emerging economies. The study was informed by the resource-based view (RBV), drawing on transaction cost economics (TCE) and the institutional view. The results based on a sample of 174 partner firms provide general



support to the proposed model and associated hypotheses. Overall, the study provided novel insights into how partner firms can benefit from utilizing resource complementarity, highlighting the importance of incorporating TCE and the institutional view in analysing alliance-related resource issues when considered along with the RBV.

Chang-Bum Choi and Beamish (2011) did a study on Resource complementarity and international joint venture performance in Korea. The data for this study were collected in 2009 through a questionnaire mail survey of Korean-US, Korean Japanese, or Korean-European manufacturing. The findings indicated that that both technology-related resources and local knowledge-related resources affect performance independently and simultaneously. The impact of local knowledge-related resources on JV performance increased with the level of technology-related resources, and the impact of technology-related resources on JV performance increased with the level of local knowledge-related resources. Technology- and local knowledge-related resources are thus not simply additive; mutually enhancing synergies exist between the two resources. This finding further suggested that the synergistic effect of both partners' complementary resources on JV performance can be substantive.

Jiang and Jiang (2019) did a study on the contingent value of resource complementarity for Alliance Performance: Evidence from Chinese Manufacturing Firms. Using a sample of manufacturing firms in China, we find that the positive effect of resource complementarity on alliance performance is reduced when partners' behavioural uncertainty increases transaction costs. The positive effect becomes stronger when relevant subnational institutions have a high index of marketization.

Moreover, the effect of resource complementarity on alliance performance is shown to be strongest with moderate government support. Overall, this study provided novel insights into how firms can benefit from utilizing resource complementarity, highlighting the importance of incorporating TCE, and the institutional view in analysing alliance-related resource issues when considered along with the RBV.

### **2.2.2 Communication and Performance of PPPs**

PPPs are complex arrangements given the opposing interests by the partners and their diverging interpersonal dynamics. It is also argued that synergy can be impeded by collaborative inertia because the short-term gains may appear to be insignificant. PPPs encounter collaboration inertia because tension and conflicts can arise due to the differences in the respective objectives of the parties and possibly, due to lack of mutual trust. Overcoming this inertia and applying collaborative advantages can facilitate an integrated development of large-scale infrastructure projects using PPPs (Huxham & Vangen, 2014).

Different actors in partnerships will most likely have different goals, they will think differently, and their approach will be different (Shonubi and Akintaro, 2016). Moreover, misunderstanding and conflicts may arise if there is a lack of a strong relationship between public and private stakeholders (Tang *et al.*, 2010). Political obstacles stand in the way of synergy in PPP. Wagner & Llerena (2011) emphasize that policymakers sometimes even intentionally require non-feasible demands from the companies. In addition, the governmental may resist change in the delivery or financing.

In addition, politically unwanted adaptation process (cultural or political barriers within an organization) is another challenge. That is why attention should be focused on agents' preferences and organizational challenges in order to create appropriate incentive contracts (Beatty & Zajac, 2014). Incentive problems appear in projects with many members who have different resources, information and decision policies, and one clear organizational objective may not be synchronized with members' individual interests.

Rajhans (2012) opined in a study effective organizational communication: a key to employee motivation and performance that organizational communication plays a vital role in employee motivation and performance as real changes are taking place in modern organizations which confront the new reality of tighter staffing, increased workloads, longer hours and a greater emphasis on performance, risk-taking and flexibility. Today's organizations are run by multi and cross-functional teams which show little tolerance for unquestioned authority. To deal with this situation, the art of persuasion and the effort to find the correct emotional match with your audience is necessary.

Oyetunde and Oladejo (2012) did a study on communication approach and firms' performance: appraisal of Nigerian Bottling Company (Coca-Cola), Ilorin-Nigeria. The findings no doubt have validated the synergistic relationship between communication approach and efficient performance of NBC, Ilorin plant. They also recommended that there can still be more room for improvement and consequently better performance if management embraces the following recommendations: More clarity of ideas before attempting to communicate; Better understanding of the physical and human environment when communicating; A thorough analysis of the

purpose of communication and in planning communication, consultation should both be top down and bottom up, while all facts are rendered implicit and explicit;

Asamu (2014) did a study on the impact of communication on workers' performance in selected organisations in Lagos State, Nigeria. The research design adopted for this study was descriptive survey method. Data for the study were collected through questionnaire with sample population of 120 respondents. The result of this study revealed that a relationship exists between effective communication and workers' performance, productivity and commitment. The study recommended that managers would need to communicate with employees regularly to improve workers commitment and performance.

Shonubi and Akintaro (2016) examined the impact of Effective Communication on Organizational Performance. The discussion was based on series of empirical studies of communication and organizational performance. The research findings validated the synerginous relationship between communication approach and efficient organizational performance. They also recommended that there can still be more room for improvement and consequently better performance if management embraces the following recommendations: More clarity of ideas before attempting to communicate; Better understanding of the physical and human environment when communicating; A thorough analysis of the purpose of communication; In planning communication, consultation should both be top down and bottom up, while all facts are rendered implicit and explicit; Consideration should be given to the content and tone of the messages.

### **2.2.3 Leadership and Performance of PPPs**

According to Kanter (2014) trust, leadership, community assets, boundary-spanning skills and partnership efficiency are critical components of partnership synergy. However, expert assets and mistrust impede partnership synergy. Successful partnerships need synergy if they are to achieve outcomes. While the public and private entities have diverse goals, the need to seek complementary and even symbiotic goals to establish commonality and clarity in purpose is important to ensure successful partnerships (Thia & Ford, 2009).

Kanter (2014) presented eight strategies that can lead to successful synergy in partnerships, six of which are especially relevant to PPPs. Firstly, the partnerships must fit major strategic objectives of the respective parties, such that they want to make it work. Partners have long term goals which play a key role in shaping the partnerships. Bennett *et al.* (2000) contended that strong foundations for PPPs are based on complementary goals. Not only must the respective strategic objectives be upheld, the partnerships will improve the chance of success if the goals of the project sponsors are mutually compatible. Secondly, the partners know that they need each other. They have complementary assets and skills, and neither can accomplish alone what both can achieve together. Thirdly, the partners need to invest in each other to demonstrate their long-term commitment. They need to pledge financial and other resources to the partnerships.

Fourthly, the partnerships must be given a formal status with clear responsibilities and decision-making processes. Fifthly, there must be open communication where partners share information on technical data and knowledge of changing situations.

The need to share information is important as it forms a common basis of agreement. This includes eliminating as much of the forecasting gaps as possible arising from an attempt to predict the level of future traffic in as scientifically founded manner as practical (Danişman, Tosuntaş and Karadağ, 2015). It also includes any compensation plans when certain risks become more prominent than originally anticipated. Finally, mutual trust must exist between the partners. Shonubi and Akintaro (2016) advocated that in addition to trust, teamwork is also a key to success in PPPs.

It is expected that there will be areas of tension and conflicts in collaboration. The partners must cooperate sufficiently to reach mutually acceptable agreements while simultaneously must satisfy their individual interests. Collaboration in PPPs thus poses challenging tasks when both parties with disparate goals attempt to align their interests when negotiating risk sharing (Danişman, Tosuntaş and Karadağ, 2015).

According to Bing *et al.* (2015) professional and sound contract drafting is the most essential component of a successful PPP, as it is the only document or item that will protect both the public and private sector. Often it is argued that renegotiations increase as demand risk is passed onto the franchise holder, which stresses the importance of fully understanding the goals and stance of each stakeholder involved and taking appropriate steps to allocate all risks. A lack of sound and protective contract drafting is one of the major reasons PPP's fail to achieve anticipated results. Clear and concise contracts reduce the probability of renegotiations, which usually result in favouring the investors. It is important that both the public and private utilize professional legal and third-party opinion during drafting and negotiation (Eduardo *et al.*, 2013).

Protecting public interest is a daunting task but can start by being aware of the conflicts of interest that are intrinsically present in large-scale public-private infrastructure projects. In addition to public participation and allocating interests to non-conflicting parties, it is always important to have third party consultants and advisors completing the forecast studies (Engel *et al.*, 2013).

Danişman, Tosuntaş and Karadağ (2015) did a study on the effect of leadership on organizational performance. This was a meta-analysis study. A total of 598 research studies were collected as a result of the review, out of which 270 were included in the meta-analysis. The 270 research studies were compiled to obtain a sample group /sector size of 101,232 subjects. The analysis results of the random effect model showed that leadership has a medium-level effect on organizational performance . Of the moderators identified, such as leadership style /approach, sample group /sector, publication type and publication year, it was found that leadership style /approach and publication year were moderator variables.

Koech and Namusonge (2012) investigated the main effects of leadership styles on organizational performance at state-owned corporations in Kenya. A descriptive survey research based on the perceptions of middle and senior managers in thirty (30) state owned corporations based in Mombasa, Kenya was undertaken. A structured self-completed research questionnaire was thereafter distributed and collected after one week. To discover the leadership styles that influence organizational performance, correlation analysis was employed. Correlations between the transformational-leadership factors and organizational performance ratings were high (0.518 to 0.696,  $P < .05$ ), whereas correlations between the transactional-leadership behaviours and organizational performance were relatively low (0.219 to 0.375,  $P <$

.05). As expected, laissez-faire leadership style is not significantly correlated to organizational performance. Based on the findings, it was recommended that managers should discard laissez-faire leadership style by becoming more involved in guiding their subordinates; public managers should formulate and implement effective reward & recognition systems.

Ibrahim and Cross Ogohi (2019) examined the impact of leadership on the organisational performance of Coca Cola Company in Abuja, the Federal Capital City, Nigeria. The study discovered that leadership on the organizational performance of any given company. The style of leadership a manager adopted has a direct effect on the organizational performance of the employee. The study among other things discovered is that participatory of leadership and delegation of duties enhances the employee performance and attainment of corporate goals and objectives. The study therefore concluded that achievement of organizational goal and objective depends solely on the leadership style an organization adopted. It therefore recommended that, since leadership is one of the basic means used in attainment of organizational goal/objective, every organization should ensure that the right leader man their organization in order to achieve their set goals and or objectives

Mshana, Aagard, Cullen and Tschida (2018) did a study on leadership in community Public Private Partnership Health and Social Care Initiatives. This qualitative inquiry used an empirical case study approach. The findings confirmed that integrated supportive supervision, teamwork, and strategic communications promote partnership LS. On the other hand, at unclear roles and responsibilities, weak data, and limited understanding of the benefits of public-private partnerships at the community level hinder ownership and accountability. The potential positive social change of this



study includes improving LS that promotes community leader engagement and ultimately improving access and use of community health and social programs.

### **2.3 Summary of Review of Literature and Research Gaps**

A good number of studies have been done on the influence of synergy on performance of public private partnerships in Kenya, but these have left gaps that this study seeks to fill. Both local and global empirical studies were highlighted including Kanter (2014); Lee, Lee, and Garrett, (2019); Younus, Al-Alusi, Ahmad & Obaidat, (2019) and Ogada, Achoki & Njuguna (2016). However, these studies fail to link synergy with PPP outcomes. Similarly, much of the literature is based on developed economies where PPP is well established, these studies require validation as their results are not generalizable to the Kenya scenario given that Kenya is a developing economy and PPP is a new concept in its formative stages including its regulation. In addition, Fife and Hosman (2009); Eduardo *et al.* (2013) and Forre *et al.* (2010) noted that despite its strategic role in enhancing optimal benefits of PPPs, synergy is an evolving concept to most of PPPs in developing economies which largely remains untested coupled with lack of models to be benchmarked with. Therefore, this study was motivated by a gap in the literature. Although the key resources and attributes of partners are likely to be important, how synergy influences the partners' contribution to performance is unclear. Rather, current research offers a deterministic account of performance improvement, in which partners with attractive resources or capabilities are able to improve firm economic performance.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter looked at the various methods that were used to collect, manipulate and organize data for the purpose of this study. The chapter covers the research design, the population, sampling design, data collection methods, research procedures, data analysis methods and finally the chapter summary

### **3.2 Research Design**

The study used the descriptive research as the design of the study. Creswell, Klassen, Plano & Smith (2011) defines descriptive research design as data collection through questionnaire administration to a given sample. The descriptive research design in this study was used to describe systemically the facts and characteristics of the concerned population that was actively involved in the PPP under study in this research study. The study looked into the descriptive nature of the various phenomena under review as per the research questions looking at the importance of synergy for the success of PPPs, challenges faced by PPPs that hindered synergy and strategies to be put in place to create synergy for the success of PPPs. According to Balnaves and Caputi (2001) descriptive design helps to describe, explain and validate the findings of a study.

### **3.3 Research Site**

The study focused on the Afya Elimu Fund. It is a PPP between the Higher Education Loans Board (HELB), Intra-health International, FUNZOKenya project and the Kenya Healthcare Federation, with the joint participation of the Ministries of Education and Health. HELB disburses the funds to deserving beneficiaries to

facilitate their capacity building. The PPPs aim was to create a self-sustaining revolving fund from which students' access financing towards scaling up of their education (AEF, 2016).

### 3.4 Target Population

The selected population for this study was all partners of the Afya Elimu Fund. This included participants from MOH, MOE, Intrahealth, FUNZOKenya, HELB and Kenya Healthcare Federation. These participants are charged with the execution of the Afya Elimu Fund and were therefore the best source of data being sought. The distribution of employees in the different organizations are as shown in the table below.

**Table 3.1 Target Population**

<b>Afya Elimu Fund Partners</b>	<b>Target Population</b>
MOH	65
MOE	65
Intrahealth	20
FUNZOKenya	15
HELB	20
Kenya Healthcare Federation	15
<b>Total</b>	<b>200</b>

### 3.5 Study Sample

#### 3.5.1 Sampling Procedures

Sampling is broadly classified into probability and non-probability sampling (Mugenda, 2011). This research project applied stratified sampling method. The study grouped the population into three strata that is: top management, middle level and lower level management. According to Mugenda and Mugenda (2008), stratified sampling technique is useful for heterogeneous samples. As a form of probability sampling, stratified sampling was used because of the different partners involved in the Afya Elimu Fund.

#### 3.5.2 Sample Size

The proposed sample size was 126 staff from all partners in the Afya Elimu Fund. The study used the Krejcie, Robert and Morgan (1996) sample size determination formula (As indicated in the appendix 1).

$$s = \frac{x^2 NP (1-P)}{d^2 (N-1) + X^2 P (P-1)}$$

Where s = required sample size.

$x^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level

N = the population size.

P = the population proportion (assumed to be 0.50 since this would provide the maximum sample size).

$d$  = the degree of accuracy expressed as a proportion (0.05).

$s=126$  employees

The study therefore used a sample size of 126 respondents distributed as shown in Table 3.1 below.

**Table 3.2 Sampling Frame**

<b>Afya Elimu Fund Partners</b>	<b>Target Population</b>	<b>Sample</b>
MOH	65	40
MOE	65	40
Intrahealth	20	13
FUNZOKenya	15	10
HELB	20	13
Kenya Healthcare Federation	15	10
<b>Total</b>	<b>200</b>	<b>126</b>

### **3.6 Data Collection**

#### **3.6.1 Data Collection Instruments**

A self-administered semi-structured questionnaire was applied for collection of data. The questionnaire contained open and close ended questions and a set of Likert scale questions. A mixture of the three types of the questions was used for collecting high quality and easily analysable data. The Likert scale questions assisted in explaining the magnitude of the respective questions the respondents were responding to. To fast-track the data collection process, the researcher used two research assistants. The research assistants were trained on study objectives before being deployed for data

collection. The researcher supervised the data collection process to ensure collection of quality data. The reason for choosing survey questionnaire as the data collection instruments was primarily because they are practical and applicable as well as cost effective when dealing with a large sample as was the case in this study (Denscombe, 2008).

### **3.6.2 Piloting of Research Instruments**

A pilot test of the study questionnaire was undertaken among 3 staff from each partner organization involved in the PPP. The pilot study was conducted with 18 respondents taking part. Through piloting the researcher improved on the reliability of the questionnaire before the main study was carried out.

### **3.6.3 Reliability of Research Instruments**

Reliability is a measure of the point to which a research instrument gives results after repeated trials. Kumar (1996) postulates that reliability has to do with consistency, practicability and accuracy. statistical coefficient - Cronbach's alpha ( $\alpha$ ) was used as a measure of internal reliability. Cronbach's alpha reliability coefficient ranges between 0 and 1. Reliability coefficient of 0 implies that there is no internal reliability while 1 indicated perfect internal reliability. The coefficient of consistency was put at a scale of 0.7, this value or above is considered reasonably high for research purpose (Mugenda and Mugenda, 1999). The reliability results are presented in table 3.2

**Table 3.3 Reliability Results**

<b>Variable</b>	<b>Alpha value</b>	<b>Number of items</b>
Resource complementarity	0.829	6
communication	0.717	6
Leadership	0.841	5
Performance of PPP	0.750	5

The pilot results indicated that the reliability of the Resource complementarity was 0.829 using Cronbach's alpha test of reliability; the reliability of communication was 0.717; the reliability of the Leadership was 0.841 and the reliability of Performance of PPP was 0.750. The study results revealed that all the variables gave an alpha test value of greater than 0.70, therefore all the items were regarded reliable.

### **3.6.4 Validity of Research Instruments**

To ascertain the content, construct and translation validity of the questionnaire, the expert opinion was sought by the researcher from the subject lecturers and other relevant specialists in the field of PPPs. Validity reflects the extent to which the research tools are assured of their accuracy, soundness and effectiveness with which an instrument measure what it is intended to measure (Kothari, 2004).

### **3.6.5 Data Collection Procedures**

The researcher obtained a permit to collect data from the university and the respective organizations targeted in this study namely, MOH, MOE, Intrahealth, FUNZO Kenya, HELB and Kenya Healthcare Federation. Once the research permit was obtained, the researcher approached the respective organizations to book an appointment with the

study respondents during which the researcher took them through the questionnaire. The respondents were left with the questionnaire to allow them time to respond. Follow up calls were made to the respondents to ensure they sent in their responses on time. Due to the good rapport created while interacting with the respondents, this helped to increase the response rate of the study.

### **3.7 Data Analysis**

Quantitative data was analysed using descriptive statistics such as frequencies, percentages. Graphical presentations, charts and tables produced using Ms-Excel were used for presenting data analysed. In addition, inferential statistics specifically Pearson correlation analysis was used to test the relationship between synergy and PPP.

### **3.8 Legal and Ethical Considerations**

The study participants were asked to give their consent and were informed that their participation was voluntary. As such at any time during the entire process they could withdraw, and they would not be penalized. All data collected was kept private and confidential. Confidentiality was assured by asking the respondents not to indicate their names. Instead, the researcher used codes to identify the questionnaires. Confidentiality was also ensured during and after data collection and the data was only used for the study purpose. The researcher also obtained a permit to conduct the study from National Commission for Science, Technology and Innovation (NACOSTI).



## CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

### 4.1 Introduction

This chapter presents the analysis of data on the study on the influence of synergy on performance of public private partnerships in Kenya. The first part of the chapter covers analysis of the background information while the rest of the analysis is guided by the three specific objectives of the study which included; to establish the influence of resource complementarity on performance of a PPP in Kenya; to determine the influence of communication on performance of a PPP in Kenya; and to evaluate the effect of leadership on performance of PPP in Kenya.

### 4.2 Response Rate

The study had a sample size of 126 respondents to whom questionnaires were administered to and the outcomes are as indicated on Table 4.1 below.

**Table 4.1 Response rate**

<b>Response Rate</b>	
Questionnaire administered	126
Questionnaire returned	120
<b>Response rate (%)</b>	<b>95.2%</b>

As indicated in Table 4.1 above, only 120 of the respondents returned the questionnaires duly filled in contributing to a response rate of 95.2%. This response rate was sufficient and representative and conforms to Mugenda and Mugenda (2008) stipulation that; a response rate of 50% is adequate; 60% is good while 70% and over is excellent for analysis and statistical reporting.

#### 4.2.1 Characteristics of the Respondents

The first part of the analysis was concerned with the descriptive analysis/statistics of the background information. The background information was gender, age, educational background and years of experience in a PPP. This was mainly to ascertain the suitability of the respondents in participating in this study. These are discussed in the following subsequent themes:

#### 4.2.2 Distribution of Respondents by Gender

Gender was an important variable in this study to investigate the representation of male and female respondents in the study. The results are as presented in Table 4.2

**Table 4.2 Gender distribution of the Respondents**

<b>Gender of Respondent</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Male	73	60.8
Female	47	39.2
<b>Total</b>	<b>120</b>	<b>100.0</b>

Table 4.1 indicates that out of a total of 120 respondents 73(60.8%) of the respondents who participated in answering the questionnaire were males while 47(39.2%) were females. This indicates that there are more male than female respondents who are employees of Afya Elimu Fund partners. Based on the Constitution of Kenya, one third rule of representation of either gender, there was no gender bias in terms of representation among the respondents.

### 4.2.3 Distribution of Respondents by Age

The respondents were asked to indicate their age bracket on the questionnaire to assess if Afya Elimu Fund partners attract employees from diverse age groups and the results are as presented in Table 4.3

**Table 4.3 Age of the Respondents**

<b>Age of the Respondents</b>	<b>Frequency</b>	<b>Percent</b>
25-30 years	21	17.3
30-35 years	23	19
35-40 years	23	19
40-45 years	25	20.7
45-50	14	11.6
Above 50 Years	14	11.6
<b>Total</b>	<b>120</b>	<b>100.0</b>

As indicated in Table 4.3, 21(17.3%) were aged between 25-30 years, while 23(19%) were aged between 30 to 35 years, 23(19%) were aged between 31 and 35 years, majority of the respondents,25(20.7%) were aged between 40-45 years and 14 (11.6%) were aged between 45 and 50 years while 14 (11.6%) were aged above 50 years. This indicates that the respondents were composed of dynamic set persons of diverse age groups and have several years of experience and skills.

#### 4.2.4 Distribution of Respondents by Highest Education Level

Respondents were asked to indicate their highest education level. This item was to assess their level of skills and to establish whether they were in a position to answer the questionnaire accurately and the results of are as indicated in Table 4.4.

**Table 4.4 Level of Education of Respondents**

<b>Level of Education</b>	<b>Frequency</b>	<b>Percentage %</b>
Certificate	25	20.7
Diploma	29	23.9
Bachelors' degree	48	39.6
Master's degree	15	12.4
PhD	4	3.3
<b>Total</b>	<b>121</b>	<b>100.0</b>

As indicated in Table 4.4, out of the 121 respondents, 25(20.7%) of the respondents certificate as their highest level of education, while 29(23.9%) had diploma level while the majority 48(39.6%) had bachelors degree level, 3(3.3%) had a PhD level of education and lastly 15(12.4) had a masters level of education as their highest education level. These findings indicate that the respondents were in a position to accurately answer the questionnaire. In addition, the findings also indicate that the Afya Elimu Fund partner's employees are equipped with the necessary knowledge

and skills on the influence of synergy on performance of public private partnerships in Kenya

#### 4.2.5 Afya Elimu Fund partners

The study sought to confirm the representation of the partner organization by the number of respondents interviewed. This is presented in Table 4.5

**Table 4.5 Afya Elimu Fund partners**

<b>Partner</b>	<b>Freq</b>	<b>Percent</b>
Ministry of Health	39	32.5
Ministry of Education	36	30
Intrahealth/USAID funded FUNZOKenya Project	13	11
Higher Education Loans Board	9	7.5
Funzo Kenya	12	10
Kenya Healthcare Federation	10	9
<b>Total</b>	<b>120</b>	<b>100</b>

The study established the representation of respondents across the five-partner organization constituting the Afya Elimu Fund to be as follows; MoH (32.5%), MoE (30%), Intrahealth (11%), HELB (7.5%), Funzo Kenya (10%) and Kenya Healthcare Federation (9%). This implies that the information collected was a balanced opinion from all the member organizations on the influence of synergy on performance of a public private partnership in Kenya.

### 4.3 Presentation of Research Analysis, Findings, and Interpretation

This section includes a presentation of the results according to the objectives and the research questions. Tables and figures are clearly presented so that the data shows evidence to support claims per each objective.

#### 4.3.1 Influence of resource complementarity on performance of a PPP

The first objective was to establish the influence of resource complementarity on performance of a PPP like Afya Elimu Fund. The findings are as described in the subsequent subsections.

##### 4.3.1.1 Benefits that came through synergising

The study sought to find out the various benefits that came through synergising amongst partners of Afya Elimu Fund. The findings are as described in Table 4.6 below.

**Table 1.6 Benefits that came through synergizing**

<b>Benefits</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>M</b>	<b>Std</b>
Alignment of PPP goals and objectives	F	44	49	10	8	10	4.28	.501
	%	36.4	40.5	8.3	6.6	8.3		
Wealth and business opportunities creation	F	44	52	7	17	1	4.20	.51
	%	36.4	43.0	5.8	14.0	0.8		
Competitive advantage creation	F	59	38	17	3	4	4.18	.59
	%	48.8	31.4	14.0	2.5	3.3		
Reduction of costs and time	F	46	36	10	11	2	4.10	.59
	%	43.8	34.3	9.5	10.5	1.8		
Resource complementarities	F	59	38	17	3	59	4.08	.610
	%	48.8	31.4	14.0	2.5	48.8		
<b>Overall mean score</b>							<b>4.17</b>	<b>0.56</b>

The majority of the respondents agreed that synergy had a high catalytic effect on the implementation of Afya Elimu Fund as indicated by the overall mean score of 4.165. This was through; enabling partners' alignment of PPP goals and objectives (Mean=4.2750); creation of wealth and business opportunities (Mean=4.2000); creation of competitive advantage for the partners (Mean=4.1750); reduction of costs and time (Mean=4.1000); and creating resource complementarities (Mean=4.0750).

From the findings it is evident that synergy is highly practiced amongst Afya Elimu Fund partners as a tool to ensure the programme goal is highly achieved. Through synergy partners have been able to create more wealth and business opportunities, reduce operational costs and project cycle time as well as create an additional pool of resources (both financial and human resources) through resource complementarities.

#### 4.3.1.2 Rating synergy

The respondents were to indicate the extent to which synergy amongst partners was reflected in the implementation of Afya Elimu Fund. This is presented in Table 4.7 below;

**Table 4.7 Rating synergy**

<b>Rating synergy</b>	<b>Freq</b>	<b>Percent</b>
To a very great extent	48	40
To a great extent	64	54.2
To a moderate extent	8	6.8
To a little extent	0	0
To no extent	0	0
<b>Total</b>	<b>120</b>	<b>100</b>

From the findings, most of the respondents 64 (54.2%) indicated that synergy was practiced to a great extent among partners reflected in the implementation of Afya

Elimu Fund, 48 (40%) to a very great extent while 8 (6.8%) indicated that it was practiced to a moderate extent none agreed on little or no extent. This means that partner organizations implementing Afya Elimu Fund do leverage on synergy to spur the implementation of the PPP.

#### **4.3.1.3 Designing and Planning of Synergy**

The respondents were to indicate the extent to which the highlighted factors were considered in the designing of synergy in the implementation of Afya Elimu Fund. The responses were rated on a five-point Likert scale where: 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent. This is presented in Table 4.8



**Table 4.8 Designing and planning of synergy**

<b>Designing and planning of synergy</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>M</b>	<b>Std</b>
Understanding of project goals and objectives	F	46	37	16	10	12	4.05	.808
	%	38.0	30.6	13.2	8.3	9.9		
Alignment of goals and objectives	F	45	41	11	16	8	4.05	.671
	%	37.2	33.9	9.1	13.2	6.6		
Creation of wealth and business opportunities	F	50	32	18	2	3	4.05	.548
	%	47.6	30.5	17.1	1.9	2.9		
Creation of competitive advantage	F	38	53	3	9	2	4.02	.614
	%	36.2	50.5	2.9	8.6	1.9		
Understanding of partner goals and objectives	F	53	43	11	11	3	4.01	.671
	%	43.8	35.5	9.1	9.1	2.5		
<b>Overall Mean Score</b>							<b>4.03</b>	<b>0.66</b>

In order of priority, the factors considered in the designing of synergy as indicated by the majority of the respondents included; understanding of project goals and objectives (Mean=4.0500); alignment of goals and objectives (Mean=4.0500); creation of wealth and business opportunities (Mean=4.0500); creation of competitive advantage (Mean=4.0250); and that understanding of partner goals and objectives (Mean=4.0165) respectively.

The findings infer that creation of synergy amongst partners implementing Afya Elimu Fund is realised through synchronization of partner's project goals and objectives, creation of wealth and business opportunities and competitive advantage.

#### **4.3.1.4 Resource complementarity and PPP performance**

The respondents were to indicate their level of agreement with various statements relating to the influence of resource complementarity on performance of Afya Elimu Fund. The responses were rated on a five-point Likert scale where: 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent. This is presented in Table 4.9

**Table 4.9 Resource complementarity and PPP performance**

<b>Resource complementarity</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>M</b>	<b>Std</b>
The top management of partner organizations in this PPP implement proactive leadership strategies in the PPP	F	50	40	6	11	14		
	%	41.3	33.1	5.0	9.1	11.6	3.90	.738
The leadership has fully supported the implementation of the PPP	F	53	43	11	11	3		
	%	43.8	35.5	9.1	9.1	2.5	3.86	.819
Players in a PPP are different and synergy is an important concept to align their way of doing things complement each other towards achieving the ultimate goals and objectives	F	71	32	11	6	1		
	%	58.7	26.4	9.1	5.0	0.8	3.83	.774
Synergies has helped in the creation of business opportunities and wealth	F	37	51	7	9	17		
	%	30.6	42.1	5.8	7.4	14.0	3.80	.643
A PPP has created synergistic results by combining the expertise and resources of the private partner with the administrative and political power of the government	F	45	41	11	16	8		
	%	37.2	33.9	9.1	13.2	6.6	3.73	.709

From the findings, the majority of the respondents agreed to a great extent that resource complementarity as a construct of synergy had a great and positive influence on performance of Afya Elimu Fund as indicated by the overall mean score of 3.8156. More specifically concerning the importance of resource complementarity as the driving force behind synergy in PPP, the majority of the respondents agreed that; the top management of partner organizations in this PPP implement proactive leadership strategies in the PPP (Mean=3.9000); the leadership has fully supported the implementation of the PPP (Mean=3.8595); players in PPP are different and synergy is an important concept to align their way of doing things complement each other towards achieving the ultimate goals and objectives (Mean=3.8250); synergies has helped in the creation of business opportunities and wealth (Mean=3.8000); PPP has created synergistic results by combining the expertise and resources of the private partner with the administrative and political power of the government (Mean=3.8000); PPP has led to cost effectiveness and efficiency and increased sales consequently leading to competitive advantage of PPP partners (Mean=3.8000); and that PPP has reduced project implementation costs and time (Mean=3.7250) respectively.

From the findings, it is evident that resource complementarity as a key component of synergy is highly leveraged to drive the performance of Afya Elimu Fund. Through resource complementarity, the partners in Afya Elimu Fund have been able to set and implement symbiotic goals and the process of collaborative negotiation based on altruistic empathy. This further has enabled the creation of a pool of resources both human and financial that is available for use by each of the partners.

### 4.3.2 Influence of communication on performance of a PPP

The second objective was to determine the influence of communication on performance of a PPP. The findings are as described in the subsequent subsections.

#### 4.3.2.1 Communication Challenges

The respondents were to indicate the communication challenges that Afya Elimu Fund faced in its implementation. According to the findings, the challenges they reported included misinformation, poor and uncoordinated sharing of information between partners, high cost of communicating with partners, and delay in passing of crucial information amongst partners due to high level of bureaucracy. From the findings, it's deduced that despite the critical role of communication as a pillar in enhancing the success of Afya Elimu Fund, the challenges thereof significantly reduced effectiveness of communication.

#### 4.3.2.2 Effectiveness of communication in a PPP

The respondents were to rate the effectiveness of communication amongst partners of Afya Elimu Fund. This is presented in Table 4.10

**Table 4.10 Effectiveness of communication**

<b>Effectiveness of communication</b>	<b>Freq</b>	<b>Percent</b>
Low	15	12.5
Moderate	37	30.8
High	68	56.7
<b>Total</b>	<b>120</b>	<b>100</b>

As indicated in Table 4.10, majority 68(56.7%) of the respondents rated the effectiveness of communication amongst partners of Afya Elimu Fund as high, 37(30.8%) rated it as moderate while 15(12.5%) rated the effectiveness of communication as low. This means that communication amongst partners of Afya Elimu Fund is playing its critical role in enhancing the performance of the PPP as it is largely effective. The effective communication amongst partners ensures that pertinent decisions are arrived at faster, hence increasing the performance of the PPP.

#### 4.3.2.3 Communication in a PPP

The respondents were to indicate the extent to which communication amongst partners of Afya Elimu Fund contributed to the meeting of the PPP targets. This is presented in Table 4.11

**Table 4.11 Communication in PPP**

<b>Communication in PPP</b>	<b>Freq</b>	<b>Percent</b>
To a very great extent	64	53.3
To a great extent	30	25
To a moderate extent	26	21.7
To a little extent	0	0
To no extent	0	0
<b>Total</b>	<b>120</b>	<b>100</b>

From the findings, the majority of the respondents 64(53.3%) indicated that communication amongst partners of Afya Elimu Fund contributed to the meeting of the PPP targets to a great extent, 30(25.0%) to a very great extent while 26(21.7%) indicated that it was practiced to a moderate extent. This implies that communication

as a synergy creating tool is applied to a great extent amongst the partners of Afya Elimu Fund. Given that PPPs are complex arrangements given the opposing interests by the partners, communication helps members to synergize in seeking win-win solutions in resolving complex PPP tension and conflicts and moving forward.

#### **4.3.2.4 Communication and PPP performance**

The respondents were to indicate their level of agreement with various statements relating to the influence of communication on performance of Afya Elimu Fund. The responses were rated on a five-point Likert scale where: 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent. This is presented in Table 4.12

**Table 4.12 Communication and PPP performance**

<b>Communication and PPP performance</b>					<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>M</b>	<b>Std</b>
The Afya Elimu Fund F	40	39	5	8	13						
communication has a SMART approach	39.1	37.1	3.8	9.6	10.4				3.73	.709	
An effective communication strategy is needed for the creation	F 46	36	10	11	2						
	% 43.8	34.3	9.5	10.5	1.9				3.67	.988	
Through communication trust is built and transparency encouraged, which increases engagement and translate into increased buy-in from partners	F 50	32	18	2	3						
	% 47.6	30.5	17.1	1.9	2.9				3.65	.729	
There exist differences in the implementation of the PPP due to hesitance in relinquishing control over the project and sharing of information	F 38	53	3	9	2						
	% 36.2	50.5	2.9	8.6	1.9				3.60	.803	
There is constant communication among partners on organization and procedural methods of doing business that has helped meeting the expectations and ultimate outcome of the PPP	F 46	36	10	11	2						
	% 43.8	34.3	9.5	10.5	1.8				3.35	.857	
<b>Overall Mean Score</b>									<b>3.45</b>	<b>0.900</b>	



From the findings, the majority of the respondents agreed to a great extent that communication as a construct of synergy had a great and positive influence on performance of a PPP like Afya Elimu Fund as indicated by the overall mean score of 3.4392. More specifically concerning the value of communication as a catalyst for building synergy in PPP, the majority of the respondents agreed that; Afya Elimu Fund communication has a SMART approach (Mean=3.7250); an effective communication strategy is needed for the creation of synergy for the success of PPPs (Mean=3.6750); through effective communication trust is built and transparency encouraged, which increases engagement and translate into increased buy-in from partners (Mean=3.6500); there exist organizational differences in the implementation of the PPP due to hesitance in relinquishing control over the project and sharing of information (Mean=3.6000); there is constant communication among partners on organization and procedural methods of doing business that has helped meeting the expectations and ultimate outcome of the PPP (Mean=3.3500); communication has helped to develop good coordination of efforts and the need for greater understanding of organizational cultures among the project partners (Mean=3.2500); and that the Afya Elimu Fund implements a communication strategy to mitigate complexity of engagement among partners (Mean=2.8250) respectively.

From the findings, it is evident that partners in Afya Elimu Fund heavily apply well designed communication strategies to create synergy in the implementation of the PPP. Through effective communication, trust and transparency between partners is enhanced and helps to bring about complete buy-in from all the stakeholders which consequently increases the performance of the PPP. Constant and effective communication further enhances timely decision-making processes and coordination

in the lifecycle of the PPM which catalyses the implementation of PPP and ultimately meeting of the set targets.

### 4.3.3 Effect of leadership on performance of a PPP

The third objective was to evaluate the effect of leadership on performance of Afya Elimu Fund. The findings are as described in the subsequent subsections.

#### 4.3.3.1 Leadership strategies

The study inquired from the respondents on the application of leadership strategies to create synergy for the success of Afya Elimu Fund. This is presented in Table 4.13

**Table 4.13 Application of Leadership strategies**

<b>Application of Leadership strategies</b>	<b>Freq</b>	<b>Percent</b>
To a very great extent	32	26.7
To a great extent	74	61.7
To a moderate extent	14	11.6
To a little extent	0	0
To no extent	0	0
<b>Total</b>	<b>120</b>	<b>100</b>

From the findings, the majority of the respondents 74(61.7%) indicated that leadership strategies applied by partners contributed to the success of the Afya Elimu Fund to a great extent, 32(26.7%) to a very great extent while 14(11.6%) indicated that it contributed to a moderate extent. From these findings, it was deduced that partners in the Afya Elimu Fund have a well-thought-out leadership strategy and structure that they adhere to as they interact with other partners in the PPP. Through a good leadership strategy, the partners are able to proactively negotiate with each other

and arrive at win-win decisions that are pivotal in achievement of the Afya Elimu Fund goal.

#### 4.3.3.2 Effectiveness of leadership strategies

The respondents were to rate the effectiveness of leadership strategies put in place to towards the achievement of the outcomes of the Afya Elimu Fund. This is presented in Table 4.14

**Table 4.14 Effectiveness of leadership strategies**

<b>Effectiveness of leadership strategies</b>	<b>Freq</b>	<b>Percent</b>
Low	20	16.7
Moderate	30	25
High	70	58.3
<b>Total</b>	<b>120</b>	<b>100</b>

The majority 70(58.3%) of the respondents rated the effectiveness of leadership applied amongst partners towards the achievement of the outcomes of the of Afya Elimu Fund as high, 30(25.5%) rated it as moderate while 20(16.7%) rated the effectiveness of leadership as low. The findings further indicate that leadership is a major construct of synergy that is the driving force in the implementation of Afya Elimu Fund as it was noted to be highly effective. Leadership is the major determinant of the extent to which respective partners are committed to the PPP as it determines top leadership decisions in-terms of resource allocation. Therefore, the more effective the leadership strategy applied by respective partners, the better the Afya Elimu Fund outcome.

#### 4.3.3.4 Leadership and performance of PPP

The respondents were to indicate their level of agreement with various statements relating to the effect of leadership on performance of Afya Elimu Fund. The responses were rated on a five-point Likert scale where: 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent.

This is presented in Table 4.15

**Table 4.15 Leadership and performance of PPP**

<b>Leadership and performance</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>M</b>	<b>Std</b>
To ensure agreement and understanding among all the partners, clear leadership strategies should be set	F	45	49	10	8	10		
	%	37.5	39.8	8.1	6.5	8.1	3.83	.774
Inclusion of leadership component in the PPP guidelines are important as they provide all players in the PPP with standard operating procedures of the partnership	F	59	33	22	3	3	3.80	.717
	%	49.2	27.5	18.3	2.5	2.5		
Effective leadership empowered throughout the organizations is required to ensure accountability in the PPP	F	42	41	15	8	14	3.80	.643
	%	35.0	34.2	12.5	6.7	11.7		
Through good leadership, the PPP has an existing accountability mechanism in place	F	52	35	6	14	3	3.80	.603
	%	51.7	29.2	5.0	11.7	2.5		
Understanding of project objectives and partner expectations by the partner's top leadership is key to the success of the PPP		44	60	3	11	2		
		36.7	50.0	2.5	9.2	1.7	3.67	.988
<b>Overall mean score</b>							<b>3.77</b>	<b>0.739</b>

From the findings, the majority of the respondents agreed to a great extent that leadership as a construct of synergy had a great and positive effect on performance of Afya Elimu Fund as indicated by the overall mean score of 3.7708. More specifically concerning the role of leadership in enhancing synergy amongst partners in AEF, the majority of the respondents agreed that; to ensure agreement and understanding among all the partners, clear leadership strategies should be set (Mean=3.8250); inclusion of leadership component in the AEF guidelines are important as they provide all players in the PPP with standard operating procedures of the partnership (Mean=3.8000); successful PPP require use of effective leadership strategies (Mean=3.8000); effective leadership empowered throughout the organizations is required to ensure accountability in the PPP (Mean=3.8000); through good leadership, the PPP has an existing accountability mechanism in place (Mean=3.7250); and that understanding of project objectives and partner expectations by the partner's top leadership is key to the success of the PPP (Mean=3.6750) respectively.

The findings imply that leadership is a major vehicle through which synergy amongst Afya Elimu Fund partners is realised. Through effective leadership in the Afya Elimu Fund lifecycle, there is mutual understanding among all the partners on the priority areas to be catered for and adherence to the agreed standard operating procedures of the partnership. It further blends in the culture of accountability in the implementation of Afya Elimu Fund. It is leadership that guarantees the resolution of any conflicts that emerge in the implementation of Afya Elimu Fund.

#### 4.3.4 Performance of PPP

The respondents were to indicate their level of agreement with various statements relating to the performance of Afya Elimu Fund. The responses were rated on a five-point Likert scale where: 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent. This is presented in Table 4.16

**Table 4.16 Performance of a PPP**

<b>Performance of a PPP</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>M</b>	<b>Std</b>
Synergies have led to cost effectiveness and efficiency	F	58	37	5	15	5	3.74	1.35
	%	48.3	30.8	4.2	12.5	4.2		
Synergies have led to improvement in workers' competence	F	71	31	12	3	3	4.08	1.06
	%	59.2	25.8	10.0	2.5	2.5		
Synergies have led to increase in number of beneficiaries	F	50	51	4	12	3	4.18	.978
	%	41.7	42.5	3.3	10.0	2.5		
Synergies have led to competitive advantage of PPP partners	F	36	49	7	8	20	4.10	.950
	%	30.0	40.8	5.8	6.7	16.7		
Synergies have helped in the creation of business opportunities and wealth	F	38	50	8	16	8	3.92	.997
	%	31.7	41.7	6.7	13.3	6.7		

From the findings, the majority of the respondents agreed to a great extent that synergies have led to cost effectiveness and efficiency as indicated by the overall mean score of 3.74. More specifically concerning the issue that synergies contribute to the performance of a PPP, majority of the respondents agreed that; synergies have led to improvement in workers' competence (Mean=4.08); synergies have led to increase in number of beneficiaries (Mean=4.18); synergies have led to competitive advantage of PPP partners (Mean=34.10); and that synergies have helped in the creation of business opportunities and wealth (Mean=3.92) respectively.

The findings imply that synergy provided various benefits leading to the performance of a PPP as reflected in the success and efficiency of Afya Elimu Fund. This is important considering that players in a PPP are different and synergy is an important concept to align their way of doing things to complement each other towards achieving the ultimate goals and objectives. Synergy also leads to cost effectiveness and efficiency and increased sales, consequently leading to competitive advantage of the PPP partners. The findings also imply that PPP's create synergistic results by combining the expertise and resources of the private partner with the administrative and political power of the government. Finally, the results imply that through synergy PPP's reduce project implementation costs and time and this has helped in the creation of business opportunities and wealth.

The findings agree with Taylor (2007) who observed that collaborations between different organizations enable them to compensate for gaps in their knowledge and capacity to provide goods or services. PPPs combine the efficiencies of the private sector with the government responsibility to meet the service needs of the public.

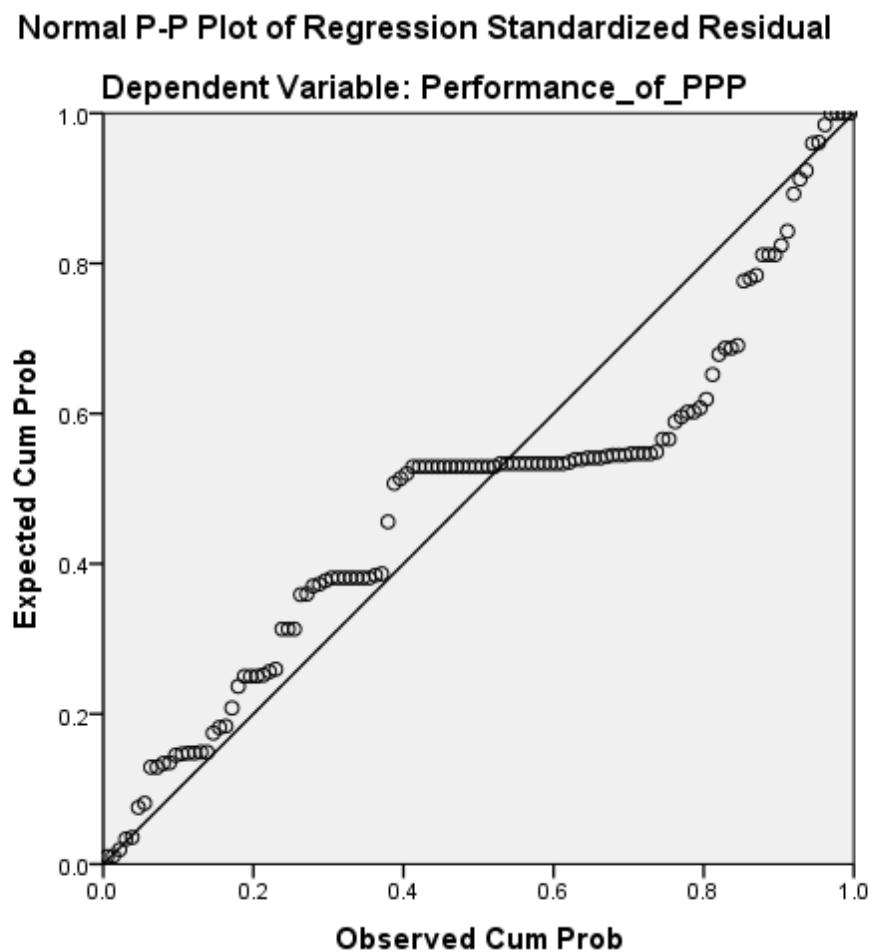
#### **4.4 Diagnostic Tests**

According to Hair et al., (2010), the diagnostic tests are essential to ensure that the results obtained were actually representative of the sample so as to obtain the best results possible. The key diagnostic tests conducted were normality, linearity, multi collinearity, homoscedasticity and independence of errors (Hair et al., 2010). After meeting the key assumptions, the study used the existing sample data to test the hypothesis.

##### **4.4.1 Linearity Assumptions**

Linearity is the assumption that a straight-line relationship exists between two variables (Tabachnick & Fidell, 2013). Testing for linearity is deemed necessary since linearity is an assumption of regression which must be satisfied. The bivariate P-P plot was used to assess the degree of linear relationship. Linearity assumption accurately estimates the relationship between dependent and independent variables. This is presented in Figure 4.3





**Figure 4.1 Linearity Assumptions**

Findings in Figure 4.1 showed that the plots in the normal P-P as presented clearly shows a normal distribution along the diagonal line, the distribution is not skewed to either side. Thus, the assumption that the data was linear was attained.

#### **4.4.2 Test of Normality Assumption**

Regression assumes that variables have normal distributions. Non-normally distributed variables can distort relationships and significance tests. Shapiro –Wilk (W) test was used to test normality. Shapiro –Wilk (W) Test for normality was used because the size of respondents is small (33 respondents). Shapiro – Wilk (W) test is

appropriate where the size is between 7 to 2000 respondents (Shapiro & Wilk, 1965). For large samples of between 2000 and 5000 respondents, Kolmogorov – Smirnov (D) test is appropriate (Ghasemi & Zahediasl, 2012). From the results if the significance value less than 0.05, the data is normal else if significance value greater than 0.05, the data is not normally distributed (Garson, 2012). The results are presented in Table 4.17

**Table 4.17 Results of Test of Normality Assumption**

		<b>Resource complementarity</b>	<b>Communica tion</b>	<b>Leadership</b>	<b>Performance</b>
Normal Parameters <sup>a, b</sup>	Mean	4.10	3.74	3.86	4.12
	Std. Deviation	.611	.777	.805	.752
Most Extreme Differences	Absolute	.177	.128	.120	.209
	Positive	.123	.066	.104	.121
	Negative	-.177	-.128	-.120	-.209
Kolmogorov-Smirnov Z		1.339	.969	.903	1.581
Asymp. Sig. (2-tailed)		.003	.0120	.000	.013

a. Test distribution is Normal.

b. Calculated from data.

The study tested the normality of the regression model to determine whether the assumption of normality of distribution was attained. From Table 4.15, Shapiro wilk test significance was less than 0.05 indicating that the distribution of the data was normal.

#### 4.4.3 Test of Autocorrelation assumption

Autocorrelation is the correlation between members of the series of observations ordered in time or space. It is a measure of correlation among regression residuals (Tabachnick & Fidell, 2013). Occasionally, the assumption of independence of errors is violated when factors such as time and distance are associated with the order in which cases are taken. Autocorrelation was tested using the Durbin-Watson statistic which is regarded as a measure of autocorrelation of errors when the order of cases is factored in (Tabachnick & Fidell, 2013). Under this test, the critical values of  $1.5 < d < 2.5$  was used to examine presence of autocorrelation. Consequently, as indicated in table 4.13 the durbin statistic was 1.576 which signifies lack of first order linear autocorrelation in our multiple linear regression data. This presented in Table 4.18

**Table 4.18 Results of Test of Autocorrelation assumption**

Test	Durbin-Watson
Value	1.576

#### 4.4.4 Test for Heteroscedasticity

According to Revelle Zinberg (2012), Heteroscedasticity refers to the circumstance in which the variability of a variable is unequal across the range of values of a second variable that predicts it. As it relates to statistics, Heteroscedasticity, refers to the error variance, or dependence of scatter, within a minimum of one independent variable within a particular sample. The Levene's statistic for equality of variances was used to test for the assumption of homoscedasticity. Violation of homoscedasticity of variance is confirmed if the Levene's test statistic is found to be greater than the significant (alpha level of 0.05). As shown in Table 4.19 the Levene's statistics were

below 0.05 (Martin and Bridgmon, 2012). The assumption of homoscedasticity of variance in this study was therefore supported.

**Table 4.19 Results of Homoscedasticity Test**

	<b>Levene Statistic</b>	<b>df1</b>	<b>df2</b>	<b>Sig.</b>
Resource complementarity	.223	8	43	.985
Communication	1.381	8	43	.232
Leadership	1.856	8	43	.093

#### **4.4.5 Test for Multi-Collinearity**

The assumption of multicollinearity implies that there is no correlation between independent variables. The standard issue in multicollinearity is that the standard errors and thus the variances of the estimated coefficients are inflated when multicollinearity exists (Vatcheva *et al*, 2016). Test for multicollinearity among study variables was conducted using Tolerance and Variance Inflation Factor (VIF). The threshold for rejecting existence of multicollinearity was therefore set at a maximum value of “5” (Ringle, Sven & Michael, 2015). If there is no multicollinearity, then the Variance Inflation Factor (VIF) will be 1. A VIF above one was an indication that the independent variables are moderately correlated while a VIF between 5 and 10 indicates severe multicollinearity, which is problematic. Based on this rule of the thumb there was no collinearity among the independent variables. From the results, inspection of the Variance Inflation Factors (VIFs) showed that multicollinearity was not a concern. No variable was observed to have VIF value more than 5 and no tolerance statistic was below 0.100 (Ringle, Sven & Michael, 2015). This hence led to

a conclusion that no predictor had a strong linear relationship with any of the predictor(s). This is presented in Table 4.20

**Table 4.20 Results of Test of for Multi-collinearity**

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Resource complementarity	.861	1.161
Communication	.742	1.348
Leadership	.686	1.458

a. Dependent Performance of PPP

#### 4.5 Multiple Regression Analysis

In this study multiple regression helped in confirming the relationship between synergy and performance of public private partnerships in Kenya using a case study of the Afya Elimu Fund. This was done with a significance level of 0.05, such that when the significance value is less than the 0.05 the null hypothesis is rejected and when it is above 0.05 it is accepted. This is discussed in the section that follows:

**Table 4.21 Multiple Regression Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851 <sup>a</sup>	.725	.709	.405

a. Predictors: (Constant), Resource complementarity, Communication, Leadership

b. Dependent Variable: Performance of PPP

From Table 4.21, R-Squared is used to evaluate the goodness of fit of a model. In regression, the R square coefficient of determination is a statistical measure of how well the regression line approximates the real data. It measures the proportion of the variation in dependent variable in this performance of public private partnerships in Kenya, explained by independent variables. From the results on model summary  $R=0.851$ ,  $R\text{-square} = 0.725$ ,  $\text{adjusted } R\text{-square} = 0.709$ , and the  $SE = 0.405$ . The coefficient of determination also called the R square is 0.725. This implies that the effect of the predictor variables (Resource complementarity, Communication, Leadership) explains 72.5% of the variations in performance of public private partnerships in Kenya. This implies that a 1-unit change in the predictor variables (Resource complementarity, Communication, Leadership) has a strong and a positive relationship to performance of public private partnerships in Kenya. This study therefore assumes that the difference of 27.5% of the variations is as a result of other factors not included in this study.

#### **4.5.1 Assessing the Fit of the Multiple Regression Model**

Multiple regression analysis was conducted to test the influence among predictor variables on financial public private partnerships in Kenya. The test results are shown in Table 4.22.

**Table 4.22 Results of Goodness of fit of the Multiple Regression Model**

<b>Model</b>	<b>Sum of</b>	<b>df</b>	<b>Mean</b>	<b>F</b>	<b>Sig.</b>
	<b>Squares</b>		<b>Square</b>		
Regression	22.955	3	7.652	46.538	.000 <sup>b</sup>
1 Residual	8.714	53	.164		
Total	31.669	56			

a. Dependent Variable: Performance of PPP

b. Predictors: (Constant), Resource complementarity, Communication, Leadership

The findings of the study in Table 4.21 showed that there was a statistically significant relationship between the independent variables and the dependent variable ( $F= 46.538$ ;  $p=0.000$ ). This therefore indicates that the multiple regression model was a good fit for the data. It also indicates that Resource complementarity, Communication, Leadership all have a strong and a positive relationship with performance of public private partnerships in Kenya.

#### **4.5.2 Regression Coefficients**

The following linear regression model was adopted to help determine the nature of this relationship:  $Y= \beta_0 + \beta_1 X_1+ \beta_2 X_2+ \beta_3 X_3+ \epsilon$ ; Where Y is the dependent variable (performance of PPP),  $\epsilon$  is the constant (intercept),  $\beta$  is are the regression coefficients and  $X_1$ ,  $X_2$ , and  $X_3$  are synergy constructs of resource complementarity, communication and leadership. This is presented in Table 4.24

**Table 4.24 Coefficient of Determination**

Model	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	3.312	.328		10.089	.000
Resource complementarity	0.752	0.1032	0.152	4.223	.0179
Communication	0.545	0.2178	0.116	3.936	.0251
Leadership	0.487	0.3425	0.054	3.724	.0269

At 5% level of significance, all the three variables were statistically significant as their  $p$ -value was within the acceptable threshold of ( $p < 0.05$ ). From the findings, a positive effect on performance of Afya Elimu Fund was found on all the three synergy constructs, that is, resource complementarity, communication and leadership with regression coefficient values:  $\beta_0=3.312$ ,  $\beta_1=0.752$ ,  $\beta_2=0.545$ , and  $\beta_3=0.487$  respectively. The regression model can therefore be expressed as follows:

$$Y = 3.312 + 0.752X_1 + 0.545X_2 + 0.487X_3 + \epsilon$$

From this regression equation, taking all factors constant at zero, the performance of Afya Elimu Fund is 3.312. These findings indicate that taking all other independent variables at zero, a unit increase in the resource complementarity will lead to 0.752 increase in performance of Afya Elimu Fund; a unit increase in the communication will lead to 0.545 increase in performance of Afya Elimu Fund; and a unit increase in the leadership will lead to 0.487 increase in performance of Afya Elimu Fund. The findings imply that resource complementarity as a synergy construct contributes the



most to performance of Afya Elimu Fund followed by communication and leadership respectively.

At 5% level of significance and 95% level of confidence, resource complementarity had a 0.0179 level of significance, communication had 0.0251 significance level while leadership had a 0.0269 level of significance. The significance values obtained indicate that the most significant synergy construct influencing performance of Afya Elimu Fund is resource complementarity, communication and leadership respectively.

## **CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

The chapter presents a summary of key findings, conclusions and recommendation on the study on the influence of synergy on performance of public private partnerships in Kenya. It further presents the areas for further research.

### **5.2 Discussions**

The discussions of were summarized based on the study objectives as shown below:

#### **5.2.1 Resource complementarity and performance of Afya Elimu Fund PPP**

The study established that resource complementarity as a construct of synergy had a great and positive influence on performance of Afya Elimu Fund as indicated by the overall mean score of 3.8156. Therefore, resource complementarity as a key component of synergy is highly leveraged to drive the performance of Afya Elimu Fund. Through resource complementarity, the partners in Afya Elimu Fund have been able to set and implement symbiotic goals and the process of collaborative negotiation based on altruistic empathy. It further has enabled creation of a pool of resources both human and financial that is available for use by each of the partners. The findings are supported by Jiang and Jiang (2019) who found a positive effect of resource complementarity on alliance performance is reduced when partners' behavioural uncertainty increases transaction costs. The positive effect becomes stronger when relevant sub-national institutions have a high index of marketization. Moreover, the effect of resource complementarity on alliance performance is shown to be strongest with moderate government support.

### **5.2.2 Communication and performance of PPP in Afya Elimu Fund**

The study established that the communication challenges experienced in the Afya Elimu Fund included misinformation, poor and uncoordinated sharing of information between partners, high cost of communicating with partners, and delay in passing of crucial information amongst partners due to high level of bureaucracy. The findings agree with Kautzman (2018) who pointed that PPPs have achieved mixed fortunes where some were very positively impactful to quality of life of the targeted populace while others led to loss of public resources and litigations. To avert some of the negative outcomes of the PPPs, the government has developed the policy to guide the PPPs.

In addition, the study established that communication as a construct of synergy had a great and positive influence on performance of Afya Elimu Fund as indicated by the overall mean score of 3.4392. From the findings, it is evident that partners in Afya Elimu Fund PPP heavily apply well designed communication strategies to create synergy in the implementation of the PPP. Through effective communication, trust and transparency between partners is enhanced and that has helped to bring about complete buy-in from all the stakeholders which consequently increases the performance of the PPP. Constant and effective communication further enhances timely decision-making processes and coordination in the lifecycle of the PPP which catalyzes its implementation and meeting of the set targets. The findings agree with Rajhans (2012) who opined that effective organizational communication is key to employee motivation and performance. In addition, organizational communication plays a vital role in employee motivation and performance as real changes are taking place in modern organizations which confront the new reality of tighter staffing,

increased workloads, longer hours and a greater emphasis on performance, risk-taking and flexibility. Further Asamu (2014) revealed that a relationship exists between effective communication and workers' performance, productivity and commitment. The agency theory explains the relationship between the agent in this case the private sector players and the principal who is the government. Given the differing goals of the government and the private sector players implementing the PPP, the theory proposes that the two should seek to create synergy so that each parties' interests are satisfactorily met.

### **5.2.3 Leadership and performance of PPP in Afya Elimu Fund**

From the findings, the study established that to a great extent, leadership strategies applied by partners contribute to the success of the Afya Elimu Fund. From these findings, it was deduced that partners in the Afya Elimu Fund have a well-thought-out leadership strategy and structure that they adhere to as they interact with other partners in the PPP. Through a good leadership strategy, the partners are able to proactively negotiate with each other and arrive at win-win decisions that are pivotal in achievement of the Afya Elimu Fund goal. The findings are in line with Kanter (2014) who opined that trust, leadership, community assets, boundary-spanning skills and partnership efficiency are critical components of partnership synergy.

Further, the study established that the effectiveness of leadership applied amongst partners towards the achievement of the outcomes of Afya Elimu Fund is high. The findings further indicate that leadership is a major construct of synergy that is the driving force in the implementation of Afya Elimu Fund as it was noted to be highly effective. Leadership is the major determinant of the extent to which respective partners are committed to the PPP as it determines top leadership decisions in-terms

of resource allocation. The more effective the leadership strategy applied by respective partners, the better the outcomes of the PPP. The findings are in line with Danişman, Tosuntaş and Karadağ (2015) whose results showed that leadership has a medium-level effect on organizational performance.

In addition, the study established that leadership as a construct of synergy has a great and positive effect on performance of Afya Elimu Fund. More specifically concerning the role of leadership in enhancing synergy amongst partners in a PPP, the study established that that; to ensure agreement and understanding among all the partners, clear leadership strategies should be set; inclusion of leadership component in the PPP guidelines is important as it provides all players in the PPP with standard operating procedures of the partnership; successful PPP require use of effective leadership strategies; effective leadership empowered throughout the organizations is required to ensure accountability in the PPP; through good leadership, the PPP has an existing accountability mechanism in place; and that understanding of project objectives and partner expectations by the partner's top leadership is key to the success of the PPP. The findings are in line with Ibrahim and Cross Ogohi (2019) who discovered that participatory leadership and delegation of duties enhances the employee performance and attainment of corporate goals and objectives. The study therefore concludes that achievement of organizational goals and objectives depends solely on the leadership style an organization adopted.

In conclusion, leadership is a major vehicle through which synergy amongst Afya Elimu Fund partners is realised. Through effective leadership in the Afya Elimu Fund lifecycle, there is mutual understanding among all the partners on the priority areas to be catered for and adherence to the agreed standard operating procedures of the

partnership. It further blends in the culture of accountability in the implementation of Afya Elimu Fund. Effective leadership also guarantees the resolution of any conflicts that emerge in the implementation of Afya Elimu Fund. This concurs with agency theory which is crucial in strategic management since the actions chosen by the agent affects several other parties. The agent's role in strategic formulation and the overall strategic management process cannot therefore be underestimated. The agency theory holds the view that there should be proper synergy between the management and its stakeholders in order to work towards a common goal (Otungu *et al.*, 2011).

### **5.3 Summary of Main Findings**

This subsection presents a summary of major findings along the studies three specific objectives. From the regression analysis, the study established that synergy with a significance value is 0.0179 had a significant influence on the performance of public private partnerships in Kenya. Similarly, synergy explains 73.1% of the performance of Afya Elimu Fund as represented by the  $R^2$ . More specifically, all the constructs of synergy in-terms of resource complementarity, communication and leadership lead to 0.752, 0.545 and 0.487 magnitude increase in performance of Afya Elimu Fund. Therefore, resource complementarity as a synergy construct contributes the most to performance of Afya Elimu Fund followed by communication and leadership respectively. In addition, the significance values obtained; resource complementarity = 0.0179, communication = 0.0251; and leadership = 0.0269 indicate that the most significant synergy construct influencing performance of Afya Elimu Fund is resource complementarity, communication and leadership respectively.

The study established that synergy had a high catalytic effect on the implementation of Afya Elimu Fund as indicated by the overall mean score of 4.165. This was

through; enabling partners' alignment of PPP goals and objectives (Mean=4.2750); creation of wealth and business opportunities (Mean=4.2000); creation of competitive advantage for the partners (Mean=4.1750); reduction of costs and time (Mean=4.1000); and creating resource complementarities (Mean=4.0750). Therefore, it was evident that synergy was highly practiced amongst Afya Elimu Fund partners as a tool to ensure the programme goal was highly achieved. Through synergy partners had been able to create more wealth and business opportunities, reduce operational costs and project cycle time and well as creating an additional pool of financial and human resources through resource complementarities.

The study established that synergy was practiced to a great extent among partners in the implementation of Afya Elimu Fund as indicated by majority of the respondents (54.2%). Thus, the partner organizations implementing Afya Elimu Fund PPP leveraged on synergy to spur the implementation of the PPP.

#### **5.4 Conclusion**

In this subsection, a number of conclusions have been drawn from the major findings along the three specific objectives of the study. In general, the study concludes that synergy has a significant influence on the performance of public private partnerships in Kenya. Synergy was highly practiced amongst Afya Elimu Fund partners as a tool to ensure the programme goals were highly achieved.

The study also concludes that resource complementarity as a synergy construct contributes the most to performance of PPPs. In this case, resource complementarity as a key component of synergy was highly leveraged to drive the performance of Afya Elimu Fund.

The study further concludes that communication is a critical pillar in enhancing the success of any PPP, and that any challenges that arise significantly reduce effectiveness of communication. It was therefore in order that the Afya Elimu Fund partners address the communication challenges identified to increase effective communication.

The study also concludes that through a good leadership strategy, the partners were able to proactively negotiate with each other and arrive at win-win decisions that were pivotal in achievement of the goals of Afya Elimu Fund.

Finally, the study concludes that leadership is a major construct of synergy that is the driving force in the implementation of a PPP. Afya Elimu Fund has a well-thought-out leadership strategy and structure that the partners adhere to as they interact with each other in the PPP and this has had a positive effect on the outcome of the PPP.

### **5.5 Recommendations**

The study revealed that resource complementarity created through synergy among partners greatly enhanced the performance of this PPP. The study recommends that moving forward, the management of the respective organizations in Afya Elimu Fund should invest more in complementing financial and human resources. The continued investment will guarantee the sustainability and success of the Afya Elimu Fund.

It was also established that communication is a critical pillar in enhancing the success of any PPP, and that communication challenges significantly reduce effectiveness of communication. The study therefore recommends that the



management of Afya Elimu Fund should review communications protocols that are in place to address communication challenges that exist amongst partners.

The study also determined that leadership is a major construct of synergy that is the driving force in the implementation of a PPP. The study recommends that leaders in the Afya Elimu Fund should be regularly retrained on emerging leadership skills to enhance their efficiency as the leaders of the PPP.

### **5.6 Areas for Further Studies**

Since the study established that the three constructs of synergy (resource complementarity, communication and leadership) accounts for 73.1% of the performance of public private partnerships in Kenya, it is recommended that other studies be done to establish which are the other synergy elements that influence performance of PPP accounting for the remaining 26.9%.

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## APPENDICES

### APPENDIX 1: QUESTIONNAIRE

Dear Respondent,

As a Master's in Business Administration finalist in the Africa Nazarene University, I wish to determine the role of synergy in the success of public private partnerships with the Afya Elimu Fund. As a study respondent, find time and respond to the questions posed in this questionnaire. The data collected will only be used for academic purposes.

Yours Sincerely,

Catherine Mukami Kathambara

#### SECTION A: DEMOGRAPHIC INFORMATION

1. Gender

Male  Female

2. What is your age bracket?

Below 25 years

25-30 years

30-35 years

35-40 years

40-45 years

45-50 years

Above 50 years

3. What is your highest level of education qualification?

Certificate

Diploma

Bachelors' degree

Master's degree

PhD

4 Have you participated/ worked in a PPP in any capacity?

Yes  No

If Yes, in what capacity and what was/ is your role?

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5 What is your role in Afya Elimu Fund?

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6 Which partner do you represent?

Ministry of Health  Ministry of Education

Intrahealth/USAID funded FUNZOKenya Project

Higher Education Loans Board  Kenya Healthcare Federation

**SECTION B: Influence of resource complementarity on performance of Afya Elimu Fund PPP**

7. What is the importance of synergy in the success of Afya Elimu Fund PPP?

.....

.....

.....

8. Does the working together of partners in Afya Elimu Fund PPP help in scaling up the implementation of Afya Elimu Project Fund?

	Yes	No
Alignment of PPP Goals and Objectives		
wealth & business opportunities creation		
Competitive Advantage creation		
Reduction of costs and time		
Resource Complementarities		

9. To what extent is synergy among partners reflected in the implementation of Afya Elimu Fund PPP?

To a very great extent  To a great extent  To a moderate extent

To a little extent  To no extent

10 The following are reasons considered in the designing and planning of synergy in the implementation of Afya Elimu Fund. To what extent was each one of them considered? Use a scale of 1-5 where 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent.

	5	4	3	2	1
Understanding of project goals and objectives					

Alignment of goals and objectives					
Creation of wealth and business opportunities					
Creation of competitive advantage					
Understanding of partner goals and objectives					

11. The following statements relates to the influence of resource complementarity on performance of Afya Elimu Fund PPP. To what extent are they reflected in the implementation of Afya Elimu Fund? Use a scale of 1-5 where 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent.

	5	4	3	2	1
The top management of partner organizations in this PPP implement proactive leadership strategies in the PPP					
The leadership has fully supported the implementation of the PPP					
Players in PPP are different, and synergy is an important concept to align their way of doing things complement each other towards achieving the ultimate goals and objectives					
Synergies has helped in the creation of business opportunities and wealth					
PPP has created synergistic results by combining the expertise and resources of the private partner with the administrative and political power of the government					
PPP has lead to cost effectiveness and efficiency and increased sales consequently leading to competitive advantage of PPP partners					
PPP has reduced project implementation costs and time,					

### **SECTION C: Influence of communication on performance of PPP in Afya Elimu Fund**

12 What are the communication challenges that Afya Elimu Fund faces that hinder its success?



### Section D: Effect of leadership on performance of PPP in Afya Elimu Fund

16. Are there leadership strategies put in place to create synergy for the success of PPPs in the Afya Elimu Fund?                      Yes    [ ]                      No    [ ]

17. Which leadership strategies have been put in place to promote the culture of synergy for the Afya Elimu Fund PPP?

.....  
 .....  
 .....

18. How would you rate the effectiveness of leadership strategies put in place to towards the achievement of the outcomes of the Afya Elimu Fund?

High    [ ]      Average      [ ]      Low    [ ]

19. The following statements relates to effect of leadership on performance of PPP in Afya Elimu Fund. To what extent are they reflected in the implementation of Afya Elimu Fund? Use a scale of 1-5 where 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent.

	5	4	3	2	1
To ensure agreement and understanding among all the partners, clear leadership strategies should be set					
Inclusion of leadership component in the PPP guidelines are important as they provide all players in the PPP with standard operating procedures of the partnership					
Successful PPP require use of effective leadership strategies					
Effective leadership empowered throughout the organizations is required to ensure accountability in the PPP					

	5	4	3	2	1
Through good leadership, the PPP has an existing accountability mechanism in place					
Understanding of project objectives and partner expectations by the partner's top leadership is key to the success of the PPP					

### Section E: Performance of PPP in Afya Elimu Fund

20. The following statements relates to effect of leadership on performance of PPP in Afya Elimu Fund. To what extent are they reflected in the implementation of Afya Elimu Fund? Use a scale of 1-5 where 5-To a very great extent, 4-To a great extent, 3-To a moderate extent, 2-To a little extent, and 1-To no extent.

<b>Performance of PPP</b>	5	4	3	2	1
Synergies have led to cost effectiveness and efficiency					
Synergies have led to improvement in workers' competence					
Synergies have led to increase in number of beneficiaries					
Synergies have led to competitive advantage of PPP partners					
Synergies have helped in the creation of business opportunities and wealth					

**Thank you for your time and responses.**

## APPENDIX 2: NACOSTI PERMIT



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349, 3310571, 2219420  
Fax: +254-20-318245, 318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

NACOSTI, Upper Kabete  
Off Waiyaki Way  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref: No **NACOSTI/P/18/52238/25476**

Date: **6<sup>th</sup> November, 2018**

Catherine Mukami Kathambara  
Africa Nazarene University  
PO BOX 53067-00200  
**Eldoret.**

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“The influence of synergy on performance of public private partnership in Kenya: A case study of the Afya Elimu Fund”* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **6<sup>th</sup> November, 2019**.

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**BONIFACE WANYAMA**  
**FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Nairobi County

The County Director of Education  
Nairobi County





### APPENDIX 3: RESEARCH AUTHORIZATION



**AFRICA NAZARENE**  
UNIVERSITY

5<sup>th</sup> September 2018

E-mail: [researchwriting.mba.anu@gmail.com](mailto:researchwriting.mba.anu@gmail.com)

Tel. 0202711213

Our Ref: 08SMBS109

The Director,  
National Commission for Science,  
Technology and Innovation (NACOSTI),  
P. O. Box 30623, 00100  
Nairobi, Kenya

Dear Sir/Madam:

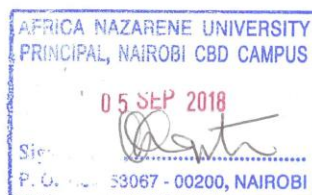
**RE: RESEARCH AUTHORIZATION FOR: MS. CATHERINE MUKAMI KATHAMBARA**

Ms. Kathambara is a postgraduate student of Africa Nazarene University in the Master of Business Administration (MBA) program.

In order to complete her program, Ms. Kathambara is conducting a research entitled: **"Influence of Synergy on Performance of Public Private Partnership in Kenya: A Case of the Afya Elimu Fund"**

Any assistance offered to her will be highly appreciated.

Yours Faithfully,



**PROF. ORPHA ONG'ITI,**  
**PRINCIPAL, NAIROBI CBD CAMPUS.**

APPENDIX 4: MAP OF STUDY AREA

