

**PROJECT MANAGEMENT SKILLS, MONITORING AND  
EVALUATION PRACTICES AND PERFORMANCE OF  
YOUTH ENVIRONMENTAL PROJECTS: A CASE OF  
SOLID WASTE MANAGEMENT PROJECTS IN NAIROBI  
COUNTY, KENYA**

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**A Thesis Submitted in Partial Fulfillment of the Requirements for the  
Award of the Degree of Doctor of Philosophy in Project Planning and  
Management of the University of Nairobi**

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## DECLARATION

This Thesis is my original work and has not been submitted for academic award in any other University.

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## **DEDICATION**

I dedicate this work to my treasured family; Richard Gachoya Nderitu, Corinne Wangare Nderitu and Clement Gachoya Nderitu for their patience and support, my adored parents; Mr. Joseph Thiong'o and Grace Thiong'o for showing me the eminence of education and my siblings for prayers and encouragement.

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## LIST OF ABBREVIATIONS AND ACRONYMS

<b>ANOVA</b>	Analysis of Variance
<b>BC</b>	Before Christ
<b>CRME</b>	Cultural Responsive Monitoring and Evaluation
<b>DV</b>	Dependent Variable
<b>ENNUI:</b>	A feeling of dissatisfaction arising from lack of occupation or excitement
<b>GIS</b>	Geographic information system
<b>GOK</b>	Government of Kenya
<b>GOK</b>	Government of Kenya
<b>ILO</b>	International Labour Organization
<b>IP</b>	Intellectual Property
<b>IV</b>	Independent Variable
<b>KKV</b>	Kazi Kwa Vijana
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>KNYP</b>	Kenya National Youth Program
<b>KPI</b>	Key performance indicators
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MV</b>	Moderating variable
<b>MTP</b>	Medium Term Plan
<b>NEMA</b>	National Environment Management Authority
<b>NCC</b>	Nairobi City County
<b>NGO</b>	Non-Governmental Organizations
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PAR</b>	Participatory Action Research
<b>PMS</b>	Project management skills
<b>SWM</b>	Solid Waste Management
<b>UNESCO</b>	United Nations Education, Scientific, and Cultural Organization
<b>YEDF</b>	Youth Enterprise Development Fund

## ABSTRACT

Globally, solid waste management is one of the greatest environmental health challenges. Today, increasing number of studies pay attention to how solid waste disposal and management would gainfully benefit the bulging number of jobless youths. In Kenya, youth unemployment rate is on the rise despite government's perennial youth interventions and funding. This study sought to investigate on solid waste collection within Nairobi County residential areas managed by youth groups dealing with environmental projects. The purpose of the study was to determine how project management skills, monitoring and evaluation practices influenced performance of youth environmental projects in Nairobi County. The objectives of the study were to establish the influence of technical skills on performance of youth environmental projects, to assess the influence of financial management skills on performance of youth environmental projects, to determine the influence of leadership skills on the performance of youth environmental projects, to establish the influence of marketing skills on the performance of youth environmental projects, to examine the influence of combined project management skills on the performance of youth environmental projects, to determine the influence of monitoring and evaluation practices on performance of youth environmental projects, and to establish the moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects. The study's unit of analysis was 70 youth environmental groups projects comprised of 700 youth group members engaged in solid waste management projects in Nairobi County. The study used a sample size of 248 group members who were selected from the target population using both simple random and proportional random sampling procedures. Key informants from each of the four departments of Directorate of Youth affairs were purposefully selected. The study adopted descriptive survey and correlational research designs using participatory action research approach. Research instruments entailed questionnaires, observation checklists, an interview guide, a focus group discussion guide and structured forms for content analysis. Qualitative data was analyzed and presented in themes narratively while quantitative data was analyzed descriptively using percentage frequencies, mean, and standard deviation. Inferentially, Pearson Correlation Coefficient and multiple regression analysis were used as tools of analysis to test for significance among various variables. The findings of the study revealed among others that, technical skills ( $\beta=.624$ ,  $t(247)=16.1, p\leq.05$ ); financial management skills ( $\beta=.72$ ,  $t(247)= 9.7, p\leq.05$ ); M&E practices( $\beta=.354, t(247)=3.13, p\leq.05$ ) and leadership skills  $\beta=.42$ ,  $t(247)=5.3, p\leq.05$ ) significantly influenced performance of youth environmental projects. However, marketing skills ( $\beta= -0.024$ ,  $t(247)= - 0.356$ ,  $p =0.722$ ) which had a negative relationship did not show any significant influence on performance of projects in the study area. Overall, the combined project management variables accounted for nearly 66 percent of the total variance in performance of youth environmental projects (R- square = 0.656). Regarding moderation, the study found that the interaction effect between M&E and the project management skills was not statistically significant,  $\beta= 0.37$ ,  $t(247) = 1.46$ ;  $p = 0.145$ . This inferred that there was no significant moderation effect of monitoring and evaluation on the relationship between project management and performance of youth environmental projects. The study therefore concluded that technical skills, financial management skills, leadership skills and monitoring and evaluation skills are statistically significant and positively influence performance of youth environmental projects. The researcher recommends policy actions by government to incorporate youths to learn project management skills under mentorship programs from corporations, firms and other public entities so as to incubate their skills and compliancy with global regulations in the transportation, handling and disposal of solid waste for effective projects performance. The

study also recommended practice actions that included provision of easy understandable and accessible accounts due to complexity of financial products in order to encourage youths on the very lowest incomes to open accounts with simplicity for savings and payments to give them greater effects with interests. The study suggested further areas of study that included political influence on monitoring and evaluation and how it affects projects success. The study also suggest Policy Actions by the government to reinforce overall projects/programs performance in Kenya by enacting a monitoring and evaluation policy supported by an Act of parliament, so as to guide organizations that deal with environmental projects. Areas of further research entails exploration of political influence towards monitoring and evaluation practices and performance of youth government funded projects to add more knowledge to what is existing.



# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the study**

It is important to define and measure the success or performance of a project for the reason that “what gets measured gets managed” (Klaus, 2015). Performance on youth environmental projects in this study context is embedded on conventional solid waste management philosophical underpinnings grounded on gainful benefits from the increasing residential volume of solid waste in developing countries (Moore, 2017) Youth environmental projects in this study entails solid waste management livelihood projects, particularly household waste. The registered youth groups in this study are primarily waste pickers who provide residential door-to-door solid waste collection business service. Project performance is assessed through performance indicators that are associated with numerous dimensions such as time, cost, and quality and client satisfaction, influenced by various project characteristics. These may comprise of project manager’s technical competence, financial management skills, marketing skills and leadership skills, monitoring and feedback from the participants (Carson-Cheng and Jones 2013). Complexity today pertaining economic, social, economic, and ecological issues constitutes important challenge which offers tremendous opportunities for youth to showcase their strengths. Youths in themselves are a strong self-organizing force which has the latent for innovation and change acceptance (Ivo Slaus and Garry Jacobs, 2011).

Youth project management skills supports youths with skills that enable them to develop the ability to analyze their own faults, strengths, have confidence with self-esteem and set personal and vocational goals, with abilities and motivation to convey them, including the capability to institute support networks to take part fully in community life and effect positive social change (Wehmeyer, Agran, and Hughes, 1998). Research indicates that with comparison to other developed countries, solid waste management and other associated disposal problems are more obvious in developing countries since they face additional institutional, technological and financial challenges towards addressing solid waste problems (Ivo Slaus and Garry Jacobs, 2011). In today’s world, environmental, social and economic prospects are becoming tougher to foresee (Moore, 2017). Solid Waste

management is viewed as a basis of income generation activity for urban youth. It has grown into a platform for attracting youths with the broader politics of elementary services, and has limitations with “sustainability” enterprises that allude to alternative market-based tactics to discourse the challenges of poverty. Studies portray substantial empirical evidence that traditionally, communities have been ingenious to use waste as food for animals, fertilizer and as materials for subsequent life products (Wilson, Rogers, Rodgers, and Wild, 2006).

These studies argue out towards a vibrant waste enterprise, without policy or legislative measures, hence, often unrecognized unhygienic, tedious, and potentially hazardous interventions with contributions that are rarely documented or quantified. In waste recycling, these activities are lowly rated where participants are largely the urban poor, particularly youth (Ahmed and Ali 2006). Broadly, waste segregation decreases the burden of waste collection and disposal that minimizes masses of waste that need to be transported to dump sites especially at household level. These consist of recycling and re-using products where ‘re-use’ involves using the product more than once for the same or a different purpose. Another effective way of disposing biodegradable is composting of waste materials, especially in residential areas since it provides compost for urban agriculture and create more local jobs.

Solid waste management innovative schemes that are carried out by Kenyan urban youth in shanty towns are deemed to be translating waste materials into valuable commodity increasingly. Gradually, waste is turning out to be a source of income generation and a way to provide service to communities where public service provision is otherwise absent. Youth groups collect solid wastes from residents’ homes and businesses and dispose them properly. Other youth workers collect, buy, and resell recycling materials to bigger companies that turn the recyclables into various products that get back to the market (Kajamaa, 2011). Access to markets and financial services with practical skill building promotes youth project performance in particular, with support for social enterprises including public-private employment opportunities. Low-income youth are less likely to have access to financial project management skills including financial opportunities, which is a contributing factor in growing income and asset inequality (Frumkin, 2002). Project

management skills on environmental issues teaches youths how to gainfully rein habit their total environment instead of merely residing; like cyclones in Madagascar and typhoons in the Philippines through participation in “youth-led virtual projects (Frumkin, 2002).

A study on gainful youth management skill conducted by Braced (2014) indicate that programs in China engage youth on gainful project management skills that include food security issues related to climate change, energy, youth programs and initiatives (Braced, 2014). A review of a study indicates that Ethiopian youth are gainfully engaged in the swiftly developing manufacturing industries with a strong demand for bamboo products from foreign markets which is an environmental enterprise that is effected through collaborative government youth project management skills (Ethiopia Status of Bamboo report, 2017). Low-income and part of medium-income areas in Nairobi County have systems of waste collection being. In low-income communities waste collection trucks pick waste mainly from door-to-door by honking as a way to alert people to take put their trash for pick up. In the upper-income residential areas however, households collect their waste in bins and place the bins in front of their homes to be collected by trash-hauling crews (Ethiopia Status of Bamboo report, 2017).

Global 2030 Agenda for Sustainable Development (SDGs) offers an exceptional opportunity towards incorporating youth policies into comprehensive sustainable development strategies. Youths bring talent, energy, including innovative creativity to economies hence contributing as entrepreneurs, consumers, and as agents of change (Kajamaa, 2011). Youth are the backbone of any nation as they transform the society future with their well-being and courageous behavior. Regrettably, youth unemployment is dubbed as the biggest development challenges in the Third World today. The global youth unemployment rate rose to 13.1 per cent in 2016 from 12.9 in 2015 and was projected to be at 13.2 per cent in 2017 (ILO 2017). Many parts of the world have youths who face poverty, hunger, barriers to education, multiple and intersecting forms of discrimination, and limited opportunities for growth and employment prospects. According to the International Year of Youth 2010-2011 report, over 600 million youth dwell within a fragile and conflict-affected countries and territories. Youth are the creative digital innovators in

their communities and participate as active citizens among other parts of the world, eager to positively contribute to sustainable development (UNEP, 2011).

Kenyan youth is defined to be within age bracket of 18–35 years; where they are given equal opportunities as other citizens to realize their fullest potential as well as exploring industriously through participating in economic, political, social, cultural and religious life without fear or favor (Republic of Kenya, Constitution 2010). Kenyan Youths are the largest population in Kenya today reported at 75 percent, with only 55 percent of youths gaining gainful employment; save the urban youths, who are the target population in this study (Kenya youth survey report, 2016). This scenario is exacerbated by the big number of youth over (1.5 M) in Kenya leaving school each year in spite of the Kenyan youth with little or no opportunities for formal employment (Directorate of Youth affairs 2016). The bulging youth population presents a number of challenges for both the youth and the country.

Labor market in Kenya is gripped with an impression of a jobless growth irrespective of abundant asset represented by the youth. Nevertheless, (KNBS survey, 2017). Literature reviews reveal that formal sector jobs are limited to the absorption capacity. On the other hand, the informal sector keeps growing, providing an alternative to formal employment jobs for many of Kenya's youth especially the Jua Kali sector and Matatu industry (Youth Enterprise Development Fund, 2010). However, the highest informal wage employer in Nairobi County is the manufacturing sector, followed by trade, medium and small scale restaurants and hotels. Others are construction industry, transport and communication industry, finance, real estate and valuation and business services which raise high returns for the economy (KNBS, 2016). Youth problems seems to be deteriorating regardless of the outstanding upsurge of agencies that are dealing with matters that affect the youth (Kenya youth survey report, 2016).

Conceptual view of youth project management skills embroils conveying solutions to environmental issues through enterprise, alluding to soil erosion, waste, deforestation and biodiversity management. Today's youth will be the tomorrow's leaders and it is prudent to furnish them with strategic project management skills for them to make knowledgeable

and gainful decisions regarding the environment in this study context (Davis and Kingsbury, 2011) and to associate the indulgent with youth personal attitudes and involvements in order to examine several facets of environmental issues (Gough, 2017). Efforts on youth development and environment projects have been made in other previous policy documents in Kenya; such as, the Sessional Paper No. 2 of 1992, on Small Scale and Jua Kali Enterprises, the 1997-2001 Development Plan and the National Poverty Eradication Plans 1999-2015, among others (MTP report, 2012); Kenya National Youth Program (KNYP) (United Nations Development Programme, 2010) targeted some priority groups that included youth with challenges: street youth; youth infected with HIV/AIDS; unemployed youth, female youth; and out-of-school youth. KNYP priority strategic areas were employment creation, sport and recreation, education, health, and training, the environment, art and culture and youth empowerment.

The Kazi Kwa Vijana program (Isahakia, 2010) which was under the Office of the Prime Minister/KKV Initiative, 2011, targeted mostly rural youths on environmental management activities mainly in clearing vegetation along Kenyan roads; National Youth Development Programs (YEDEF 2010); ‘Yes Youth Can’ “Bunge” Youth Empowerment programme by the USA government (Ranneberger, 2010 ); Uwezo funds (GOK session Paper, 2013); the 30 percent Procurement directive from the President on youth, women and persons with disability and the several grants given to youths by NGOs and philanthropists (Awiti and Bruce Scott, 2016). However, despite all these youth initiatives and entrepreneurship trainings embarked upon by the government, youth unemployment rates are still overwhelmingly high (World Bank, Youth Unemployment Rate report, 2017).

Literature reviewed has not answered the gap over “ennui” state on youths; why they are not enthusiastic on environmental projects uptake despite the many initiatives and loans availed by the government. The study under scrutiny investigates how technical, financial, leadership and marketing skills through constructivist pedagogy on youth are significant components of project management skills on performance of environmental projects (Monroe, Cheng, 2010).

### **1.1.1 Performance of Youth Environmental Projects**

The ontological assumption on performance of youth environmental projects in this research context is grounded on social positioning of consequences of an intervention; comprising of a huge quantity of performance indicators which are related to various project dimensions (Patton, 2011). These include, time, cost, quality and sustainability alluding to clients satisfaction that creates valuable positive outcomes, to navigate choices and challenges in the world of work; save, competency on environmental projects, enterprise, employment creation and behavior change (Keabetswe, 2013). Research reviewed in this study portrays that registered youth groups in Nairobi today engage in solid waste management projects, through garbage collection activities in varied residential zones which are categorised as government youth environmental funded projects. They also collect various materials, recycle and re-sell them to improve their livelihood (YEDF, 2016).

Youth environmental projects in this study is benchmarked against performance of other environmental projects targets previously funded in Kenya. The performance entails gainful improvement on youth's current and past projects throughout planning, execution and completion process (Carson-Cheng, 2013). Research indicates that well inculcated project management skills on environmental projects enhances youth's hands on skills towards recycling businesses like plastic waste, collected from dumpsites and garbage cans across Nairobi for gainful project. However, youth performance seems to be unfavorably exaggerated with erroneous assumptions on availability of labor, positive community responses to the project, assessments of real time community needs, effective service delivery systems, including provision of certain crucial short and long term services like procurement (Evans and Evans, 2011). Delays in obtaining equipment, approving contracts, finding a market or acquiring recycling materials recurrently lead to delay in project implementation, high cost overruns, reduced quality services, with poor accessibility for certain target groups like youths. Youth economic growth is seen to be an imperious course to improve the low rate of youths' jobs and enterprise creation globally (Turton and Herrington, 2012).

### **1.1.2 Project Management Skills**

Project management skills in this study context comprises of a pedagogical process to inculcate management attitudes and skills, which begins with having a clear vision of what the project would create within the project scope for life-long learning process that consists of basic technical competency, market awareness, creative leadership and financial project management skills (Turton and Herrington, 2012). Youth Project management skills entails estimating how much the project will cost and how long the work should take with the resources available. This entails the ability to make the best of personal networks through strategic thinking, risk assessment, self-confidence and (OECD, 2010). However, literature reviews reveal that many youth projects get started with unrealistic schedules and budgets.

Budget planning is a significant of project management because it provides the overall plan for spending, transversely and on specific project activities within a given timeframe. Stakeholders, such as customers may have assumptions that the services would be delivered on time especially on residential waste collection. Thus, effective task management skill is essential to completing any project deliverables successfully whether working with a group or within a team (Ghan, Jian, 2013). Scheduling daily task planning for group solid waste collection chain and reviewing each day's accomplishments is helpful including periodic evaluation on all the tasks that entail the entire waste collection process.

Tracking the status of a project against the projects major milestones should be a continuous process for total quality management (Georgieva and Allan, 2008). Good marketers are branded with robust communication skills and they are astute in operating business projects. Effective communication skills helps astute project teams to make lucrative projects transactions with customers and service providers, maintain relationships with clients, and build valuable networks in the market (Ghan, Jian, 2013). Measuring the Success of project management skills benefits in this study context include observation of attitude change through examining environmental problems as gainful enterprises (Aktan, 2008). This may include other youth issues in all-inclusive manner like social, moral, and ethical dimensions, promoting values and respect of society's diversity in uptake of environmental projects.

### **1.1.2.1 Technical Skills**

Technical aspects of solid waste management projects are essentially concerned with the preparation of solid waste collection, transportation and final disposal process. This entails selection of technical facilities and equipment in regard to their operating characteristics that they are designed for; to enhance the project waste collection rate within its areas of jurisdiction (Adebayo, 2014). Technical skill is a fundamental insight into how a business operates and how it makes money including sustainable profitable growth, now and in the future. It involves wide multifaceted competencies and awareness of numerous aspects of a project. As the global economy continues to struggle, today's projects technical skills requires teams that directly contributes to the apprehension of their projects' goals and objectives by making the right business decisions.

Skills in solid waste management projects includes strategic business design which creates value by acquiring raw materials and using them to produce something useful, where the documented value that a project creates becomes the profit margin. Preparation of detailed project reports highlighting projects technological application and financial details is also a technical skill in this research study (Gakungu, Gitau, Njoroge, and Kimani, 2012). Technical report may include amount of waste collected in tons per collection days, operating rate report on preventive maintenance of waste collection vehicles including overhaul with the necessary spare parts availability reports, vehicle specification, routing and vehicle maintenance and the number of residential zones served by the project (NCC, 2010).

### **1.1.2.2. Financial Management Skills**

Keeping accurate records is one of the most vital financial practices needed for monetary enactment of a given project over time. Mathematical and scientific tasks like estimated requirements of a project record keeping typically used in many projects consist of books of accounts that comprise journals, ledgers, and other classified records of a projects set of accounts which is essentially financial management (Agwu, 2014). Using a template to create a budget helps projects teams to be more in control of finances and promotes savings. Accounting involves bookkeeping for both revenues and expenditures at unit and project levels. Budgeting also offers an ongoing check for expenditure judgment by



comparing actual outlays against projected incurred costs. Budgets should be included in contracts and written agreements so that project partners know how much and on what the money should be spent (Georgieva, and Allan, 2008). Expressed simply, financial project management skills espoused in this study alludes to arrangement of files for the documents that need to store evidence on the project costs and benefits achieved. The documents include financial information as well as details of the project activity and its results. Youth financial management skill pertains record keeping of all solid waste management project activities ranging from control of dumping places, collection of the solid waste, transportation to designated dumping sites, disposal of waste and processing including recycling. Range includes all involved attendants, Local administrative, financial implications, legal regulations, as well as forecasting functions (Agwu, 2014).

Habitually, cost values are key component of financial management because they keep ineligible and excessive spending in check. They are the regulations that govern eligible charges for specific activities, which are outlined in project funding agreements and contracts. Project savings entails a portion of disposable income accumulated or invested directly in to projects capital equipment's or in paying off loans. Performance of youth environmental projects is determined through the groups' projects financial statement used to show performance over a certain period of time that consists of balance sheets, cash flow statements and income statements (Agwu, 2014). Financial audits are a critical constituent of financial management because they provide an autonomous analysis that determines if the accounting records are accurate.

### **1.1.2.3 Leadership Skills**

Leadership skill in this study context entails prominent handling of youth project teams; strategic setting of a realistic vision, motivating teams, credibility in service, team work and capacity building including inspiring potential and existing customers (Alivert, 2014). Youth group project managers possess leadership skills on both strategic and functional perspective by communicating the vision of the project to get team buy-in, accomplish set goals and resolve conflict. This include evaluating performance; ensuring that project teams are adequately equipped with the tools, money and space required to get things done. Every project demands an aptitude leader to support the project processes, teams and the

customers. Project team leader is expected to be the team's relentless cheerleader and chief encourager; not petrified to caution the team when they drop the ball; thus maintaining balance between the project and the team (Global entrepreneurship monitor report, 2013). Leading a group well means serving them by taking responsibility to improve project team's standard of living by moving challenging mountains for them, greasing the wheels and moving all unnecessary barriers that could get in their way; thus availing a vision and a roadmap to accomplishment by helping and empowering the teams towards projects completion (Boateng, and Bampoe, 2014). Ability to communicate well is the core of any affiliation and so the efficacy youth environmental project leads' communication has an impact on the respective project team, clients and stakeholders too (Boateng and Bampoe, 2014); save, for residential solid waste management entails clients' touch-points that include pick schedules and payment deadlines. Project status meetings and reports helps groups to efficiently track the subsequent steps, intended action items, anticipated project risks, planned budgets and procedures. Thus, communication in leadership triangle alludes to team members needing clarifications, stakeholders needing status updates and sponsors needing results (Davis and Kate 2014).

#### **1.1.2.4 Marketing Skills**

Operationalization of a marketing framework include sufficient details to guarantee precise groups of youths articulate selling aspects in the right sequence using accurate tools and the right data. Developing a sturdy marketing brand and awareness creation is a unending marketing skill. Having an overall understanding of the market is a step to developing a portfolio and making more sound decisions on youth waste management projects. In Kenya, youth face challenges regarding access to suitable space for waste sorting and value addition, including high costs of registration and licenses to allow them work formally in the waste management sector (Okot-Okumu, 2017). Technology causes a major impact on youth business sales performance as well, especially when they try to connect their recycled products to their users through internet, social media and mobile devices, thus driving an increase in revenue and their savings; through e-commerce and digital marketing industry (Njoroge, Kimani, and Ndunge, 2014).

Sales alignment, effective utility of social media including pay-per click advertising strategy, digital re-marketing, and instant customer usage of real time data are new concepts that are part of an advanced record keeping learning strategy for successful projects (World Vision International report, 2015). Solid waste management Youth groups' activities include reduce, reuse recycle processes through connections with local and international markets for products such as recycled plastic products, bags, jewelry, clothing, rugs, blankets, charcoal briquettes and recycled virgin materials like glass. Study reveals that youth led groups' projects that engage in networking exercise are most likely to realize business peculiarity through formation of formal support systems while learning through inaccuracies, more than those without commercial practices (Okot-Okumu, 2017). Consequently, it may be presumed that deficiency of pertinent linkages in market networks may be a hindrance to youth projects which impacts negatively on growing their projects (Njoroge, Kimani, and Ndunge, 2014).

### **1.1.3 Monitoring and Evaluation Practices**

Monitoring and evaluation comprises of a systematic collection of information about project activities, process characteristics and results of projects or programmes to make judgment on whether to improve, inform decisions and increase the understanding of the programs processes (Patton, 2008). This study targeted monitoring and evaluation practices based on axiological and ontological assumptions of cultural responsive approaches that demonstrates how well youth connects with their environmental projects including tools and methods that the Directorate of youth project officers and group members term as useful accountability and management tools for M&E processes. Youth Projects are social project designed to advance youths quality of life by improving their inclusion aptitude to participate fully in all levels of social, economic and political activities, including improved physical well-being and access to social amenities and services through income generating activities for youth empowerment; equity issues and alleviating poverty that leads to ennui-; state of hopelessness among the youth (UNESCO, 2013).

Youth environmental government funded projects incorporates an affiliation of unemployed young youth engaged in activities which have provision of environmental service that benefits the communities. Environmental funded projects are packaged with

opportunities for personal development, accredited training and exit opportunities. Monitoring and evaluation framework is largely concerned with the detailed planning of the implementation and evaluation of these projects. It builds on the evaluation context to specifically identify practices, realistic processes, timing and responsibilities for completing an evaluation (Chessman, 2005). However, evaluation of youth environmental projects ought to be based on Evaluation theory knowledge base, which serves as a guide to practice by navigating through the choices associated with different schools of thought during projects evaluation, since all evaluation theories differ on several dimensions (UNEG Evaluation Competency Framework, 2016). Thus, monitoring and evaluation practices starts with identifying anticipated change during the implementation of an intervention to addresses a phenomenon.

Youth environmental projects performance outcomes are established based on effective output processes involving both quantitative and qualitative indicators and reconciling them through triangulation; in order to attain further consistent techniques of assessing and explaining project performance (Davis and Kingsbury, 2011). Regular documentation and data collection need to be effected while youth waste management projects are ongoing by means of diagnostic studies so as to ascertain the underlying causes and effects to propose solutions especially when milestones are not accomplished, when negative or positive feedback and feed forward is received from the beneficiaries or when loan reimbursement is poor (Bamberger, Michael and Cheema 1994). Data sources are the documentation tools, and evidence that shows progress on youth projects that include pre-posttests of set scores, project records (formative evaluations documents such continuous as assessment reports), records from other youth environmental projects stakeholders, and annotations during focus groups discussions, interviews, or the environmental project itself (Villard, 2010).

Dissemination of evaluation report involves the procedure of effective communication of either the processes or the lessons learned from an articulated evaluation in a consistent, unbiased, and timely manner. Scheduling of effective communication necessitates allowing the disseminator to consider the timing, style, tone, message source, vehicle, and format of information of the products being reported (Carson-Cheng, and Jones, 2013). The purpose of disseminating evaluation reports effectively is to ensure that usefulness by the possible

users, beyond those that have been involved in the evaluation process, are aware of the evaluation report findings, conclusions and the necessary recommendations made. Leveraging technology entails mobile and social media applications to collect data; including use of geographic information system (GIS) technology (Carson-Cheng, and Jones, 2013), to map youth environment projects from varied sub counties. However, youth environmental projects evaluators may have to work hard in preparing to enter a communal neighborhood, or organization (buy-in); they have an obligation to edify themselves on transformative evaluation paradigms that are focused on groups and their interrogating systematic structures. These necessitates social justice oriented tactics that include Cultural Responsive Evaluations (CRE), which includes the history of the location or the project scope, the project, and the people or clients social-economic status and their side of story (Bagele,Thenjiwe, Gaotlhobogwe, and Mokgolodi, 2016).

#### **1.1.4 Solid Waste Management Projects in Nairobi County**

Among the greatest environmental health challenges globally include solid waste management which endures to devastate prevailing local authorities and national governments as surging urban populations continue to escalate and consumption patterns change in the dynamic world. Rapid urban population upsurge in emerging third world countries has resulted in to huge unplanned settlements with excessive amount of solid waste (World Vision Report, 2015). Research reviews that urban areas create about 1.3 billion tons of strong waste every year, a volume expected to ascend to 2.2 billion tons by 2025, additional twofold increment for creating nations (Gakungu et. al., 2012). Industrial solid waste, household solid waste, hazardous waste and agricultural waste are the major types of solid waste (ICA, 2010).

Kenya's 2010 Constitution; Article 42, concerning the environment provides that "every person has a right to a clean and healthy environment". However, lack of ability to provide infrastructure services to match rapidly growing population; including high commercial and industrial demands by the Nairobi City Council (NCC) has led to problems such as overcrowding of heaps of disposable waste, poor and inadequate sanitation, polluted water, poor health as a result of respiratory and waterborne diseases especially within the slums and the peripherals of dumpsites like Dandora (Nairobi dumping site), inadequate liquid

and solid waste management and lack of decent recreational facilities besides many other fashioned urban degeneration problems. The situation has subsequently led to amplified crime, mushrooming and encroaching of slums, construction of illegal structures and rapidly declining standards of living (NCC, 2010). Most towns in Kenya have inefficient solid waste management systems and according to a study completed by Habitat, the findings stated that 30-40 percent of waste generated in Nairobi is not collected and that only 50 percent of the population is served (NEMA, 2016).

The existing National Solid Waste Management Strategy (NSWS) developed by the National Environment Management Authority (NEMA) reported that Nairobi generates 1,900 to 2400 tonnes of waste per day both from residential and industrial quotas currently. Of these, the report indicates that 80 percent is collected. Forty- five percent (45) of the collected waste is then recovered purportedly for recycling purposes by interested groups and hence strewn haphazardly (HABITAT, 2016). Insufficient Solid Waste Management (SWM) strategies in Nairobi County pose dangerous environmental and public health risks linked with significant environmental, health and social costs; save in residential areas. Solid waste management youth projects entails dealing gainfully with the increasing volumes of solid waste in Nairobi County with quite common mountains and heaps of refuse which harbor vectors of transmissible diseases including rodents and insects which increases the potential for the spread of infectious diseases including malaria, tuberculosis and diarrhea, within the residential areas (Kajamaa, 2011). Waste picking by waste pickers is relatively a phenomenon that is intense in urban areas, according to the author,

With slight or absolutely no capital being provided to the youth where the overall resources are scarce, waste picking becomes an important survivalist strategy for most of unemployed youths. Today, this is a tremendous task to the Kenyan government with the traditional ways being to incinerate or landfill solid waste on dump sites like Dandora; leading to serious environmental glitches including untapped energy waste (Achankeng, 2003). Most of the studies reviewed on solid waste management argue about vibrant waste enterprise, devoid of policy solid waste framework or legislative, often very tedious, filthy and unhygienic, unrecognized and potentially hazardous occupation, whose contributions are rarely documented or quantified; where participants are generally the urban poor,

particularly the jobless youths (Ahmed and Ali 2006). Recycling of solid waste and composting have numerous economic benefits since they create job opportunities especially to the vulnerable urban youths. This entails distracting of raw materials along the solid waste value chain stream, thus generating cost-effective devices for further use in addition to significantly contributing to the reduction of greenhouse gas emissions. Solid waste transportation entails the collection of waste from residential homes, including transmission from designated stations where solid waste is temporally concentrated and refilled onto designed tracks for delivery to the landfill or disposal sites (Kajamaa, 2011).

## **1.2 Statement of the Problem**

Environment offers context for alienated youth, towards re-engaging in gainful environmental projects that improves their livelihoods (Achankeng, 2003). Waste dumped in open areas attracts pests, the dumps occasionally catch fire and are public health and environmental hazard. Waste collection charges in urban areas are higher than ideal and Municipalities in charge of collection are not able to generate a good fee collection rate, since residents do not get good services; thus, always reluctant to pay; exacerbating the vicious cycle of poor waste management save; residential areas (Frediani, Walker, and Butcher, 2013). However, systematic research reviewed on this study indicates growing number of studies that are paying attention to solid waste disposal and management, by use of sustainable methods that are appropriate to combat with the urban solid waste challenges. This is to gainfully benefit the bulging number of jobless youths, particularly low-income urban youth; to enable them find positive and meaningful ways to engage in environmental projects by reducing the amount of solid waste that has been dumped or burnt while creating meaningful jobs that can improve their livelihoods (ILO, 2017).

In lieu of this, 70 youth environmental group projects out of 400 registered youth groups in Nairobi County pose as “waste pickers” in solid waste management projects for their livelihood. However, there is scanty youth’s business progress or discontinuance rates reported in these environmental projects, with scanty indicators on performance (YEDF, 2016). Performance of many of the youth environmental projects in all the 47 counties in Kenya remains thin, irrespective of government funding, save Nairobi County which has

more youths accessing government projects funding and training aggravated by proximity (Afon, 2012).

Literature review collated from several documented reports by the Directorate of youth reports and other Youth stakeholders in Kenya shows that quite a number of youth projects have been successful, especially various environmental projects in previous years that addressed the challenge of youth employment through adopting an Entrepreneurship Training Manual to facilitate youths environmental projects through Youth Enterprise Development Fund loans (YEDF). Key Objective of these serial projects was to facilitate a wider spectrum of youth economic opportunities as a way of enabling them to participate in nation building. Among the projects is the Uwezo Fund loans project that funds solid waste management interventions including other youth projects. None the less, numerous projects in Kenya have also been informally cited as botched projects; denoting that they may not have achieved the desired outcome. Former Kazi kwa vijana (KKV) environmental project and a Million tree planting program Vision 2030 project (MTP 2013-2017) are among the reported failed projects. However, a significant share of the reported failed projects is termed to be government funded and donor funded where they usually undergo the required project management process including heavy presence of monitoring and evaluation activities; which are often legal donor requirement. Other NGOs and corporates have also been involved in engaging the youths on environmental projects that include Green Belt Movement, UNEP, GEF, Equity Bank, Coca cola and Flower firms (Kajamaa, 2011). The paradox in this study review is that despite a consensus among scholars that proper project management skills and monitoring and evaluation practices leads to project success, these cases of failing youth environmental projects in Kenya is aptly reported (Ochieng, Chepkuto, Tubey, and Kuto, 2012).

Kenya's population is reported to comprise of 75 percent youth with overall youth unemployment rate reported at 55.3 percent by the end of the year 2016 (Bureau of Labor Statistics, U.S. Department of Labor 2016). This is defined as a perilous ticking bomb, with idle exasperated youth that are vulnerable to irresponsible behaviors that may include drugs that renders them hopeless, radicalization, prostitution, thus high prevalence of sexually transmitted diseases, or even being lured into terrorism. They lack patience to



manage protracted projects and will always opt for what seems to be scarce quick and profitable fixes. Some especially urban youth today choose to waste their days playing video games or sitting home in front of their televisions playing games and betting all day and spend their nights partying or on criminal activities; instead of bettering themselves in the world of work. They remain vulnerable to crime and social unrest; thus spelling a doomed and a blunt future for our Country Kenya (Kimando, Njogu and Kihoro, 2012). Literature reviews show that youth lack project management skills and buoyancy; which impacts on their creativity and innovative ability adversely (ennui state); to take deliberate risks using available opportunities as well as accessible business government support for gainful projects startups and growth (Kenya economic survey 2015). This study therefore seeks to investigate the missing links leading to poor performance of youth groups' solid waste management projects; by investigating how project management skills, monitoring and evaluation practices, influence performance of youth environmental projects. Findings of the study shall attempt to provide a solution to the stated problem.

### **1.3 Significance of the Study**

The purpose of this study was to examine the influence of project management skills, monitoring and evaluation practices on performance of youth environmental projects in Nairobi County, a case of solid waste management projects. The study further sought to establish how monitoring and evaluation practices moderated the relationship between project management skills and performance of youth environmental projects.

### **1.4 Objectives of the Study**

The study was guided by the following objectives:

1. To establish the influence of technical skills on performance of youth environmental projects in Nairobi County.
2. To assess the influence of financial management skills on performance of youth environmental projects in Nairobi County.
3. To determine the influence of leadership skills on the performance of youth environmental projects in Nairobi County.
4. To establish the influence of marketing skills on the performance of youth environmental projects in Nairobi County.

5. To examine the influence of combined project management skills on the performance of youth environmental projects in Nairobi County.
6. To determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.
7. To establish the moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects in Nairobi County.

### **1.5 Research Questions**

The study sought to answer the following questions:

1. How does technical skills influence performance of youth environmental projects in Nairobi County?
2. How does financial management skills influence performance of youth environmental projects in Nairobi County?
3. How does leadership skills influence performance of youth environmental projects in Nairobi County?
4. How does marketing skills influence performance of youth environmental projects in Nairobi County?
5. How does combined project management skills influence performance of youth environmental projects in Nairobi County?
6. How does monitoring and evaluation practices influence performance of youth environmental projects in Nairobi County?
7. What is the moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects in Nairobi County?

### **1.6. Research Hypotheses**

The study tested the following research hypotheses:

1.  $H_0$ : There is no significant relationship between technical skills and performance of youth environmental projects in Nairobi County.
2.  $H_0$ : There is no significant relationship between financial management skills and performance of youth environmental projects in Nairobi County.

3. H<sub>0</sub>: There is no significant relationship between Leadership skills and performance of youth environmental projects in Nairobi County.
4. H<sub>0</sub>: There is no significant relationship between Marketing skills and performance of youth environmental projects in Nairobi County.
5. H<sub>0</sub>: There is no significant relationship between Project management skills and Performance of youth environmental projects in Nairobi County.
6. H<sub>0</sub>: There is no significant relationship between Monitoring and evaluation practices and performance of youth environmental projects in Nairobi County.
7. H<sub>0</sub>: There is no significant Moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects.

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

The study aimed to investigate the root causes of impediments that negatively impacted the uptake and performance of youth's environmental projects in Nairobi County; despite a number of youth enterprises and funding that have been continuously embarked upon by the government; targeting the unemployed Kenyan youth's including the out-of-school youth. The study advocates and analytically discusses strategies for engaging the youth through project management skills and monitoring and evaluation practices so as to empower them on positive uptake of government loans and job creation. The study findings raise "waste pickers" skills levels which allude to addressing broad skills needs (technical as well as general project management business skills like marketing, and financial), and offering bendable methods of training that permit linking work with skills upgrading. Given the granular nature of the informal sector, the study addresses performance of youth environmental project asymmetries with an aim of hooking up youths environmental groups with the modern economy, create linkages with technological solutions, to help youths enterprises enter into local, regional and global value chains.

The study findings are therefore significant in terms of contribution towards environmental funded projects through the Directorate of Youth Affairs by redirecting, improving and strengthening the existing government funded youth environmental projects with a view to inform or influence the policymakers, donors, volunteers, youth stakeholders; largely the

Ministry of Public Service, Gender and Youth Affairs. The study also advocates for urgent strategies on youth project monitoring and evaluation practices as an approach towards improving awareness and promoting youth participation and performance in environmental projects; thus overcoming “ennui”; low enthusiasms on youth projects uptake.

### **1.8 Basic Assumptions of the Study**

The study was based on the assumptions that Project management skills, monitoring and evaluation practices influences performance of youth environmental projects in Nairobi County.

### **1.9 Delimitations of the Study**

This study was delimited to project management skills, monitoring an evaluation practices and performance of youth environmental projects in seventeen sub-Counties of Nairobi County. The study was also delimited to selected residential estates with controlled development within the administrative Wards as they offer ideal solid waste collection business to youths (Richard Odour, 2017). Emphasis was drawn to youth groups that are engaged in environmental projects funded by the government for the last two Medium terms (2008-2012; 2013-2017). These include Westland-Highridge and Kangemi; Dagoretti North-Kilimani and Kileleshwa; Dagoretti South-Uthiru and Waithaka; Langata-Ngumo and Nyayo Highrise; Kibra-Woodely; Roysambu-Ridgeways, Roysambu and Muthaiga; Kasarani-Clay city and Kasarani; Ruaraka-Utalii; Embakasi South-Imara Daima; Embakasi North-Kariobangi; Embakasi Central- Komarock; Embakasi West-Umoja 1 and Kariobangi South; Makadara- Harambee; Kamukunji- Pumwani; Starehe – Pangani and Ngara; Mathare- Hospital. Nairobi County is deemed ideal to the study due to reported challenges on solid waste management from the literature reviewed, compared to other counties in Kenya; including the high uptake of solid waste management projects by the urban youths; exaggerated by easy access to information about funding in form of youth loans through the Directorate of Youth Affairs. The study delimited itself to the mixed method approach and sampling was based only on the focused groups within the selected residential regions that are functional within the targeted population.

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

The study target was the dynamic youth groups, who were difficult to find in one place when administering interviews due to their dynamics. This therefore demanded for more youth-groups site visits so as to administer the questionnaires effectively. The researcher had also to capture data from the key informants working closely with the officials in charge of the youth groups which belonged to different Government financial Funds (UWEZO Fund, YEDEF and WEF) who were engaged on different Youth Directorate functions. The researcher had to make several visits together with my research assistants to different youth functions in order to collect data which was time consuming.

### **1.11 Definition of Significant Terms Used in the Study**

**Financial management skill:** Knowledge in record keeping as well as details of the project activity that is determined by budgeting skills, accounting skills, records keeping, financial reporting, knowledge on cost allocation and audit tips cost allocation, and audit results indicators.

**Leadership skill:** Entails leading and managing teams by setting the projects' vision, on both strategic and operational perspective that entails indicators measures of communication skills, strategic thinking, levels of honesty and integrity, motivational skills and team management approaches and skills.

**Management:** In this study, management generally refers to a cyclic procedure of setting objectives alluding to establishment of that include long term plans, programming, budgeting, cost control, implementation, and operation and, monitoring and evaluation.

**Marketing skill:** Having an overall understanding of the market successful sales and marketing alignment, customer segmentation, digital marketing, brand development, price negotiation including personal selling.

**Monitoring and evaluation practices:** This study embarks on government funded youth environmental projects anticipated to have Monitoring and Evaluation (M&E) Plans, standard monitoring and evaluation schedules for the youth environmental projects, Project implementation and monitoring plan, Progress and impact evaluation, data collection strategies and reporting framework. Monitoring and evaluation practices also entails Continuous Improvement, results dissemination and feedback, Leverage technologies, development of M&E youth field staff and groups members capacity to maximize on learning opportunities.

**Performance of youth environmental project:** Performance of youth projects in this study context alludes to project success throughout the project life cycle operations, save waste management youth-projects within the target areas of the study. Measures through performance key indicators include Rate of Return on Investment, No. of solid waste management equipment's owned by the youth groups, Coverage percentage of the service provided, Quality of solid waste collection service in the target areas, Level of youth projects sustainability, Proportion of employment creation, Level of youth inclusion, amount of group members average earnings, Increased sales of recycled products, Low crime and youth survival rates, and No. of youth employed on salary as tested for overall youth economic growth.

**Project management skills:** In this study context it refers to a range of abilities and qualities inculcated upon youths to enable them bear the capacity to run a business and lead the projects to a successful end; which include skills like leadership, financial, marketing and technical skills leading to project performance.

**Solid waste management projects:** This study context addresses means of garbage or refuse disposal procedures as an endless endeavour with a stipulated time, cost and scope for sustainability of youth groups' empowerment livelihoods for social-economic development.

**Solid wastes:** These denotes unwanted or abandoned materials. Solid wastes entails solid, liquid, and semi-solid or containerized gaseous material.

**Technical skill:** The ability to perform technical aspects of a project which involves knowing all of the projects' inputs necessary to achieve the designed goals measured through oversight on waste management schemes, Level of compliance with waste disposal legislation, quality waste services, Level of Solid waste Management budget formulation a control waste disposal and Participatory Level in project solid waste management within the scope.

**Waste Management:** In this study encompasses youth's environmental projects that entails assortment of waste, transportation of the solid waste, and disposal of garbage to designated dumping sites, sewage attendance, and handling of other solid waste products. It also includes management of all processes and resources for proper treatment of waste materials, from conservation of solid waste, designed transport trucks and dumping services to compliance with health codes and government environmental regulations.

### **1.12 Organization of the Study**

This research proposal is organized into five chapters. Chapter one entails an introduction to the proposed research which covers the background of the study in a systematic approach, capturing the historical, theoretical, Conceptual and Contextual perspectives; the statement of the problem; the purpose of the study; objectives of the study; research questions; hypotheses of the study; significance of the study; delimitations of the study; limitations of the study; assumptions of the study and definition of significant terms. Chapter two, institutes the literature review. It summarizes the study variables and their relationships. Themes include Introduction; performance of youth environmental projects; project management skills and performance of youth environmental projects; Technical skills and performance of youth environmental projects; financial management skills and performance of youth environmental projects; leadership skill and performance of youth environmental projects; marketing skills and performance of youth environmental projects; monitoring and evaluation practices and the performance of youth environmental projects; theoretical framework; human capital theory; theory of change; conceptual framework; summary of literature review; and knowledge gap . Chapter three follows which describes the research methodology.

The research paradigm and design are deliberated on; target population; sampling design; sampling procedure and sample size; research instruments; data collection procedures. The chapter also defines validity and reliability of instruments; data analysis techniques; Ethical considerations and operationalization of the variables. Chapter four entail data analysis; presentation; interpretation and discussions. Chapter five covers summary of the study findings; conclusion recommendations and suggestions for further studies.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents reviewed literature associated to the study based on the following thematic and sub-thematic areas; introduction; performance of youth environmental projects; project management skills and performance of youth environmental projects. It also delves into the technical skills and performance of youth environmental projects, financial management skills and performance of youth environmental projects, leadership skill and performance of youth environmental projects, marketing skills and performance of youth environmental projects. Other topics covered on this chapter are: monitoring and evaluation practices and the performance of youth environmental projects, theoretical framework, human capital theory, theory of change, conceptual framework, and summary of literature review and knowledge gap.

#### **2.2 Performance of Youth Environmental Projects**

Extraordinary rates of youth unemployment following the literature reviewed in this study represent widespread adversity among the youths with a mislaid opportunity for critical local, national, and global economic development (Evans and Evans, 2011). Youth in most of the emerging countries continue to be swamped with poverty, particularly stemming from the irregularity of scarce work, absence of formal employment and prevailing social protection. Further study shows that the youth unemployment menace is also predominantly intense in some of the developed world. In Spain for example, a majority of youth (51.4 percent) were unemployed by the third quarter of 2011, and the figure was nearly as high in Greece (46.6 percent) during the same year. The youth unemployment rate in Portugal was 30.7 percent, and in the UK 22 percent. (The Economist, September 10, 2011). Kenyan population mostly comprises of 75 percent youth. Unemployed youth accounts for about 55 percent (Youth Enterprise Development Fund Report, 2015).

Researchers describes access to finance as a factor that influences the capacity of youth- led groups owned businesses to survive and grow. Youth's access to finance denotes the youths' micro-loan provided by the government, which is regarded as the main driver for economic participation by youths in Kenya (YEDF, 2012). In addition, a scholar; Huebner, A.J. (1998)



in his “how to empower youth” research publication comments that access to finance is a substantial aspect, and expedites entry, exit, and sustainable growth of youth projects.

Youths’ environmental projects study was conducted by a scholars, Chimucheka and Rungani (2011) in Buffalo city municipality, South Africa using descriptive research concluded that 79 out of 109 youth respondent groups with micro-businesses applied for bank finance. Findings indicated that Out of 109 youth groups, 30 (28 percent) never applied for bank finance while the majority (87.3 percent) of respondents indicated that inaccessibility of bank financing had a stagnating negative impact on growth of their firms. On the other hand, only 7.3 percent indicated that inaccessibility of financing never affected growth of their groups’ projects, while 6 percent claimed that access to financing positively impacted the growth of their businesses gradually. This findings were supported by a similar research report findings following a report on Financial Knowledge and Behavior Survey (2013) which equally acknowledged that lack of access to affordable finances is largely perceived as one of the biggest impediments for youth entrepreneurship compared to older age-groups.

Addressing youth unemployment in Kenya in March 2009, President and Prime Minister (former regime), launched the renown Kazi Kwa Vijana (KKV) (‘Jobs or Work for Youth’) government-funded programme with an obligation to basically manage poverty/hunger and perennial unemployment rates among the youth. This was through spawning government-related environmental projects and was envisioned to arbitrate during the triple ‘F’ crisis (food, fuel, and financial) period. The project was predicted as an instantaneous relief to youth by way of providing them with a source of financial support through employment in public works and environmental projects. Its objective was to employ 200,000–300,000 youths from selected regions who were at risk of hunger and starvation (Isahakia, 2010). Youth Enterprise Development Fund (YEDF) project was officially launched in February 2007. Its preliminary decree was to deliver affordable loans for on-lending to youth-owned enterprises with a bid to entice and facilitate their investments in micro, small and medium enterprises commercial infrastructure. These entailed environmental business projects like industrial parks, minor markets or business incubators, display stalls, that would be beneficial to youth-owned enterprises in addition to support of youth-oriented micro,

small and medium enterprises, thus developing linkages with large enterprises. This was anticipated to expedite marketing of products and services of youth-owned enterprises in both the domestic and the international markets as well as provision of funding and business development services to youth-owned or youth focused enterprises; and facilitate employment of youth in the international labor market. (YEDF, 2010).

Treasury allocations to YEDF through fiscal years is an accumulated total of approximately US\$34 million (YEDF, 2016). Majority of these distributions are mainly budgeted for loans that are disbursed by YEDF using the Constituency Youth Enterprise Scheme which essentially finances projects belonging to registered youth groups of which are approved by community committees at the sub-county level. The maximum amount lent through this constituent is the approximate equivalent of US\$635 (YEDF, 2016). The Easy Youth Enterprise Scheme (E-YES) finances projects owned by individuals who belong to validated groups that have completed repayment of the loan with approximate equivalent of US\$318 to US\$1,272 (YEDF, 2016). Other financial intermediaries and providers that are in partnership with YEDF are provided with term loans by the YEDF at 1 percent interest where they on-lend to the youth at 8 percent interest. The 7 percent variance range is utilised on administrative costs as well as mitigating anticipated losses that may arise from lending to a clientele perceived as risky (YEDF, 2016).

Establishment of a US government US\$10 million was announced by US Ambassador to Kenya in the year 2010, concerning Youth Innovate for Change Fund that was to provide youth with an exclusive opportunity to access capital for their economic empowerment; save environmental projects. The fund was youth-owned, led, and managed, which was in addition to the US\$45 million 'Yes Youth Can'(YYC) youth empowerment programme that the USA government funded project of the National Youth Forum (Ranneberger, 2010). Kenya's President's; His Excellency Uhuru Kenyatta's directive of reserving 30 percent of all government procurement for youth owned enterprises is now a key pillar of the government's agenda for the youth to enable them to participate and benefit from public procurement opportunities (Gok Procurement Policy paper, 2013).

This study includes extensive research on other funded youth environmental projects and their performance which include projects like Ghana's Bamboo Tree project whose objective is to largely promote a non-polluting and healthy form of substitute transport to meet predominant emergent Country wide mobility needs while still addressing climate change, environmental degradation, abject poverty as well as high unemployment rate among the youth (Odhiambo, Scott, Gow, 2016). Study review indicates that the project acquired 2.44 acres of land with a conventional bamboo plantation and a nursery with a capacity to produce 10,000 seedlings and 15,000 bamboo seedlings for start-up. Participating youth receive project technical skills pertaining project procedures on planting and after care for the bamboo trees. The unemployed youths are trained and offered full-time jobs in manufacturing and assembling bamboo products like bikes at the bamboo bike factory amongst the bamboo tree products value chain (Odhiambo, Scott, Gow, 2016). However, lack of timely data on the critical drivers of change in relation to youth's bamboo projects performance limits the design of policies and strategies that can improve the performance of the bamboo projects (Yvan, 2012).

Study reviews portrays that government youth marshal plans and project training manuals have not adequately proved to be effective or sufficient to create gainful projects performance for the youths sustainably (Odhiambo, Scott, Gow, 2016). According to research by Ogembo (2005), youth solid waste management projects may involve marketing and sales team, recycling and production youth group team, logistics bearing well stipulated schedules, quality control, and customer service team on domestic solid waste specifically, which possess as a multidimensional challenge for urban communities in emerging nations (Ogembo, 2015). Open dumping of garbage accelerates the breeding havens of disease vectors affecting household environments which include flies, mosquitoes, snakes, cockroaches, rats, and other pests. Poor SWM and illegal dumping sites exacerbate pollution of surface and ground largely contaminating water for human consumption. Literature reviewed in this study terms the main challenges facing solid waste management comprise of insufficient allocated financing, meagre infrastructure and inadequate technology, lack of public responsiveness on good hygienic practices and scanty legal and regulatory policies (Ogembo, 2015).

Study indicates that swelling amount of researched studies are today considering solid waste disposal and management traits. Developed and emerging nations are concerned about using viable and appropriate methods so as to deal with urban solid waste challenges to gainfully benefit the bulging number of jobless youths through project performance, thus portraying change as a result of an intervention that include higher profits, increased sales of recycled products, better employment of other youths, low crime and youth survival rates (Odour, 2017). Following the readings reviewed in this study context, 45 percent of waste is managed by unemployed youth.

Scanty information is available on waste management at the counties; thus, reported youth play a bigger role in waste management than the County government, save, solid waste assortment within Nairobi residential areas, though there is a gap of clarity on the roles played by both players, collection schedules, budget incurred and the scope (Odour, 2017). However, solid waste management requires multi-disciplinary project knowledge (NEMA, 2015). Youth groups businesses requires bookkeeping reports and financial statements at the end of each month. This may be compiled as adjusted trial balance for the group's accountant as a foundation for effectively preparing reports, tax returns, and financial statement to close the books annually (Agwu, 2014).

Sustainable capital is addressed by sensitizing the youths on the ripple effects of their actions and empowering them to engage in gainful environmental projects that can generate income, yet do not have antagonistic effects on the environment that include water harvesting for home use, irrigation, fishing for those by the lake shores, agroforestry and waste management projects (Davis and Kingsbury, 2011). With job opportunities deficiency in the formal labor market, participation for youths may be increased from environmental protection and may be objectively sought from varied levels ranging from grass root activism to policy bodies and Non-Governmental Organizations (NGOs). Their role can be established in policy creation through dominant local advisory bodies such as youth councils. Increasing deterioration of the natural environment is a major trepidations of young people worldwide since it has direct implications for their well-being today and in the future for posterity (UNESCO Paris, 2005).

Reviewed studies showed that Key Performance Indicators (KPIs) provide longitudinal data to evaluate the realization of goals and objectives against a baseline or future target. Subsequently, KPIs provide hard pragmatic evidence to funders, policy-makers, and, most importantly, community members on the value of the youth's environmental project and how they are performing over time, and where improvement is needed, thus enhancing accountability and youths buy-in (Evans and Evans, 2011). Literature reviewed studies by two scholars; (Van, 2007) and (Dale, 2004) acquaint with the term "anthro capital" that incorporates human, social and constructed capital so as to achieve a broader view on the measurability of performance. They argue that in order to assess the social and environmental performance of a precise activity, one must first comprehend its impact on non-financial capital. This is essence of the capital-based theory of performance (Dale, 2004).

Literature reviewed pertaining this study indicates that, youth projects performance glitches can be drawn towards procurement; particularly on reported delays while obtaining environmental equipment's, rate of approval for contracts or obtaining components habitually leading to project procedure delays, scaled cost overruns, poor quality services or in-accessibility of desired services for certain target youth groups (Canadian International Development Agency Journal, 2002). The notion of sustainability of a growth-oriented and profit-making project entails building multiple youth-based communication channels on youth environmental projects and using those channels to get information out including reactions and feedback and feed forward to the implementers is vital (Volk and Cheak, 2003). A communication plan should be developed to build understanding and buy in of youth projects service delivery systems, using stakeholders and champions of change to promote the service delivery approach (Nyonje, Ndunge, and Mulwa, 2012).

Owing to the substantial role played by the urban youth, it is essential to focus on their greater achievements so as to empower them with project management skills applicable in solid waste management, mainly in categorised waste segregation and recycling projects so as to promote a clean environment and endorse their livelihood (Oduor, 2017). Waste management methods include landfill, incineration, recycling and plasma gasification.

However, the study seeks to investigate the gap in knowledge towards the performance of these processes to gainfully benefit the youths. The study specifically concentrates on influence of project management skills on performance of waste management projects of youth groups dealing with solid waste management projects in selected residential zones of Nairobi County.

### **2.3 Project Management Skills and Performance of Youth Environmental Projects**

There are three sayings that have been repeatedly mentioned by scholars demonstrating skills and performance; one concerns frequent dead bodies found floating down the river while all is done is building more impressive services for fishing them out; about streaming ambulances headed towards a bottom of a cliff instead of building fences at the top; and about giving someone a fish versus the value of teaching that person how to fish (Yolande, 2010). Reviewing these dialects, distinguished scholar comments about repeated tendency towards short-term quick fixes rather than examining, synthesis and articulate change within the functions of a system that creates the very problems being addressed. At a time when society's prevalent issue is youth unemployment, business stakeholders and governments ought to work together to help young people develop a project mindset; nurturing values which supports young people to undertake risks by setting up enterprises, creating jobs to enable them become masters of their own destiny. According to a study by McKenzie, and Woodruff (2014) on skills and Youth Projects in Africa, Swaziland; a qualitative exercise using FGDs on how to create an enabling entrepreneurship Project framework was conceded with potential young entrepreneurs (students) comprising of interviews with key stakeholders engaged in public sector and Youth Enterprise Fund.

The participants were requested to make available resolutions to any of the identified challenges. Largely, FGDs results are indicative and thus provided valuable acumen implying that Young Swazi entrepreneurs regarded lack of skills (including work experience) and finance as top barriers to start ups. Youths acknowledged that the entrepreneurship exercise only exaggerated business concepts, without practically equipping them with the tangible 'know-how' tactics to start and run a business. In their view, effective training programs should go beyond business plan preparation and foster reliable linkages with varied business service providers and networks (McKenzie and

Woodruff, 2014). This study agrees with the findings of this study where youths highly agreed that project management training programs should be practical with supportive set-up such as incubators for exploring youth business ideas.

Other studies reported on project management skills on environmental projects basically described the approach for teaching the urban youths towards transitioning to a society that is conversant of the environment and its allied problems, aware of the solutions to these problems, and motivated to solve them gainfully (UNESCO, 2014). The prevailing state of resolving global economic disintegration, economic predicaments and recession globally has necessitated the need to cultivate effective project management skills and training among youth for appropriate operation aimed at revamping innovation capacity towards more creative youth (Gisela, 2016). The component of project management skills is to improve youth employability through skills to transfer and implement ecological and phenological objectives into practice, which engages participants in the learning process (Moore, 2017). Research terms self-employment as ability to generating one's returns straight from potential customers, clients or owned organizations as opposed to being wage earner of a business or person, thus carrying on one's own sustainable business rather than working for an employer (Mauchi et.al.; 2011).

Project management skills based on project techniques requires meticulous planning and youth stakeholders' cooperation for building environmental awareness in order to stimulate participation, developing investigative and gainful skills in youth, save on environmental oriented projects which entails the process of championing best ideas into reality; autonomy and risk taking; pro-activeness and competitive aggressiveness, which is being achievement oriented (Agwu, 2014). It includes timely record keeping and creativity, innovative and analytical communication, marketing skills and risk-taking, as well as the capability to plan and accomplish projects in order to realize objectives and to master one's own life (Myrick, 2013). Operational skills following research reviewed include breaking down of payroll salary calculations, managing contracts of employment, appointment letters and time spent on project including counter-signed staff timesheets showing all eligible and ineligible project activities (Mumbi, Okori, Jada, Koushik and Wilson, 2017).

Record keeping in project management is an intensive and applicable indulgent that alludes to how a business project realizes projected goals and objectives. Book keeping provides a thorough understanding on the levers that fashion value and proposition to customers to realise profitability, lucrative cash inflows, and shareholder value (Georgieva and Allan, 2008). Keeping records, such as copies of relevant project articles of memorandum is a crucial project operational strategy to organize work and to assess business growth, improve written communication skills, understand project financial needs, heed to details and deadlines promptly, make decisions including setting priorities (Davis, 2014). Following skillful records keeping, youth projects team are able to reflect on annual returns and accomplishments, improve on document skill development, track goal setting and achievement, receive market recognition, understand financial management and gain satisfaction and motivation (Georgieva and Allan, 2008).

Project management skill is a crucial proficiency while engaging youth for development, as entrenched in Kenya 2010 constitution. In lieu of this, the Directorate of Youth uses a standard youth entrepreneurship training manual to train on project management skills (MTP 2008–2012). The environmental youth projects are hence expected to meet economic needs, fit within government-funded programme objectives, and add value to the beneficiaries' whereas providing employment, or self-employment opportunities by opening up business ventures for the bulging youth population as exit opportunities from the programme (UNEP, 2006).

#### **2.4 Technical Skills and Performance of Youth Environmental Projects.**

Kenyan youths face challenges today that include high unemployment rate, marginalization, and obstructions while accessing crucial facilities and basic services such as education and healthcare (Shauri, 2017). Literature reviewed in this study recommends youths to develop strategies for responsible citizenship through the application of project management skills, to work cooperatively towards gainful resolutions of environmental problem (Kenya youth survey report 2013). This promotes the need for technical operational skills on integrated waste management projects requirements especially in residential areas, like a waste diversion, anti-littering, open burning ban and debris



management requirements as proper waste management to promote waste reduction and separation, and influence waste disposal practices (Boateng, and Bampoe, 2014).

Technical skill is a fundamental insight that ventures into how a project operates and how it makes money and sustains profitable growth, now and in the future. It entails extensive competencies, acquaintance, and responsiveness of multiple characteristics of a business. Today's projects business requires teams that openly contributes to the success of their projects set goals and objectives by initiating the right business. This statement is supported by a study by Gakungu, Gitau, Njoroge Kimani (2012) on solid waste management in Kenya. The study was based on objective assessment of the state of practice towards Solid Waste Management where descriptive survey was deployed with a target population of approximately 3.5 Million Nairobi residents.

The study concluded that Solid Waste collection rate was about 33% of the waste generated, with recycling rate being about 3.7% hence leaving about 63% uncollected waste and un recycled. This indicates that project technical skills towards developments of solid waste collection arrangements are essential right from solid waste collection level to container and vehicle specification, vehicle routing and vehicle maintenance; that include transfer to final disposal. This entails selection of technical facilities and equipment's in regard to their operating characteristics that they are designed for; to enhance the rate of waste collection projects growth and to supervise the transportation of solid waste so as to ensure the process is articulated proficiently without polluting air, roads, land or water sources.

Provision of more firms' value to customers builds a competitive edge or advantage. In the dynamic world with burgeoning youth population, approaches towards developing training, coaching and mentoring youth projects today are devised contrary to the current setting of youth in the country's economy and society; focused on developing project mind-sets towards management and changing attitudes (Davis and Kate, 2014). Research review by (Mumbi, Okori, Jada, Koushik, and Wilson, 2017) using theoretical heuristic methodology through a retroductive process by examining theories appropriate for a conceptual framework for community environmental education (CEE).

The study concluded that youth empowerment, transformative learning was lacking which inferred that the knowledge required for project technical skills on diverse projects is not necessarily related to professional practice in running a business project, but it is also related to skills and perceptions, and to metaqualities and ability to run a business effectively. This include consultation with residents, community groups, administrative key informants, residential within housing associations including traders' associations on solid waste management matters, recognizing what they require in order to provide applicable resolutions. This may allude to developing research by project teams to contribute to the activities and knowledge concerned with solid waste management and disposal.

Technical skill includes a representation of contingency plans developed a thorough analysis of unpredicted risks that a project faces through project cycle predictions by considering alternative strategies while identifying all critical business functions to outline ways to lessen losses (Davis and Kate, 2014). The end result of technical risk analysis may result to many potential threats; hence prioritizing risks is one of the greatest challenges of a project contingency plan to expedite a careful balance between over-preparing the unknown with adequate preparation, so as to respond quickly and effectively to a crisis condition when it occurs (Agwu, 2014). Compliance knowhow with present legislation in the transportation of waste, cautious handling and disposal of solid waste to counter all forms of water or air pollution during the transportation, routine monitoring of the quality provided and performance of waste services, including contract management of external providers and governments that formulate the budget for waste disposal in addition to the ability to gather statistics and compile reports on stringent deadlines are essential technical skills towards solid waste management projects (Agwu, 2014).

Solid waste project planning include setting priorities and designing goals for project growth, through practice using tools such as group brain storming exercises in solid waste management solutions. In essence, solid waste is a problem because it causes pollution, diseases and environmental crisis when it's not properly disposed. (Nairobi Waste Management plan, 2010). A Study conducted by Kimani, Njoroge, Ndunge (2014) on Municipal solid management targeting Nairobi high income zones through mixed method

reviewed that Nairobi 38 percent of the total waste is recyclable (plastic, paper, glass and metal). However, it is estimated only about 20 percent of these recyclables are recovered. Approximately another 20 percent recyclable end up in the dumpsite, while the remainder is either uncollected or disposed of through open burning. However, the study established inadequate technical skills on SWM by private enterprises, with inefficient return on investment resulting from the complexity of their maneuvers; especially due to lack of proper coordination on SWM models and technology.

Currently, Nairobi city has not established transfer stations and does not have a sanitary landfill. The existing open dumpsite at Dandora dumping site is both a health and environmental hazard and is overdue for decommissioning (Kimani, Njoroge, Ndunge, 2014). These study findings advocate for understanding waste disposal current emergent trends, preparedness to challenge the status quo, decision-making, data-analysis creates awareness towards environmentally sound waste management technical skills to youths; with increased knowledge on positive enterprises and benefits of waste, particularly household waste, and garbage. Thus, technical project skill on youth environmental project aims first to earn, sustain, and grow profits.

Technical planning includes the aptitude to crop up operative plans to realise particular project goals and to manage solid waste management systems, ]that entails landfill sites; supervision on conveyance of solid waste to ensure the process takes place efficiently without contaminating air, land or water sources. It contributes to project logic of overall representation and tolerant of the project business and helps project team to examine projected goals and set priorities, identify potential threats and opportunities and execute long-term predictions. Strategic project technical planners are future-based, adaptable, long-term focused, life-long learners and creative (Awitti and Scott, 2016). Methods of inculcating project management skills to the youths are diverse ranging between traditional ways of information transferal through to interaction with diverse projects from their fellow peers that include skills to assess the market, customers, and competition. Formal approaches may be complemented by tacit learning with other youth peers and networks while monitoring and evaluation practices are deemed imperative to rise the effectiveness of youth project management skills (Evans and Evans, 2011).

Literature review and studies based on technical skills and performance of youth environmental projects specifies that youth led waste management Projects create sources of employment particularly among alienated and marginalized urban youth and youths-waste management projects could help address particular socio-psychological problems and crime that arise from joblessness (Moore, 2017). Hence, technical project skills sharpen the capacity to recollect youth projects so as to work efficiently by handling costs and resources, focusing on quality, solid waste management tools, project management standards and cycles, managing resources, and understanding technology trends.

### **2.5 Financial Management Skills and Performance of Youth Environmental Projects.**

Financial project management skills in this context entails the managerial and regulatory knowhow, ranging from registration of business, duration taken to register, a likely responsibility for handling multimillion-pound budgets, procedures, capital requirements, in addition to property rights (Financial Knowledge and Behavior Survey (2013). A descriptive research was conducted by (Adomako Ramesh, Natraj, Ponna, (2014), targeting out of school youths who owned small businesses on business analytics that aimed at teaching introduction to business financial management and business analytics in the context of both current and prospective business. The study conclusion agreed with the facts that financial project management skills entails key monetary literacy and appreciation of procedures such as budgeting, reporting and forecasting alluding to understanding how a project runs and makes money, which is key to growing business and developing record keeping. This attributes to an economic value in a project business by managing financial performance indicators linked to goals set, products sales, stakeholders, resources or inputs and market efficacy. Project teams with financial acumen are unlikely to hold inadequate cash, apply debt more attentively, and are more sophisticated in using suitable discount rates when appraising projects. They are also extra effective at communicating with clients and more popular at obtaining access to outside financing when facing limited credit supply (Custódio, Mendes, and Metzger, 2016).

Books of accounts processes originates through defining pertinent information about each transaction. Hence, basis of documents are the initial points in the book keeping process

for all transactions, targeted operations, and all other business events. Youth groups should document projects novel entries of monetary properties into designated journals and accounts, with suitable references to the underpinning documents (Adomako et. al., 2014). With official groups, reputable chart of accounts are used in recording transactions. Using simple document(s) for every itemized transaction, the bookkeeper registers original entry into the journal then to the business's accounts. Journal entry document entails the whole Youth group solid waste management project transaction being captured in one place (Davis and Kate, 2014).

Financial management skill includes money-saving habits with a realistic savings plan. A descriptive study on Keys to project financial management was conducted by a Financial Consulting Firm by Michael, (2016). The study was conducted in Boston targeting young entrepreneurs which indicated some of the best financial management practices to include financial journals which are the original books of entry used to trail employees payroll payments including the generated sales receipts after products transactions, withdraw and bank deposits as well as all the purchases made by the project. The study reiterates that totals summed up in the Journal should then be transferred to the general Ledger; ensuring that each entry captured is posted to particular relevant subsidiary Ledger books that are kept for inspection purposes. Journals generally contain account records with specific information like accounts receivable and payable, payroll data, and financial information concerning project jobs proceeding within the billing process (Michael, 2016). The study findings further showed that effective accounting record keeping is commonly known as the projects balance Sheet which is denoted in this study as the solid waste assets and liabilities achieved in double entry book keeping systems, since total debits should equal total credits for the a given project.

Prioritizing goals in a given project may give a clear idea of where to start saving. Study shows that certain investors put their money in a jar, coffee cans or form of piggy bank (Rebecca, 2016). For short spells of time and for small amounts of money, the piggy bank method may work. However, long-term saving requires a safer method. Study reviewed recommends saving money at a depository institution that give ideal financial services to youths, such as savings and checking accounts. Unlike tangible money deposited at home

which is prone to fire, burglary, or some other types of risks or disaster, money saved at a depository institution is constantly protected from fitful loss (Rebecca, 2016). Study on savings by (Boateng, Samuel, Baidoo, Amponsah, 2018) on the role of financial literacy in saving decisions was conducted in Ghana. The researchers used primary data, which was analysed using a regression model.

The study findings employed estimation technique indicated that improving financial literacy portrayed that depository organizations propose accounts that earn interest, allowing customers or youths to benefit from the time value of money. Almost all banks offer automated transfers between checking and savings accounts which is an ideal way to save money. Further research findings concludes that market deposit accounts and savings accounts were the most mutual depository institution accounts that earned interest. A savings account is an account that has a depository institution which embraces money that is not disbursed on present expenditures. According to the literature reviewed, scholars retaliate that money can be saved in a savings account until the owner requests to use at his discretion. Money market deposit account pays a higher interest rate than a savings account. However though, money market deposit accounts generally require ample cash to open and often have limits on the number of times that money can be withdrawn from the account every month (Boateng et. al., 2018).

Creating a budget starts by identifying the amount of money coming in a project and listing all fixed regular monthly expenses like bills such as rent or mortgage, utilities or vehicle and solid waste equipment payments. It encompasses recording or keying in monitored daily spending with monitoring tools like a pen and paper, an app or smartphone as a spending and budgeting tool including a list of all financial goals to be accomplished in the short-and long-term for budget line allocations (Michael, 2016). Skills in financial trends and environment which includes economic performance has a major effect on how budgeting of youth environment projects are conducted. One of the major challenges the financial environment may pose on youth group project is currency fluctuation (Colantonio Andrea, 2009).

The lending activity of banks on youth Projects constrains youth's environmental activities since it becomes difficult to secure finances. Moreover, majority of Kenyan Youths groups face several huddles in accessing government funding or loans of their environmental projects, thus segregating a bigger proportion of potential beneficiaries. For example, some youth face difficulties to fulfill YEDF requirements such as generating a viable business plan, being in a legitimate registered group and having prevailing bank account which is the requirement for accountability during loan repayment; thus, budgeting of projects daily mundane may pose a challenge. A study that was conducted by researchers; Oduol, Okoth, Okelo, Aila, Abiud, Awiti, Maria, Ogutu and Odhiambo (2016), the effect of the Youth Enterprise Development Fund (YEDF) on youth enterprises, in Siaya County,

Kenya, used stratified random sampling on 28 selected Financiers of YEDF with a target population of 202,897 youths in the County and a sample size of 128 respondents where 28 respondents were in the first stratum while 100 respondents were in the second stratum. The data collection instruments included survey questionnaires which was analyzed using multiple linear regression analysis. The study findings concluded that the YEDF did not have a significant effect on youth enterprises and therefore recommended proliferation of financial intermediaries (FIs) in partnership with the fund with vigorous participation of all the stakeholders towards mobilization of the youth on enterprise project groups improvement and YEDF activities (Oduor et.al., 2013).

The study alluded to Changes in government and policy regulatory reforms affecting youth support budget packages and representation too. Financial aspects of solid waste management concerns budgeting and cost accounting, capital investment, cost recovery and cost reduction. Major preferences for financing capital investment for solid waste management especially on youth projects entails homegrown budget sourced resources, available loans from financial intermediaries and distinct government youth loans or grants (Rebecca, 2016).

## **2.6 Leadership Skill and Performance of Youth Environmental Projects.**

There exists a significant growth in the amount of studies, dissertations, journal articles, and academic research within the area of transformational leadership. However, scanty

scientific work on transformational leadership survives, particularly in the third world countries (Kouzes, and Posner, 2002). Numerous concepts and models together with their instruments of measure have been relatively developed to quantify leadership behaviors but preference for validity and accessibility of leadership theories and instruments traversing within cultures makes a strong case for developing new models of leadership skill. This is especially the models outside the “Kouzes and Posner Leadership Model” which is based on Western culture context where components entails; enabling others to act, encouraging the heart, modeling leadership way, challenging existing leadership practice, and inspiring a leaders shared vision. (Lam, 2002).

Effective manager obliges to a combination of widespread abilities. A study was conducted by two scholars; Burgoyney (2000), London; on project management and leadership abilities, using interviews and content analysis on 83 management and leadership ability sets drawn out a data set of 1013 selected individual management and leadership abilities, as identified from survey texts and interviews and fed into a computerized qualitative data analysis system. The study findings skewed towards people abilities inclined more in the area of lead direction and culture, with an emphasis on ability to handle risks and ambiguity and building teams. The results indicated Leadership in management essential and most useful tool for success in project management. Leaders are invaluable especially when it comes to formulating and communicating new strategic directions within a project set up, as well as communicating with and motivating project teams to increase dedication to project goals. It is embedded on a culture to listen to the customer’s voice using the information provided to match the right value service to the customers (Goleman, 2000), which is a crucial skill while dealing with projects like solid waste Youth groups dealing with residential clients.

Literature reviewed further points out that great leaders possess outstanding team building skills in order to build teams that have complementary skill sets and experiences emulated with ethical value system to inculcate a trustworthy culture as a hybrid blended with honesty, transparency and integrity. This is deemed a fundamental cornerstone of a project intervention cascading from leadership to group members (Hallinger, 2010). A study by an old scholar (Bass, 1996), on paradigms of leadership analysed on leadership and trust



in the Army through social exchange approach. The major unit of analysis in this approach was the affiliation between the leader and his groups. The study findings concurred with the findings of the current research which agreed that effective leaders provide direction, guidance, and activity structuring with a collective goal; where teams collectively grant the leader authority to influence them (therefore reflecting legitimacy), as well as reverence and respect. The research findings further establish Leader effectiveness as a function of the dynamics that transpires between leader and followers in recognition of the cognitive, interpersonal, and social richness of a given phenomenon, to come to grips with practices that expounds on outcomes (Bass, 1996).

Reviewed literature portrays Leaders to be extremely organized and often trust the team members to do their corresponding jobs as they delegate, setting clear expectations and availing on-going feedback. Effective leaders frequently and publicly recognize others and conduct rewarding ceremonies to appreciate teams and team work within an Organisation. They are swift to admit blame for failures, even when they may have not been directly responsible and are hasty to accord others credit for successes rather than themselves (Kevin, Scott, Michael, Heberling, 2001). Communication skills is a key leadership skill, where a project leader learns to communicate effectively with the market for improved interpersonal skills. This auger well with result-oriented behavior which is proactive in seizing opportunities by identifying potential threats and taking action by communicating against them (Lonn, Reisman, 2013).

Challenges within residential waste management projects include delayed collection of waste due to issues within the dump sites, waste carrier vehicles breakdown, licensing complications and youth group teams' absenteeism. Hence, profound communication with good managerial skills are among the crucial aptitudes in the leadership skills that may entail the ability to organize a wide range of stuffs ranging from people to events (Lonn, Reisman, 2013). Communication today can be enhanced using modern technology based on varied technology software solutions such like project collaboration software meant for teams, good time management tools and team task management software.

Effective communication gets project group managers continually realigned, where frequent communication alludes to successful project implementation processes according to a descriptive study that was conducted by Richard Odour, (2017) targeting clients obtaining solid waste services. In view of client's perspective, the findings in addition to periodic status report was absolutely important to reinforce communication and build rapport between the service providers and the clients. The study expounded communication to include financial statements on household payments and client's appreciation messages during seasonal holidays like Christmas or Idd (Odour, 2017). This study alludes to African culture traits of a leader who inspires and motivates those around them to inculcate vibrant team work. The study also portrays Soft skills like learning to be confident and conflict resolution abilities, creativity and creative thinking as a very essential part of developing leadership skills.

Study reviewed indicates that analytical skills and decision making is another key characteristic found in a good project team leader to select among many lucrative actions and probable resolutions to the emerging problems. This involves the capability to resolve hitches and to realise decisions that requires creativity in the heart of solid waste business projects (Lonn, Reisman, 2013). Duties delegation skills in project leadership means transferring responsibilities and functions to precise project teams. Delegating project team capabilities is a key attributes in the project management skills. Effective leader is readily adaptable to unanticipated situations and difficulties (Odour, 2017). Solid waste projects consists of systematic duties of from mapping out of individual residential households, distribution of waste collection bags or bins, scheduling of solid waste collection days and payment schedules. However, feedback schedules from customers or from the service providers who are the youth groups is scarcely provided.

Scheduling and goals setting as a leadership skill expresses the long-term conceptualized vision of leaders as well as managers (Ezugwu, 2015). Literature retaliates that setting goals means a project has the vision of the future. Goals helps project teams in time management and personal motivation, save waste management project in order to realize projected profits (Phillips, 2017). Study reviews that effective leadership skills enables project team to understand their business project value chain alongside the project phases

so as to inculcate appropriate communication, manage incomes and stakeholders expectation, and learn techniques which emulates project documentation that are used to guide the implementation and the completion of projects.

These milestones are realized through sequencing tasks and understanding dependencies in order to determine critical paths so as to allocate resources effectively; track expenditures, and harness agile methods in management (Phillips, 2017). Waste management challenges in other discussed literature reviewed in leadership traits include honesty which has an irreplaceable value in waste management intervention business projects. Scholars indicate that an honest leader inspires teams and customers, with respect for their personality and cultivates bases of trust with project team, project staff, business partners and customers. Listening techniques skills are considered to be absolutely critical and necessary leadership skills for good communications which generates earned respect (Ezugwu, 2015).

## **2.7 Marketing Skills and Performance of Youth Environmental Projects.**

Satisfying the needs of customers in an improved way than other competitors is a core goal for every business project (Mumbi et.al 2017). Solid waste project business entails an investigation per capita waste generation by residents within diverse places of residence, its composition, together with the households' attitudes towards solid waste management. Marketing networks is largely defined as an innovative process of linking youth initiatives as well as sharing of varied contacts including exchanging marketing resources with other enterprises in a cost-effective manner in this study (Sawyer, 2012). Study shows that Networks differ widely in nature, beginning with private networks (family and friends) through market networks (business collaborators), in addition to identity-based networks. Ethnic affiliation is an example, as well as in the prevailing power of ties between different actors. Thus, literature retaliates that youth may face challenges while joining networks due to limited resources with inadequate expertise in entrepreneurship and the labor market more generally. Explicit youth marketing challenges include making viable links to the wider business community, balancing targeted network initiatives against (Mumbi et. al., 2017).

Several authors indicate confusion about the conceptualization of marketing from the literature reviewed in this study due to multiplicity of definitions and interpretations established by academic literature. However, a scholar, Frank Lozada (2015) conducted a study on marketing manager's perception using content analysis techniques to explore how marketing managers defined the concept of marketing in Puerto Rican companies in Caribbean countries which run similar business projects with African countries. The results showed that 16 percent of marketing managers defined marketing by means of concepts related to strategic functions, 50 percent defined it by concepts that are related to marketing tactics, while 28 percent stated that marketing reflects both of the stated functions. This study elaborates on the components of marketing skills demonstrated in this study that entails developing a robust brand, exploring sales through social media and digital marketing, (Odour, 2017). Marketing and products market orientation is a crucial project management skill for every project team since it focuses on discovering along with meeting necessities of the projected market and customers.

Literature reviews particular fundamental marketing skills which are imperative for enhanced market orientation to include verbal and non-verbal communication marketing skills while communicating to diverse clientele; to identify what the audience wants and needs (Njoroge, Kimani, and Ndunge, 2014). Other documented marketing skills include the capability to evaluate market survey data and generate solutions founded on research. Business project networks are imperative towards supporting project management skills since they act as sources of ideas, customers business, partners and information on market trends (Evans and Evans, 2011). Negotiating with project sponsors, other project team, business partners, competitors and clients with open mindedness is deemed among the popular examples of marketing skill. Leaders that are open minded are termed to be inventive, flexible, and not selfish. They are optimistic and positive thinkers who are highly effective gifted with positive emotional intelligence (Kouzes and Posner 2012). The ability to innovate, with adequate planning is a vital management skill too especially in production of recycled solid waste items for sale. Different scholars following study reviewed shows that a good leader makes successful plans for an unpredictable future; through contingency planning.

In support of this view, John Burnett (2008) conducted a study on targeting small youthful business owners in Switzerland on effects of marketing networks on growth of small businesses either in service or product industry. The findings of the study produced settled on general strategies that should be developed into actionable and realizable activities based on the marketing mix-product, price, promotion, and distribution to epitomize the way in which small businesses networking marketing strategies may be transformed into marketing plans for action. He categorized networks into four perceived areas that include; individual networks perceived as personal attained networks that provide upkeep and acquaintances worthy on sharing ideas; social networks which are perceived as networks which similar marketing interest are shared; referral networks deemed as rapport of another person's acceptance and trust in the other person; and business networks which embody connections that include professionals, social, and personal marketing networks in addition to technical networking that permit varied business transactions and the sharing of diverse personal experiences. The study concluded that all the perceived networking activities portrayed a positive impact towards the growth venture. (Burnett, 2008).

These findings imply that project management marketing skills is dependent on individualized highly innovative process. Despite the accessibility of technology, marketing is still more of an art rather than a science and therefore each youth group on environmental project ought to customize marketing efforts in response to prevailing environment, considering profound understanding of targeted customer's profiles and purchasing criteria to satisfy the needs better than other solid waste collection competitors. Skills in patent licensing royalty rates which is a percentage of the gross royalty rate that youth groups as inventors receive each and every time their products sells is a key marketing skill. To authenticate the importance of Intellectual Property skills, Kazunari (2017) conducted a study with a purpose to contribute to existing literature by escalating the scope of the research area in order to integrate Intellectual Property (IP) and marketing. The research was to enrich the understanding on how to incorporate IP tools into marketing activities. The research concluded that IP (including information of it) is a crucial potential tool especially for product marketing.

Research reviewed however indicates that enterprise architecture for the government is an obstruction in the success of e-Governance initiatives in most of the developing countries today. Requirements for a marketing framework suitable for framing the technical aspects of e-government procurement systems and interest rates on youth projects funding are important for youth's environmental projects including its application in the context of youth waste management projects; so as to venture in to Intellectual property rights. (Halt, Gerald, Robert, John, Donch, and Amber, 2014). Study results towards incorporating Intellectual Property within marketing of goods and services can be applicable to youth groups dealing with small scale solid waste projects within varied regions in Nairobi County. This may require training on networking marketing and Intellectual Property rights. Nairobi Community is the utmost significant stakeholder in solid waste management undertakings, and hence may also take a forceful part in promoting waste management recycled products.

Youth groups' partnership involves personal selling and partnerships through meetings with funders, intermediary financiers, banks, landlords, incubators, trade and professional organizations. Project teams may also reach out to community experts, donors, volunteers, for market and support (Alarape, 2013). Literature reviewed policy approaches to include developing precise networks around disadvantaged groups; expending networks as a means for delivering marketing skills; building networks around a specific growth through marketing and the development of virtual network financial support (ILO, 2015), viable to business projects like solid waste management reports. Policy design on youth projects and continuous focus on lessons learned promote feedback for future development on internal marketing approach amongst solid waste key players (Odour, 2017).

## **2.8 Monitoring and Evaluation Practices and the Performance of Youth**

### **Environmental Projects**

In the past two decades, monitoring and evaluation literature mirrors growing attention to culture and cultural contexts looking through the lens that judges the standards in to which outcomes are considered as real project outcomes, what values support the monitoring and evaluation practice and the measures of knowledge gained (Bagele, et.al.; 2016).

Following systematic studies reviewed on this study, numerous parts of the world, project monitoring involves consistent management practices which are applied to project inputs such as project resources to routinely generate project realistic plans, where plans and resources are termed as the inputs for the execution of the project. Output measures are correlated with set performance targets in order to identify performance gaps; which may be evaluated to conclude on corrective decisions and improve the project as the implementation proceeds (Carson- Cheng, 2013).

Monitoring and evaluation practices is therefore an objective process of answering questions related primarily to youth's environmental project on effects, implementation, and purposes effectively using culturally responsive monitoring and evaluation practices associated with assessment of waste management projects outcomes and impacts, analysis of procedures, implementation, cost-effectiveness and underlying theories of change, among other constituents of interest. Hence, monitoring and evaluation as a social learning intervention theory expounds largely on human behavior in terms of continuous mutual interaction between cognitive behavior and environmental inspirations. (Patton, 2010)

Appropriateness of project management skills, save environmental projects requires data to be collected while the projects are ongoing deploying diagnostic studies or project process evaluation (Rist, Bolly, and Martin, 2012). Adequate monitoring and evaluation practices ensures that effective data gathering procedures are selected and implemented to ensure that the interpretation of the findings acquired is valid for the envisioned utility by project teams. Collected data that is processed, and reported in an evaluation ought to be systematically reviewed and any errors identified corrected (Nyonje, Ndunge, and Mulwa (2012). Following wider literature review on monitoring and evaluation of youth project, assessment of the utilization of findings depends on a number of determinants which can be situational or related to resources. A study on utilization focus evaluation was conducted by Kathryn, Hatry and Joseph (2015) that corresponds to possible determinants of utilization of evaluation results by the youth groups. The study was conducted using content analysis on various evaluation reports performed on youth related projects in South Africa. The findings of the study indicated that evaluations must be designed and carried out in a way that is culturally responsive to values and beliefs for a given target group,

which should be context specific. These are values developed to teach youths how to work within the monitoring cycles using cultural tools that may include African or ethnic proverbs or memory stories while designing an evaluation framework for a environmental projects (Bagele et.al., 2016).

The challenge under this study was to investigate whether youth groups were engaging with the process of monitoring and evaluation as “researchers of their personal continuous practice” not as “mere data collectors” to eliminate ennui upon youth’s projects (Patton, 2010). To address this quagmire, a study conducted by Capacity and Institution Building (CIB) Working Group in South Africa in 2017 actively involved 19 members of the CIB Working Group in the country. The research focused on definite facets of M&E policies of the group members, such as the roles and objectives of M&E policies, organization of M &E within the members of the group, existing funding mechanisms, tools and methods frequently used by the group and how learning was organized within the members of the CIB Working Group. The data gathered during the survey was checked for reliability through informal, unstructured interviews with some of the respondents which served the purpose of clarifying some of their responses to the questionnaire and gaining deeper insight into some of the respondents’ practices and policies (Carlos, 2017).

The findings from the respondents of the study concluded on involving focused activity-based knowledge mapping to project to team in order to support improvements in management of monitoring and evaluation practices; promoting the formation of communities of practice both at National and Local levels to enhance collaboration and peer-to-peer assistance; to foster knowledge sharing and finally, focusing on the development of shared network on leverage technologies for knowledge management (Carlos, 2017). Hence, the outcome of the study was an illumination of youth in congruence and espoused performance. The study supported crucial involvement of youths during initial stages of the evaluation so that the recommendations that are eventually made are relevant and practically useful to them.

Evaluation reports describe the projects being evaluated generally, as well as the context and the intended purposes including the procedures followed towards the findings of the



evaluation. Hence, necessary information is provide which is palatable by the beneficiaries (youths) while significant provisional findings and evaluation reports is disseminated to intended users (Nyonje, Ndunge, and Mulwa, (2012).

Evaluation findings can be disseminated in detailed documented reports, news releases, press conferences and workshops, seminars, or communicated through email-based. However, from the literature review, majority of stakeholders often find documented evaluation reports too long and not easily accessible. Hence, lessons learnt is that evaluation results can be 'packaged' in form of targeted dissemination categorised products to meet different demand driven needs of the various users (Ray, 2007). Researchers recommends that youth and stakeholders brief workshops may be organized to discuss and internalize final evaluation report, including follow-up on utility of the results on the recommended findings. This exposes stakeholders to learning opportunities to fully appreciate the value of the evaluation results by receiving additional information with elaborated explanations. Such workshops ought to be planned in advance and funding reserved accordingly (Petty, 2014).

Creating monitoring and evaluation team during project implementation is an imperative task, to oversee all activities including procurement processes, track timelines and evaluate and make adjustments as needed, follow up with contracts, agreements, general supervision, oversight, policies and procedures (Rist, 2011). Evaluators term logic model as a visual approach to link youth environmental project's resources and against activities to the anticipated results. Distinctive elements in a logic model include key influencers, inputs, outputs indicators, outcomes indicators, impact indicators, assumptions, data sources, data intervals, goals and set targets (Patton, 2010). Literature review concludes that monitoring and evaluation team should determine changes needed in current funding mechanisms of youth environmental projects, plan and align government provisional fiscal resources to cover: infrastructure costs, start- up costs, resources, training, materials, and service delivery costs such as team meetings, consultations and monitoring impromptu visits to project sites all based on cultural perceptions (Bagele, et.al., 2016).

Project performance indicators on youth projects dynamics and social costs of development, possess a great growing concern on projects evaluation today (Engelen, 2007). Study indicates that the standard of living is largely measured by economic standards such as inflation rate, per capital income and poverty index rate. Other social indicators measures include community cultural amenities such as access and quality of health care, income growth inequality level, and educational standards also used (Hood, 2009). Evaluation research results may be used to demonstrate the effectiveness of the youth environmental projects, identify ways to improve them, modify their annual planning, demonstrate effective accountability, thus motivating the targeted youth groups to eliminate 'ennui' in youths and justify funding (Hensen, 2010).

Additional utilization of evaluation results may include demonstrations to existing legislators or other indirect stakeholders to show case accountability that resources are efficiently spent and that the projects are effective; to aid forming of budgets formulation and to justify the allocation of resources while comparing outcomes with those of preceding years. (Kathryn, Hatry and Joseph, 2015).

Lessons learned is part of performance, commonly used as a feedback and feed forward mechanism to improve policies including procedures that may drive changes towards decision making in addition to other processes (Nyonje, Ndunge, and Mulwa, 2012). Authors in this study review indicate scanty recorded data and metrics in solid waste management system. However, numerous studies indicate that Strategic constituent of a successful solid waste management system entails provisions for comprehensive data collection. The data enables waste management projects to evaluate the performance in order to learn from achievements and failures of others. Part of the data collection procedures on solid waste management projects involve collecting sufficient data within the solid management process to examine performance indicators that discourse relevant environmental, social, and economic concerns giving attention to youth cultural antecedents (Hood, 2009).

This study was grounded on participatory action research approach embedded on axiological and epistemological assumptions on culturally responsive monitoring and

evaluation (CRME) practices by youth environmental groups, team leaders and Youth Directorate monitoring and evaluation staff working in diverse cultural, contextual, and complex communities in Kenya; save Nairobi County.

## **2.9 Theoretical Framework**

The theoretical framework in regard to this study was adopted from various studies relating to human capital theory and the theory of change.

### **2.9.1 Human Capital Theory**

This study is linked to theoretical underpinnings that relate to human capital theory by (Becker, 1964) with a concept of performance empirically. The theory assumes the diversity of views, value systems and needs that are acknowledged and utilized in the study of environmental projects towards the delineation of innovative solutions. Human capital is a term that describes hierarchy of skills and knowledge and is one of the most used theories in relation to project readiness and ability (Wright, and McMahan, 1992 with a set of skills and characteristics that may increase productivity; indicating significant relationship between innovativeness and project performance. Human capital theory in relation to project innovative skills include financial performance measures such as projected percentage of sales resulting from new products, amount of capital employed, rate of profitability, return on investment (ROI) rate, including return on assets (ROA) rate (Gratton and Ghoshal, 2003). The assumption of human capital theory and performance is based on the link between resource-based view of the project and the expectancy theory of motivation composed of the valence or value attached to rewards, the instrumentality, or the belief that the project team receives a reward upon reaching a certain level of performance (Victor Vroom 1964). Based on (Gratton and Ghoshal, 2003) view, human capital theory assumes that engaging youth in financial management skills contributes to higher knowledge and skills that will boost their future enterprise with increased productivity and higher owner wages. The propositions of this theory embraces learning that is learner-centered whereby knowledge is created through experiential learning.

Expectancy theory of motivation states that the intensity of a tendency to perform in a particular manner is dependent on the intensity of an expectation that the performance will

be followed by a definite outcome. The theory assumes that youth and environmental projects stewardship actions contributes towards natural capital (biodiversity and ecosystems), which in turn produces ecosystem services and participation in civic ecology activities, thus enhancing the links, shared values and understandings among the youth groups that enable them to work together; social capital (UNESCO, 2013); in respect to solid waste management projects. These theories fulfills the gap in knowledge in this study since they are pragmatic at micro levels. They offer the rationale behind knowledge and skills that increase youth entrepreneurial prospects in generation of income save, solid waste management projects funded by the government.

The skills not only generate income but supplements productivity and higher owner wages. Human capital enhancement through quality project management skills is deemed a critical factor that propels economic growth and sustainable development (Nerdrum, and Erikson, 2001). In addition, (Rastogi, 2000) establishes a correlation between the level of project management skills and new products development in knowledge-based economies that invest massively in project management skills, technology and other related growth elements. Successful project management skills focus on processes that generally stimulate critical thinking, analytical problem solving abilities, with effective decision-making skills and therefore assisting the youths in discussing, inferring, predicting, and interpreting environmental opportunities like waste management (Brymer, 2014). Literature in this study review indicates emerging evidence that human capital investment leads to greater project performance which is a study gap. Thus, this study therefor adopts the human capital theory to address this gap in knowledge. The findings of this study have important implications on youth environmental projects policy and practice.

### **2.9.2 Theory of Change**

Theory of Change is basically inclusive explanation that exhibits how and why an anticipated change is likely to occur in an explicit context (Gujit, 2013). Theory of change in this research context is predominantly focused on assumptions that are anticipated to improve the already existing youth entrepreneurship manual for projects implementation into a more innovative design. This is largely the research gap in this study; between what youth environmental project achieve and how the results may lead to desired goals being realized. The theory of change approach is articulated by establishing first the desired

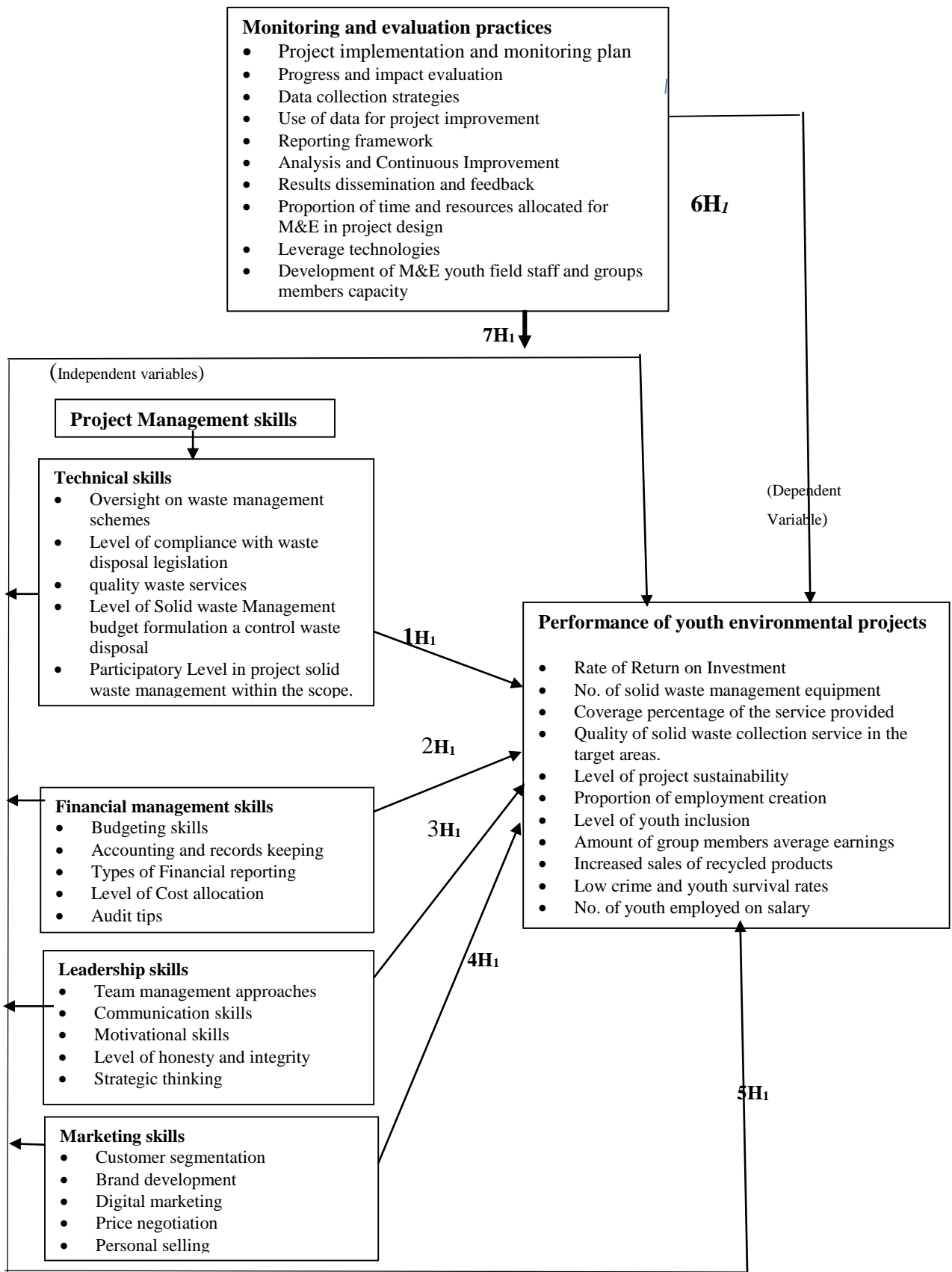
long-term anticipated goals and then working backwards, thus identifying the responsiveness (outcomes) that should happen ( in view of how they may be related to each other causally) for the goals to occur (Brest, 2010). The study mapped out monitoring and evaluation practices to provide the rationale in identifying the type of activity or intervention that may lead to performance outcomes for achieving the long-term goal; including the performance of youth environmental projects. Through this procedure, the precise link between activities, out puts, outcome and impacts that anticipated to lead to achievement of the long-term goals is completely understood. The approach also leads to better evaluation, credibility of findings thus making it possible to measure progress indicators towards the achievement of future longer-term goals towards performance of youth environmental projects.

Developmental evaluation endeavors to make logic of evaluation particularly on youth environmental projects in this study context that emerge under awareness of complexity, recording and interpreting frequent dynamics, interactions and interdependencies that occur as unrelenting youth innovations unfold (Patton, 2010). This makes dealing with monitoring and evaluation of youth's projects complexity a defining characteristic of developmental evaluation's niche. Monitoring and evaluation of Youth environmental projects complexity theory of change elaborates the design of the evaluation to respect and protect the youths' welfare rights and the ethical mandates of evaluators (Carol, 1995). Research shows that the theory of change also expounds on evaluation ethics, like conflict of interest by evaluators to avoid compromising the evaluation procedures and results. This includes evaluator's resource allocation and expenditure that should reflect thorough accountability processes that are prudent and ethically responsible on disbursements (Lisa and Phillips, 2013). The diversity of views, behaviors, value systems and needs to be acknowledged, esteemed, and utilized in the study of environmental projects towards the delineation of innovative solutions to youth environmental projects. This study alludes to post positivism and critical postmodernism perspectives as it supports different project views; instructivist and constructivist philosophies (Connell, JP, Kubisch, 1998).

## **2.10 Conceptual Framework**

The conceptual framework illustrates the relationship under investigation in this study context between influence of project management skills, monitoring and evaluation practices, and performance of youth environmental projects; a case of solid waste management in Nairobi County, Kenya.

(Moderating variable)



**Figure 1: Conceptual framework on project management skills, monitoring and evaluation practices, and performance of youth environmental projects.**

Conceptual framework is a concise description of the phenomenon under this study. The Independent variables is Project management skills whose indicators are technical skills, financial management skills, leadership skills and marketing skills. It is hypothesized that these predictor variables (H1, H2, H3, H4) directly influence the Performance of youth's environmental projects whose indicators include the rate of return on investment, the proportion of employment creation, number of youths employed on salary, quality of solid waste collection service in the targeted areas and number of waste management equipment's obtained by the youth groups. When combined further (H5), it is hypothesized that project management skills significantly influence the performance of youth environmental projects. Monitoring and evaluation practices (H6) is hypothesized to directly influence performance of youth environmental projects and also significantly moderating (H7) the relationship between project management skills and performance of youth environmental projects in Nairobi County. The formulated conceptual model is informed by Human Capital theory and The Theory of Change including review of empirical literature.

### **2.11 Summary of Literature Review**

Literature reviewed in this study consist of the theoretical framework, empirical review, and conceptual framework. Theoretical significance of this study examines human capital theory, and the theory of change in relation to the study outcome which is performance of youth environmental projects. Human capital theory indicates that valid entities with more or complex quality of human capital may reap higher desired outcomes (Becker, 1964). Scholars indicate that human capital is a term that describes the hierarchy of skills and knowledge and is one of the preferred theories in relation to project preparedness and ability (Maruping, 2002). Human capital is normally assumed to consist of the individual's abilities, acquaintance, expertise and experience of project teams, as they are relevant to performance. The concept and perception of human capital stem from the fact that it is considered not to be a substitute for knowledge and learning, creativity and innovation, competencies and capabilities; hence, all these attributes require to be persistently tracked and concentrated towards projects environmental context and competitive logic' (Rastogi, 2000). The link between human capital and performance is grounded on two theoretical strands which are resource-based view of the project and the expectancy theory of



motivation which is composed of the valence or value attached to rewards, the instrumentality, or the belief that the project team may obtain a reward upon attaining a definite level of performance, including the expectancy; the belief that the project team can actually realize the essential performance level (Nerdum and Erikson, 2001).

This study is founded on thorough empirical inquiry that supports the prevailing assumption that the growth of human capital is very paramount in project performance. It establishes a correlation between the level of project management skills and knowledge-based economies that invest immensely in project management skills, technology and related growth rudiments (Wagner, 1994). The theory affirms that project management requires meticulous planning and stakeholders' cooperation to provide adequate scope for project responsiveness, motivating youth involvement and developing exploratory gainful skills, save on youth environmental oriented projects which entails the process of thrashing out the best ideas into reality; autonomy and risk taking; pro-activeness and competitive aggressiveness towards achievement (Wagner, 1994). It includes record keeping and creativity, innovative communication, marketing skills and risk taking, as well as the agility to plan and manage environmental projects so as to achieve objectives and to master one's own life (Nahapiet, and Ghoshal, 1998). Human capital links project operational skills to performance that include breaking down of team payroll, salary calculations, managing contracts of engagement, appointment letters and time spent on project including counter-signed project team timesheets showing all eligible and ineligible project activities. (Mumbi et.al, 2017).

In the literature, research is inclined towards project turnover in terms of output, Productivity, and financial performance. A significant finding of empirical study reviewed is that both project management skills and monitoring and evaluation best practice complement each other building circumstances for effective human capital management. Performance is likely to result from utility of evaluation reports which clearly describe the projects context alongside procedures and findings of the evaluation, so that fundamental information is provided and the purpose is easily understood by the beneficiaries (youths) while important interim evaluation reports are disseminated to intended users for timely utilization (Nyonje, Ndunge, and Mulwa, 2012). However, following the review conducted

on variables under study, few studies have acknowledged effective performance of youth environmental project as influenced by the predictor variables. Hence, further study ought to be established to establish the relationship of performance of youth environmental projects and project management skills embedded on monitoring and evaluation practices moderating effects.

### **2.12 Knowledge Gaps**

The literature reviewed offers substantive theoretical and empirical evidence of the study underway that seeks to investigate how project management skills influences performance of youth environmental projects and how the moderating effect of monitoring and evaluation practices influences the relationships between the predictor variables and the performance of youth environmental projects. Table 2.1 gives a summary of the empirical studies reviewed and the knowledge gap perceived in the reviewed literature. The findings lead to the construction of the problem statement and the conceptual framework to guide this study; and also form the framework upon which this study results shall be discussed and interpreted.

**Table 2.1**  
**Knowledge Gaps Matrix**

Variable	Author (Year)	Title of the Study	Findings	Knowledge Gaps
Technical skills	Boateng and Bampoe (2014).	Technical operational skills on solid waste management	Explanatory research design to describe operational skills that include proper waste diversion, anti-littering, open burning ban and debris management to promote waste reduction and separation, and influence waste disposal practices	Technical awareness of solid waste management projects using descriptive survey methodology to examine the influence of technical skill on performance of youth environmental projects in Nairobi County
	Gakungu et.al., (2012)	Solid waste management technical operational skills and technical waste collection systems	Descriptive research was used with Lack of demonstration activities concerning SWM technologies and services which entails selection of technical facilities and equipment's in regard to their operating characteristics that they are designed for; to enhance the rate of waste collection projects growth and to supervise the transportation of waste	Implore descriptive survey research methodology to demonstrate the influence of technical skills on Lack of integrated sustainable waste management project concepts in youth training programmes from the literature review and lack of institutional capacity referring to trained personnel including insufficient funds and policy constraints.
	Mumbi et. al., (2017)	Understanding waste disposal emerging trends	Nature of data sorted is narrative quotations, and descriptions using cross sectional studies that may not provide definite information about cause-and-effect relationships on technical skills and awareness of solid waste gainful projects.	Defined information about cause-and-effect relationships on technical skills and awareness of solid waste gainful projects using Structured data collection based on statistics to examine the influence of technical skills on performance of youth environmental projects in Nairobi County

<b>Variable</b>	<b>Author (Year)</b>	<b>Title of the Study</b>	<b>Findings</b>	<b>Knowledge Gaps</b>
Financial management skills	Custodio, Mendes, Metzger, (2016)	Financial project management skills	Qualitative single study method studies that do not develop testable generalizations in financial management as it lacks similarities and differences between the cases.	Multiple case studies for understanding of the phenomenon using tables and figures to make the case more reliable on presentation of evidence to assess the influence of financial management skills on performance of youth environmental projects in Nairobi County
	Michel, (2016)	Saving habits and project management	Mis-match between what people on Lower incomes can access and the products and services that are available with no correlational research adopted to proof money market deposit accounts pays a higher interest allowing customers to take advantage of the time value of money.	Realistic savings plan; Youth on low incomes need clear information about accounts that are easily accessible to assess the influence of financial management skill on performance of youth environmental projects using correlational research design.
	Adomako, et.al., (2014)	Budgeting in Project management	Descriptive study supports that Youths with limited knowledge on finance tend to hold wrong opinions and make incorrect decisions in conservative investment decisions on projects can retard financial wellness in youths.	Analyze the linear combination effect of predictor variable indicators relevant to financial wellness and budget know how as evidence on influence of financial management skills on performance of youth environmental projects in Nairobi County
	Boateng, et.al.. (2018)	Book keeping process Financial literacy	The relationship between bookkeeping and business sustainability needed further Investigation through correlational research design for youth projects survival because SWM projects have been able to expand local economies by offering employment opportunities to urban youths compared with other youth environmental projects as indicated in the literature reviewed.	Studying bookkeeping and decision-making practices of successful youth environmental projects through triangulation of data obtained from the study since the literature supports bookkeeping as an important role in project sustainability to assess the influence of financial management skill on performance of youth environmental projects in Nairobi County

Variable	Author (Year)	Title of the Study	Findings	Knowledge Gaps
Leadership skills	Kouzes and Posner, (2012)	Effective leadership skills	Qualitative data analysis revolving around the impressions and interpretations of key researchers studied in management leadership skill	Snowball sampling by asking other youth environmental groups to identify groups who will interview well, because they have an in-depth understanding about the Issues under study to determine the influence of leadership skill on the performance of youth environmental projects in Nairobi County.
	Philips, (2017)	Analytical leadership in Communication and management.	Exploratory studies analysis on competencies that most closely associate with project performance and growth.	Leadership skills and perspectives critical for project performance, now and in the future and the metrics in place to assess impact through descriptive survey research design determine the influence of leadership skill on the performance of youth environmental projects in Nairobi County
	Oduol,et.al., (2016)	Setting goals in leadership	Explanatory research types literature on the ability to envision the future and set the direction of project accordingly, including being able to have enough agility in thinking to adjust course when needed.	Descriptive survey research to investigate organizational practices towards Identifying, selecting, and developing of youth leadership talent determine the influence of leadership

Variable	Author (Year)	Title of the Study	Findings	Knowledge Gaps
				skill on the performance of youth environmental projects in Nairobi County
Marketing skills	Mumbi et.al., (2017)	Marketing network as enterprise	Data collected based on Perceptions of labor market skills. Descriptive cross-sectional studies giving anecdotal evidence of the rapidly increasing complexity of the market environment, with illustrative era of mobile phone market.	Stratified sampling for benchmarking of actual solid waste management projects marketing skills to establish the influence of marketing skill on the performance of youth environmental projects in Nairobi County
	Gitau et.al., (2012)	Branding of business projects	Exploratory studies navigating the ambiguity that comes with more strategic challenges, such as improving quality, building relationships and focusing on customers and efficiency including building or reinventing brands, markets, organizations and cultures, represent the most serious, context-driven skill gaps. Perception gap rest on factors, such as quality and price.	Collate findings on how branding is viewed by customers due to knowledge deficiency gap in focused on proximity marketing, interactions analysis, and mobile device usage which are all key to bridge the gap to establish the influence of marketing skill on the performance of youth environmental projects in Nairobi County
	Alarape, Sawyer and Peterson, (2012)	Digital marketing platforms Personal selling	In this study context, scholars Focuses on the process of communicating knowledge brand externally rather than on the elements or constituencies of a brand. They recognize branding as a perspective on marketing must not only focus on advertising, sponsorship or design (traditional marketing domains), but also, for example, on the media, investors, lobbyists and project teams as well as clients	Using an extensive qualitative dataset, mainly in-depth interviews, in order to better understand how the gap between marketing and sales and related existing social media gaps can be bridged to establish the influence of marketing skill on the performance of youth environmental projects in Nairobi County

Variable	Author (Year)	Title of the Study	Findings	Knowledge Gaps
			as integrated Communication aspects using exploratory research.	
Monitoring and Evaluation Practices	Carson- Cheng, (2013)	Proponents of monitoring and evaluation practices on project performance	Using exploratory study design, researchers retaliates monitoring and evaluation practices to be relevant in management of project scope, time, cost, quality, human resources, communication and risks. They also conclude that Monitoring and evaluating, budget performance, schedule performance and quality performance could lead to project Success.	Regression analysis to show significant Relationship between each of critical Success factors and project success; factors that include time, cost, quality to determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.
	Patton, (2010)	Complexity of innovative evaluation	Theories of developmental evaluation that tracks and attempts to make sense of evaluation of youth environmental projects that emerge under awareness of complexity, documenting and interpreting the dynamics, interactions and interdependencies that occur as youth innovations unfold.	Analyse the role of innovative project evaluation for growth and performance advanced in new technologies, with a greater focus on knowledge creation to determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.

Variable	Author (Year)	Title of the Study	Findings	Knowledge Gaps
	Kathryn, Hatry and Joseph (2015)	Factors related to M&E influencing project success and indicators to measure project performance.	Explanatory Studies terms the role of Monitoring and evaluation being to gather enough knowledge and understanding in order to predict with some degree of confidence how a project and set of activities might work in a different situation, or how it needs to be adjusted to get similar or better results, hence influencing project performance	Adopt descriptive survey research design to address inadequately documented outcome indicators on M&E systems and capacity building practices that influence performance of youth environmental Projects.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section described the research methodology used in conducting the study. This include research paradigm, research design, target population, sampling design, sample size, and sampling procedure, research instruments, reliability and validity of instruments, data collection procedure, data analysis techniques, as well as Ethical considerations and operationalization of the variables.

#### **3.2 Research Paradigm**

This study was guided by pragmatism paradigm grounded on the notion that mixed methods explore a concept from more than one methodological, perspective; therefore making it more 'practical' in terms of overall outcomes (Lincoln and Guba, 1985). The naturalistic (qualitative) paradigm is founded on diverse ontological and epistemological views (Cohen and Bailey, 1997). The aim of naturalistic inquiry is fundamentally to concentrate on an idiographic body of knowledge in the form of working hypothesis that refer to a distinct case (Lincoln and Guba, 1985). The positivistic (quantitative) perspectives' purpose is to expound on the phenomena that human beings experiences (Patton, 2002). Identifying cause and effect is difficult in a naturalistic inquiry approach, but scholars indicate that positivists believe that reality can be expounded as the result of a cause that occurs before the effect temporally or simultaneously based on values (axiology) that inform evaluation inquiry and practice (Creswell, 2012).

“Truth” is established by applying the proposition of quantifiable influence (independent or predictor variables) to measurable outcomes (dependent variables) in cause and effect way (Bamberger, Michael and Shabbir, 1990). Both approaches shall be involved in tandem so that the overall strength of the study through triangulation shall be termed greater than either qualitative or quantitative research (Prochaska, and DiClemente, 1993). Thus, the philosophical underpinning the inquiry of interest for this study will be based on pragmatism philosophy determined by the nature of constructs under study that entails predictions of evaluations on youth environmental Projects and their performance

### **3.2.1 Research Design**

The purpose of any inquiry design is to guarantee that evidence obtained can enable the researcher to respond to the problem under scrutiny as explicitly as possible (Scholarship fellow, 2017). The researcher in this study applied descriptive research and exploratory research designs as well as correlation research design to test the hypothesis. The research was preplanned and structured in design so that the information gathered could be statistically inferred on the respondents since descriptive design is conclusive and quantitative in nature. The main idea behind using this type of research was to define opinions, attitudes and behaviors held by the youth groups that were engaged in environmental projects. This allowed the researcher to deliver deep insight into set study objectives, as well as allowing more opportunities for the researcher to study new things and question them; since exploratory research focuses on the discovery of concepts and perceptions (Creswell, 2012).

The study therefore involved Participatory Action Research (PAR) approach, a democratic exercise involved with developing practical knowing and understanding based on emulated culture and values in the pursuit of meaningful social purposes, grounded in a participatory worldview (McNamara, 2009). Its intention was to contribute to elementary knowledge in social science and to routine social actions; hence defined as an emergent inquiry progression in which applied behavioral science knowledge is integrated with fundamental organizational knowledge while purposefully solving factual organizational problems.

In this study context, PAR focused on the effects of the researcher's direct actions within participating youth environmental groups with the goal of cultivating improved performance of the projects. The study bore both the causal effects of relationships and the extent in to which the combination of predictor variables influenced the outcome of the dependent variable (Angen, 2000). Participatory action research in this study was also anticipated to assess youth's involvement in their environmental projects and the development of their leadership skills. This technique was to assess the level of young people's knowledge, skills, and capabilities to be authorities on issues of environment (Creswell, 2012) Through participatory action research, the researcher established how

project management skills influenced the performance of youth environmental projects in Nairobi County through thinking about causes; deterministically and probabilistically.

### **3.3 Target Population**

The study population were the youth group's beneficiaries who included the urban youths in Nairobi. There are 400 reported registered youth groups in Nairobi County that were engaged in varied projects (Directorate of youth report, 2017). However, out of the 400 registered urban youth groups, reviewed reports indicated that only 70 youth groups comprising of an average of ten youth members per group dealt with environmental projects (Directorate of youth report, 2017). The study therefore targeted the 70 youth groups as the study's unit of analysis, with a population of 700 youths undertaking environmental projects; save, waste management initiatives drawn from the seventeen sub counties in Nairobi County. The 700 youth group members were the researchers target population from which a sample was drawn.

### **3.4 Sample and Sampling Procedure**

This section describe the study sample size and the sampling procedures used in conducting the study. Probability and non- probability techniques were both used and further discussed in the following sub-sequent sub-themes.

**Table 3.1**  
**Distribution of Youth groups in Nairobi County on environmental project; solid waste management business projects**

<b>Nbi sub counties</b>	<b>No. of groups per group</b>	<b>No. of members</b>	<b>No. of youth members</b>
Kasarani youths	6	10	60
Roysambu Youths	6	10	60
Westlands youths	5	10	50
Kamukuji	4	10	40
Kibra	3	10	30
Langata	5	10	50
Makadara	4	10	40
Dogoreti North	5	10	50
Dagoreto South	5	10	50
Ruaraka	5	10	50
Embakasi North	1	10	10
Embakasi South	3	10	30
Embakasi East	4	10	40
Embabakasi West	4	10	40
Embakasi Central	2	10	20
Mathare	3	10	30
Starehe	5	10	50
<b>Total</b>	<b>70</b>		<b>700</b>

Source: Youth Directorate report, 2017

### **3.4.1 Sample Size**

The sample size in this study was a selected representative sample from the accessible population to be studied and inference made to the larger population which was obtained; realized using the Krejcie and Morgan table (1970). Thus, 248 is a sample size from a population of 700. The sample size table is calculated using proportionate method;  $(x/700*248)$  while the actual respondents from the number of youth members per group was homogenously selected using simple random sampling.

### **3.4.2 Sampling Procedure**

Sampling technique selects cases based on research unit of analysis (Hertzog, 2008), which was the youth groups for this study. This is the act of selecting the subjects of research, a suitable representative as part of population to determine the characteristic of the entire population. The study used proportionate methodology and stratified simple Radom

sampling designs to select 248 group members as a study sample. This is because the youth groups are distributed within the seventeen sub-counties in Nairobi. The Key informants' managers of youth environmental projects from the Directorate of youth Affairs were sampled using purposive non probability sampling design.

**Table 3.2**  
**Sample and Sampling Procedure**

<b>Nbi sub counties</b>	<b>No. of groups</b>	<b>No. of youth members</b>	<b>Sample size (<math>x/700*248</math>)</b>
Kasarani youths	6	60	21
Roysambu Youths	6	60	21
Westlands youths	5	50	18
Kamukujji	4	40	14
Kibra	3	30	10
Langata	5	50	18
Makadara	4	40	14
Dogoreti North	5	50	18
Dagoreto South	5	50	18
Ruaraka	5	50	18
Embakasi North	1	10	4
Embakasi South	3	30	10
Embakasi East	4	40	14
Embabakasi West	4	40	14
Embakasi Central	2	20	7
Mathare	3	30	10
Starehe	5	50	18
<b>Total</b>	<b>70</b>	<b>700</b>	<b>248</b>

Source: Directorate of Youth, 2017

The researcher purposively selected Four (4) Youth Monitoring and Evaluation officers from Directorate of youth affairs as suitable key informants implementing youth funded environmental projects; to obtain valuable data through in-depth interviews as indicated in the sample grid.

**Table 3.3**  
**Key informants sample Grid**

Ministry of Public Service, Youth Gender	Number of Monitoring and Evaluation personnel To be interviewed
Kenya Youth Development Fund	1
Uwezo Fund field project	1
National Youth Service project (NBI)	1
Kenyan Youth- Employment and opportunities Project	1
<b>Total</b>	<b>4</b>

Source: Directorate of Youth, 2017

### **3.5 Research Instruments**

This section described the instruments that were used to collect data. The study collected data using questionnaires, observation guide, interview guide, and structure forms for content analysis guide as shown in Appendices 2, 3, 4 and 5. These are further described in the following subsequent sub-themes.

#### **3.5.1 Questionnaires for the Youth groups**

The study used questionnaires which was a list of standard questions (Angen, 2000), to gather both qualitative and quantitative information from the scope of study using both open and close - ended questions. The concept of this research instrument was derived from objectives of the study which were operational form of theoretical construct of phenomenon under inquiry. The questionnaire elaborated on the five study objectives purposively grouped together in five themes as emphasized in the literature review. The objectives were to establish the influence of technical skills on performance of youth environmental projects, to assess the influence of financial management skills on performance of youth environmental projects, to determine the influence of leadership skills on the performance of youth environmental projects, to establish the influence of marketing skills on the performance of youth environmental projects, to examine the influence of combined project management skills on the performance of youth environmental projects, to determine the

influence of monitoring and evaluation practices on performance of youth environmental projects, and to establish the moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects. The questionnaire had open ended questions which enabled the respondents to complete the questionnaire in their own views. The items in the questionnaire constructs applied a five-point Likert type scale with the responses ranging from Strongly agree, agree, neutral, disagree and strongly disagree; on a scale of 5,4,3,2 and 1 rating scale, respectively (advent of Likert scale in 1932). The Likert Scale in this study context was a 5-point scale that offered a range of answer options from one extreme attitude to another, like “strongly disagree” to “strongly agree” and typically include a moderate or neutral midpoint.

### **3.5.2 Observation guide for enumerators**

An observation guide was a list of questions the researcher needed to answer through enumerators while observing and assessing skills towards youth’s environmental projects (Liu, 2003). 1994). The researcher implored Participant observation methods (Petty, (2014) in this study, which is an anthropological data collection method using nonverbal expressions of feelings to observe who interacts with whom among environmental groups members and their Directorate of Youth Officials, observe how they communicate with each other at the project sites, and how much time is spent on numerous environmental project activities. It also included observation of youth informal discussions on their groups’ environmental projects including the observation of prevailing politics amongst the youths over solid waste collection, transportation and disposal during the time of the study. The observation tools in this study included anecdotal records or observation short stories captured after observing some factual incidences in non-invasive way.

### **3.5.3 Documents Analysis Guide**

Structured forms on content analysis from Youth Projects was effected in this study for classified information especially from the Ministry’s reports. Review of literature and youth environmental project documents and published journals on performance evaluation, were studied as a source of data on youth environmental project progress. They included the Directorate of youth quarterly and annual reports comprised of project performance

monitoring plan, baseline reports and summative reports. The documents were anticipated to provide valuable background on to project design and progress for the research to establish the youth environmental projects selection criteria; to legitimize the implementation processes. (Saunders, Lewis, and Thornhill, 2012).

#### **3.5.4 Interview Guide for Key Informants**

Semi-structured interviews in this study were designed to help generate a range of measures of dimensions of the study variables as has been operationalized in the study. The researcher therefore conducted in-depth interviews to garner empirical data from the four respondents who were the heads of Monitoring and Evaluation Departments in Directorate of Youth Affairs - Ministry of Youth, Gender and Public Service. Recording of the interviews was only effected with the key informants consent. The interview guide was composed of six open ended qualitative questions. The reason for conducting interviews was to beef up the quantitative data through an informal interview with the Directorate of Youth Officers on their opinions about, monitoring and evaluation practices on performance of youth environmental projects.

#### **3.5.5 Pilot Testing of the Instruments**

Pilot testing of research instruments involved the use of a small number of selected respondents (10% of targeted sample of 248) to test the suitability of the questions and their comprehension; the correlation (American Institutes for Research (AIR) 2015). The study administered the pilot study to Twenty (25) subjects to test validity and reliability of the instruments. The pilot group was picked through randomized sampling from another youth group project in Nairobi County which was implementing a beautification government funded youth environmental project; after which the main survey followed. The respondents were not involved in the actual study group and were excluded from the group final analysis. Pretesting and piloting assisted the researcher in this study to identify questions that would not make sense to participants, or problems with the questionnaire that may have led to biased answers. The researcher then debriefed the respondents upon completion of the pre-test exercise. This was explicitly to gather feedback and reactions to specific questions and reactions on the research design and process (Allan, 2009).



### **3.5.6 Validity of Research Instrument**

Validity in this research context referred to how accurately the instruments answered the study question or the strength of the study conclusions. (Dale, 2004). The study validated the research instruments through the assessment of content, Construct and face validity. Content validity in research context is defined as “the degree to which items in an instrument reflect the content universe to which the instrument would be generalized” (Rist, Bolly, and Martin, 2012). The study subjected the research instrument to a judgmental approach by the researcher’s peers as recommended by Rist, 2012), for evaluation to ensure that it included all the items that were necessary and eliminating detrimental items to a particular construct domain. The judgmental methodology to establish content validity involved literature review on the variables to be measured by the instruments and the set of items representing the variables under study. Follow-up of the evaluation results were utilised to validate the instruments as recommended to ensure that the question statements helped in answering the research questions per thematic area adequately.

Construct validity denotes how well a researcher translated or converted a concept, idea, or behavior for operationalization (Creswell, 2012). The researcher determined construct validity of the research instruments by empirically exploring and correlating the outcomes of other multiple sources of research found with similar qualities of the study under scrutiny through triangulation to determine whether the inferences made about the results of the assessment were meaningful and served the purpose of the assessment.

Face validity referred to researchers’ subjective assessments of the presentation and relevance of the measuring instrument used, examining whether the items in the instrument appeared to be relevant, reasonable and explicit including the appearance of the questionnaire in terms of, readability, consistency of style and formatting as well as the clarity of the language used (Rist, 2012). This was achieved through the assessment of the research instruments by the supervisors and fellow peers. The researcher also triangulated different data sources of complementary evidence to improve internal validity and to realise accuracy of qualitative findings from the respondents’ feedback.

### **3.5.7 Reliability of the Research Instruments**

Reliability means that the scores of an instrument are stable and consistent. This refers to whether an assessment instrument conveys the same results each time it is used in the same setting with the similar type of subjects (Creswell, 2012). Reliability essentially means consistent or reliable outcomes additionally known as the coefficients of stability. Despite the fact that irregularity may additionally always exist to a certain extent, there's normally an acceptable deal of consistency within the results of a quality instrument gathered at unique instances. The researcher used 10 percent Youths from the sample size where the fifty two items were used to test the reliability. The tendency in the direction of consistency found in repeated measurements is called reliability (Sekaran, 2003). The researcher determined the internal consistency of Likert scale items using Cronbach's Alpha (Lee Cronbach's in 1951). Cronbach's Alpha gives a score of between zero and one, with 0.7 generally accepted as a sign of acceptable reliability.

Cronbach's alpha tests to see if multiple-question Likert scale surveys are reliable. The researcher determined the reliability of the observation guide through Inter-Rater method by having two peers rate the same research instrument and then correlate their observations to test if the ratings are positively correlated. The researcher implored Inter-coder reliability using qualitative coding techniques which is a critical component in the content analysis of open-ended research responses, to ensure reliability of the Interview guide. This was to ensure that the data collected within qualitative research was correctly interpreted to build new insight. The study achieved this by two independent research assistants agreeing on the coding of the content of interest with an application of the same coding scheme, without which the interpretation of the content could not be considered objective and valid (Creswell, 2012).

Cronbach's Alpha gives a score of between zero and one, with 0.7 generally accepted as a sign of acceptable reliability as demonstrated in this study findings

**Table 3.4:  
Case Processing Summary**

		N	%
Cases	Valid	24	100.0
	Excluded <sup>a</sup>	0	.0
<u>Total</u>		<u>24</u>	<u>100.0</u>

### **Reliability Statistics**

Cronbach's Alpha N of Items (variables)

.746	52
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### **3.6 Data Collection Procedure**

This refers to the procedure that should be followed to ensure that data collection tools are applied appropriately and efficiently. (Donald, 2008) indicate that both primary and secondary sources of data are permitted in research. The researcher used environmental projects groups contact list of youths which was provided by the Sub- County Youth Officers, to collect primary data. Secondary data was attained from the Monitoring and evaluation reports, Directorate of youth Affairs. Data collection procedure entailed the preparing the proposal to be presented to a panel appointed by the University of Nairobi at the Departmental and School level by the researcher; who sought the approval from the University of Nairobi. The permission was granted and the researcher then applied for permit from the National Council for Science and Technology (NACOST), upon which the researcher proceeded to the field. The researcher addressed three categories of logistical issues in this study proposal that entailed Pre-field work, Field work and post- field work logistics.

Pre-field work entailed main items that included terms of reference for research assistants; obtaining a research permit; training enumerators; and pretesting the instrument. Self-evaluation forms were also be administered to the research assistants to attest their preparedness towards this study. Field work logistics included distribution of the instrument by the enumerators to youth environmental projects sites within the seventeen

sub-counties of Nairobi, assisted by Youth Sub-county officers, transport for enumerators to diverse youth project sites and reviewing completed tools and feedback meetings by the enumerators. The researcher then finalized with post-field work logistics that included data coding and keying it in to SPSS as well as data analysis which was effected by the researcher and a statistician; with the help of the enumerators.

### **3.7 Data Analysis Technique**

Data analysis entails collecting and organizing data so that a researcher can realize a factual conclusion (Creswell, 2012).

#### **3.7.1 Quantitative data analysis**

The researcher conducted Quantitative analysis by editing, coding, cleaning and transforming data received from the respondents. Data was largely analyzed using descriptive statistics of arithmetic means, standard deviations, frequencies and percentages. The quantitative data was processed and analyzed using the Package for Social Sciences (SPSS) package.

#### **3.7.2 Qualitative data analysis**

Qualitative data collected was polished and analysed in themes of narrative statements.

#### **3.7.3 Inferential analysis**

Inferential statistics was used to analyze data from the interval scale. Each hypothesis was analyzed using Pearson's Product Moment Correlation (r) coefficient which was used to test the relationship of hypothesis H<sub>01</sub>, H<sub>02</sub>, H<sub>03</sub>, H<sub>04</sub>, since it was appropriate for interval scaled variables to establish the single significant relationship and strength between technical skills, financial management skills, leadership skills and marketing since these four relationships were linear. They were tested at 95% confidence level, implying that 95 times out of 100 had a significant correlation between two variables, with 5% chance that the relationship did not even exist. This error margin of 5% was used to test the null hypothesis. For variables whose calculated p value was less than 0.05, the null hypothesis that corresponded to it would be accepted or otherwise rejected. H<sub>05</sub> tested the combined

relationship of four independent variables and moderating variable on the dependent variable, which was analyzed using Multi-linear Regression analysis.

The researcher used multiple regression model to establish the influence of each of the project management skills on performance of youth environmental projects. The researcher based the regression analysis on the assumption of the classical linear regression that says that on average, the impact of all left-out factors in classical linear regression model are expected to be zero; thus, the variance for the error term would be the same for all observations. The researcher finally wrote a descriptive report, and presented data in figures, graphs and tables.

### 3.7.3.1 Regression Models and Hypotheses Testing

Regression analysis is a technique that attempts to explore and model the relationship between two or more variables while a linear regression model attempts to describe the relationship between two or more variables using a straight line (Tabachnick, & Fidell, 2007). A relation is said to exist as the relationship between  $x$  and  $Y$ .

In this model, the actual values represented the dependent variables ( $Y$ ) while the predictor values represented the independent variable as shown in the following section.

#### Simple Regression Model 1.

1. **Hypothesis H<sub>01</sub>** H<sub>0</sub>: Technical skills do not significantly influence performance of youth environmental projects in Nairobi County.

$$P = \beta_0 + \beta_1 X_1 + \varepsilon \quad \text{where:}$$

$P$  is the dependent variable (performance of youth environmental projects in Nairobi County).

$\beta_0$  and  $\beta_1$  are constant/ regression parameters

$X_1$  is the predictor variable (Technical skills)

$\varepsilon$  is the error term

#### Simple linear Regression Model 2

Hypothesis 1. H<sub>02</sub>: Financial management skills do not significantly influence performance of youth environmental projects in Nairobi County.

$$P = \beta_0 + \beta_2 X_2 + \varepsilon \quad \text{where;}$$

**FS** is the predictor variable (Financial skills)

$\beta_0$  and  $\beta_2$  are constant/ regression parameters

**FS** is the predictor variable (Financial skills)

$\varepsilon$  is the error term

### **Simple linear Regression Model 3**

**H<sub>03</sub>**: Leadership skills do not significantly influence performance of youth environmental projects in Nairobi County.

$$P = \beta_0 + \beta_3 X_3 + \varepsilon \quad \text{where;}$$

**X<sub>3</sub>** is the predictor variable (Leadership skills)

$\beta_0$  and  $\beta_3$  are constant/ regression parameters

**X<sub>3</sub>** is the predictor variable (Leadership skills)

$\varepsilon$  is the error term

### **Simple linear Regression Model 4**

**Hypothesis 1. H<sub>04</sub>**: Marketing skills do not significantly influence performance of youth environmental projects in Nairobi County.

$$P = \beta_0 + \beta_4 X_4 + \varepsilon \quad \text{Where;}$$

**MS** is the predictor variable (Marketing skills)

$\beta_0$  and  $\beta_1$  are constant/ regression parameters

**X<sub>4</sub>** is the predictor variable (Marketing skills)

$\varepsilon$  is the error term

### **Multiple linear Regression Model 5**

**Hypothesis 1. H<sub>05</sub>**: combined Project management skills do not significantly influence Performance of youth environmental projects in Nairobi County.

$$P = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where

**P** is performance of youth environmental projects

**X<sub>1</sub>** is technical skills

**X<sub>2</sub>** is financial skills

**X<sub>3</sub>** is leadership Skills

**X<sub>4</sub>** is marketing skills

$\varepsilon$  is the error term

### Simple linear regression Model 6

**Hypothesis H<sub>06</sub>**: Monitoring and evaluation practices do not significantly influence performance of youth environmental projects in Nairobi County.

$$P = \beta_0 + \beta_6 X_6 + \varepsilon \text{ where;}$$

$\beta_0$  and  $\beta_6$  are constant/ regression parameters

**X<sub>6</sub>** is the predictor variable (M&E Practices)

$\varepsilon$  is the error term

### Multiple linear regression Model 7

**Hypothesis 1. H<sub>0</sub>**: There is no significant Moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects.

### Un-moderated Model

$$P = \beta_0 + \beta_1 PM + \varepsilon$$

Where

**PM** is project management skills

### Moderated Model

$$P = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 (X_1 * X_2) + \epsilon$$

Where

$X_1$  is project management skills

$X_2$  denotes monitoring and evaluation practices

$(X_1 * X_2)$  is the interaction between project management skills and monitoring and evaluation practices.

**Table 3.5**  
**Summary of Hypothesis Models and Results**

Research objective	Hypothesis	Statistical model	Tools of Analysis	Interpretation of results
To examine the influence of technical skills on performance of youth environmental projects in Nairobi County.	1H <sub>0</sub> : There is no significant relationship between Technical skills and performance of youth environmental projects in Nairobi County.	$Y = \beta_0 + \beta_1 X_1 + \epsilon$	Regression analysis Spearman's correlations	H <sub>0</sub> rejected  ( $\beta = .624$ , $t(247) = 16.1, p \leq .05$ )
To assess the influence of financial management skills on performance of youth environmental projects in Nairobi County.	2H <sub>0</sub> : There is no significant relationship between financial management skills and performance of youth environmental projects in Nairobi County.	$Y = \beta_0 + \beta_2 X_2 + \epsilon$	Regression analysis Spearman's correlations	H <sub>0</sub> rejected  ( $\beta = .72$ , $t(247) = 9.7, p \leq .05$ )
To determine the influence of Leadership skills on the performance of youth environmental projects in Nairobi County.	3H <sub>0</sub> There is no significant relationship between Leadership skills and performance of youth environmental projects in Nairobi County.	$Y = \beta_0 + \beta_3 X_3 + \epsilon$	Regression analysis Spearman's correlations	H <sub>0</sub> rejected  $\beta = .42$ , $t(247) = 5.3, p \leq .05$ )
To establish the influence of marketing skills on the performance of youth environmental projects in Nairobi County.	4H <sub>0</sub> : There is no significant relationship between Marketing skills and performance of youth environmental projects in Nairobi County	$Y = \beta_0 + \beta_4 X_4 + \epsilon$	Regression analysis spearman's correlations	H <sub>0</sub> accepted  ( $\beta = -0.024$ , $t(247) = -0.356$ , $p = 0.722$ )
To determine the influence of Combined Project management skills on performance of youth environmental projects in Nairobi County	5H <sub>0</sub> : 1. There is no significant relationship between combined Project management skills and Performance of youth environmental projects in Nairobi County.	$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$	Regression analysis spearman's correlations	H <sub>0</sub> rejected  ( $-0.672$ $+0.482 + 0.417 + 0.372 + \epsilon$ )
To determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.	6H <sub>0</sub> : There is no significant relationship between Monitoring and evaluation	$Y = \beta_0 + \beta_6 X_6 + \epsilon$	Regression analysis	H <sub>0</sub> rejected  ( $\beta = .354$ $t(247) = 3.13, p \leq .05$ ).



Research objective	Hypothesis	Statistical model	Tools of Analysis	Interpretation of results
	practices and performance of youth environmental projects in Nairobi County.		spearman's correlations	
To establish the moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects in Nairobi County.	H <sub>0</sub> : There is no significant Moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects	$Y_7 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 (X_1 * X_2) + \epsilon_i$ Where X <sub>1</sub> is project management skills X <sub>2</sub> is monitoring and evaluation (X <sub>1</sub> * X <sub>2</sub> ) is interaction between project management skills and monitoring and evaluation	Regression analysis  Pearman's correlations	H <sub>0</sub> accepted  β= 0.37, t (247) = 1.46; p = 0.145

### 3.8 Ethical Considerations

Conducting effective and meaningful research requires application of virtuous standards in the planning of the anticipated study, data collection and analysis (Best and Kahn, 2006). Ethical norms enjoin virtues of honesty that uphold the role of research, such as the acquisition of knowledge, the pursuit of truth and the avoidance of errors. Ethical considerations in this study context was focused on the methods by which information would be collected and the way it was to be reported. Participants in this study entirely volunteered and were fully informed about the objectives of the study. Research instruments were not presented in a manner that would tend to skew the results or force a certain outcome or answer from the respondents and confidentiality was highly exercised in the letter of invitation, where the respondents were assured of anonymity and confidentiality. The data collected was not distributed to third parties.

### 3.9 Operationalization of the Variables

**Table 3.6**  
**Operationalization of Variables.**

Objectives	Variables	Indicator	Measurement	Measurement scale	Data analysis Techniques	Tools of Analysis
To examine the influence of technical skills on performance of youth environmental projects in Nairobi County.	Technical skills	-Level of oversight on waste management schemes -Level of compliance with waste disposal legislation -Quality of waste services -Level of SWM budget formulation an control waste disposal -The size of the population receiving collection services	Knowledge Level on technicalities required to realize optimal project performance	Interval	Inferential & descriptive statistics (Parametric and non-parametric)	Linear Regression Pearson-product; pearson correlation  Central Tendency
To assess the influence of financial management skill on performance of youth environmental projects in Nairobi County.	Financial management skills	-Budgeting skills -Accounting and records keeping -Types of Financial reporting -Level of Cost allocation -Audit tips -Average earnings	Financial literacy In project management to realise gainful performance	Interval	Inferential & descriptive statistic (Parametric and non-parametric)	Test of Relationship s Linear regression analysis

To determine the influence of Leadership skill on the performance of youth environmental projects in Nairobi County.	Leadership skills	<ul style="list-style-type: none"> <li>-Number of project team managed</li> <li>-Types of communication strategies</li> <li>-Types of rewarding</li> <li>-Team management approaches</li> <li>-Motivational skills</li> <li>-Level of honesty and integrity</li> </ul>	Social capital- interaction level of youths with wider community to influence project performance	Likert	Inferential Non parametric	<p>Test of Relationships</p> <p>Pearson-product; Pearson correlation</p> <p>Inferential statistics</p>
To establish the influence of marketing skill on the performance of youth environmental projects in Nairobi County.	Marketing skill	<ul style="list-style-type: none"> <li>- Customer segmentation</li> <li>-Types of branded projects tools</li> <li>- Types of Digital marketing</li> <li>- Amount of pricing negotiated on products and service</li> <li>-Scores of ranking</li> <li>-Level of project technology adopted</li> <li>-Level of personal selling</li> </ul>	Degree of association of Marketing strategies with ripple effects on performance of youth environmental	Interval	Inferential & Test of Relationships Linear regression analysis	<p>Test of Relationships</p> <p>Pearson-product; pearson correlation</p> <p>Inferential statistics</p>

To determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.	Monitoring and evaluation practices on	<ul style="list-style-type: none"> <li>- Project implementation and monitoring plan</li> <li>-Progress and impact evaluation</li> <li>-Data collection strategies</li> <li>-Use of data for project improvement</li> <li>-Reporting framework</li> <li>-Analysis and Continuous Improvement</li> <li>-Results dissemination and feedback</li> <li>-Proportion of time and resources allocated for M&amp;E in project design</li> <li>-Leverage technologies</li> <li>-Development of M&amp;E youth field staff and groups members capacity</li> </ul>	Utility of M&E practices and performance of youth environmental Projects	Likert	Inferential statistics non-parametric	Test of Relationships Pearson-product; Pearson correlation  Inferential statistics
Performance of youth environmental projects		<ul style="list-style-type: none"> <li>-Rate of Return on Investment</li> <li>-No. of solid waste management equipment</li> <li>-Coverage percentage of the service provided</li> <li>-Quality of solid waste collection service in the target areas.</li> <li>-Level of project sustainability</li> <li>-Proportion of employment creation</li> </ul>	Living standard measures Break even Return on investment Employment Ripple effects	Likert	Inferential statistics non-parametric	Pearson-product; pearson correlation  Test of Relationships

-Level of youth inclusion  
-Amount of group  
members average earnings  
-Increased sales of recycled  
products  
-Low crime and youth  
survival rates  
No. of youth employed on  
salary

Inferential  
statistics

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents the study results which have been discussed and analysed using themes and sub-themes drawn from study objectives. Thematic areas include questionnaire return rate, demographic information of the respondents, basic statistical assumptions, performance of youth environmental projects, technical skills and performance of youth environmental projects, financial management skills and performance of youth environmental projects, Leadership skills and performance of youth environmental projects, marketing skills and performance of youth environmental projects, project management skills and performance of youth environmental projects, monitoring and evaluation practices and performance of youth environmental projects.

#### **4.2 Questionnaire Return Rate**

A sample size of 248 respondents from a target population of 700 youth group members that were engaged in youth environmental projects dealing with solid waste management projects in Nairobi County was selected. A total of 248 questionnaires were self-administered by the researcher. All the questionnaires were dully filled and returned by the respondents, thus giving a questionnaire return rate of 100 percent. The response rate for the survey was realized due to factors that entailed prior engagement between the researcher and Sub-county youth Officers; during a previous USAID assignment on Kenya Youth Empowerment and Employment Initiative (KYEEI) of which the researcher was the Monitoring and Evaluation officer in charge of the project in the year 2013. The Sub County Officers are in charge of the Youth environmental groups in Nairobi County and hence the study used a list of youths from the sampled groups, they expedited the process by calling group meetings with the respondents that enabled the researcher to administer the questionnaires through face to face interaction during the site visits. Another factor was the youth group turned out in large numbers especially during designated sports days and other planned activities by the Sub County Youth Officers as scheduled in their Calendar of activities by the Directorate of Youth, Head office as they were fed with incentives like bread and soda. The researcher therefore took the advantage of the high turnout to collect data where it was observed that most of the groups had more than ten

youth members. Response rate in this study was also hastened by demographics since the section of the population was simply more likely to respond to survey invitations than others that included 92.3 percent available young youths who had solid waste collection as their full occupation. Thus, the researcher noted no nonresponse bias since all the respondents that were included in the sample responded to the questionnaires.

The sampled youths were also digital natives, hence sending out links through their social media netted the study to some good response rates. In regard to key informant interviews, 3 Monitoring and Evaluation officers from the ministry of Public Service, Youth and Gender were interviewed giving a response rate of 75 percent. These response rates were considered to be high enough to enable the researcher avoid biases and draw study conclusions from the findings. This is in line with research scholars; Saunders, Lewis, and Thornhill, (2012) who observes that a response rate of between 50- 75 percent and above is reasonable enough for statistical generalization. Baruch and Holtom (2008) however, observes that whilst researchers aim to have high response rate, the response rates of between approximately 35 per cent and 55 per cent are considered to be realistic, while low response rates increase the likelihood of statistical biases. There is therefore a general agreement from the researchers that higher response rates often lead to a higher probability of the sample being representative (Baruch and Holtom, 2008). Besides, since response rate is imperative in assessing the value of research findings, then higher response rates provide greater credibility (Saunders, Lewis, and Thornhill, 2012).

#### **4.3 Demographic Characteristics of the Respondents**

The study was interested in capturing the demographic characteristics of the respondents who participated in the study. This information was significant especially in relation to the nature of the projects which the respondents were engaged in. The study sought to draw information from the respondents on distribution by gender, age, marital status, level of education and the length of time the respondents were engaged in solid waste management projects. Distribution by gender was important to inform how disaggregated the respondent's groups under consideration were distributed between the two gender since none of the two gender categories was granted preferential consideration within the selection of the respondents. Distribution of respondents by age group was

done to ascertain that respondents were evenly distributed in respect to the defined age bracket for a youth in Kenya, since an individual age was not a consideration in the selection of respondents. Age groups were classified into five categories. Distribution of respondents by marital status was significant to check on the influence of age and involvement of the respondents with solid waste management projects compared to the level of education. Distribution of respondents by Level of Education was considered important because level of Education would most likely have an impact on the performance of youth environmental education. It had five options of Primary, Secondary, college certificate, and Diploma and university Bachelor's degree. Distribution of respondents by level of service was done to indicate how long the respondents had worked in their respective solid waste management projects. The results in view of this variable are as presented in Table 4.1.

**Table 4.1**  
**Demographic Information of Respondents**

<b>Variable Name</b>	<b>Values</b>	<b>Frequency</b>	<b>Percent (%)</b>	<b>Cumulative Percent</b>
<b>Gender</b>	Male	160	64.5	64.5
	Female	88	35.5	100.0
	<b>Total</b>	<b>248</b>	<b>100.0</b>	
<b>Age</b>	Below 20	48	19.4	19.4
	21-25	112	45.2	64.5
	26-30	69	27.8	92.3
	31-35	19	7.7	100.0
	<b>Total</b>	<b>248</b>	<b>100.0</b>	
<b>Marital Status</b>	Married	146	58.9	58.9
	Single	102	41.1	100.0
	<b>Total</b>	<b>248</b>	<b>100.0</b>	
<b>Highest Education Level</b>	KCPE	78	31.5	31.5
	KCSE	114	46.0	77.4
	Certificate	28	11.3	88.7
	Diploma	28	11.3	100.0
	<b>Total</b>	<b>248</b>	<b>100.0</b>	



On gender, out of 248 respondents who participated in the study, 160(64.5%) of the respondents were male and 88(33%) were female. This implies that there are many males involved in youth environmental projects than females. The finding also implies that there is a fair distribution of gender among youth groups engaged in solid waste management projects within Nairobi County in line with Kenya National Policy on Gender and Development (NPGD), (2000); the minimum one third gender rule which spells out a policy approach of Gender Mainstreaming and empowerment of women and plainly states that it is the right of women, men, girls and boys to fully participate in and benefit equally from the development process.

The involvement of more males than females in the youth environmental projects can be attributed to gender relations that are deeply unequal and diverge in notch all over the world, regardless of day-to-day life or at work. The distinguished value placed on the work that is done by men in detriment of the work carried out by women, which is still a harsh reality in many countries (Dias, Sonia and Lucia, 2013). This finding supports the literature reviewed in this study context that states that the asymmetrical relations between genders is based on traditional and stereotypical dimensions of the sexual division of Labour. It argues that gendered perspective is necessary when examining the issues waste pickers face, and therefore a gendered approach to solid waste collection needs to address the multiple dimensions of subordination women are subject to at home, in the workplace, and within their organizations. This would provide women waste pickers with the tools they require so as to enhance the role they play as economic and political actors, strengthening their capacities and voice (Dias, Sonia and Lucia, 2013).

Youth is a critical time in life when young people start comprehending their ambitions, assuming their economic independence and discovering their domicile in the society. The Kenya youth policy defines a youth as someone who is below 35 years of age (Republic of Kenya, Constitution 2010). The age variable in this study was construed categorically with value ranges of below 20 years, 21-25 years, 26-30 years, 31-35years and 35 and above years. From table 4.1, it can be observed that distribution of the respondents by age indicated that most 112(45%) of the youths were between 21-25yrs, 69(27.8%) were between 26-30 years, 48(19.4%) were below 20 years and 19(7.7%) were between 31-35 years of age. Overall, the findings showed that about 92 percent of the youth in the

study area were aged below 30 years. This implies that majority of the respondents were in their early twenties hence young and dynamic and largely motivated by the basic needs according to Maslow's hierarchy of needs theory (1943) that age has significant effects on physiological needs. This findings support the understanding that young people are especially proficient enough to produce great ideas, either in scientific research, invention, or entrepreneurship. Famous individual cases such as Bill Gates, Steve Jobs, and Mark Zuckerberg show that people in their early 20s can create eventually world-leading companies (Carson-Cheng, and Jones, 2014).

On marital status, 146(59%) of youths were married while 102(41%) were single. This implies that most married youths were likely to engage in entrepreneurial activities to support their families than the unmarried ones who are likely to depend on parents for livelihood support. This findings support the similar literature reviewed from Bangladesh, Ethiopia and Chad (ILO, 2010) that indicated that most young people who become entrepreneurs in these countries do so out of necessity, exacerbated mostly by early marriages rather than as a profit-seeking activity (Braced, 2014). Similarly, the likelihood of youth entrepreneurship in Kenya is greater among married people, which is attributed to the need to provide for their family. The findings implies that there is a relationship between youth entrepreneurial activities and marital status (Pasquier- Doumer, 2013).

Education level was measured on the basis of the highest level of education that one was assumed to have attained. In the context of the study, one could have attained basic level qualification and attained either KCPE or KCSE. Similarly, one could also have attained the tertiary level qualifications leading to award of a certificate or Diploma. In view of the aforementioned, the findings indicates that 78(32%) of the respondents had attained KCPE as the highest level of basic education, while 114(46%) of the respondents had attained KCSE as the highest level of basic education, similarly, 28(11.3%) of the respondents had proceeded to attain Certificate Level of level of education and 28(11.3%) of the respondents had attained a Diploma as the highest level of Education. From this finding, it can be depicted that majority of the youth (about 77%) had not proceeded with their education beyond the basic education level (Grade 12). This finding is in line with the views of Isahakia (2010) who asserted that most unskilled and disadvantaged young individuals begun by doing casual tasks as a main entry point into the labor market. Education is thus

an important area for youth development as entrenched in the 2010 Constitution, on youth access to relevant education and training in order to furnish youths with what they need to grow into active agents of societal change (Muthee, 2010).

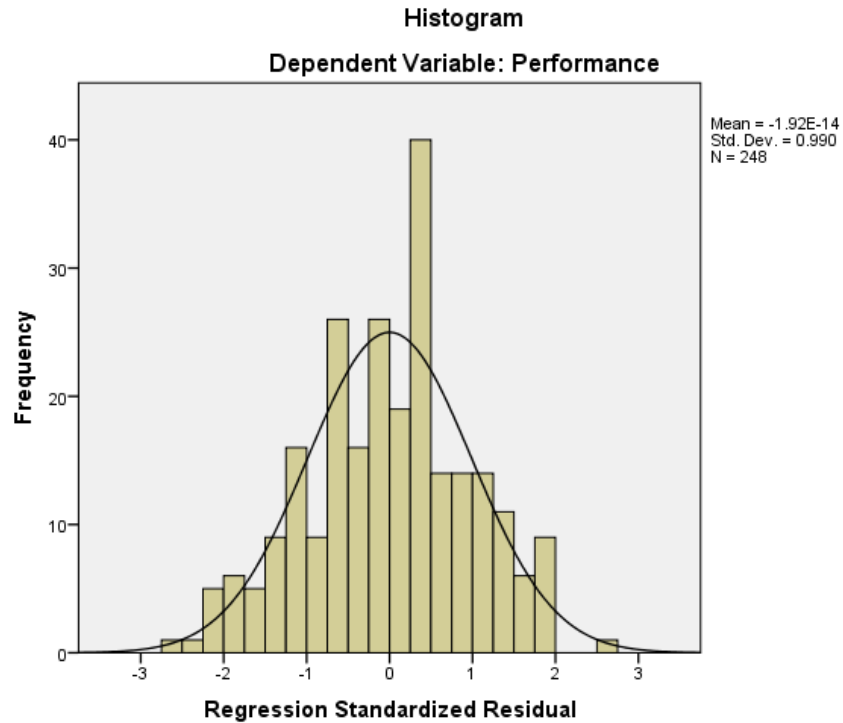
#### **4.4 Basic Tests for Statistical Assumptions and Likert Type Data**

Statistical tests assumptions are normally carried on the variables used in the analysis of data to ensure that the results are trustworthy and did not result in a Type I or Type II error, or over or under-estimation of the level of significance or size of effects. These are data diagnostic tests carried out to ensure that the violations of assumptions do not lead to any serious bias or whether they are of little consequence and are of importance to meaningful data analysis (Angen, 2000). Since this study relied on regression analysis for statistical testing, it was important to test the main statistical assumptions underlying regression analysis. These basic assumptions included: test for normality, linearity, Multicollineality and homoscedastic as discussed in sections 4.4.1 through 4.4.4. According to Asghar Ghasemi, Saleh Zahediasl (2012) violation of statistical assumptions can invalidate statistical assumptions.

##### **4.4.1 Test for Normality**

Regression assumes that variables have normal distributions and that data is not highly skewed or kurtotic. Substantial outliers can distort relationships (Jarque, Carlos and. Bera, (1987). There are several ways the researcher can test this assumption i.e. visual inspection of data plots, skewness, kurtosis, normal Q-Qplots and histogram that give researchers information about normality and Kolmogorov-Smirnov tests which can be used in order to provide inferential statistics on normality. Formal approach in this was to conduct a statistical test of the Assumption of Normality to provide the shape of the sample using histogram based on the multivariate standardized residuals of the Independent Variables and the Dependent Variables. This was done using the standard error residuals

in a multivariate relationship which resulted to the histogram based on regression standardized



residuals as shown in

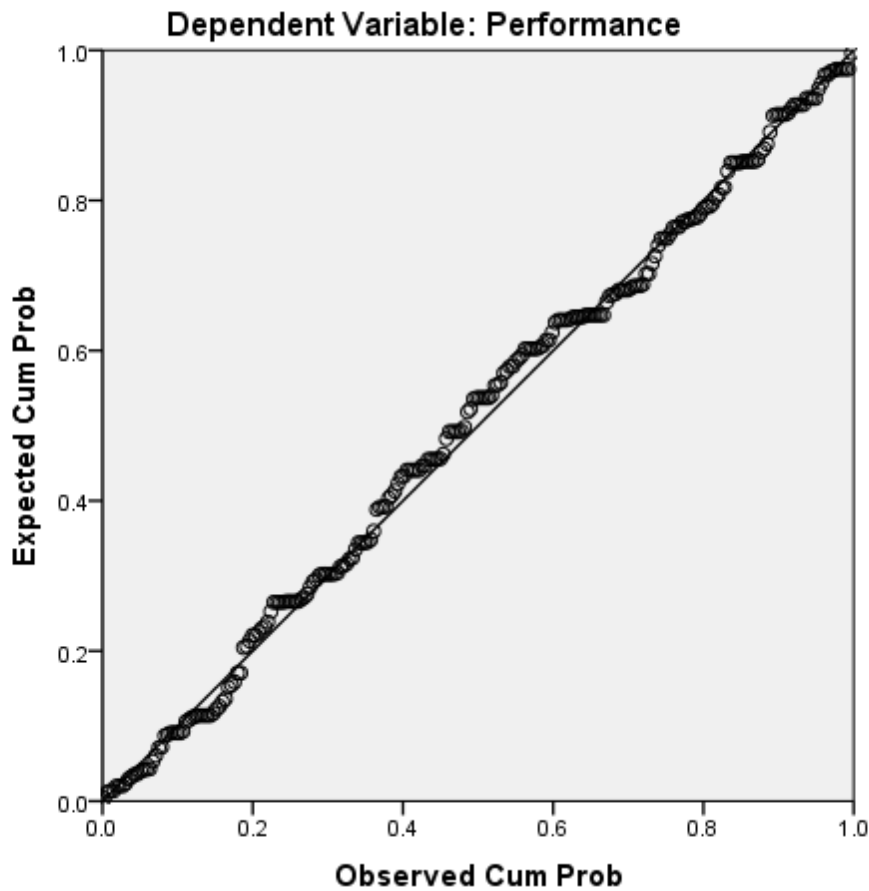
**Figure 2: Test of Normality**

From the figure 2, it can be noted that the errors between observed and predicted values of the residuals were normally distributed. This implies that the assumption of normality was not violated.

#### **4.4.2 Test for Linearity**

Multiple linear regression requires that the relationship between the independent and dependent variables be linear. This linearity assumption is best tested using scatterplots on the basis of the variables. In this study, this assumption was tested using the standard residuals run on the dependent variable and resulted in the normal P-P plots as shown in figure 4.2

### Normal P-P Plot of Regression Standardized Residual



**Figure 3: Normal P-P plots for testing linearity**

It should be noted from figure 3 that the distribution of the scatter plots for the cumulative residuals fitted through the line of best fit. This therefore implied linearity of distribution of data among the variables under consideration.

#### **4.4.3 Test for Multicollinearity and Singularity**

Linear assumptions of singularity and multicollinearity were checked as well before undertaking regression analysis through correlations and residual tables generated by SPSS. During data analysis, singularity occurs when an independent variable is formed from a combination of other independent variables. On the other hand, multicollinearity is checked by analyzing the tolerance values under collinearity to ensure that the assumption is not violated (Murray, Leigh; Nguyen, Hien; Lee, Yu-

Feng; Remmenga, Marta and Smith, David, 2012). In particular,  $1 - R^2$  values should be more than 0.1 which implies low multicollinearity (Murray *et al.*, 2012). If two variables are perfectly collinear, singularity is said to exist and an exact linear relationship exists between the two predictor variables with a correlation coefficient equal to 1.0 or -1.0. On the other hand, Pedace (2013) argues that multicollinearity occurs when the correlation coefficient of two predictor variables is equal to or greater than 0.7. In this study, multicollinearity was tested using the variance inflation factor (VIF) and tolerance levels. A tolerance level of less than 0.1 could imply existence of multicollinearity while a VIF of more than 10 implied Multicollinearity. Table 4.3 shows the collinearity statistics for each of the IVs in the relationship between project management skills and performance of youth environmental projects.

**Table 4.2**  
**Multicollinearity Statistics**

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
	(Constant)	0-.672	0.297		-2.261	0.025		
1	Technical skills	0.482	0.038	0.552	12.568	0.000	0.737	1.357
	Financial management skills	0.417	0.058	0.303	7.195	0.000	0.802	1.246
	Leadership skills	0.372	0.051	0.287	7.347	0.000	0.927	1.078
	Marketing skills	0-.097	0.061	0-.090	-1.586	0.114	0.439	2.276
	M and E practice	0.079	0.108	0.043	0.729	0.467	0.399	2.506

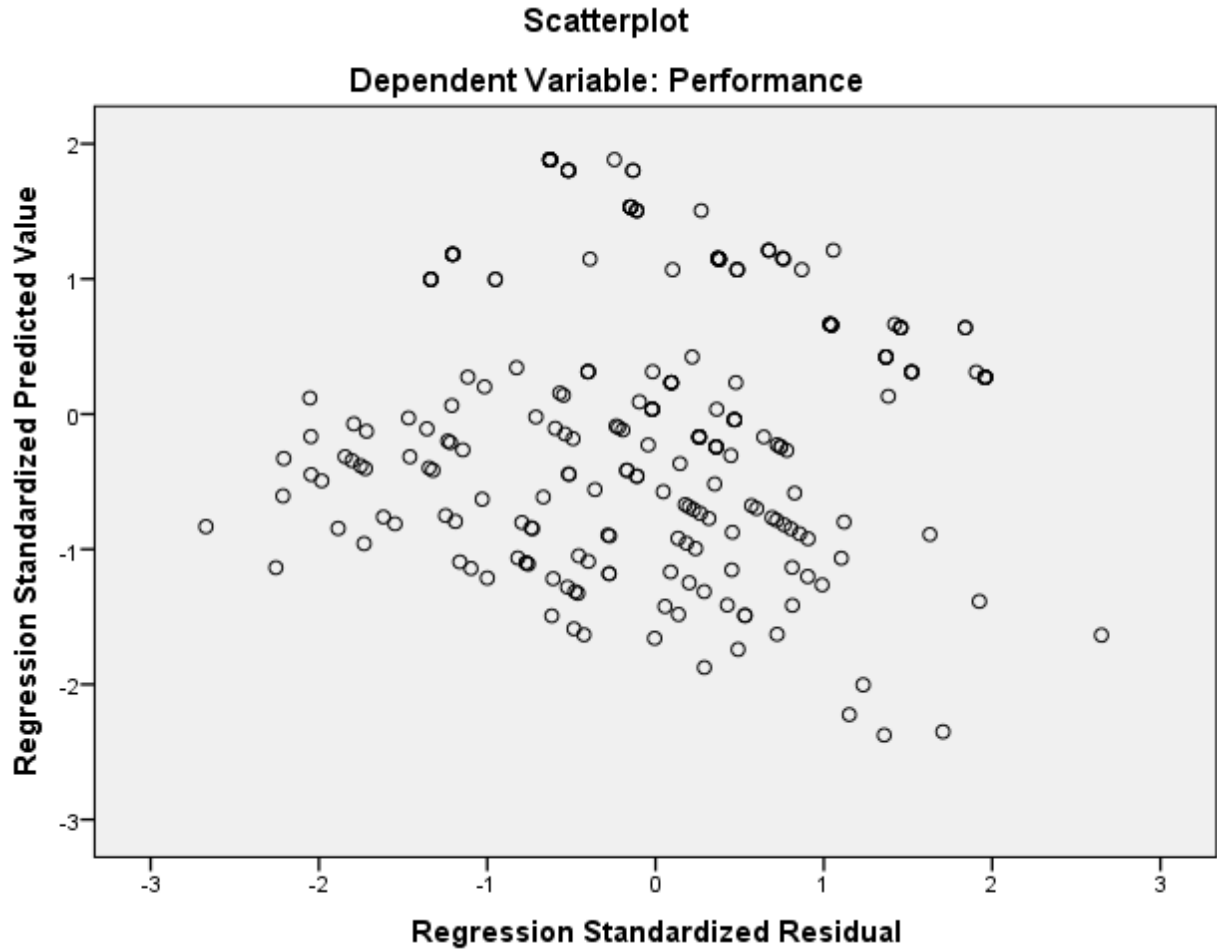
a. Dependent Variable: Performance

From table 4.2, it can be observed in the last two columns where collinearity statistics are shown that tolerance levels ranged between 0.399 and 0.927. Since none of the variables had a tolerance level of less than 0.1, it was concluded that there was no multicollinearity. Similarly, the VIF values in the analysis showed that maximum value in the range was 2.506. This also implied that there is no multicollinearity. This therefore means that the independent variables in the model were not highly correlated with each other.

#### **4.4.4 Tests for Homoscedasticity and Heteroscedasticity**

Scatter diagrams were plotted preceding the correlation analysis to counter check homoscedasticity and Heteroscedasticity. A sequence of random variables is homoscedastic in statistics if all random variables in the sequence have the same finite variance. Even though the assumption of homoscedasticity simplifies mathematical modelling, scholars like Wonsuk Yoo, Robert Mayberry, Sejong Bae, Karan Singh, Qinghua Peter, He, James W. Lillard, Jr. (2014), argues that severe violations in homoscedasticity may result in overestimating the goodness of fit as measured by the Pearson coefficient. However, this does not necessarily invalidate regression results. Homoscedasticity in this study, was checked by looking at scatterplots of the residual components of the predictor variables and the dependent variable to ascertain that the cluster of points were approximately the same width in the residuals plots derived by SPSS (Figure 4.3). Heteroscedasticity is the absence of homoscedasticity.

A collection of random variables is heteroscedastic if there are sub-populations that have different variabilities from others. Heteroscedasticity in regression analysis can invalidate statistical tests of significance especially with the assumption that the modelling errors are uncorrelated and normally distributed; and that their variances do not vary with the effects being modelled. In Spherical-Homoscedastic Distributions, Wonsuk et al., (2014) argue that the correlation and residual tables generated by SPSS that are used to test for collinearity can also be used to check for existence of Heteroscedasticity. In this study, this assumption was not violated as the standard multivariate residuals scatter plots fitted well within -3 and +3 standard deviations as shown in figure 3.



**Figure 4: Scatter plots for multivariate residuals for checking homoscedasticity**

#### **4.4.5 Control of Type I Error and Type II Error**

For statistical findings to be valid, a researcher has to control Type I and Type II errors which occur due to the wrong interpretation of results during tests of various statistics. Type I error occurs when the null hypothesis is rejected when it was supposed to be accepted while Type II error occurs when the null hypothesis is accepted when it was supposed to be rejected (Banerjee, Chitnis, Jadhav, Bhawalkar, & Chaudhury, 2009). In this study, Type I error was minimized by using a confidence level of 95% implying that the standard variate was 1.96 and the sample proportion ( $p$ ) was less than or equal to 0.05 as recommended by Larry (2013). Type II error was minimized by taking a large enough sample of 248 respondents as recommended by (Banerjee *et. al.*, 2009) sample size criterion.



#### 4. 4. 6 Treatment of Likert Type Data

The interpretation of research findings by use of Likert Scale determines the accuracy of results. In order to measure the variables as used in this study, a likert type of scale was developed using a scale of 1-5 where by a numerical value of 1=SD – Strongly Disagree; 2=D – Disagree; 3=N – Neutral; 4=A – Agree; and 5= SA – Strongly Agree as recommended by Bishop, & Herron, (2015). The statements in the Likert Scale were both affirmative and negation statements. In the self-administered questionnaire of this study, nine of the sections comprised of items in a Likert type scale which were both affirmative and negation statements. During data analysis the scale was reversed for the negatively phrased statements to guarantee uniformity in computation of means and standard deviations.

Each of the six sections of Likert type scale format had items limited to less than items, apart from one section on the moderating variable to increase the response rate (Frauke Kreuter, Stanley Presser, and Roger Tourangeau, 2008) propose that ten objectively constructed items for each research variable in a Likert type scale are sufficient to measure anticipated construct where mathematical modelling is convoluted in data analysis thus necessitating the need for combining indicators of various variables. In the study on equidistance of Likert-type scales and authentication of inferential methods expending experiments and simulations, Lantz (2013) indicates that Likert-type data are habitually assumed to be equidistant by applied researchers so that they can use parametric methods to analyse the data. Since the equidistance assumption is rarely tested, Lantz (2013) argues that the validity of parametric analyses of Likert-type data is often unclear and that the preferred statistical method to analyse Likert-type data depends on the nature of their non-equidistance in addition to their skewness.

In addition, during analysis of Likert-type data, Carifio and Rocco (2007) indicates strongly Disagree (SD)  $1 < SD < 1.8$ ; Disagree (D)  $1.8 < D < 2.6$ ; Neutral (N)  $2.6 < N < 3.4$ ; Agree (A)  $3.4 < A < 4.2$ ; and Strongly Agree (SA)  $4.2 < SA < 5.0$  scale gives an equidistance of 0.8. This weighting criteria of responses of Likert-type data as advocated by Carifio and Rocco (2007) was used as an

interpretation schema during data analysis in this study. These weighting criteria was used to check the level of agreement for respondents of the items for each indicator.

#### **4.5 Performance of Youth Environmental Projects**

Performance of youth environmental projects was the dependent variable in this study. To measure it, eight statements were developed to determine performance of youth environmental projects. The respondents were asked to give their opinion based on the statements which were measured in a scale of 1-5 where 1 = Strongly Disagree, 2 = Disagree, 3 =Neutral, 4 = Agree, 5 = Strongly Agree. The results were presented in Table 4.3.

**Table 4.3**  
**Performance of Youth Environmental Projects**

Statements	SD	D	N	A	SA	Mean	SD
1. My group has already realized profits in terms of Rate of Return on Investment invested in the group.	0	0	171(69.0)	76(30.6)	1(.4)	3.31	0.474
2. My group has acquired No. of solid waste management equipment's that are functional and reliable.	48(19.4)	28(11.3)	0	57(23.0)	115(46.4)	3.66	1.596
3. Percentage coverage of our service is wide enough to cover our designated residential areas.	0	10(4)	0	92(37.1)	146(58.9)	4.51	0.703
4. We are remarkably popular for Quality services in this solid waste collection intervention.	3(1.2)	12(4.8)	6(2.4)	90(36.3)	137(55.2)	4.40	0.853
5. My group solid waste project is well-grounded on sustainable structures with government support.	58(23.4)	49(19.8)	13(5.2)	47(19.0)	81(32.7)	3.17	1.615
6. There are equal opportunities for employment creation within our youth environmental group with more youths gaining gainful employment through solid waste management projects.	0	0	0	85(34.3)	163(65.7)	4.66	0.476
7. Youths groups are well represented in all Levels of service delivery and decision making within Nairobi County.	0	155(62.5)	65(26.2)	28(11.3)	0	2.49	0.691
8. There has been gradual Increase of recycled products within the groups as a major income generating project to members	77(31.0)	33(13.3)	18(7.3)	120(48.4)	0	2.73	1.339
<b>Composite mean and Standard deviation.</b>						<b>3.62</b>	<b>0.550</b>

On statement (1) that my group has already realized profits in terms of Rate of Return on Investment invested in the group, the results indicated that 171(69%) of the respondents were neutral to the statement while 76(31%) agreed to the statement and 1(0.4%) strongly agreed with the statement. The mean index for this statement was 3.31 with a standard deviation of 0.0474 which was lower than composite mean of 3.62 and standard deviation of 0.550 implying that most respondents were

neutral. Additionally, when this mean index was compared to the composite mean index on performance, it was found to be lower meaning that the variable had little contribution to the performance of youth environmental projects.

Statement (2) my group has acquired No. of solid waste management equipment's that are functional and reliable, Out of 248 respondents, 115(46.4%) strongly agreed that their group had acquired No. of solid waste management equipment's that were functional and reliable, 57(23.0%) agreed, 48(19.4%) respondents strongly disagreed and 28(11.3%) disagreed. This had a mean score of 3.66 and a standard deviation of 1.597 of which was much higher than the composite mean of 3.62 and a standard deviation of 0.550. These results indicated that the statement influences performance of youth environmental projects positively.

Statement (3) percentage coverage of our service is wide enough to cover our designated residential areas, majority of the respondents 146(58.9%) strongly agreed that the percentage coverage of their service was wide enough to cover their designated residential areas, 92(37.1%) agreed while 10(4%) disagreed. This had a mean score of 4.51 and a standard deviation of 0.703 of which was much higher than the composite mean of 3.62 and a standard deviation of 0.550. The statement positively influences performance of youth environmental projects.

Statement (4) we are remarkably popular for Quality services in this solid waste collection intervention, the results indicated that majority of the respondents 137(55.2%) strongly agreed that they were remarkably popular for quality services in solid waste collection intervention, 90(36.3) % agreed, 12(4.8%) respondents disagreed. This had a mean score of 4.40 and a standard deviation of 0.852. Which was much higher than the composite mean of 3.62 and a standard deviation of 0.550 meaning that this statement positively influence performance of youth environmental projects.

Statement (5) my group solid waste project is well-grounded on sustainable structures with government support, the results indicated that majority of the respondents 81(32.7%) strongly agreed that their group solid waste project was well-grounded on sustainable structures with government support, 47(19.0%) agreed, 58(23.4%) respondents strongly disagreed, 49(19.8) respondents

disagreed and the lowest response was 13(5.2%) respondents who were neutral. This had a mean score of 3.18 and a standard deviation of 1.615 which was much lower than the composite mean of 3.62 and a standard deviation of 0.550 implying that the statement does not influence performance of youth environmental projects positively. The results indicated that.

Statement (6) there are equal opportunities for employment creation within our youth environmental group with more youths gaining gainful employment through solid waste management projects, the results indicated that majority of the respondents 163(65.7%) strongly agreed that there were equal opportunities for employment creation within their youth environmental group with more youths gaining gainful employment through solid waste management projects while 85(34.3%) respondents agreed. This had a mean score of 4.66 and a standard deviation of 0.476 of which was much higher than the composite mean of 3.62 and a standard deviation of 0.550, implying that this statement positively influence performance of youth environmental projects.

Statement (7) youths groups are well represented in all Levels of service delivery and decision making within Nairobi County, the results indicated that majority of the respondents 155(62.5%) disagreed that youths groups were well represented in all Levels of service delivery and decision making within Nairobi County, 65(26.2%) respondents were neutral, while 28(11.3%) respondents agreed. This had a mean score of 2.49 and a standard deviation of 0.691 which was much lower than the composite mean of 3.62 and a standard deviation of 0.550, implying that this statement negatively influence performance of youth environmental projects.

Statement (8) there has been gradual Increase of recycled products within the groups as a major income generating project to members, The results indicated that majority of the respondents 120(48.4%) agreed that there have been gradual increase of recycled products within the groups as a major income generating project to members, 77(31.0%) respondents strongly disagreed, 33 (13.3%) respondents disagreed while 18(17.3%) were neutral. This had a mean score of 2.73 and a standard deviation of 1.339 which was much lower than the composite mean of 3.62 and a standard deviation of 0.550, implying that this statement does not influence performance of youth environmental projects.

#### **4.5.1 Performance of Youth Environmental Projects**

Performance of Youth environmental projects was the dependent variable in this study. Following studies reviewed in this study context, 45 percent of waste is managed by the youth. Research carried out by Ika, Diallo, and Thuillier, (2010) on performance of youth environmental projects established that youth projects success was insensitive to youth in the 21<sup>st</sup> century. This study impulses the government to deal with urban solid waste challenges to gainfully benefit the bulging number of jobless youths through project performance, thus portraying change as a result of solid waste management interventions that would portray higher profits, increased sales of recycled products, greater employment of other youths; hence low crime and youth survival rates (Richard Odour 2017).

This study agrees with a study conducted by Chimucheka and Rungani (2011) on youths environmental projects in Buffalo city municipality, South Africa using descriptive research which was concluded on 79 out of 109 youth groups with micro-businesses who applied for bank finance but only 8 (10 percent) managed to access it while out of 109 youth groups, 30 (28 percent) never applied for bank finance, (87.3 percent) of respondents indicated that inaccessibility of bank financing had stagnating a negative impact on progression of their firms, 7.3 percent showed that inaccessibility of financing never affected growth of their groups' projects, while 6 percent claimed that access to financing positively impacted the growth of their businesses gradually. This study expounds on the findings of this study since only a tiny portion of young entrepreneurs proves to be successful even with provision of government youth entrepreneurial loans. Majority rests among subsistence activities, held back by low levels of education, informality, poor employment infrastructure with less financially rewarding interventions and limited access to finance.

The fact that a large majority of youth fail to succeed as entrepreneurs on government funded projects cautions policy makers to reengineer and revamp project management skills as a solution to the youth employment challenge (Ika, Diallo, and Thuillier, 2010 ), specifically skills that enhance performance, which was the context of this study grounded on the theory of change, which provides information about how, why and whether an intervention works (Linda Dudar, Shelleyann Scott, Donald Scott (2017). This is by diverse range of stakeholders reaching a realistic consensus on what is to be achieved, using what resources and under what constraints. Thus, projects grounded in good

theory are sustainable since each step; from the ideas behind it, to the outcomes it hopes to provide and the resources needed, are clearly defined within the theory (Craig, 2014).

Reviewed studies largely support performance as they indicate that Key Performance Indicators (KPIs) provide longitudinal data to measure the realization of goals and objectives against a baseline or future target. Consequently, KPIs makes available solid empirical evidence to funders, policy-makers, and, most significantly, community members on the value of the youth's environmental project and how they are performing over time, and where improvement is needed, thus enhancing accountability and youths buy-in (Evans and Evans, 2011). Literature studied reviews scholar; (Dale, 2004) in support of performance who introduced the term "anthro capital" which incorporates human, social and constructed capital in order to achieve a broader view on the measurability of performance. He argued that in order to assess the social and environmental performance of a particular activity, one must first understand its impact on non-financial capital. This is essence of the capital-based theory of performance (Dale, 2004). In the absence of job opportunities in the formal labor market, Participation for youths may be increased from environmental protection and may be sought at all levels ranging from grass root activism to policy bodies and non-Governmental organizations (NGOs). Their role can be institutionalized in policy making through existing advisory bodies such as Youth councils.

Captivating a human capital perspective, younger people lacks experience in running companies, including the effective management of business operations that include sales and marketing, finance, human resources, lack sector-specific knowledge regarding customer needs, regulatory constraints, or strategic opportunities forms of "market knowledge" that may be important to successful innovation (Cummings, 2000). When the Youth Officer was asked on how the level of youth inclusion increased employment creation, this is what he had to say;

*"Facilitate complimentary premises for recreational activities and for youth groups with diverse projects to meet often for show- casing exhibitions to enhance creativity and innovation. This is because with the limited resources, many of our youth groups do not have the premises where we can meet and hold our activities. If this is not*

*possible, then Government should invest in such premises, and especially municipal councils should make places available to the youth for moral and financial support including institutional support to help us sustain promising projects. The government should also take up an initiative to fund more research on projects that benefit youths. However, as Youths, we prefer implementing youths-initiated and youth led projects rather than government dictated projects. ”*

The study findings indicated that in deeper technological leverage, young people may not have sufficient scientific knowledge to produce or manage effective Research and Development to improve on their environmental projects. (Ika, Diallo, and Thuillier, (2010). Hence, Performance of youths can be enhanced through embracing cultural values which include implementing social capital mentoring programmes (Bagele *et.al* 2016). These programmes provide guidance and support to young people in need to encourage behavioral change towards implementing of projects and performance. Mentoring provides young individuals with a role model that guides his/her social, professional and academic life. Youths should also be exposed to existence of associations in their communities, especially business-oriented associations within Nairobi County and the importance of getting involved which include Business funded expos and trips to other developed countries for exposure and learning purposes. This can be done, for example by organisation youth recreational activities, and improving the management and effectiveness of associations through the establishment of monitoring and evaluation practices in addition to capacity building of members and building of reunion centers as well as leisure activities in associations to arouse the interest of young people.

#### **4.6 Technical Skills and Performance of Youth Environmental Projects**

One of the objectives that this study was to examine the extent to which Technical skills influences the performance of youth environmental projects. In order to achieve this, the respondents were asked to give their options based on their level of agreements or disagreements based on statements on a Likert scale of 1-5 where 1=strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The results were presented in table 4.4



**Table 4.4**  
**Analysis of Technical skills and performance of youth environmental projects.**

Statements	SD	D	N	A	SA	Mean	SD
1. You have oversight management schemes to oversee SWM schemes and landfill sites	34(13.7)	71(28.6)	6(2.4)	52(21.0)	85(34.3)	3.33	1.521
2. Your SWM group environmental has ensured compliancy with current legislation in the transportation, handling and disposal of solid waste	45(18.1)	44(17.7)	8(3.2)	46(18.5)	105(42.3)	3.49	1.597
3. You offer quality waste services in transportation of SW without contaminating air, land or water sources	0	0	15(6.0)	62(25.0)	171(69.0)	4.63	.596
4. Level of SWM an control waste disposal: Project tasks are well scheduled within formulated budget time frame	65(26.2)	107(43.1)	0	56(22.6)	20(8.1)	2.43	1.308
5. The size of the population receiving collection services is equivalent to solid waste collection bags distributed per household.	3(1.2)	64(25.8)	34(13.7)	66(26.6)	81(32.7)	3.64	1.216
<b>Composite mean and standard deviation</b>						<b>3.51</b>	<b>0.630</b>

Five statements were developed to measure the extent to which Technical skills influences the performance of youth environmental projects.

Statement (1) you have oversight management schemes to oversee Solid Waste Management schemes and landfill sites, out of 248 respondents who participated in the study, 85(34.3%) of respondents strongly agreed with the statement, 52(21.0%) Agreed, 34(13.7%) Strongly disagreed, 71(28.6%) Disagreed while 6(2.4%) were neutral. This finding shows that 137 (55.3%) respondents Agreed with the statement, 105(42.3%) disagreed with the statement while 6(2.4%) were neutral. This item had a mean of 3.33 and a standard deviation of 1.521 which is lower than composite mean

of 3.51 with standard deviation of 0.630, implying that the statement does not positively influence performance of youth environmental projects. This statement disagreed with a scholar, (Boateng, 2014) who explored solid waste operational skills to include waste diversion, anti –littering, open burning ban and debris management which are not available as reported by the youths. he statement supports the study’s gap in knowledge on technical awareness of solid waste management skills.

Statement (2) your Solid Waste Management environmental group has ensured compliancy with current legislation in the transportation, handling and disposal of solid waste, 105(42.3%) respondents Strongly agreed that their environmental groups were compliant with current legislation in the transportation, handling and disposal of solid waste, 46(18.5%) respondents Agreed, 45(18.1%) Strongly disagreed, 44(17.7%) disagreed while 8(3.2%) were neutral. This had a line item mean score of 3.49 and a standard deviation of 1.597 which is lower than composite mean of 3.51 with standard deviation of 0.630, implying that the statement does not positively influence performance of youth environmental projects. This also means that if this is an important statement to enhance environmental projects, something should be done to improve it. This results disagrees with the findings by Mumbi *et.al.*, (2017) on waste disposal emerging trends and regulations which found that compliancy on solid waste oversight schemes is a technical skill but supports the study’s research gap on cause and effects of defined information and awareness of technical skills on solid waste gainful disposal mechanisms.

Statement (3) you offer quality waste services in transportation of solid waste without contaminating air, land or water sources, 171(69.0%) respondents strongly agreed that their groups offered quality waste services during the transportation of solid waste without contaminating air, land or water resources , 62(25.0 %) agreed while 15(6.0%) who were neutral. This had a mean score 4.63 and a standard deviation of 0.596 which is much higher than the composite mean of 3.51 and a standard deviation of 0.630 implying that the statement positively influence performance of youth environmental projects. This results found that majority of the respondents agreed with (Gakungu, *et.al.*, 2012) findings on solid waste management and technical waste collection systems which include quality waste services in transportation of solid waste which entails preventive techniques from contaminating water, air and land.

Statement (4) Level of Solid Waste Management and control of waste disposal Project tasks are well scheduled within formulated budget time frame, majority of the respondents 107(43.1%) disagreed that the project tasks are well scheduled within formulated budget on the level of solid waste management and control of waste disposal, 65(26.2%) respondents strongly disagreed, 56(22.6%) agreed with the statement while 20(8.1%) strongly agreed with the statement. This had a mean score of 2.43 and a standard deviation of 1.308 which was lower than the composite mean of 3.51 and a standard deviation of 0.630, meaning that the statement negatively influenced performance of youth environmental projects. The findings supported the study's gap in knowledge by (Gakungu *et.al.*, 2012) that explained on integrated sustainable waste management project concepts in youth training programs and lack of institutional capacity on solid waste management gainful skills

Statement (5) the size of the population receiving collection services is equivalent to solid waste collection bags distributed per house hold indicated that 81 (32.7%) of respondents strongly agreed that the size of the population receiving collection services is equivalent to solid waste collection bags distributed per household, 66(26.6%) respondents agreed with the statement, 64(25.8%) disagreed, 3(1.2%) strongly disagreed with the statement while 34(13.7%) were neutral. This findings had a mean score of 3.64 and a standard deviation of 1. 216 which was higher than the composite mean of 3.51 and a standard deviation of 0.630, meaning that the statement influenced performance of youth environmental projects.

Variability among the respondents was higher ( $\sigma= 1.597$ ) on statement 2, and lower ( $\sigma=0.596$ ) for statement 3. Results from this study showed the link between the two quality services in transportation of solid waste without contaminating water, land and air and compliancy of solid waste legislation in transportation are more able to leverage performance of youth environmental projects ( $r = 512, p = .000$ ).

Interview responses was acquired from Youth officers in the Directorate of Youth expounded on the roles played by different funds that are provided by the government. When asked on the technical aspect of the Directorate of Youth especially on Kenya Youth Employment Opportunities Project (KYEOP), this is what the key informant he had to say;

*“The Government through the Ministry of Public service, Youth and gender services intends to initiate 150 youth training centers nationally to equip youths on technical knowhow pertaining youth led-projects. Unfortunately, most of these empowerment centers lack the infrastructure and the construction is still ongoing, with a target to complete at least 10 youth empowerment centers per fiscal year. Kenya Youth Employment Opportunities Project (KYEOP) is funded by the World Bank through the Ministry of Public Service, Youth and Gender services. KYEOP entails youth Business Support Programs and Micro and Small Enterprise Authority. Our role as Youth Officers is to coordinate all issues of the youths in Nairobi County at sub county levels; working collaboratively with the National Industrial Training, Ministry of labour Information Systems and Macro and small enterprise Authority. We conduct youth induction for eligible youths selected after a newspaper advert, for one day, then life skills for two weeks where the youths takes up specific trainings for another two weeks using the Uwezo Fund Entrepreneurial Capacity Building manual. The youths are taught on book keeping and how to access Government procurement. The youths are then recommended for a two months internship under apprenticeship under a Master Craft man where they are given a stipend for transport after attending at least 80 percent training. The youths are either retained after learning the skills for two months, create their jobs as per the practical skills gained or recommended for employment in other similar bigger companies. However, the programs does not reach out to many youths due to the selection criteria required”.*

When asked about the lessons learnt over time on youths technical know- how pertaining the funded youth environmental projects, he had these to say:

*“I feel there is a disconnect between our Head- quarters obligations and youths activities on the ground since our role is to coordinate defined youth programs in the ministry; due to poor bottom-up management of youths project. For example, one of the Food security KYEOP youth activity is to plant over 20,000 fruits and medicinal trees, regardless of the concern that a tree may take over ten years to mature to benefit the youths. Youths are dynamic and require the government to concentrate*

*on activities that would banish youth emerging issues like radicalization, irresponsible betting activities, youth and crime, social media addiction, and the rampant youth unemployment. Tree planting can be effected jointly with other bodies dealing with environmental programs like Kenya Forest Services, UNEP and the Ministry of Environment and agriculture to allow youth run lucrative projects in their daily mundane”.*

Particular observations captured in the field on technical skills and performance of youth environmental projects during the interviews entailed; most groups had no oversight technical knowhow pertaining solid waste a part from a few that were under the Nairobi County council for instance, Sonko Regeneration group whose activities are managed and monitored through the governor’s office, city council section. The youth projects entails Sonko Rescue team that deals with emergencies within the City of Nairobi like Fires. The Rescue team is also in charge of welfare issues that include holding funerals to poor members of the community and fetching water to needy estates; largely slums during water crisis in Nairobi. Apart from the Sonko regeneration groups and Nairobi City council, other youth environmental groups lacked compliancy. Some youth environmental groups depended on other companies to help them dump the collected garbage especially because they did not have trucks to transport their garbage to the main dumping sites in Dandora. (They use wheelbarrows and Carts (“mikokotenis”). They therefore dumped their waste in designated sites within the estates to be collected later mainly by the county government and taken to the main dumping site.

Majority of the groups did not offer quality services due to lack of the right tools of trade- mainly trucks. Most groups lacked waste collections protective gears and did not even know of their importance. Although most groups consulted with the residents and traders within the shopping centers and markets in regard to SWM, they reported minimal consultation with county government officials. Majority did not even know that such offices existed.

#### 4.6.1 Inferential analysis of Technical Skills and Performance of Youth Environmental Projects

Inferential analysis were conducted to determine the relationship between technical skills and performance of youth environmental projects. This included correlational analysis, regression analysis and hypotheses testing. These are further discussed as follows;

#### 4.6.2 Correlation of Technical skills and Performance of Youth Environmental Projects

Table (4.5), the correlation output table, shows that technical skills characteristics were statistically significant (P-values under significant 2-tailed were all less than  $\alpha=0.05$ ) towards performance of youth environmental projects. From table 4.5 the correlation index between technical skills and performance was positive and significant,  $r(247) = .715$ ;  $p \leq .05$ . This implies that as the level of technical skills increases, the performance levels also increases.

**Table 4.5**  
**Correlation of Technical skills and Performance of Youth Environmental Projects**

Variables		Technical skills	Performance
Technical skills	Pearson Correlation	1	0.715**
	Sig. (2-tailed)		0.000
	N	248	248
Performance of youth environmental projects	Pearson Correlation	0.715**	1
	Sig. (2-tailed)	0.000	
	N	248	248

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

#### 4.6.3 Regression of technical skills and performance of youth environmental projects

Further, a Regression analysis was conducted between the technical skills and performance of youth environmental projects to determine the relative contribution in terms of the variance that could be accounted by the independent variable towards the change in the dependent variable. From this

analysis, it was observed from the model summary table (table 4.6) that the coefficient of correlation was 0.715 with an R<sup>2</sup> square of 0.512 implying that the technical skill variable could explain about 51.2 percent of the total variance in performance of youth environmental projects. Other 48.8 % are explained by other things that include equipping youths with technical skills on oversight solid waste management schemes, which include recycling techniques and their entire business value chain for gainful economic returns.

**Table 4.6.**  
**Regression analysis on technical skills and performance of youth environmental projects.**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.715 <sup>a</sup>	0.512	0.510	0.38500	0.512	257.948	1	246	.000

a. Predictors: (Constant), Technical skills

As to whether this model was significant in enabling predictions containing the independent and dependent variable, the ANOVA table was produced and the results are as shown in Table 4.7

**Table 4.7.**  
**ANOVA showing Regression Model on Technical skills and performance of environmental projects**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	38.235	1	38.235	257.948	0.000 <sup>b</sup>
1	Residual	36.464	246	.148		
	Total	74.698	247			

Dependent variable: performance

Predictor: Technical skills

The ANOVA table 4.7 showed that in the global model, technical skills had a significant prediction on performance of youth environmental projects, This implies that the levels of technical skills

possessed by youths can be a good predictor of performance of youth environmental projects;  $F(1,246) = 257.948$ ;  $p \leq .05$ .

It was important to establish the amount of contribution that technical skills had on the outcome variable of performance. These results are presented in table 4. 8 on regression coefficient and reported using the t-value statistics

**Table 4.8**  
**Regression Coefficients<sup>a</sup> on Technical skills and performance of environmental projects**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.428	0.138		10.312	0.000
1 Technical skills	0.624	0.039	0.715	16.061	0.000

Dependent variable: Performance

The table 4.8 of regression coefficient shows the unstandardised beta coefficient for technical skills to be 0.624. The t- value for technical skill is also significant, implying that for each unit increase in technical skills, performance of youth environmental projects can increase by 0.624 units;  $t(247) = 16.06$ ;  $\beta = .624$ ;  $P \leq .05$ .

#### 4.6.4 Hypothesis Testing

The study sought to examine the technical project management skills and the performance of youth environmental projects. Pearson correlation coefficient was administered to test the relationship between Technical skills and performance of youth environmental projects. This was done at 95% level of confidence in order to test the extent of the relationship between technical skills and performance of youth environmental projects. The hypothesis testing the relationship between technical skills and performance as the main IV and DV respectively for the study was tested at 0.05 level of significance which stated that (H0): There is no significant influence between technical skills and performance of youth environmental projects in Nairobi County. In order to prove the validity of this claim, both correlation and regression analysis were run on the SPSS programme version 22



based on the decision criterion that any P-value less than the threshold of  $\alpha=0.05$  would be considered significant and subsequently lead to the rejection of the null hypothesis and acceptance of the alternative hypothesis or fail to reject the null hypothesis when the P-value obtained is greater than the threshold of  $\alpha=0.05$  while failing to accept the alternative hypothesis. From the findings of regression and correlation analysis, it can be depicted that technical skills significantly influenced the level of performance of youth environmental projects in the study area,  $t(247) = 16.06$ ;  $\beta = .624$ ;  $P \leq .05$ . This therefore implies that the null hypothesis which stated that:  $H_0$ : Technical skills do not significantly influence performance of youth environmental projects in Nairobi County; was rejected and the conclusion was made that:  $H_1$  There is a significant influence of technical skills on performance of youth environmental projects in Nairobi County, which was the alternative hypothesis hence, the research findings concluded that there was a significant influence of technical skills on performance of youth environmental projects in Nairobi County.

#### **4. 7 Financial Management Skills and Performance of Youth Environmental Projects**

The second objective of this study was to examine the extent to which Financial Management skills influences the performance of youth environmental projects. In order to achieve this, the respondents were asked to give their options based on their level of agreements or disagreements based on a Likert scale in which a numerical scale of 1=strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The results were presented in Table 4.9.

**Table 4.9**  
**Financial Management skills and Performance of Youth Environmental Projects**

Statements	SD	D	N	A	SA	Mean	Std. Deviation
1. All Project procedures are captured in every fiscal budget of the group budget depends on available government financial solutions	89(35.9)	159(64.1)	0	0	0	1.64	.481
2. We spend our group savings when we run out of money before the next government funding arrives	20(8.1)	9(3.6)	18(7.3)	191(77.0)	10(4.0)	3.65	.931
3. Group Members understand parameters that determine Services offered by banks and other financial intermediaries	25(10.1)	163(65.7)	12(4.8)	48(19.4)	0	2.33	.903
4. My group have a robust Knowledge management system for all entries and expenditures	14(4.6)	206(83.1)	6(2.4)	22(8.9)	0	2.15	.645
5. Our financial statements, and other aspects of youth project activities have been audited within the last two years by a either a governmental agency or independent public accountant	24(9.7)	153(61.7)	60(24.2)	11(4.4)	0	2.23	.681
<b>Composite Mean and standard deviation.</b>						<b>2.40</b>	<b>.399</b>

Table 4.9 presents the responses of financial management skills on performance of youth environmental projects in Nairobi County. The results were presented in mean and standard deviation five statements were developed to measure the extent to which Financial Management skills influences the performance of youth environmental projects.

Statement (1) All Project procedures captured in every fiscal budget of the group depends on available government financial solutions results indicated that 159(64.1%) respondents disagreed

with the statement while 89(35.9) respondents strongly disagreed with the statement. This had a line item mean of 1.64 and a standard deviation of 0.482 which was lower than the composite mean of 2.40 and a standard deviation of 0.399. This implies that out of 248(100%) of the respondents disagreed with this statement, meaning that this statement negatively influence performance of youth environmental projects in Nairobi County. This statement agrees with literature reviewed in this study concerning savings habits and Mis-Match between what financial aids people on lower income like youths can access and learn on financial management skills (Rebbeca, 2016), especially when engaged in solid waste projects which may demand constant funding to upgrade waste disposal and recycling mechanisms.

Statement (2) we spend our group savings when we run out of money before the next government funding arrives, results indicated that 191(77.0%) respondents agreed that they spend their group savings when they run out of money before the next government funding arrives, 20(8.1%) strongly disagreed with the statement, 18(7.3) were neutral and 9(3.6%) disagreed with the statement. This had a line item mean score of 3.65 and a standard deviation of 0.931 which was much higher than the composite mean of 2.40 and a standard deviation of 0.399, implying that this statement positively influence performance of youth environmental projects. This statements supports the exploratory study conducted by Adamako et. al., (2013) on budgeting in project management where youth with limited knowledge on finance tend to hold wrong opinions and make incorrect financial management decisions.

Statement (3) group members understand parameters that determine Services offered by banks and other financial intermediaries, 163(65.7%) respondents disagreed that group members understand parameters that determine services offered by banks and other financial intermediaries, 25(10.1%) respondents strongly disagreed, 48(19.4%) respondents agreed with the statement, , while 12(4.8%) were neutral. This had a line item mean score of 2.33 and a standard deviation of 0.903 which was lower than the composite mean of 2.40 and a standard deviation of 0.399, implying that this statement negatively influence performance of youth environmental projects. This result agrees with the study findings by Adomako *et.al.*, (2014) on budgeting in project management and the impetus of financial management towards performance of youth projects which was also a key finding in this study.

Statement (4) my group has a robust Knowledge management system for all entries and expenditures, results indicated that 206(83.1%) respondents disagreed with the statement, 14 (4.6%) strongly disagreed with the statement, 22(8.9%) respondents agreed and the lowest response was 6(2.4%) who were neutral. This line item had a mean score of 2.15 and a standard deviation of 0.645 which was lower than the composite mean of 2.40 and a standard deviation of 0.399, implying that this statement negatively influence performance of youth environmental projects. The findings agrees with study by Boateng, *et.al.*, (2018) on book keeping and financial literacy by youths managing projects which was also was supported by this study findings which retaliated on book keeping processes and financial literacy for successful implementation of youth funded environmental projects.

Statement (5) our financial statements, and other aspects of youth project activities have been audited within the last two years by either a governmental agency or independent public accountant, results indicated that 153(61.7%) respondents disagreed that their financial statements, and other aspects of youth project activities have been audited within the last two years by either a governmental agency or independent public accountant, 24(9.7%) respondents strongly disagreed, 60(24.2%) respondents remained neutral and 11(4.4%) respondents agreed. This line item had a mean score of 2.23 and a standard deviation of 0.681 which was lower than the composite mean of 2.40 and a standard deviation of 0.399, implying that this statement negatively influence performance of youth environmental projects. This statement supported empirical studies reviewed on financial management skills to some extent, which also agreed with research findings in this study that indicated financial management skills positively influence performance of youth environmental projects.

Variability amongst respondents was higher ( $\sigma= 0.931$ ) on statement 2, and lower ( $\sigma=0.481$ ) for statement 1. This study findings showed that the two links between group savings and robust knowledge management systems for all entries and expenditures are more able to leverage performance of youth environmental projects ( $r = .525, p = .000$ ).

Interview responses was acquired following the key informants interviews on project management skills and performance of youth environmental projects, they amicably had views that supported the study findings. When asked on their views concerning youth's financial project management skills, he had this to say:

*“Most groups do not comprehend what a fiscal budget is or available government financial solutions irrespective of sporadic trainings that they are given through the Entrepreneurial training manual before the uptake of loans. The trainings entails basic book keeping and generation of a business plan without deep practical understanding of savings and investment networks. Most of the groups treasures are chosen by the group members due to their focal expression rather than what they can deliver. Group members assume that their savings is what the group use to buy simple equipment's like wheelbarrows, gloves, blooms and aprons. Some groups also use the savings to hire Carts 'mikokotenis'. However, most groups have opened bank accounts though with little understanding on bank operations and services. Some group officials have some little understanding and insight on financial management skills. They wish they would access their group bank statements and use them to explain to members on their progress financially especially where the elected official members are not conversant with financial statements. However, Some groups have documented their income and expenditures in minutes taken during their weekly, biweekly or monthly meetings though”.*

When asked whether there is a framework to capture and record youth loan reimbursement process after up take to mitigate against defaulters, and the challenges therein, this is what one of the youth officers had to say:

*“Most of the youths in my region have defaulted Uwezo fund loans irrespective of the financial management training that we accord them before the uptake of loans that takes three to five days using the Uwezo fund entrepreneurial capacity building manual. This is because irrespective of meeting the loan disbursement*

*criteria, they borrow the money with a perceived mind-set that they shall default. For example; I approved 14.6 million shillings to different youths last fiscal year and I have only managed to recover 3.4 Million Kenya shillings. Meaning that I still have to follow up with dynamic youths to recover about 11 million Kenya shillings. Some of my youths after acquiring the loan decided to upgrade their mobile phones. Others colluded among the officials and eloped with the money. I reported the incidence to the Office so that an action can be taken against them.”*

From field observation, many respondents groups in this study apart from the city council groups never had their accounts audited. The researcher found one group in babadogo that was guided by their bank to start auditing their accounts where the bank had offered to provide its internal accountant to help with the audit beginning year 2019.,time allocation for groups’ activities and budgeting was done in an informal way. They had adhoc schedules and did not follow any defined structure. This implies that youths may need formal training on budgeting skills. Most group leaders lacked basic understanding of is monitoring undervaluation and so could not expound on terms “inputs” as described in their training entrepreneurial manual, and hence budgeting was not applicable to most groups. Some groups admitted having obtained loans from government funding, save one group in Dandora that had just received government funding of Ksh. 100,000 through uwezo fund at the time this study was being conducted. However, a few groups were not aware of government funding while others relied on politicians to partially fund some of their activities. Some groups talked of aligning their activities with the vision 2030 but lacked any customized systems.

#### **4.7.1 Inferential analysis of Financial Management Skills and Performance of Youth Environmental Projects**

Correlation, regression analysis and hypothesis testing were conducted to determine the relationship between financial management skills and performance of youth environmental projects. These are further explained in the following sub-themes:

#### 4.7.2 Correlation of Financial Management Skills and Performance of Youth Environmental Projects

Table 4.10, presents the correlation output table which shows that financial management skills were statistically significant (P-values under significant 2-tailed were all less than  $\alpha=0.05$ ) towards performance of youth environmental projects. From table 4.10, shows the correlation index between financial management skills and performance of youth environmental projects was positive and significant,  $r(247) = .525$ ;  $p \leq .05$ . This implies that as the level of financial skills increases, the performance also increases.

**Table 4.10**  
**Correlation Matrix between Financial Management Skills and Performance of Youth Environmental Projects**

Variables		Performance	Financial
Performance of youth environmental projects	Pearson Correlation	1	0.525**
	Sig. (2-tailed)		0.000
	N	248	248
Financial management skills	Pearson Correlation	0.525**	1
	Sig. (2-tailed)	0.000	
	N	248	248

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

#### 4.7.3 Regression Analysis of Financial Management skills and Performance of Youth Environmental

Additionally, to estimate the overall effect of financial management skills on performance of the youth environmental projects, a regression analysis was run on the two variables and results were shown in table 4.11. It can be noticed that the model summary table 4.11 of regression, showed that the coefficient of correlation was 0.525 with an R square of 0.276 implying that the financial management skills variable can explain about 27.6 percent of the total variance in performance of youth environmental projects. Majority of the respondents (group members) disagreed that they had

robust Knowledge on management system for all financial entries and expenditures on services offered by banks and other financial intermediaries which could explain the other 72.4 percent factors on financial acumen that are not marooned by the traditional Entrepreneurial Training Manual only to influence the performance youth environmental projects.

**Table 4.11**  
**Regression analysis of Financial Management skills and Performance of Youth Environmental**

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.525 <sup>a</sup>	0.276	0.273	0.46890	0.276	93.746	1	246	0.000

a. Predictors: (Constant), Financial

As to whether this model was significant in enabling predictions containing the independent and dependent variable, the ANOVA table was produced and the results are as shown in Table 4.12

**Table 4.12**  
**ANOVA showing Regression Model for Financial Management and Performance of youth environmental projects**

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	20.612	1	20.612	93.746	0.000 <sup>b</sup>
1	Residual	54.087	246	0.220		
	Total	74.698	247			

a. Dependent Variable: Performance

b. Predictors: (Constant), Financial

The ANOVA table (4.12) shows that the global model containing the predictor of financial management skills and performance of youth environmental projects was significant;  $F(1,246) = 93.75$ ;  $P \leq .05$ . This implies that the regression coefficient of the predictor variable cannot be equal to zero, thus making the predictive power of financial management on performance to be high.



Lastly, it was important to establish the amount of contribution that financial management skills had on the outcome variable of performance. These results are presented in table 4.13 on regression coefficient and reported using the t-value statistics

**Table 4.13**  
**Regression Coefficients of Financial Management skills and Performance of youth environmental projects**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1	(Constant)	1.876	0.182	10.302	0.000
	Financial	0.724	0.075	9.682	0.000

The Table 4.13 of regression coefficient shows the unstandardised beta coefficient for financial management skills to be 0.724. The T value for financial management skills is also significant;  $T(247) = 9.682$ ;  $\beta = 0.724$ ;  $P \leq 0.05$ . This implies that for each unit increase in financial management skills, the performance of youth environmental projects could increase by 0.724 units.

#### 4.7.4 Hypothesis Testing

The study sought to examine the financial management skills and the performance of youth environmental projects. Pearson correlation coefficient was used to test the relationship between financial management skills and performance of youth environmental projects. This was done at 95% level of confidence in order to test the extent of the relationship between technical skills and performance of youth environmental projects. The hypothesis testing the relationship between financial management skills and performance of youth environmental as the main IV and DV respectively for the study was tested at 0.05 level of significance which stated that (H0): Financial management skills do not significantly influence performance of youth environmental projects in Nairobi County. In order to prove the validity of this claim, both correlation and regression analysis were run on the SPSS programme version 22 based on the decision criterion that any P-value less than the threshold of  $\alpha = 0.05$  would be considered significant and subsequently lead to the rejection

of the null hypothesis and acceptance of the alternative hypothesis or fail to reject the null hypothesis when the P-value obtained is greater than the threshold of  $\alpha=0.05$  while failing to accept the alternative hypothesis. From the findings of regression and correlation analysis, it can be depicted that financial management skills significantly influences the level of performance of youth environmental project;  $T(247) = 9.682$ ;  $\beta= 0.724$ .;  $P\leq.05$ . This therefore implies that the null hypothesis which stated that:  $H_0$ : There is no significant relationship between Financial skills and performance of youth environmental projects in Nairobi County was rejected and the conclusion made that:  $H_1$ : There is a significant influence of financial management skills on performance of youth environmental projects in Nairobi County, which was the alternative hypothesis hence, the research findings concluded that there was a significant influence of financial skills on performance of youth environmental projects in Nairobi County.

#### **4.8 Leadership Skills and Performance of Youth Environmental Projects.**

The third objective of this study was to examine the extent to which Leadership skills influences the performance of youth environmental projects. In order to achieve this, the respondents were asked to give their options based on their level of agreements or disagreements based on a Likert type of scale in which a numerical scale of 5-1 was provided where 1=strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The results were presented in Table 4.14

**Table 4.14**  
**Leadership skills and performance of youth Environmental projects.**

Statements	SD	D	N	A	SA	Mean	Std. Deviation
1. A leader's best asset is the ability to motivate and inspire a team of professionals who can work together to achieve the goals of the organization Performance management.	0	0	0	85(34.3)	163(65.7)	4.66	0.476
2. A leader ought to have the right amount of positive and constructive feedback to help teams perform effectively.	0	0	0	85(34.3)	163(65.7)	4.66	0.476
3. Effective communication entails Problem solving and decision making, talking about the importance of the overall goal and the implications if teams didn't come together to achieve it.	0	0	0	85(34.3)	163(65.7)	4.66	0.476
4. Self-determination, independence and competence are the conditions that increase my enthusiasm and motivation towards youth environmental projects.	0	0	42(16.9)	176(71.0)	30(12.1)	3.95	0.538
5. The most important value that I have is my integrity. I demonstrate honesty and trust in all my actions to establish credibility as a leader	0	0	0	85(34.3)	163(65.7)	4.66	0.476
<b>Composite mean and standard deviation.</b>						<b>4.52</b>	<b>0.425</b>

Table 4.14 presents the responses of leadership skills on performance of youth environmental projects in Nairobi County. The results were presented using mean and standard deviation. Five statements were developed to measure the extent to which leadership skills influences the performance of youth environmental projects.

Statement (1) a leader's best asset is the ability to motivate and inspire a team of professionals who can work together to achieve the goals of the organization and performance management results indicated that majority of respondents 163(65.7%) strongly agreed that a leader's best asset is the ability to motivate and inspire a team of professionals who can work together to achieve the goals of the organization and performance management while 85(34.3%) respondents agreed unanimously. This had a mean score of 4.66 and a standard deviation of 0.476 which was higher than the composite mean of 4.52 and a standard deviation of 0.425, implying that the statement positively influenced performance of youth environmental projects in Nairobi County. This statement supports the findings

by Philips, (2013) on analytical leadership in communication and management expounding on leadership approaches while leading a team working on a given youth project; which also concurs with the findings of this study which entails motivation of teams as an operational skills in leadership.

Statement (2) a leader ought to have the right amount of positive and constructive feedback to help teams perform effectively, the results indicated that 163(65.7%) strongly agreed that a leader ought to have the right amount of positive and constructive feedback to help teams perform effectively, 85(34.3) respondents agreed unanimously as well. This had a mean score of 4.66 and a standard deviation of 0.476 which was much higher than the composite mean of 4.42 and a standard deviation of 0.425, implying that the statement positively influenced performance of youth environmental projects in Nairobi County. This statement agrees with explanatory research study by Ziegler, (2013) on the impetus of feedback and feed forward mechanism during project implementation, which concluded that ability to envision the future and set the direction of projects requires skillful leadership traits.

Statement (3) effective communication entails Problem solving and decision making, talking about the importance of the overall goal and the implications of teams coming together to achieve it, 163(65.7%) respondents strongly agreed with the statement while 85(34.3%) respondents also agreed unanimously. This had a mean score of 4.66 and a standard deviation of 0.476 which was higher than the composite mean of 4.52 and a standard deviation of 0.425, implying that the statement positively influenced performance of youth environmental projects in Nairobi County. This statement concurs with literature reviewed on agility in thinking as a team leader (Ziegler, 2013), which also agrees with the findings of this study.

Statement (4) self-determination, independence and competence are the conditions that increase my enthusiasm and motivation towards youth environmental projects, majority of the respondents 176(71.0%) agreed with the statement, 30 (12.1%) strongly agreed with the statement while 42(16.9%) were neutral. This line item had a mean score of 3.95 and a standard deviation of 0.538 which was lower than the composite mean of 4.52 and a standard deviation of 0.425, implying that the statement negatively influenced performance of youth environmental projects in Nairobi County.

This findings critiques the empirical study findings on effective leadership skills revolving around the impressions and interpretations of study findings by other scholars (Kouzes, 2012) but agrees with this study findings on engaging youths with in-depth interviews in order to help them understand the impetus of leadership skills and project performance.

Statement (5) the most important value that I have is my integrity. I demonstrate honesty and trust in all my actions to establish credibility as a leader. The results indicated that majority of respondents 163 (65.7%) strongly agreed with the statement while 85(34.3%) respondents agreed with the statement. This had a mean score of 4.66 and a standard deviation of 0.476 which was much higher than the composite mean of 4.52 and a standard deviation of 0.425 implying that the statement positively influenced performance of youth environmental projects in Nairobi County. This result findings indicate that the majority of the respondents strongly agreed that leadership management skills played a major role on performance of youth environmental projects. The study findings validated the respondents perception on leadership skill and project management where they all agreed that it would leverage performance; save their solid waste management projects ( $r = 0.321$ ,  $p = .000$  ). Variability among the respondents was higher ( $\sigma = 0.538$ ) on statement 4, and lower ( $\sigma = 0.476$ ) for statement 1,2, 3 and 5. The current study confirms the position taken by previous studies on leadership skills and performance of youth environmental projects.

The key informants expressed varied challenges while dealing with the group's leadership. When asked to explain some of the leadership challenges that they have experienced while dealing with leadership aspect of youth groups, this is what she had to say;

*"I experience a lot of challenges especially with data collection aspect since youths are very dynamic. At times the youth leadership disagrees and the group disintegrate. Leaving me with little or no information pertaining the project implementation progress report. Other groups disintegrate after acquiring donor fund, like a case of two garbage collection groups that crumbled the group and divided the funds amongst themselves. Some group leaders also get other jobs especially in construction industry and disappear with the groups records, while others get*

*married or acquire new gainful jobs, join colleges and therefore resigns from the groups”.*

When asked on key lessons learnt by the key informants and ways of mitigating against the youth dynamics and loss of data, this is what she had to say:

*“To mitigate data loss, I ensure that all groups hold meeting with their group leaders to deliberate on their financial progress on diverse tacit ways. Some daily, others weekly, biweekly and others monthly, then I acquire the data to key on my note pad. In my view, management of youth group projects is quite challenging and one ought to only engage a youth group that has previous outstanding history and records. However, Most of these groups have members who have transited from youth age bracket and may have joined the politics on the ground concerning government funded money which is highly defaulted. For example, my region has a lot of defaulters on Uwezo Fund loans but a few ladies on Women Enterprise Fund pay up. I experience a lot of political interference too; since some youth reiterate that government money should not be paid back since even previous corruption cases have not been fully tackled”.*

When asked to mention some of the key challenges that they had documented pertaining the leadership of youth projects; though they did not quote an environmental project, she had this to say:

*“In my opinion, it is important for youths to be trained on project management skills because they are very inadequate in the way they handle their projects. For example, one politician assembled the youths and asked them to mention key items that he could facilitate them with for them to start up lucrative on spot business. They were facilitated with motorbikes, saloon gargets to start up salon shops and others were issued with car wash equipment’s to start up car wash businesses. Unfortunately, the politician did not establish a mentor to supervise and walk with the youths as they implemented their businesses; hence they sold off all the equipment in a period of three months and shared the money amongst themselves. Hence, I would advocate that youths go through mentorship programs even after being trained on entrepreneurial projects since the training given by government youth ministry is minimal and may not be practical to a youth who in dire need of instant profits”.*

Following field observation, the researcher observed that most of the groups were not aware of government officials as key informants whom they needed to work with since they only held meetings amongst themselves, community support groups and some with their community leaders. One group in Babadogo was observed to often meet with an NGO that supports them in SWM and community clean ups occasionally. Every group had at least a success story to tell amidst a number of challenges. Most groups managed to rehabilitate youths that had been carried away in drugs, alcoholism and other criminal engagements.

A statement dominated the response cited by most of the group's leaders including key informants.

*“Seeing them reform and live a positive life is one of the main achievement that I endure to document in my term of service”.*

Leadership skills and performance of youth environmental projects respondents response was observed to characterize African brotherhood; “UBUNTU” which is the essence of being human that embraces hospitality, caring about others and being able to go an extra mile for the sake of others (Bagele *et.al.*, 2016). The study findings also observes leadership should be celebrated and passed on to different legacies through varied cultural responsive heritages and indigenous practices; to better appreciate and understand the multitude of ways in which leadership notions can be understood and expressed. This is not only beneficial for the recipients of solid waste management projects, but also help to expand and refresh performance of youth projects, offering new insights into the phenomenon of leadership and its pivotal role in social change, hence embracing a world-view of value systems.

#### **4.8.1 Inferential analysis of Leadership Management Skills and Performance of Youth Environmental Projects**

Correlation, regression analysis and hypothesis testing were conducted to determine the relationship between leadership management skills and performance of youth environmental projects. These are further discussed in the subsequent subthemes.

## 4.8.2 Correlation of Leadership Management Skills and Performance of youth

### Environmental projects

Table (4.15), the correlation output table shows that leadership characteristics were statistically significant (P-values under significant 2-tailed were all less than  $\alpha=0.05$ ) towards performance of youth environmental projects. From table 4.15, the correlation index between leadership skills and performance was positive and significant,  $r(247) = .321$ ;  $p \leq .05$ . This implies that as the level of leadership skills increases, the performance also increases

**Table 4.15**  
**Correlation Matrix between Leadership Management Skills and Performance of youth environmental projects**

Correlations		Performance	Leadership
Variables			
Performance of youth environmental projects	Pearson Correlation	1	0.321**
	Sig. (2-tailed)		0.000
	N	248	248
Leadership skills	Pearson Correlation	0.321**	1
	Sig. (2-tailed)	0.000	
	N	248	248

---

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

Further, a Regression analysis was conducted between the leadership management skills and performance to determine the relative contribution in terms of the variance that could be accounted by the independent variable towards the change in the dependent variable. From this analysis, it was observed from the model summary Table 4.16 that the coefficient of correlation was 0.321 with an  $R^2$  square of 0.103 implying that the leadership skills variable could explain about 99 percent of the total variance in performance of youth environmental projects. The finding inferred leadership being more of in born virtue exhilarated within a given phenomenon.



**Table 4.16****Regression analysis Model Summary table between Leadership Management Skills and Performance of youth environmental projects**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.321 <sup>a</sup>	0.103	0.099	00.52198	.103	28.164	1	246	0.000

a. Predictors: (Constant), Leadership

As to whether this model was significant in enabling predictions containing the independent and dependent variable, the ANOVA table was produced and the results are as shown in Table 4.17

**Table 4.17****ANOVA showing Regression Model of Leadership Skills and Performance of youth environmental projects**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	7.674	1	7.674	28.164	0.000 <sup>b</sup>
Residual	67.025	246	0.272		
Total	74.698	247			

a. Dependent Variable: Performance

b. Predictors: (Constant), Leadership

The ANOVA table showed that in the global model, Leadership skills had a significant prediction on performance of youth environmental projects, This implies that the levels of leadership skills possessed by youths can be a good predictor of performance of youth environmental projects;  $F(1,246) = 28.164$   $p \leq .05$ .

To establish the amount of contribution that leadership skills had on the outcome variable of performance, the results are presented in table 4.18 on regression coefficient and reported using the t-value statistics

**Table 4.18**  
**Regression coefficient of Leadership Skills and Performance of youth environmental projects**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.744	0.354		4.922	0.000
Leadership	0.415	0.078	0.321	5.307	0.000

The table of regression coefficient (4.18) showed that the unstandardised beta coefficient for leadership skills to be 0.41. The T value for leadership skill is also significant, implying that for each unit increase in leadership skill, performance of youth environmental projects can increase by 0.415 units;  $T(247) = 5.307$ ;  $\beta = 0.0.415.$ ;  $P \leq .05$ .

#### 4.8.3 Hypothesis Testing

The study sought to assess the influence of leadership skills on the performance of youth environmental projects. Pearson correlation coefficient was used to test the relationship between leadership skills and performance of youth environmental projects. This was done at 95% level of confidence. In order to prove the validity of this claim, both correlation and regression analysis were run on the SPSS programme version 22 based on the decision criterion that any P-value less than the threshold of  $\alpha = 0.05$  would be considered significant and subsequently lead to the rejection of the null hypothesis and acceptance of the alternative hypothesis or fail to reject the null hypothesis when the P-value obtained is greater than the threshold of  $\alpha = 0.05$  while failing to accept the alternative hypothesis. From the findings of regression and correlation analysis, it can be depicted that leadership skills significantly influences the level of performance of youth environmental project  $T(247) = 5.307$ ;  $\beta = 0.0.415.$ ;  $P \leq .05$  in the study area. This therefore implies that the null hypothesis which stated that:  $H_0$ : There is no significant relationship between Leadership skills and performance of youth environmental projects in Nairobi County; to be rejected and the conclusion made that:  $H_1$  There is a significant influence of leadership skills on performance of youth environmental projects in Nairobi County, which was the alternative hypothesis hence, the research findings concluded that there was a significant influence of leadership skills on performance of youth environmental projects in Nairobi County.

#### 4.9 Marketing skills and Performance of Youth Environmental Projects

The Fourth objective of this study was to examine the extent to which marketing skills influences the performance of youth environmental projects. In order to achieve this, the respondents were asked to give their options based on their level of agreements or disagreements based on a Likert scale in which a numerical scale of 5-1 was provided where 1=strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The results were presented in Table 4.18

**Table 4.19**  
**Marketing skills and Performance of Youth Environmental Projects**

Statements	SD	D	N	A	SA	Mean	Std. Deviation
1. Market segmentation is well distributed within Nairobi County to sell groups' products and services.	4(1.6)	156(62.9)	50(20.2)	38(15.3)	0	2.49	0.769
2. Group members are aware of Patenting and other intellectual property rights so as to increase their niche in the market place	0	0	55(22.2)	85(34.3)	108(43.5)	4.21	0.784
3. Project products, tools and services are branded using the group's patents.	0	26(10.5)	57(23.0)	82(33.1)	83(33.5)	3.90	0.988
4. The project has a digital marketing platform for online selling	6(2.4)	120(48.4)	8(3.2)	20(8.1)	94(37.9)	3.31	1.446
5. Solid waste recycled products are aligned to local and international market networks through teams personalised selling	145(58.5)	15(6.0)	88(35.5)	0	0	1.77	0.944
<b>Composite mean and standard deviation.</b>						<b>3.14</b>	<b>0.510</b>

Table 4.19 presents the responses of marketing skills on performance of youth environmental projects in Nairobi County. The results were presented in mean and standard deviation. Five statements were developed to measure the extent to which marketing skills influenced the performance of youth environmental projects.

Statement (1) market segmentation is well distributed within Nairobi County to sell groups, 156 (62.9%) respondents disagreed with the statement, 4(1.6%) respondents strongly disagreed, and 50 (20.2%) respondents were neutral while 38 (15.3%) respondents agreed. This line item had a mean score of 2.49 and a standard deviation of 0.769, which was lower than the composite mean of 3.14 and a standard deviation of 0.510, implying that the statement does not influence performance of youth environmental projects in Nairobi County. This statement agrees with the empirical study by (Mumbi et.al, 2017) on market segmentation which reviewed marketing networks as an important attribute in marketing as an enterprise which also expounded on complexity of the market environment and strategies implored today with modern technologies.

Statement (2) group members are aware of patenting and other intellectual property rights so to increase their niche in the market place , 108(43.3%) of respondents Strongly agreed that group members are aware of patenting and other intellectual property rights so to increase their niche in the market place, 85(34.3%) agreed with the statement, while 55(22.2%) were neutral. This line item had a mean score of 4.21 and a standard deviation of 0.784 which was much higher than the composite mean of 3.14 and a standard deviation of 0.510 which was higher than the composite mean of 3.14 and a standard deviation of 0.510, implying that the statement positively influence performance of youth environmental projects in Nairobi County. This statement agrees with the literature reviewed on this study on navigating the ambiguity that comes with marketing strategies, concluding on customer focus marketing strategies like reinventing brands and markets, which concurs with the findings of this study.

Statement (3) Project products, tools and services are branded using the group's patents, 83(33.5%) respondents strongly agreed that project products, tools and services are branded using the group's patents, 83(33.1%) agreed with the statement, 57(23.0%) were neutral and 26(10.5%) disagreed. This item had a mean score of 3.90 and a standard deviation of 0.988 which was much higher than the composite mean of 3.14 and a standard deviation of 0.510 implying that the statement positively influence performance of youth environmental projects in Nairobi County. This results inferred the respondents existing marketing strategies embedded on leverage technologies like social media but

agrees with empirical studies on branding of business projects which entails business tools and equipment's like colored bins, bio-degradable waste bags and machinery (Gitau *et.al.*, 2012).

Statement (4) the project has a digital marketing platform for online selling, result indicated that 120(48.4%) respondents disagreed with the statement, 6(2.4%) respondents strongly disagreed, 94(37.9%) respondents strongly agreed while 8(3.2%) respondents were neutral. This had a mean score of 3.31 and a standard deviation of 1.446 which was much higher than the composite mean of 3.14 and a standard deviation of 0.510 implying that the statement positively influence performance of youth environmental projects in Nairobi County. This findings supports the study conclusion on the benefits of digital marketing platforms and personal selling, embedded on brand communication on social media, instead of traditional marketing domains (Sawyer, 2012 This statement also relates positively to this study findings as well.

Statement (5) solid waste recycled products are aligned to local and international market networks through teams personalised selling, 145(58.5%) respondents strongly disagreed that solid waste recycled products are aligned to local and international market networks through teams personalised selling, 15(6.0%) disagreed with the statement while 88(35.5%) were neutral. This line item had a mean score of 1.77 and a standard deviation of 0.944 which was much lower than the composite mean of 3.14 and a standard deviation of 0.510 implying that the statement negatively influence performance of youth environmental projects in Nairobi County.

Observation on the Groups' Solid Waste groups Projects marketing strategies, some groups had created segments amongst members and they all understand their areas of operation in terms of garbage collection. In some groups, each member had specific homesteads to man. This they say had helped reduce insecurity cases for members who were answerable to any loss of items or any theft cases in the homesteads or areas they manned to gained trust with their clients. Only a few groups had branded collection bags. Majority were using used sacks to collect waste following the ban of plastic bags in the country. Members in most groups did not even have an idea of what patent and intellectual property rights were. Very few groups had branded materials. The researcher observed a group in Langata with branded t-shirts, a group in Runda with a branded truck and overalls and the

Sonko regeneration group with branded overalls and t-shirts. From the findings, almost all youth groups carried out their marketing services through the social media; facebook, twitter and Instagram. Every group had a set of prices for different estates and different locations in which they operated on SWM. Some groups had specific prices for the elderly and also charged some flats differently. For instance, in Huruma the elderly were charged Ksh. 50 Ksh, some flats are charged as 200 Ksh while others were charged 250 Ksh. From the observation, one group was observed to have recycled products from plastics. This group made ornaments for sale. However, most groups sorted out resalable waste products like plastics, glass and metal for sale.

Key informant response following marketing on solid waste recycled products did not yield much. When asked about marketing of youth solid waste recycled products, one had this to say:

*Most of the groups lack skills and machinery to recycle and covert solid waste products raw materials to marketable products. What I see them do is collect garbage, separate different raw materials for sale especially scrap metals and used bottles. Before the government ban on nylon papers, youths used to weave nylon paper baskets using different colors from the supermarkets; but they have since ceased. However, I have recorded a group in Babadogo that have great recycled branded artifacts using household waste like bones; done by persons with disability welfare group that target international markets.*

#### **4.9.1 Inferential analysis of marketing Skills and Performance of Youth Environmental Projects**

Correlation, regression analysis and hypothesis testing were conducted to determine the relationship between marketing skills and performance of youth environmental projects. These are further explained as follows;

### 4.9.2 Correlation of marketing Skills and Performance of Youth Environmental Projects

From table 4.20, the correlation output table shows that marketing skills were statistically insignificant where the (P-values under significant 2-tailed were all more than  $\alpha=0.05$ ) towards performance of youth environmental projects. Hence, the correlation index between marketing skills and performance was negative and insignificant,  $r(247) = -.023$ ;  $p \geq 0.05$ . This implies that marketing skills does not necessarily influence the performance of youth environmental projects.

**Table 4.20**  
**Correlation of Matrix between marketing Skills and Performance of youth environmental projects**

Variables	Performance	Marketing
Performance	Pearson Correlation	1
	Sig. (2-tailed)	-0.023
	N	0.722
Marketing	Pearson Correlation	248
	Sig. (2-tailed)	-0.023
	N	0.722
		1
		248

### 4.9.3 Regression analysis of marketing Skills and Performance of Youth Environmental Projects

Further, a Regression analysis was conducted between the marketing skills and performance to determine the relative contribution in terms of the variance that could be accounted by the independent variable towards the change in the dependent variable. From this analysis, it was observed from the model summary Table 4.21; 0.023 with an R square of 0.001 implying that the marketing skills variable could explain about -0.4 percent of the total variance in performance of youth project.

**Table 4.21****Regression analysis for marketing skills and performance of Youth Environmental Projects**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.023 <sup>a</sup>	0.001	-0.004	0.55090	0.001	0.126	1	246	0.722

a. Predictors: (Constant), marketing

To test whether this model was significant in enabling predictions containing the independent and dependent variable, the ANOVA table was produced and the results are as shown in Table 4.22

**Table 4.22****ANOVA Table showing Regression Model for marketing skills and Performance of youth environmental projects**

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	0.038	1	0.038	0.126	0.722 <sup>b</sup>
1	Residual	74.660	246	0.303		
	Total	74.698	247			

a. Dependent Variable: Performance

b. Predictors: (Constant), marketing

The ANOVA table showed that in the global model, marketing skills had insignificant prediction on performance of youth environmental projects, This implies that the levels of marketing skills possessed by youths may not necessarily be a good predictor of performance of youth environmental projects;  $F(1,246) = .126$   $p \geq .05$ .



**Table 4.23**  
**Coefficients<sup>a</sup> of marketing skills and performance of youth environmental projects.**

Model		Unstandardized Coefficients		Standardized	T	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	3.693	0.218		16.913	0.000
	marketing	-0.024	0.069	-0.023	-0.356	0.722

The table of regression coefficient (4.23) showed that the unstandardised beta coefficient for marketing skill to be 0.-024 The T value for marketing skill was insignificant, implying that for each unit increase in marketing management skills, performance of youth environmental projects could only increase by 0.-024units;  $T(247) = -0.356$ ;  $\beta = 0.0.-.024.$ ;  $P \geq .05$ .

#### 4.9.4 Hypothesis Testing

The study sought to assess the influence of marketing skills on the performance of youth environmental projects. Pearson correlation coefficient was used to test the relationship between marketing skills and performance of youth environmental projects. This was done at 95% level of confidence. In order to prove the validity of this claim, both correlation and regression analysis were run on the SPSS programme version 22 based on the decision criterion that any P-value less than the threshold of  $\alpha = 0.05$  would be considered significant and subsequently lead to the rejection of the null hypothesis and acceptance of the alternative hypothesis or fail to reject the null hypothesis when the P-value obtained is greater than the threshold of  $\alpha = 0.05$  while failing to accept the alternative hypothesis. From the findings of regression and correlation analysis, it can be depicted that marketing skills insignificantly influences the level of performance of youth environmental project,  $T(247) = -0.356$ ;  $\beta = 0.0.-.024.$ ;  $P \geq .05$  This therefore embraces the null hypothesis which stated that:  $H_0$ : There is no significant relationship between Marketing skills and performance of youth environmental projects in Nairobi County; and rejected alternative hypothesis:  $H_1$ : There is a significant influence of marketing skills on performance of youth environmental projects in Nairobi County. The model collapsed, hence the research findings concluded that marketing could not predict performance since as it had a zero coefficient.

#### 4.10 Combined Project Management Skills and Performance of Youth Environmental Projects

The Fifth objective of this study was to examine the extent to which combined project management skills influences the performance of youth environmental projects. Combined project management skills in this study context constituted of technical skills, financial management skills, Leadership skills and marketing skills.

##### 4.10.1 Correlation Analysis of combined Project Management Skills and Performance of Youth Environmental Projects.

Table 4. 24 presents the correlations of project management skills on performance of youth environmental projects in Nairobi County.

**Table 4.24**  
**Correlations of project management skills and performance of youth environmental projects.**

Variables		Technical skills	Financial	Leadership	marketing	MnEpractice	Performance
Technicalskills	Pearson Correlation	1	0.429**	0.093	0.041	0.249**	0.715**
	Sig. (2-tailed)		0.000	0.145	0.518	0.000	0.000
	N	248	248	248	248	248	248
Financial	Pearson Correlation	0.429**	1	-0.068	-0.031	0.061	0.525**
	Sig. (2-tailed)	0.000		0.286	0.632	0.342	0.000
	N	248	248	248	248	248	248
Leadership	Pearson Correlation	0.093	-0.068	1	0.077	0.215**	0.321**
	Sig. (2-tailed)	0.145	0.286		0.225	0.001	0.000
	N	248	248	248	248	248	248
Marketing	Pearson Correlation	0.041	-0.031	0.077	1	0.730**	-0.023
	Sig. (2-tailed)	0.518	0.632	0.225		0.000	0.722
	N	248	248	248	248	248	248
MnEpractice	Pearson Correlation	0.249**	0.061	0.215**	0.730**	1	0.196**
	Sig. (2-tailed)	0.000	0.342	0.001	0.000		.002
	N	248	248	248	248	248	248
Performance	Pearson Correlation	0.715**	0.525**	0.321**	-0.023	0.196**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.722	0.002	
	N	248	248	248	248	248	248

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

From table 4.24 the correlation index between technical skills and performance of youth environmental projects was positive and significant,  $r(247) = .715$ ;  $p \leq .05$ . This implies that as the level of technical skills increases, the performance also increases.

Correlation index between Financial management skills and performance of youth environmental projects was positive and significant,  $r(247) = .525$ ;  $p \leq .05$  portraying that financial management skills leveraged the performance of youth environmental projects.

Correlation index between Leadership skills and performance of youth environmental projects was positive but slightly insignificant,  $r(247) = .321$ ;  $p \geq .05$ . (.093) 2-tailed Pearson correlation

Correlation index between marketing skills and performance of youth environmental projects was negatively significant,  $r(247) = -.023$ ;  $p \geq .05$ ; (.518) 2-tailed Pearson correlation; showing that marketing could not predict performance of youth environmental projects.

#### 4.10.2 Regression Analysis of combined Project Management Skills and Performance of Youth Environmental Projects

Similarly, in order to determine the level of influence of combined project management skills on performance of youth environmental projects, a regression analysis was performed on the variables as shown in table 4.25 on Regression analysis.

A model Table 4.25 showed that the coefficient of correlation of combined project management variables was 0.810 with an R square of 0.656 implying that the combined project management variable could explain about 65% percent of the total variance in performance of youth project.

**Table 25**  
**Regression analysis between combined Project Management Skills and Performance of youth Environmental Projects.**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.810 <sup>a</sup>	0.656	0.649	0.32566	0.656	92.464	5	242	0.000

a. Predictors: (Constant), MnEpractice, Financial, Leadership, Technical skills, marketing

To test whether this model was significant in enabling predictions containing the combined predictor variables and dependent variable, the ANOVA table was produced and the results are as shown in Table 4.26

**Table 4.26**  
**ANOVA table showing Regression Model for combined Project Management Skills and Performance of Youth Environmental projects**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	49.033	5	9.807	92.464	0.000 <sup>b</sup>
	Residual	25.666	242	0.106		
	Total	74.698	247			

a. Dependent Variable: Performance

b. Predictors: (Constant), MnEpractice, Financial, Leadership, Technical skills, marketing

The ANOVA table showed that in the global model, combined project management skills had significant prediction on performance of youth environmental projects, This implied that the levels of project management skills possessed by youths may be a good predictor of performance of youth environmental projects;  $F(5,242) = .92.464$   $p \leq .05$ .

**Table 27**  
**Regression Coefficient of Project Management Skills and Performance of Youth Environmental Projects**

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.	
(Constant)	-0.672	0.297		-2.261	0.025	
1	Technical skills	0.482	0.038	0.552	12.568	0.000
	Financial	0.417	0.058	0.303	7.195	0.000
	Leadership	0.372	0.051	0.287	7.347	0.000
	Marketing	-0.097	0.061	-0.090	-1.586	0.114
	MnEpractice	0.079	0.108	0.043	0.729	0.467

The table 4.27 of regression coefficient showed that the unstandardised beta coefficient for: Technical skill to be 0.482. The T value for technical skill was insignificant,  $T(247) = -12.568$ ; Unstandardised beta coefficient for Financial management skills at 0.417, The T value for Financial management skills was significant,  $T(247) = 7.195$ ; unstandardised beta coefficient for Leadership skills at .372, The T value for leadership skill was significant,  $T(247) = 7.347$  unstandardised beta coefficient for marketing skills was  $-0.97$ , The T value for marketing skills was insignificant,  $T(247) = -1.586$ ; 0.079; unstandardised beta coefficient for Monitoring and evaluation practices at .079 , The T value for monitoring and evaluation practices was significant,  $T(247) = .729$ . Therefore:

$$Y_7 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon_i$$

$$Y_7 = -0.672 + 0.482 + 0.417 + 0.372 + (-0.097) + 0.079 + \epsilon_i$$

Hence, project management skills influence performance and are also good measures for performance of youth environmental projects; solid waste management projects.

#### **4.11 Monitoring and Evaluation Practices and performance of Youth Environmental Projects**

This was the sixth variable which measured the extent to which monitoring and evaluation practices influenced the performance of youth environmental projects. In order to achieve this, the respondents were asked to give their options based on their level of agreements or disagreements based on a Likert scale in which a numerical scale of 1-5 was provided where 1=strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The results were presented in Table 4.28

**Table 4. 28**  
**Monitoring and Evaluation Practices and performance of Youth Environmental Projects**

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Deviation
1. My group has impact evaluation reports over time on Project implementation processes.	179(72.2)	34(13.7)	35(14.1)	0	0	1.42	.727
2. The group holds evaluative consultative meetings on financial flows for shared profits and dividends	11(4.4)	4(1.6)	38(15.3)	167(67.3)	28(11.3)	3.79	.831
3. The most immediate results from our group projects are the outputs indicators which relates directly to our projects for continued improvement.	39(15.7)	48(19.4)	39(15.7)	106(42.7)	16(6.5)	3.05	1.230
4. We often hold consultative evaluation dissemination meetings between the group members and key informants and other stakeholders on solid waste management	2(.8)	58(23.4)	43(17.3)	127(51.2)	18(7.3)	3.41	0.952
5. We have recorded actual benefits and success stories by our group members as a result of outcomes achieved over time following the implementation of our environmental projects.	7(2.8)	118(47.6)	12(4.8)	111(44.8)	0	2.92	1.017
6. Group's strategic designs include allocation of time and budget framework for effective implementation.	0	86(34.7)	1(.4)	28(11.3)	133(53.6)	3.84	1.382
7. Team leaders ensure information emerging from M&E is fed back into our ongoing projects implementation and future planning.	151(60.9)	44(17.7)	38(15.3)	15(6.0)	0	1.67	.946
8. Our project promotes stakeholders participation in all our project related activities	53(21.4)	88(35.5)	16(6.5)	68(27.4)	23(9.3)	2.68	1.326
9. Project funders (GOK) has provided a common reporting framework and a standard M&E guidance to systematically demonstrate project results	206(83.1)	4(1.6)	38(15.3)	0	0	1.32	0.726
10. Customized application systems with project-specific indicators help team members track the project progress along a results chain to contribute to Vision 2030 social –economic pillars.	50(20.2)	17(6.9)	51(20.6)	114(46.0)	16(6.5)	3.12	1.259
11. A systematic assessment of youth group projects implementation capacity and needs can inform government funding towards scaling up or replicating youth social- economic innovations.	0	0	40(16.1)	175(70.6)	33(13.3)	3.97	0.543
<b>Composite mean and standard deviation.</b>						<b>2.83</b>	<b>.303</b>

Table 4.28 presents the responses of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County. The results were presented in mean and standard deviation. Eleven statements were developed to measure the extent to which monitoring and evaluation practices influenced the performance of youth environmental projects.

Statement (1) my group has impact evaluation reports over time on Project implementation processes, majority of respondents 179 (72.2%) strongly disagreed with the statement, 34(13.7%) respondents agreed and 35(14.1%) were neutral. This line item had a mean score of 1.42 and a standard deviation of 0.727 which was lower than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement negatively influence performance of youth environmental projects in Nairobi County. The findings disagrees with previous literature reviewed in this study on relevant project management skills that include savings and investment and the relationship between each critical success factors towards the realization of profits for impact assessment (Carson Cheng, 2013). This findings depicts the respondent's status on investments which could be low or nothing at all. This implies that if youth group projects have to make impact, then something must done right from their inception to closure.

Statement (2) The group holds evaluative consultative meetings on financial flows for shared profits and dividends, 167(67.3%) respondents agreed with the statement, 28(11.3%) strongly agreed, 38(15.3%) were neutral, 11(4.4%) respondents Strongly disagreed while 4(1.6%) disagreed. This line item had a mean score of 3.79 and a standard deviation of 0.831 which was higher than the composite mean of 2.83 and a standard deviation of 0.303, implying that the findings positively influence performance of youth environmental projects in Nairobi County. The findings concurs with study findings on the impetus of monitoring and evaluating budget to assess project performance (Carson- Cheng, 2013, which was also portrayed by the respondents in this study findings.

Statement (3) The most immediate results from our group projects are the outputs indicators which relates directly to our projects for continued improvement, 106(42.7%) respondents agreed with the statement, 16 (6.5%) strongly agreed with the statement, 48 (19.4%) disagreed while 39(15.7%) while 39(15.7%). This line item had a mean score of 3.05 and a standard deviation of 1.230 which

was higher than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement positively influence performance of youth environmental projects in Nairobi County. The findings concur with empirical study on complexity of evaluation which expounds on culturally responsive evaluation approaches (Bagele *et.al.*, 2016). This confirms that youths perform tacit monitoring and evaluation regardless of formal M&E systems within their projects as indicated by this study findings.

Statement (4) we often hold consultative evaluation dissemination meetings between the group members and key informants and other stakeholders on solid waste management, 127 (51.2%) agreed, 18(7.3%) strongly agreed, 58(23.4%) disagreed, 2(0.8%) strongly disagreed while 43(17.3%) were neutral. This line item had a mean score of 3.41 and a standard deviation of 0.952 which was higher than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement positively influence performance of youth environmental projects in Nairobi. This statement agrees with the exploratory study findings on monitoring and evaluation practices (Carson Cheng, 2013) that entails participatory approaches during project evaluation and dissemination, to enhance projects performance, which supports this study findings as well.

Statement (5) We have recorded actual benefits and success stories by our group members as a result of outcomes achieved over time following the implementation of our environmental projects, 118 (47.6%) respondents disagreed with the statement, 7(2.8%) strongly disagreed, 111(44.8%) agreed while 12(4.8%) were neutral. This line item had a mean score of 2.92 and a standard deviation of 1.017 which was higher than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement positively influence performance of youth environmental projects in Nairobi. This findings agrees with literature reviewed findings on factors influencing project success that entails timely data collection, documentation of reports and success stories including lessons learnt, which also supports the findings of this study.

Statement (6) Group's strategic designs include allocation of time and budget framework for effective implementation, 133(53.6%) respondents strongly agreed, 28(11.3%) agreed with the statement, 86 (34.7%) disagreed while 1(0.4%) respondents remained neutral. This line item had a



mean score of 3.84 and a standard deviation of 1.382 which was higher than the composite mean of 2.83 and a standard deviation of 0.303, implying that the findings positively influence performance of youth environmental projects in Nairobi. This findings approves the empirical study findings on developmental evaluation (Patton, 2010) which concludes that effective monitoring and evaluation practices entails projects strategic designs with a budget frame work to determine cost effectiveness during project implementation. This findings agrees with this study findings as established from the respondent's responses which implies that youth environmental groups have their tacit frame works and designs that guide their projects.

Statement (7) Team leaders ensure information emerging from M&E is fed back into our ongoing projects implementation and future planning, 151(60.9%) respondents strongly disagreed, 44(17.7%) disagreed, 15(6.0%) agreed, while 38(15.3%) were neutral. This line item had a mean score of 1.67 and a standard deviation of 0.946 which was much lower than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement negatively influence performance of youth environmental projects in Nairobi. This findings disagrees with the empirical study findings on managing effective evaluations which expounds on effects of stakeholders feedback and feed forward during project implementation (Rist, and Stame, 2006), implying that the respondents were not involved on projects processes; which support the findings of this study.

Statement (8) our project promotes stakeholders participation in all our project related activities, 88(35.5%), disagreed with the statement, 53(21.4%) strongly disagreed with the statement, 68(27.4%) respondents agreed, 23(9.3%) strongly agreed, while 16(6.5%) were neutral. This line item had a mean score of 2.68 and a standard deviation of 1.326 which was lower than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement positively influence performance of youth environmental projects in Nairobi. This findings disagrees with empirical study findings on stakeholder's engagement during project implementation by Patton, (2009) which elaborates on the impetus for bottom- up approach for project performance. This findings addresses the gap in knowledge in this study denoting that youth environmental groups ought to engage with stakeholders to enhance their solid waste projects performance. This findings alludes to culturally

responsive monitoring and evaluation practices where youths are mentored on project performance by other successful stakeholders through experiential learning.

Statement (9) Project funders (GOK) has provided a common reporting framework and a standard M&E guidance to systematically demonstrate project results, 206(83.1%) respondents strongly disagreed with the statement, 4(1.6%) respondents agreed while 38(15.3%) were neutral. This line item had a mean score of 1.32 and a standard deviation of 0.726 which was much lower than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement negatively influence performance of youth environmental projects in Nairobi County. This findings support the empirical study findings by Rist, *et.al.*; 2012, on building of evaluation capacity to strengthen governance which describes the importance of a monitoring and evaluation policy framework by governments towards effect programme implementation.

Statement (10) Customized application systems with project-specific indicators help team members track the project progress along a results chain to contribute to Vision 2030 social –economic pillars, 114(46.0%) respondents agreed with the statement, 16(6.5%) strongly agreed, 50(20.2%) strongly disagreed, 17(6.9%) respondents disagreed while 51(20.6%) were neutral. This line item had a mean score of 3.12 and a standard deviation of 1.259 which was higher than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement positively influence performance of youth environmental projects in Nairobi County. This findings agreed with empirical study findings on Utilization –focused evaluation using technology leverages (Quinn, 2008). The findings infers that customized application systems with project indicators can enhance performance on youth environmental projects through application programmes for tracking systematic project results.

Statement (11) A systematic assessment of youth group projects implementation capacity and needs can inform government funding towards scaling up or replicating youth social-economic innovations, 175(70.6%) respondents agrees with the statement, 33(13.3%)strongly agreed with the statement while 40(16.1%) were neutral. This line item had a mean score of 3.97 and a standard deviation of 0.543 which was much higher than the composite mean of 2.83 and a standard deviation of 0.303, implying that the statement positively influence performance of youth environmental projects in

Nairobi. This statement agrees with empirical findings by Cummings, (2000) on results based management which expounds on Logic models that can be used as tools for systematic assessment of youth groups during project implementation. These he indicates are a viable monitoring and evaluation project evaluation practices to enable build capacity using participatory action approaches and in return thrush out youth capacity building needs to inform future funding. This findings also supports literature reviewed in this study on explanatory monitoring and evaluation knowledge and understanding on how project indictors accelerate development (Nyonge, Ndunge and Mulwa (2012), which can be replicated or funded on varied scope which affirms the respondents view in this study findings.

Response by the key informants when interviewed on monitoring and evaluation practices was cutting across various project management components particularly financial management and leadership skills. When asked concerning an existing youth environmental monitoring and evaluation framework by the Directorate of youth, this is what he had to say;

*“We have already existing monitoring and evaluation forms designed to track the implementation of youth projects. We monitor attendance of the youth trainings using a designed list of participant which does not necessarily capture disaggregated data. We monitor the training sessions, the mode of delivery and the environment on which the youth capacity building sessions takes place. We take data on the number of participants’ attendance per training on life skills or on Core Business Training skills and key them on our Government provided Note pads; then send to the Headquarters for their analysis”.*

#### **4.11.1 Inferential analysis of Monitoring and Evaluation Practices and performance of Youth Environmental Projects**

Correlation, regression analysis and hypothesis testing were conducted to determine the relationship between Monitoring and Evaluation Practices and performance of Youth Environmental Projects. These are further discussed in subsequent themes:

#### 4.11.2 Correlations Analysis of Monitoring and evaluation practices and Performance of Youth Environmental Projects.

Table (4.29), the correlation output table shows that monitoring and evaluation practices characteristics were statistically significant (P-values under significant 2-tailed were all less than  $\alpha=0.05$ ) towards performance of youth environmental projects.

**Table 4.29**  
**Correlations Analysis of Monitoring and evaluation practices and Performance of Youth Environmental Projects**

		Performance	MnEpractice
Performance of youth environmental projects	Pearson Correlation	1	0.196**
	Sig. (2-tailed)		0.002
	N	248	248

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

From table 4.29, the correlation index between monitoring and evaluation and performance was positive and significant,  $r(247) = 0.196$ ;  $p \leq 0.05$ . This implies that as the level of monitoring and evaluation increases, the performance also increases.

Similarly, in order to determine the level of influence of monitoring and evaluation on performance, a regression analysis was performed on the variables as shown in table 4.30 on Regression analysis.

**Table 4.30**  
**Regression analysis of Monitoring and evaluation practices and Performance of Youth Environmental Projects.**

Model Summary

Model	R	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
				R Square Change	F Change	df1	df2	Sig. F Change	
1	0.196 <sup>a</sup>	0.038	0.034	0.54041	0.038	9.777	1	246	0.002

a. Predictors: (Constant), MnE practice

From this analysis, it was observed from the model summary table 0.196 with an R square of 0.38 implying that monitoring and evaluation practices variable could explain about 0.34 percent of the total variance in performance of youth project. This implies that monitoring and evaluation practices alone is not necessarily a good fit measure on performance. The findings established that 66 percent of the total variance is influenced by other culturally responsive monitoring and evaluation practices that are based on axiological philosophical paradigms that may collectively increase performance within a project significantly.

To test whether this model was significant in enabling predictions containing the moderating variable and dependent variable, the ANOVA table was produced and the results are as shown in Table 4.31

**Table 4.31**  
**ANOVA Table showing Regression Model of Monitoring and evaluation practices and Performance of Youth Environmental Projects**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.855	1	2.855	9.777	.002 <sup>b</sup>
	Residual	71.843	246	.292		
	Total	74.698	247			

- a. Dependent Variable: Performance
- b. Predictors: (Constant), MnEpractice

The ANOVA table showed that in the global model, monitoring and evaluation practices had significant prediction on performance of youth environmental projects, This implied that the levels of monitoring and evaluation practices possessed by youths may be a good predictor of performance of youth environmental projects; though not very significant  $F(5,242) = 9.777$   $p \leq .05$

**Table 4.32****Coefficients<sup>a</sup> Regression table of Monitoring and evaluation practices and Performance of Youth Environmental Projects**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.612	.323		8.086	.000
1 MnEpractice	.354	.113	.196	3.127	.002

The Table 4.32 of regression coefficient showed that the unstandardised beta coefficient for: monitoring and evaluation practices to be 0.354. The T value for monitoring and evaluation was significant,  $T(247) = 3.127$ .

**4.11.3 Hypothesis testing**

The study sought to assess the influence of Monitoring and evaluation practices and Performance of Youth Environmental Projects. Pearson correlation coefficient was used to test the relationship between Monitoring and evaluation practices and Performance of Youth Environmental Projects. This was done at 95% level of confidence. In order to prove the validity of this claim, both correlation and regression analysis were run on the SPSS programme version 22 based on the decision criterion that any P-value less than the threshold of  $\alpha=0.05$  would be considered significant and subsequently lead to the rejection of the null hypothesis and acceptance of the alternative hypothesis or fail to reject the null hypothesis when the P-value obtained is greater than the threshold of  $\alpha=0.05$  while failing to accept the alternative hypothesis. From the findings of regression and correlation analysis, it can be depicted that Monitoring and evaluation practices significantly influenced the level of performance of youth environmental project,  $F(5,242) = 9.777$   $p \leq .05$ . This therefore rejects the null hypothesis which stated that:  $H_0$ : There is no significant relationship between monitoring and evaluation practices and performance of youth environmental projects in Nairobi County; and accepted the alternative hypothesis:  $H_1$ : There is a significant influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.

**4.12 Moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects.**

This study also sought to examine the moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects in Nairobi County. The moderating analysis was performed on the combined variables using Andrew Hays’s (2018) conditional process analysis which integrates mediation and moderation analysis. This type of analysis is applicable in circumstances where one’s goal is geared towards understanding the conditional nature of the mechanism by which a variable transmits its effects on another (Hayes, 2018). Using the Ordinary Least Squares regression based path analysis, the moderation was determined through the application of the PROCESS tool for SPSS and the results of this analysis are as described in subsequent sub-themes

**Table 4.33**  
**Regression Coefficient of Moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance**

**Part A** of the process model in table 4.33 shows that the dependent variable (Y) is performance of youth environmental projects while the independent variable (X) is project management skills and moderating variable (W) is the monitoring and evaluation practices. The total sample size is given as 248.

Part A) Model	: 1
Y:	Performance of youth environmental projects
X:	Project management skills
W:	Monitoring and evaluation practices
Sample size : 248	

**Part B** shows the outcome variable in the process model is a regression model table which shows that the coefficient of regression is 0.7354 and its coefficient of determination as expressed by the R- square value is 0. 5409. Further, this model is said to be significant,  $F( 3,244) = 95.8126$ ,

$p \leq 0.05$ ). This therefore implies that the independent variables (project management skills and monitoring and evaluation) in the model can be able to explain about 54% of the total variance in the dependent variable (performance of youth environmental projects).

### Model Summary

R	R-sq	MSE	F	df1	df2	P
0.7354	0.5409	0.1406	95.8126	3.0000	244.0000	0.0000
Model						
	Coeff	Se	T	P	LLCI	ULCI
Constant	3.5980	0.0268	134.3489	0.0000	3.5452	3.6507
Project management skills	1.6366	0.1041	15.7269	0.0000	1.4316	1.8416
MnE practices	-0.5582	0.0974	-5.7303	0.0000	-0.7501	-0.3663
Int_1	0.3678	0.2516	1.4621	0.1450	-0.1277	0.8633

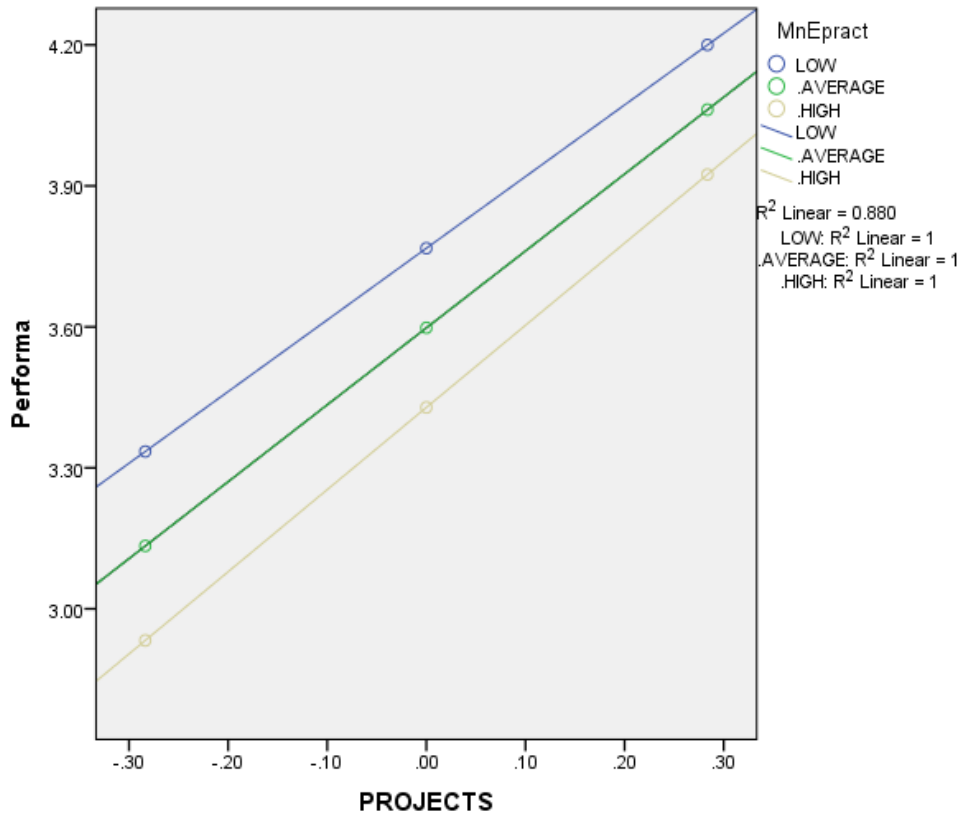
Data for visualizing the conditional effect of the focal predictor:

Projects management skills	MnE practice	Performance of youth environmental projects
-0.2836	-0.3035	3.3349
0.0000	-0.3035	3.7674
0.2836	-0.3035	4.1999
-0.2836	0.0000	3.1338
0.0000	0.0000	3.5980
0.2836	0.0000	4.0622
-0.2836	0.3035	2.9328
0.0000	0.3035	3.4286
0.2836	0.3035	3.9244

**Part C** of the table shows the syntax for the various points at which the conditional effect of the interaction was visualized namely; low, average and high levels of interaction. When this syntax



was run on the SPSS programme, it yielded an interaction graph thus confirming that the M&E practices do not moderate the relationship between project management skills and performance of youth environmental projects. Analysis of the slopes with regard to the independent variables and the interaction effect between monitoring and evaluation and project management skills in the model further depicted that project management skills have a significant influence on performance,  $b = 1.64$ ;  $t(247) = 15.73$ ,  $p = 0.000$ . This implied that a unit increase in project management skills would cause a change of about 1.64 units in the performance of youth projects. Also M&E has a significant but negative influence on performance of youth environmental projects in the study area;  $b = -.56$ ,  $t(247) = -0.57$ ;  $p = 0.000$ . This implies that a unit increase in M&E will cause performance to drop by 0.56 points. However, the interaction effect between M&E and the project management skills was not statistically significant,  $b = 0.37$ ,  $t(247) = 1.46$ ;  $p = 0.145$ . This implies there is no significant moderation effect of monitoring and evaluation on the relationship between project management and performance of youth environmental projects. Therefore the null hypothesis which stated that monitoring and evaluation does not have a significant moderating effect on the relationship between project management skills and performance of youth environmental projects in Nairobi County was accepted. This kind of relationship can be presented using the interaction graph figure 5:shi



**Figure 5: Interaction of variables between project management skills, Monitoring and evaluation practices and performance of youth environmental projects.**

From figure 5, it can be observed that performance of youth environmental projects increases as the level of project management skills increases. This relationship is not affected by the interaction of M&E and project skills at all levels i.e lower average and higher levels of M&E. Thus, the findings concludes that monitoring and evaluation practices regulate the implementation and performance of programs.

This study finding agrees with other scholarly reviews in this study that monitoring and evaluation practices regulate the implementation of programs, what evaluators should see, and how they should measure and report what they see. In developing countries, monitoring and evaluation has become the worst instrument of epistemological imperialism: an attempt to determine the kinds of facts to be gathered, the appropriate techniques for gathering and theorizing the data, and the generation of reports based on these marginalizing research processes. Unlike research where there is a choice on

using knowledge that is generated, monitoring and evaluation has accountability and utilization of evaluation results as one of its objectives. As a practice, monitoring and evaluation thus makes compelling judgments about the realities judged as relevant to measure accountability and about ways to improve interventions.

Responses to Focus Group Discussion and Interviews by the Key Informants from the Directorate of Youth Interviews were conducted with three youth Officers from the Ministry of public service, Youth and gender services. One out of the respondents to a questionnaire on views about a monitoring and evaluation practices when asked , informed by culturally responsive approaches world view, had this to say;

*“Kenya is too diverse to constitute a monolithic worldview in monitoring and evaluation in my opinion since diversity is manifest in all aspects of implementation of youth projects and so each local cultural context should be honored and valued, but not some mythical generic or archetypal western perspective since it is not useful to us. Monitoring and evaluation should be something that invokes us to do some evaluations for some reason, but it should not be a process that we should mainstream or apply across board for all youth projects for donors or funder reasons. I think that we will continue to do monitoring and evaluation traditionally.”*

. When the three youth officers were asked about their views on monitoring and evaluation practices on performance of youth environmental projects, they had this to say about their role in youth projects;

*“our role is to empower the youths and act as intermediaries between them and the government who is their primary donor”.*

When asked about how long they have you worked in the project, they gave varied period ranging between 2013 to 2018 and they all indicated that they had worked before in different offices within the ministry of youth prior segmentation of their ministries but in different capacities other that monitoring and evaluation officers.

*“They all reiterated that the goals of their youth environmental projects was to empower the youth through social-economic projects unanimously. They mentioned their key inputs being financial resource that cut across all other resources that they needed. Their outputs included their youth training manual and financial budgets across the training needs; outcomes being the application of their training skills by the youths towards the implementation of their environmental projects.”*

When asked whether they used monitoring and evaluation information and for what purpose, they had this to say

*” I use monitoring and evaluation information for reporting purposes based on the list of project indicators, and work plans stipulated on the annual work plan for youth docket, since they are the major beneficiaries. However, I do not have a specific framework from the office, so I apply tacit reporting formats that will reflect youth progress.*

While asked to discuss youth projects evaluation framework, evaluation design and analysis of the findings, they commented that;

*“Implementation of youth projects is guided by the objectives indicated in each Medium Term Plans so we plug in youth activities so as to report on expected outcomes by the end of each fiscal year”.*

While asked to describe their youth programme theory of change including the most critical elements to the success of youth environmental projects;

*“Vocational youth training for effective implementation of environmental projects; where youth would be exposed to more practical work as opposed to short term lecture mode. Champions of change in youth environmental projects ought to be publicly rewarded and success stories viewed through social media as a bait to other jobless youths in Kenya. In our view, it is our preference of having an effective*

*one youth funded budget within a common pool instead of having separate funds (Uwezo fund, Youth Enterprise Fund. Women Enterprise Fund). We also support the observation by the youth group leaders and sub-county officers that youths obtain funds interchangeably from all the set funds, presenting different projects but with poor implementation strategies; thus exacerbating loan defaulters and irregular repayment.” “These are emerging issues that hinder the implementation progress being as a result of lack of general awareness on immerging policies like affirmative actions, issues of equity during loan disbursement and youth nomadic nature that results to default of loans”.*

This, they reiterated inhibits their outcomes and the programme’s ability to monitor and evaluate the outcomes since they experience challenges during data collection and information gathering. However, the three Youth officers agreed that there was relevant publicly available data sources useful for project implementation from their records through the Ministry’s Youth Information management systems.

While asked how they would ‘grow’ the youth group teams to equip them to do good level of monitoring and evaluation to demonstrate impact; one had this to say;

*” By profiling monitoring and evaluation of youth group environmental projects to establish how environmental projects are interlinked through solid waste value chain; from collection, transportation and disposal. For example, manufacturing industry or Food security value chains where services and products are tagged along results value chain, thus creating jobs all along. We see active youths talented in bead work, brick making, door and floor mats sewing from solid waste. But they have inadequate market and value addition techniques to enhance their products for global markets”.*

When asked about the major challenges in relation to funding and the youth groups including their opinions on youth environmental projects; they all gave a mutual view;

*“A more viable groups funding need to be effected by grouping youth projects based on well researched projected indicators of change including Lessons learnt from previous successful small business enterprises that pose as big projects today. There is also inadequate use of evidence data to inform the implementation of the youth projects as a result of poor monitoring and evaluation practices, which is still new with lax political will”. However, I feel youth environmental projects could uplift our youths if only the government could be more keen on funding and providing technical and financial management skills to youths on diverse environmental projects. For example, with the help of the government, youths can venture in to Blue economy marine environmental projects, solid and inorganic waste projects, tree planting (food security); fruit and medicinal nurseries, then environment should be the next employer to curb the bulging youth unemployment menace”.*

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents summary of findings, conclusions and recommendations. The chapter also presents contribution of the study to the body of knowledge and areas for further research.

#### 5.2 Summary of Findings.

This section presents summary of findings based on the following sub-thematic areas:

##### 5.2.1 Technical Skills and Performance of Youth Environmental Projects

This part highlights the findings of the first research objective which was to examine the influence of technical skills on performance of youth environmental projects. The measurement of this objective had five indicators. The response towards youth offering quality waste services in transportation of solid waste without contaminating the air, land or water sources had the highest mean (4.63) and the standard deviation was 0.596. This findings indicated that most youths (69%) were conscious of environmental conservation. Similarly, most youths (69%), acknowledged the importance of quality services during the transportation of solid waste without contaminating air, land or water sources as a technical skill while implementing solid waste projects.

The findings on the size of the population receiving collection services being equivalent to solid waste collection bags distributed per house hold had a mean score of 3.64 and a standard deviation of 1.216 which was much higher than the composite mean of 3.51 and a standard deviation of 0.630. This implied that youths had made concerted efforts to ensure each household (32%) conserves the environment by providing solid waste collection bags per household. The ANOVA showed the global model where technical skills predicted performance as a good fit, signifying that it was a good predictor of performance of youth projects;  $F(1/246) = 93.746$ ;  $p \leq .05$ . The correlation index between overall technical skills and performance was positive and significant,  $r(247) = .715$ ;  $p \leq .05$ . Following this findings of regression and correlation analysis, it was depicted that technical skills significantly influenced the level of performance of youth environmental project.

### **5.2.2 Financial Management Skills and Performance of Youth Environmental Projects.**

The second objective in this study was to examine the extent to which Financial Management skills influenced the performance of youth environmental projects. The measure of this objective had Five indicators which were developed to measure the extent to which Financial Management skills influenced the performance of youth environmental projects.

Findings on group spending their savings when they run out of money before subsequent government funding had the highest mean (3.65) and the standard deviation was 0.931. This result indicated that (77%) of the respondents strongly agreed that they spent their group savings when they run out of money before the next government funding arrived which reflected a gap in financial acumen amongst youths. Findings on whether group members understood parameters that determined Services offered by banks and other financial intermediaries had a mean score of 2.33 and the standard deviation was 0.903. This result validated why the majority (83.1%) of the respondents disagreed that groups had a robust Knowledge management system for all entries and expenditures. The correlation index between financial management and performance was positive and significant,  $r(247) = .525$ ;  $p \leq .05$ . This implied that as the level of financial skills increased, the performance also increased.

A model table 4.12 showed that the coefficient of correlation was 0.525 with an R square of 0.276 implying that the financial management skills variable could explain about 47 percent of the total variance in performance of youth project. Regression coefficient table (4.14) showed that the unstandardised beta coefficient for financial management skills was 0.724. The T value for financial skill was also significant, which implied that for each unit increase in financial management skills, performance of youth environmental projects could increase by 0.724 units; In conclusion, findings of regression and correlation analysis;  $T(247) = 9.682$ ;  $\beta = 0.724$ ;  $P \leq .05$ , indicated that financial management skills significantly influenced the level of performance of youth environmental project.

### **5.2.3 Leadership Skills and Performance of Youth Environmental Projects**

This part highlights the third research objective that intended to measure the extent to which leadership skills influenced the performance of youth environmental projects. The measurement of



this objective was effected through five indicator statements. Findings on the four indicator statements had synonymous score of 4.66 and equal standard deviation of 0.476 with equal majority of responds (65.7%) who strongly agreed that a leader's best asset is the ability to motivate and inspire a team of professionals who can work together to achieve the goals of the organization; signifying strategic and operational leadership skills. Findings on Self-determination, independence and competence conferred to be the conditions that increases a leader's enthusiasm and motivation which had a mean score of 3.95 and a standard deviation of 0.538. The study findings implied that the majority of the respondents (71%) strongly agreed that leadership management skills played a major role on performance of youth environmental projects.

From the findings, the correlation output table showed that leadership skills characteristics were statistically significant (P-values under significant 2-tailed were all less than  $\alpha=0.05$ ) against performance of youth environmental projects. Hence, the correlation index between leadership skills and performance was positive and significant,  $r(247) = .321$ ;  $p \leq .05$ . This implied that as the level of leadership skills increased, the performance also increased. Similarly, the table of regression coefficient (4.18) showed that the unstandardised beta coefficient for leadership skill was 0.415. The T value for leadership was also significant which implied that for each unit increase in leadership skills, performance of youth environmental projects increased by 0.415 units; The findings of regression and correlation analysis;  $T(247) = 5.307$ ;  $\beta = 0.0.415$ .;  $P \leq .05$ , concluded that leadership skills significantly influence the level of performance of youth environmental project.

#### **5.2.4 Marketing Skills and Performance of Youth Environmental Projects**

The fourth research objective was to measure the extent to which marketing skills influenced the performance of youth environmental projects. The measurement of this objective had five indicator statement. The correlation output table showed that marketing characteristics were statistically insignificant (P-values under significant 2-tailed were all more than  $\alpha=0.05$ ) towards performance of youth environmental projects. Hence, the correlation index between marketing skills and performance was negative and insignificant,  $r(247) = -.023$ ;  $p \geq .05$ . This implied that marketing skills do not necessarily influence the performance. Similarly, the table of regression coefficient (4.23) showed that the unstandardised beta coefficient for marketing skills to be 0.0-024. The T value for

marketing skills was insignificant, implying that for each unit increase in marketing management skills, performance of youth environmental projects could only increase by -0.024 units; From the findings of regression and correlation analysis;  $T(247) = -0.356$ ;  $\beta = 0.0$ -0.024.;  $P \geq 0.05$ ., it was depicted that marketing skills insignificantly influence the level of performance of youth environmental project .

#### **5.2.5. Combined Project Management Skills and Performance of Youth Environmental Projects.**

This part highlights the fifth research objective that intended to measure the extent to which combined project management skills influences the performance of youth environmental projects. All project management skills in this study context was measured through four project management skills Indicators that entailed of; technical skills, financial management skills, Leadership skills and marketing skills. From findings, correlation index between technical skills and performance was positive and significant,  $r(247) = .715$ ;  $p \leq 0.05$ . This implies that as the level of technical skills increases, the performance also increases.

Correlation index between Financial management skills and performance was positive and significant,  $r(247) = 0.525$ ;  $p \leq 0.05$  portraying that financial management skills leveraged the performance of youth environmental projects. Correlation index between Leadership skills and performance was positive but slightly insignificant,  $r(247) = 0.321$ ;  $p \geq 0.05$ . (0.093) 2-tailed Pearson correlation and Correlation index between marketing skills and performance was negatively significant,  $r(247) = -0.023$ ;  $p \geq 0.05$ ; (0.518) 2-tailed Pearson correlation; showing that marketing could not predict performance of youth environmental projects. From the findings, a model table showed that the coefficient of correlation of combined project management variables was 0.810 with an R square of 0.656 implying that the combined project management variable could explain about 65% percent of the total variance in performance of youth project. This implied that the levels of project management skills possessed by youths may be a good predictor of performance of youth environmental projects.

### **5.2.6 Monitoring and Evaluation Practices and Performance of Youth Environmental Projects**

This part shows the results of the sixth variable which measured the extent to which monitoring and evaluation practices influenced the performance of youth environmental projects. The measurement of this objective had eleven statements indicators. The indicator statement on the systematic assessment of youth group projects implementation capacity and needs can inform government funding towards scaling up or replicating youth social-economic innovations had the highest mean (3.97) and the standard deviation was 0.543. of which was much higher than the composite mean of 2.83 and a standard deviation of 0.303. The findings indicated that (70.6%) agreed that a systematic assessment of youth group projects implementation capacity and needs can inform government funding towards scaling up or replicating youth social-economic innovations.

The findings concluded that though groups lacked M&E understanding, they believed it should be incorporated in their operations and also evaluation and constant assessment of youth projects in Kenya should be conducted. From the findings, the correlation output table showed that monitoring and evaluation practices characteristics were statistically significant (P-values under significant 2-tailed were all less than  $\alpha=0.05$ ) against performance of youth environmental projects. Hence, the correlation index between monitoring and evaluation practices and performance was positive and significant,  $r(247) = .196$ ;  $p \leq .05$ . This implied that as the level of monitoring and evaluation practices increased, the performance also increased. Similarly, in order to determine the level of influence of monitoring and evaluation practices on performance, a regression analysis was performed. The table of regression coefficient (Table 4.32) showed that the unstandardised beta coefficient for monitoring and evaluation practices to be 0.354. The T value for monitoring and evaluation practices was also significant,  $T(247) = 3.127$ ;  $\beta = 0.354$ .;  $P \leq .05$ . implying that for each unit increase in monitoring and evaluation skills, performance of youth environmental projects could increase by 0.354 units; Monitoring and evaluation practices significantly influence performance of youth environmental projects in Nairobi County

### 5.2.7 Moderating influence of Monitoring and Evaluation Practices on the relationship

#### between Project Management skills and Performance of Youth Environmental projects.

This part shows the seventh variable which measured the extent of Moderating influence of Monitoring and Evaluation Practices on the relationship between Project Management skills and Performance of Youth Environmental projects. From the analysis, it was found that the interaction effect between M&E and the project management skills was not statistically significant,  $b = .37$ ,  $t(247) = 1.46$ ;  $p = .145$ . This implied that there is no significant moderation effect of monitoring and evaluation on the relationship between project management and performance of youth environmental projects. The conclusion derived therefore indicates that Monitoring and evaluation influences performance directly.

### 5.2.8 Summary of Tests on Hypothesis

**Table 5.1**

**Summary of Hypothesis Models and Results.**

Research objective	Hypothesis	Interpretation of results
To examine the influence of technical skills on performance of youth environmental projects in Nairobi County.	1H <sub>0</sub> : There is no significant relationship between Technical skills and performance of youth environmental projects in Nairobi County.	H <sub>0</sub> rejected  ( $\beta = .624$ , $t(247) = 16.1$ , $p \leq .05$ )
To assess the influence of financial management skills on performance of youth environmental projects in Nairobi County.	2H <sub>0</sub> : There is no significant relationship between Financial skills and performance of youth environmental projects in Nairobi County.	H <sub>0</sub> rejected  ( $\beta = .72$ , $t(247) = 9.7$ , $p \leq .05$ )
To determine the influence of Leadership skills on the performance of youth environmental projects in Nairobi County.	3H <sub>0</sub> : There is no significant relationship between Leadership skills and performance of youth environmental projects in Nairobi County.	H <sub>0</sub> rejected  $\beta = .42$ , $t(247) = 5.3$ , $p \leq .05$ )
To establish the influence of marketing skills on the performance of youth environmental projects in Nairobi County.	4H <sub>0</sub> : There is no significant relationship between Marketing skills and performance of youth environmental projects in Nairobi County.	H <sub>0</sub> accepted  ( $\beta = -0.024$ , $t(247) = -0.356$ , $p = 0.722$ )

<b>Research objective</b>	<b>Hypothesis</b>	<b>Interpretation of results</b>
To determine the influence of Combined Project management skills on performance of youth environmental projects in Nairobi County	5H <sub>0</sub> : There is no significant relationship between Combined Project management skills and Performance of youth environmental projects in Nairobi County.	H <sub>0</sub> rejected  (-0.672 +0.482+0.417+0.372+ ε )
To determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.	6H <sub>0</sub> : There is no significant relationship between Monitoring and evaluation practices and performance of youth environmental projects in Nairobi County.	H <sub>0</sub> rejected  (β=.354 t(247)=3.13,p≤.05).
To establish the moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects in Nairobi County.	7H <sub>0</sub> : There is no significant Moderating influence of monitoring and evaluation practices on the relationship between project management skills and performance of youth environmental projects	H <sub>0</sub> accepted  β= 0.37, t (247) = 1.46; p = 0.145

### **5.3 Conclusions**

This section presents the conclusions for the study of project management skills, monitoring and evaluation practices and performance of youth environmental projects; a case of Nairobi County. The dependent variable was performance of youth environmental projects in Nairobi County. Research objective one was to examine the influence of technical skills on performance of youth environmental projects in Nairobi County. Five items were developed to measure the extent to which technical skills influenced performance of youth environmental projects in Nairobi County. Key performance indicators for technical skills were the level of oversight management skills to oversee landfill sites and the quality of service rendered in solid waste management projects by youth groups. The correlation index between overall technical skills and performance was positive and significant. This implied that as the level of technical skills increased, the performance also increased. Similarly there was relatively high degree of positive correlation exhibited between the various bivariate variables implying that technical skills predicted performance as a good fit. Technical skills was found to statistically significantly influence performance of youth environmental projects in Nairobi County, thus, rejection of the null hypothesis.

Objective two in this study was to assess the influence of financial management skills on performance of youth environmental projects in Nairobi County. Five items were developed to measure the extent to which financial management skills influenced performance of youth environmental projects in Nairobi County. Key performance indicators for financial management skills were availability of budgets, level of savings, level of knowledge management and audit reports. The correlation index between financial management skills and performance was positive and significant. This implied that as the level of financial skills increased, the performance also increased. Similarly there was relatively high degree of positive correlation exhibited between the various bivariate variables implying that financial management skills predicted performance as a good fit. Financial management skill was found to statistically significantly influence performance of youth

Objective three in this study was to determine the influence of Leadership skills on the performance of youth environmental projects in Nairobi County. Five items were developed to measure the extent to which leadership skills influenced performance of youth environmental projects in Nairobi

County. Key performance indicators for leadership skills were cognitive that included level of professionalism, level of integrity, effective communication strategies and competence. The correlation index between leadership skills and performance was positive and significant. This implied that as the level of leadership skills increased, the performance also increased. This implied that as the level of leadership skills increased, the performance also increased. Similarly there was relatively high degree of positive correlation exhibited between the various bivariate variables implying that leadership skills predicted performance as a good fit. Leadership skills was found to statistically significantly influence performance of youth environmental projects in Nairobi County, thus, rejection of the null hypothesis.

Objective four in this study was to establish the influence of marketing skills on the performance of youth environmental projects in Nairobi County. The correlation index between marketing skills and performance was negative and insignificant. This implied that marketing skills could not necessarily influence the performance. Similarly there was negative correlation exhibited between the various bivariate variables implying marketing skills was insignificant, implying that for each unit increase in marketing skills, performance of youth environmental projects could only increase by negative units. From the findings of regression and correlation analysis, it was depicted that marketing skills insignificantly statistically influences performance of youth environmental projects in Nairobi County, thus, acceptance of the null hypothesis.

Objective five in this study was to determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County. Eleven items were developed to measure the extent to which leadership skills influenced performance of youth environmental projects in Nairobi County. Key performance indicators for monitoring and evaluation practices included monitoring and evaluation plans, evaluation reports, training schedules, documentation, funding track records, reporting framework, dissemination and feedback reports. The correlation index between monitoring and evaluation practices and performance was positive and significant. The findings accepted alternative hypothesis. There is a statistical significant influence performance of youth environmental projects in Nairobi County, thus, rejection of the null hypothesis.

## **5.4 Recommendations**

This section presents recommendations made in the study based on the research findings.

### **5.4.1 Recommendations for Policy actions**

1. It is instrumental for youths to gain skills to apply for compliancy with current legislation in the transportation, handling and disposal of solid waste including knowledge on pollution so as offer quality waste services in transportation of Solid Waste without contaminating air, land or water sources. The government should provide youths with project management skills that include oversight technical management skills on schemes to oversee solid waste management and landfill sites; for job creation in reducing, reuse and recycling solid waste for job creation.
2. Policy actions by government to incorporate youths to learn project management skills under mentorship programs from corporations, firms and other public entities so as to incubate their skills for effective projects performance.
3. The study recommends pulling together of a common funding accessible to all youths by the government of Kenya. This is in consensus from the study findings that indicate that the linkage amid human capital and performance is grounded on two theoretical strands that include resource-based view of the project and the expectancy theory of motivation.
4. Policy Actions by the government to reinforce overall projects/programs performance in Kenya by embracing monitoring and evaluation as a tool for governance by enacting a monitoring and evaluation policy supported by an Act of parliament, so as to govern the implementation of youth projects; save, the organizations that deal with youth environmental projects.

### **5.4.2 Recommendations for practice**

1. Setting up of easy to understand accounts that are easily accessible is highly recommended. This is to encourage youths on the very lowest incomes to open an account with simplicity for savings and bonus payments to give them greater effects with interests due to involvedness in financial products normally, combined with youth 's lack of financial management know-how and understanding which discourages them from using formal



saving products. This was compounded by a lack of products with a simple expression of returns and a scarcity of easy-to-read financial management information. Financial intermediaries have an essential role to play as a source of information and advice to youth.

2. The study therefore recommends monitoring and evaluation practices that include basic research; status assessment; and effectiveness measurement, performance evaluation framework, by developing a Theory of change Project Management Model (ToCPMM). The purpose of this performance model is to illustrate a sequence of cause-and-effect relationships discussion between different stakeholders groups on the context the initiative is seeking to influence including other actors able to influence change.

### **5.5 Suggestions for Further Research**

1. This study was delimited to Nairobi County only and the topic delimited to project management skills, monitoring and evaluation practices and performance of youth environmental projects. However, a study can be replicated in other various regions in Kenya to improve the generalization of the results or for exploration of other variables which may produce varied results when considering their relationship with the interaction of project management skills and performance.
2. There is compelling reason to debate on the assumptions about the nature of reality (ontology), knowledge (epistemology), and values (axiology) that inform evaluation inquiry and practice. Hence, a need to research on Afro-centric epistemological approaches towards evaluations on performance of youth projects in African set up.
3. African developing countries, including Kenya have political influence playing a significant role in project management, more so in the public sector (Atieno, 2012). One of the models that is employed by the politicians in scheming projects in form of “sacred cow” model where the politician or a powerful person in the organization dictates on the projects to be implemented (Asaka et’al, 2012). Political influence is projected in youth project and this affects the monitoring and the evaluation aspect. A research may be conducted to examine the effects of political influence on monitoring and evaluation and how it affects the project success.

## 5.6 Contribution to the Body of Knowledge.

**Table 5.2**

**Contribution of the study to body of knowledge**

	<b>Objective</b>	<b>Contribution to knowledge</b>
1	To examine the influence of technical skills on performance of youth environmental projects in Nairobi County.	The findings depicted that technical skills significantly influenced the level of performance of youth environmental projects and could explain about 51.2 percent of the total variance in performance of youth projects. To achieve the 48.8%, findings indicate that complexity of Solid waste Project requires youth to learn through apprenticeship and incubation centers for effective performance. These include setting out the right kinds of partnerships, types of forums, particular kinds of technical assistance, tools and processes that help youth operate more collaboratively and be more results focused.
2	To assess the influence of financial management skills on performance of youth environmental projects in Nairobi County.	The correlation index between financial management skills and performance was positive and statistically significant, implying that as the level of financial skills increased, the performance also increased, explaining about 27.6 percent of the total variance in performance of youth environmental projects. This findings infers to more robust project financial management training paradigms and exposure since most youths have basic financial knowledge with no skills at face validity. This would expose the youths to other 72.4 percent parameters that determine financial services, financial entries and knowledge management systems and audits including youth based financial networks and linkages. This is with an anticipated outcome to inculcate a saving and investment (job creation) culture among Kenyan youths on the rationale that the correlation between financial management skills and performance is significant.
3	To determine the influence of leadership skills on the performance of youth environmental projects in Nairobi County.	Findings indicated that leadership skills variable could explain about 99 percent of the total variance in performance of youth environmental projects. All groups believed that leadership was key in running and sustaining their groups, signifying very promising cultural responsive

	<b>Objective</b>	<b>Contribution to knowledge</b>
		practices that even though the groups lacked any formal training on leadership skills, they at least understood the basics of holding groups together through youth led leadership. The finding inferred leadership being more of in born virtue exhilarated within a given phenomenon. They are inherent; youth have their tacit ways that are not culturally biased and neutral to leadership paradigms trapped in the historical moment dominated by global capitalism.
4	To establish the influence of marketing skills on the performance of youth environmental projects in Nairobi County.	The correlation index between marketing skills and performance was negative and insignificant. This implied that marketing skills could not necessarily influence the performance of youth environmental projects. However, taking the form of literature reviewed and the respondents responses, this study illustrates how marketing would contribute to marketing of youth environmental projects- products, segmentation of their market, potential of Intellectual Property as a marketing’ tool for expanding market share and creating new market especially from a project perspective.
5	To determine the influence of monitoring and evaluation practices on performance of youth environmental projects in Nairobi County.	This study findings addressed the specific link between monitoring and evaluation practices in relation to the performance of youth environmental projects which could explain about 34 percent of the total variance in performance of youth environmental projects implying that M&E practices alone is not a good fit to measure performance of selected youth government funded projects. The findings established that 66 percent of the total variance is influenced by other culturally responsive monitoring and evaluation practices based on axiological philosophical paradigms increases performance within a project significantly. These comprises of youth environmental projects stories during the implementation and who is telling them, How one respectfully enters (buy- in) in to a given community (residential areas) to market on quality SWM as designated group project, the dimensions of diversity that are most salient

	<b>Objective</b>	<b>Contribution to knowledge</b>
		within that community and how external forces (PESTEL) are distributed, both formally and informally within a project scope.
	Moderating influence of Monitoring and Evaluation Practices on the relationship between Project Management skills and Performance of Youth Environmental projects	The study findings illustrated that can be observed that performance of youth environmental projects increases as the level of project management skills increases. The results of the findings illustrated the Interaction of variables between project management skills, Monitoring and evaluation practices and performance of youth environmental projects. It implied that the relationship is not affected by the interaction of M&E and project skills at all levels i.e lower average and higher levels of M&E. The conclusion derived thus is that M&E directly influences performance but does not necessarily influence the relationship between Project management skills and Performance.

## REFERENCES

- A report on Financial Knowledge and Behavior Survey (2013), Report prepared for Commission for Financial Literacy and Retirement; Income, Reference: 109104260
- Abteu A. A. Pretzsch J, Secco L, & Mohamod T. E. (2014). Contribution of Small-Scale Gum and Resin; *Commercialization to Local Livelihood and Rural Economic Development in the Drylands of Eastern; Africa. Forests*, 5, 952-977.
- Adebayo Eludoyin (2014) *African Journal of Environmental Science and Technology*; Obafemi Awolowo University, Nigeria
- Achankeng, E. (2003). Globalization, Urbanizations and Municipal Solid Waste Management in Africa. African; Studies Association of Australia and the Pacific. Conference Proceedings-Africa on a Global Stage
- Acharya, B. Y., Kumar, V., Satyamurti, R., & Tandon. (2006). Reflections on Participatory Evaluation - the Private Voluntary Organization for Health-II (PVOH) Experience. Paper presented for the International Conference on Participatory Monitoring and Evaluation: Experience and Lessons. Cavite, Philippines.
- Ackermann, F., Eden, C., & Cropper, S. (1993). Cognitive Mapping: Getting Started with Cognitive Mapping.
- Adomako, S., & Albert, D. (2014). Financial Literacy and Firm performance: The moderating role of financial capital availability and resource flexibility.
- Afon, A. (2012). "A survey of operational characteristics, socioeconomic and health effects of scavenging activity in Lagos, Nigeria", *Waste Management and Research*, 30(7).
- Africa Waste Management Outlook - Summary for Decision-makers; United Nations Environment Programme UNEP (2011)
- Agwu, M. O. (2014). Issues, challenges and prospects of Small and Medium Scale Enterprises (SMEs) in Port-Harcourt City, Nigeria. *European Journal of Sustainable Development*, 3:101-114.
- Ahlemann, F., El Arbi, F., Kaiser, M. & Hexk, A. (2013). A process framework for theoretically grounded prescriptive research in the management field. *International Journal of Project Management*, 31(1), 43-56.
- Ahmed, S. A., & Ali, S. M. (2006). People as partners: facilitating people's participation in public private partnerships for solid waste management. *Habitat International*, 30, 781e796

- Akermans, H., & van Helden, K. (2002). Vicious and virtuous cycles in ERP implementation. *European Journal of Information Systems*, 11(1), 35-46.
- Aktan, B. & Bulut, C. (2008). Financial performance impacts of corporate entrepreneurship in Emerging markets: A case of Turkey. *European Journal of Economics, Finance and Administrative Sciences*, 12: 69-79.
- Alan Sawyer (2012): Marketing strategy and the internet: An organizing framework: Journal of the Academy of Marketing Science
- Alarape, A. A. (2013). Project orientation and the growth performance of small and medium enterprises in Southwestern Nigeria. *Journal of Small Business and Entrepreneurship*, 26(6): 553-577.
- Alasadi, R. & Abdelrahim, A. (2007). Critical analysis and modelling of small business performance (case study: Syria). *Journal of Asia Entrepreneurship and Sustainability*, 3(2): 1-131
- Alex O. Awitti & Bruce Scott (2016); The Kenya Youth Survey Report1 January 18, Agah khan University
- Alexander, M., (2015), "Communication Skills of Effective Project Leaders". [Online] Available: <http://www.cio.com/article/2882199/projectmanagement/11-communicationskills-of-effective-projectleaders.htm>
- Aliu, I R, Adeyemi, O E, & Adebayo, A. (2014). Municipal household solid waste collection: analysis of public private partnership performance in Lagos
- Alivert Cabrera (2014) Business Process Improvement, Leadership and Team Building; Santa Ana California.
- Allan Bryman (2009).Mixed methods in organizational Research in D.A .Buchanan and A.Bryman (eds) SAGE Handbook of organizational Research methods L and, Sage
- Allard, C., Goldblatt, P., Kembball, J., Kendrick, S., Millen, J. & Smith, D. (2007). Becoming a reflective community of practice, *Reflective Practice*, Vol. 8 No. 3, pp. 299-314.
- Alojaiiri, A. & Safayeni, F. (2012). The dynamics of inter-node coordination in social networks: a theoretical perspective and empirical evidence. *International Journal of Project Management*, 30(1), 15-26.
- Altuwaijri, M. M. & Khorsheed, M. S. (2012). Inno Diff: a project-based model for successful IT innovation diffusion. *International Journal of Project Management*, 30(1), 37-47
- Andrew F. Hayes, Ph.D. Documentation available in Hayes (2018). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

- Angen, M. J. (2000). Evaluating interpretive inquiry: Reviewing the validity debate and opening the dialogue. *Qualitative Health Research*
- Anja, K. (2010). Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior; *Environmental Education Research Published online*
- Anthony Abayomi Adebayo (2014) Youths' unemployment and crime in Nigeria: A nexus and implications for national development Department of Sociology, Federal University Oye-Ekiti, Ekiti State, Nigeria.
- Asghar Ghasemi, Saleh Zahediasl (2012): Normality Tests for Statistical Analysis: A Guide for Non-Statisticians Spring; 10(2): 486–489. Published online 2012 Apr 20. doi: 10.5812/ijem.3505.
- Association of Experiential Education, (2006). Retrieved March 25, 2006, from <http://www.aee.org/>  
Bracey, Gerald W. (2003).
- Atieno, M. (2012). A critical success factors framework that includes leadership competencies for successful delivery of projects (Doctoral dissertation). University of Salford. Retrieved from Dissertations and Theses database. (<http://usir.salford.ac.uk/30638/>)
- Awiti and Scott (2016); Aga Khan University Bruce Scott. The Kenya Youth Survey Report
- Bagele Chilisa, Thenjiwe Emily Major, Michael Gaotlhobogwe & Hildah Mokgolodi (2016): Decolonizing and Indigenizing Evaluation Practice in Africa: Toward African Relational Evaluation Approaches; University of Botswana.
- Bamberger, M., & Shabbir, C. (1990). *Project performance: Case study from Bangladesh*, Washington D.C: World Bank.
- Bamberger, Michael and Shabbir Cheema (1994). *Project performance: Case study from Bangladesh*, World Bank: Washington D.C
- Banerjee, A., Chitnis, U. B., Jadhav, S. L., Bhawalkar, J. S., & Chaudhury, S. (2009). Hypothesis testing, type I and type II errors. *Industrial psychiatry journal*, 18(2), 127-31.
- Barbara, G. (1986). *Teaching Evaluation across Discipline, Directors for program Evaluation*, San Francisco: Jossey – Bass.
- Baruch C. Holtom First Published August 1, 2008 Research Article information, <https://doi.org/10.1177/0018726708094863>, UEA Norwich, UK.
- Bass, B. M. (1996). *A new paradigm of leadership: An inquiry into transformational leadership*. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences

- Bass, B. M., & Riggio, R. E. (2010). The transformational model of leadership. In G. R. Hickman (Ed.), *Leading organizations perspectives for a new era* (2nd ed., pp. 76–86).
- Baum, S., & Payea, K. (2004). Education Pays2004: The Benefit of Higher Education for Individuals and Society. *The College Entrance Examination Board*. Retrieved February 26, 2006 from <http://www.collegeboard.com>.
- Becker, G. S. (1964). *Human capital*. New York: National Bureau of Economic Research
- Bercow, J. (2008). *DCSF 19: The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs*, London: Palgrave
- Berliner & Biddle (1995). *The manufactured crisis: Myths, fraud, and the attack on America's public schools*. Reading, MA: Addison-Wesley
- Berman, M., Jonides, J., & Kaplan, S. (2008). The Cognitive Benefits of Interacting With Nature. *Psychological*
- Best and James V. Kahn (2006) Introduction to Educational Research,” purpose of research, hypotheses, ethics in research: University of Illinois, Chicago, USA
- Berson, Y., Nemanich, L. A., Waldman, D. A., Galvin, B. M., & Keller, R. T. (2006). *Leadership and organizational learning: A multiple levels perspective*. Thousand Oaks, CA: Sag
- Bishop, P. A., & Herron, R. L. (2015). Use and Misuse of the Likert Item Responses and Other Ordinal Measures. *International journal of exercise science*, 8(3), 297-302.
- Bless, C., Highson-Smith, C. & Sithole, S.L. (2013). *Fundamentals of social research method. An African perspective*. 5th edn. Cape Town: Juta.
- Boateng, G.O., Boateng, A.A. & Bampoe, H.S. (2014). Barriers to youth entrepreneurship in ana: A case study of Komenda-Edina-Eguafo-Abirem (KEEA) in the central region of Ghana. *Global Conference on Business and Finance proceedings*, 9: 460-471.
- Bon G. H. Wei J. N. (2013). Management knowledge and skills for green construction: *Overcoming challenges* Volume 31, Pages 272-284
- Bon Gang, W. (2013). *Project management skills*, Vol. 32, pp 272-284)
- Braced (2014). Methodology for reporting against Key Performance Indicator No. 4 – Number of people whose resilience has been improved as a result of project support, available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/328254/BRACED-KPI4-methodology](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328254/BRACED-KPI4-methodology)



- Breunig, M. (2005). Turning experiential education and critical pedagogy theory into praxis. *Journal of Experiential Education*, 28(2), 106-122.
- Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*, Youth unemployment rate, at <https://www.bls.gov/opub/ted/2016/youth-unemployment-rate-employment-population>
- C. N. Ezugwu (2015), New Approaches to Solid Waste Management, Vol II WCECS 2015, October 21-23, San Francisco, USA,
- Cajete, G. A. (1997). *Looking to the mountain: ecology of indigenous education*. Skyland, NC: Kivaki Press.
- California Environmental Protection Agency (EPA), (2013). Retrieved January 28, 2013 from <http://www.calepa.ca.gov/education/eei/>
- Canadian International Development Agency (2002). How to Perform Evaluation, Canada: Evaluation Reports.
- Canadian journal of Marouli, C. (2002). Environmental education: theory and practice. *Canadian journal of environmental education*. 7(1), 26-42.
- Carifio, James and Rocco J. Perla. (2007) *Ten Common Misunderstandings, Misconceptions, Persistent Myths and Urban Legends about Likert Scales and Likert Response Formats and their Antidotes*. *Journal of Social Sciences* 3 (3): 106-116.
- Carlos Hernandez Ferreira (2017): Monitoring and Evaluation and Learning Practices; the UCLG Capacity and Institution Building (CIB) Working Group: The Hague (Netherlands)
- Carol Weiss et al. (1995): *New Approaches to Evaluating Community Initiatives: Concepts, Methods and Contexts*. Roundtable on Community Change, The Aspen Institute.
- Carson-Cheng, E. & Jones, M. (2013). *Using Focus Groups to Enhance your Evaluation*. *Centre for Community Health and Evaluation*, USA: Healthcare Community Georgia Foundation Publication.
- Catalano, R. F., Berglund, M.L., Ryan, J., Lonczak, H.S., & Hawkins, J.D. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention & Treatment*, 5(15).
- Center for Disease Control and Prevention. (2008). Evaluation Briefs. Data Collection methods for Program Evaluation: Focus Group. [www.cdc.gov/healthyouth/evaluation/index.h](http://www.cdc.gov/healthyouth/evaluation/index.h) Retrieved on 7th March 2017.

- Center for the Theory of Change (2013). What is Theory of Change? Available from <http://www.Centers for Disease Control and Prevention>. (2001). *Evaluating CDC-funded health department*
- Cheng, J., Monroe, M. (2010). Connection to Nature: Children's Affective Attitude Toward Nature. *Environment and Behavior*, 44: 31-49.
- Chessman, B. (2005). *Causal inference in performance evaluation for natural resource management*, Sydney: Sydney printing press.
- Chimuka and Rungani (2011); Youth environmental projects; Youth Unemployment in Africa; Buffalo City; South Africa
- Chin, C. M. M. (2012). Development of a project management methodology for use in a university-industry collaborative research environment (Doctoral dissertation). University of Nottingham, Semenyih Selangor Darul Ehsan, Malaysia
- City Council of Nairobi (2010), Integrated Solid Waste Management Plan for the City of Nairobi, Kenya: 2010–2020, Nairobi: City council of Nairobi
- Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, 23(3), 239-290. <http://dx.doi.org/10.1177/014920639702300303>
- Colantonio, A. (2009). *Social Performance: Linking Research to Policy and Practice*, Oxford Institute for Sustainable Development, (OISD): Oxford Brookes University
- Connell, JP, Kubisch, AC (1998). Applying a Theory of Change Approach to the Evaluation of Comprehensive Community Initiatives: Progress, Prospects, and Problems. In *New Approaches*
- Connelly, L. M. (2008). Pilot studies. *Medsurg Nursing*, 17(6), 411-2.
- Craig Valters, 2014, *Theories of Change in International Development: Communication, Learning, or Accountability*
- Creswell, J. W. (2012). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Cropanzano R, Mitchell MS. Social exchange theory: An interdisciplinary review. *J Manage* 2005;31: 874–900
- Cummings, H. (2000). Logic models, logical frameworks and results-based management: Contrasts and comparisons. *Canadian Journal of Development Studies*, 18(3), 587–596.

- Custódio, C., Mendes, D.M, & Metzger, D. (2016). Financial literacy of managers and efficiency of capital allocation in corporations, New York: International Growth Centre.
- Dale, R. (2004). *Evaluating development programmes and projects* (2nd ed.). Thousand Oaks, California: Sage Publications Inc.
- Davis and Kate (2014), Volume 2014, Project management skills ( Pg 189-201)
- Davis, & Kate (2014). *Indicators as interventions: Pitfalls and prospects in supporting development Projects*; Retrieved from <http://bit.ly/wnTGHo>
- Davis, K. (2014). *Project management skills* Vol. 2014, Pp. 189-201
- Davis, K., & Kingsbury, B. (2011). *Indicators as project: Pitfalls and prospects in supporting development Projects*. Retrieved from <http://bit.ly/wnTGHo>
- De Silva, M. J., Breuer, E., Lee, L., Asher, L., Chowdhary, N., Lund, C., & Patel, V. (2014). Theory of Change: a theory-driven approach to enhance the Medical Research Council's framework for complex interventions. *Trials*, 15(1), 267.
- Design and Monitoring Framework Asian Development Bank. (2007). ADB Project Performance Management System, 2ed.
- Develtere, P. I. Pollet & Wanyama, F. (2008). *Cooperating out of poverty: The renaissance of the African cooperative movement*. International Labour Office, Geneva: World Bank Institute.
- Dhyani S. K. (2012). Agroforestry project in India: Focus on environmental services and livelihood security. *Indian Journal of Agroforestry*, 13 (2), 1-9.
- Dhyani S. K., Handa, A. K., & Uma (2013). Area under agroforestry in India: An assessment for present status and future perspective. *Indian Journal of Agroforestry*, 15(1), 1-11.
- Directorate of Youth Affairs (2016); Ministry of Public Service, Youth and Gender Affairs
- Dias, Sonia and Lucia Fernandez. (2013). "Waste Pickers – A Gendered Perspective." In: Cela, B, I. Dankelman, J. Stern. (eds) *Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability*. UNDP: 153-157.  
<http://wiego.org/publications/wastepickers-gendered-perspective>
- Donald B. Yarbrough (2008). *A Guide for Evaluators and Evaluation Univerity of Iowa*. USA: User
- Dweck, C. (2000). *DCSF 20 Self-Theories: Their role in personality, motivation and development*, Philadelphia: Psychology Press.

- ECD, (2005). Aid Effectiveness: Three Good Reasons Why the Paris Declaration Will Make a Difference. Development Co-Operation Report, USA: User, *Sage Publisher's Journal*, Vol.5
- Education Running Grass. (1994). Towards an Environmental Education  
 Entrepreneurial advantage of world cities. Available at: [www.entrepreneurship-sme.eu](http://www.entrepreneurship-sme.eu)  
 Entrepreneurship Evaluations around the Developing World?', World Bank Research Observer,
- Eric Brymer (2014) experiential learning as a constraint-led process: an ecological dynamics perspective: *Journal of Adventure Education & Outdoor Learning*: Published online
- Eric, B. (2014). Experiential Learning as a constraint-led process: an ecological dynamics perspective: *Journal of Adventure Education & Outdoor Learning*: Published online.
- Ethiopia status of Bamboo report, 2017; *Ethiopian Journal of Natural Resources* 1 (2017)
- Evans, A., & Evans, J. (2011). *Resource scarcity, well-being and development*. Paper commissioned by the Bellagio Initiative: The Future of Philanthropy and Development in the Pursuit of Human Well-being.
- Farzana Asad Mir | Ashly H. (2014). Pinning ton exploring the value of project management: *Linking Management Performance and Project Success*, Volume 32, Issue 2, Pp. 202-217
- Fenwick, T. (2001). *Experiential learning: A theoretical critique from 5 perspectives*. Columbus, Ohio: ERIC Clearinghouse on Adult.
- Fisman, L. (2005). The Effects of Local Learning on Environmental Awareness in Children: An Empirical Investigation. *Journal of Environmental Education*, 36(3), 39-50.
- Flanagan, C. A. (Eds.). *Handbook of Research on Civic Engagement in youth*. Hoboken, NJ: John Wiley & Sons, Inc.
- Frank Lozada Contreras (2015) A Study on Marketing Managers' Perception of the Definition of Marketing: Pontifical Catholic University of Puerto Rico
- Frauke Kreuter, Stanley Presser, and Roger Tourangeau. (2008). *Social Desirability Bias in CATI, IVR, and Web Surveys: The Effects of Mode and Question Sensitivity*. *Public Opinion Quarterly*, 72(5): 847-865
- Frediani, A.; Walker, J. and Butcher, S. (2013). Participatory informal settlement upgrading and well-being in Kisumu, Kenya. MSc Social Development Practice Student Report. Development Planning Unit, The Bartlett, University College London.
- Frumkin, P. (2002). Good performance is not measured by financial data alone. *The Chronicle of Philanthropy*. from <http://www.newamerica.net/index.cfm>

- Furze, B., De lacy, T., & Birckhead, J. (1996). Culture and biodiversity: The social dimension of linking local level development and through protected areas.
- Gakungu, N. K., Gitau, A. N., Njoroge, B. N., & Kimani, M. W. (2012). Solid Waste Management in Kenya: A case study of public technical training institutions”, ICASTOR, *Journal of Engineering* Vol 5, No 3, pages 127–138.
- Geoffrey “Jeff” Hill (2015) Assistant Professor [ghill@uca.edu](mailto:ghill@uca.edu) COB 305P; Managemet Information Systems; University of Central Arkansas, 201 Donaghey Ave., Conway, AR 72035 · (501) 450-5000.
- Georgieva, S., & Allan, G. (2008). Best Practices in Project Management Through a Grounded Theory Lens. *Electronic Journal of Business Research Methods*, 6(1), 43-52
- Gillham, J. E., Reivich, K., & Shatt, A. (2002). Positive youth development, prevention, and positive psychology: Commentary on Positive youth development in the United States. *Prevention & Treatment*, 5(18).
- Ginwright, S., Noguera, P., & Cammarota, J. (2006). *Beyond Resistance! Youth Activism and Community Change: New Democratic Possibilities for Policy and Practice for America’s Youth*. New York, NY: Routledge Taylor & Francis Group.
- Gisela Cebrian (2016): Journal of model for embedding education for sustainability within higher education institutions;<https://doi.org/10.1080/13504622.2016.1217395>
- Ghan, Jian (2013) *Assessing Project Management Maturity in Africa: A Ghanaian Perspective* November 2013DOI: [10.5430/ijba.v4n6p41](https://doi.org/10.5430/ijba.v4n6p41)
- Global Entrepreneurship Monitor report 2013* <https://www.enterprise-ireland.com/en/Publications/Reports-USA>
- GoK (Government of Kenya) (2017) *Kenya Vision 2030, Nairobi: Government of the Republic of Kenya*, [www.vision2030.go.ke/](http://www.vision2030.go.ke/)
- GoK (Government of Kenya) (2011) *Youth Enterprise Development Fund: Fund Status Report*, Nairobi: Government of the Republic of Kenya.
- Goleman, D. (2000): Leadership that gets results, *Harvard Business Review*, March-April, pp. 78 to 90
- Gough Mayer-Smith, (2017) Volume 48, 2017 - Issue 1: Special Issue: Gender and Environmental Education; Guest Editors: Annete, Constance Russell, & Hilary Whitehouse Outcome

- Government of Kenya (2010): *National Climate Change Response Strategy*. Ministry of Environment and Mineral Resources. Nairobi Kenya.
- Government of Kenya (GoK) (2013a). Second Medium-Term Plan, 2013-2017. Nairobi: Government Printers.
- Government of Kenya (GoK) (2013b). *National Climate Change Action Plan, 2013-2017*, Nairobi: Government Printers.
- Gratton. L. & Ghoshal, S. (2003): Managing personal human capital: New ethos for the ‘volunteer’ employee. *European Management Journal*, 21: 1-10.
- Gratton. L. & Ghoshal, S. (2003): Managing personal human capital: New Methods for the ‘volunteer’ employee. *European Management Journal*, 21: 1-10.
- Gruenewald, D. A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*. 32(4), 3-12.
- Guidance Note on Developing an Evaluation Dissemination Strategy* UNIFEM (2009) Article
- Gumbihi, H. (2013). Lords of the flies: Unmasking Dandora’s trash lords, Standard, 26 October, available at <http://www.standardmedia.co.ke/entertainment/thenairobi/article/2598/unmasking-the-trashlords-of-dandora>. Google Scholar.
- Hallinger, P. (2010), “A review of three decades of doctoral studies using the Principal Instructional Management Rating Scale: a lens on methodological progress in educational leadership and management”, paper prepared for presentation at the Annual Meeting of the University Council of Educational Administration, New Orleans, LA
- Halt, Gerald B. Jr., Robert Fesnak, John C. Donch, and Amber R. Stiles (2014), *Intellectual Property in Consumer Electronics, Software and Technology Startups*, Springe
- Hansen, J. B. & Patton, M. Q. (1994). The Joint Committee on Standards for Educational Evaluation's "The Program Environmental Education: How to Assess Evaluations of Educational Programs Book Review. *Educational and Psychological Measurement*, 54(2), 550-67.
- Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85, 4-40.
- Heinze, M. M. Davis, Amy, T. Butchart, D. C. Singer, S. J. & Clark (2014). Gender Role Beliefs and Parents’ Support for Athletic Participation Justin E. Heinze, Kathryn L. First Published October 19, 2014; pp. 634–657

- Hertzog, M.A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health*, 31,180-191
- Hewlett, R. (2002): Integrating human capital concepts in productivity and growth topics. *Journal of Management Research*, 2: 22-37.
- Hensen, (2010) *Education Psychology*; property of Kendal Hunt Publishers; India
- Higgs, G.E., (1995). *Rethinking locus of agency in the at-risk condition*. The University of Tennessee: College of Education.
- Hood (2014) *Holistic framework for centering evaluation in culture*; S.Africa
- Hood, S. (2001). “Nobody Knows My Name: In Praise of African American Evaluators Who Were Responsive.” In J. C. Greene and T. A. Abma (eds.), *Responsive Evaluation. New Directions for Evaluation*, , 92, 31–44.
- Hood, S. (2009). “Evaluation for and by Navajos: A Narrative Case of the Irrelevance of Globalization.” In K. E. Ryan and J. B. Cousins (eds.). *The SAGE International Handbook of Educational Evaluation* (pp. 447–463). Thousand Oaks, CA: Sage,
- Hope, K.R. (2011). Investing in capacity development: Towards an implementation framework. *Policy Studies*, 32(1): 59–72.
- Hubbert, K. (2002). *Service learning and learning communities*, California: Cerritos College.
- Huebner, A.J. (1998). Examining ‘empowerment’: A how-to guide for the youth development professional. *Journal of Extension*, 36(6), [online edition]. Retrieved December 12, 2010, from <http://www.joe.org/joe/1998december/a1.php>
- Hungerford, H. R. (2010). Environmental Education (EE) for the 21st Century: *Journal of Environmental Education* 41:1–6
- Ian, R. (2010). *Physical Education & Sport Pedagogy: Environmental Education Research*; Published online
- IBRD World Bank (2007). *Strategic Environmental Assessment of the Kenya Forest Act 2005*. Report no. 40659-KE
- ICA (2010) *Preparatory Survey for Integrated Solid Waste management in Nairobi City in the Republic of Kenya, Final Report*

- Ika, L. A., Diallo, A., & Thuillier, D. (2010). Project management in the international development industry: the project coordinator's perspective. *International Journal of Managing Projects in Business*, 3(1), 61-93
- Ika, L. A., Diallo, A., & Thuillier, D. (2010). Project management in the international development industry: the project coordinator's perspective. *International Journal of Managing Projects in Business*, 3(1), 61-93
- Ika, L. A., Diallo, A., & Thuillier, D. (2012). Critical success factors for World Bank projects: an empirical investigation. *International Journal of Project Management*, 30(1), 105-116.
- ILO (2015). *Trends Econometric Models*, April 2015.
- ILO (2017): *Methodology of the global estimates of child labour*, (Geneva, International Labour Organization).
- International Labor Office (2010). *Innovations in public employment programmes (Global Jobs Pact Policy Brief No. 2)*. Geneva: ILO.
- Irene Gujit. (2013). *Working with Assumptions in a Theory of Change Process TOC: Copyright 2016 Innovations for Poverty Action*
- Isahakia, M. (2010). Foreword. *Kazi Kwa Vijana Operations Manual: Volume I*. Nairobi: Office of the Prime Minister.
- Ivo Slaus and Garry Jacobs, Published in *Performance Journal*, Volume 3 Issue 1, 7 January 2011
- James W. Altschuld, and Belle Ruth Witkin. (1999). *From Needs Assessment to Action: Transforming Needs into Solution Strategies..* Thousand Oaks, CA: Sage Publications
- Jarque, Carlos M., and Anil K. Bera. 1980. "Efficient Tests for Normality, Homoscedasticity and Serial Independence of Regression Residuals." *Economics Letters*, 6(3):255-259.
- Jarque, Carlos M., and Anil K. Bera. 1987. "A Test for Normality of Observations and Regression Residuals." *International Statistical Review*, 55(2):163-172.
- John Burnett (2008): *Core Concepts of marketing: Jacobs Foundation, Zurich, Switzerland*.
- Johnson A. G. (2011). *Urbanization and Youth in Kenya: A Demographic Overview*, pp. 6-9.
- Joint Committee on Standards for Educational Evaluations, the (1994). *The Program Environmental Education: How to Assess Evaluations of Educational Programs*. Thousand Oaks, CA: Sage Publications.



- Jorna, R.J., van Engelen, J. (2006). Rethinking Social Capital Theory: A Knowledge Management; Perspective. *Journal of Knowledge Management* 10(5): 124-126.
- Kajamaa. A. (2011); Expansion learning between the works of evaluation and frontline work Article
- Kathryn E. Newcomer, Harry P. Hatry and Joseph S. Wholey (2015) Handbook of Practical Program Evaluation, Fourth Edition.
- Kazunari Sugimitsu (2017): Intellectual Property as a Marketing Tool Professor, Graduate School of Innovation Management, Kanazawa. Institute of Technology
- Kenya Economic survey (2015); Kenya Bureau of statistics 2015 Edition; *GOK*
- Kenya Law Reports (2010). The Constitution of Kenya, 2010. The National Council for Law Reporting with the Authority of the Attorney General. Available [online]: <http://www.kenyaembassy.com>
- Kenya National Bureau of Statistics (2016) Economic Survey. KNBS, Nairobi.
- Kenya National Policy on Gender and Development (NPGD), (2000);
- Kenya Policy Framework (ESMF). Retrieved December 20, 2010, from <http://www.primeminister.go.ke/DOCS/ESMF.pdf>
- Kenya youth survey report (YEDF), 2012; Youth Enterprise Development Fund: Status Report, Nairobi: Ministry of Youth Affairs.
- Kenya youth survey report, (2013); Ministry of Youth and Gender services; Youth Directorate.
- Kenya youth survey report, 2016; *Youth Enterprise Development Fund: Status Report*, Nairobi: Ministry of Youth Affairs.
- Kevin P. Grant, T. Scott, Graham Michael, E. Heberling (2001) Research Journal on Leadership; University of Texas at San Antonio Wright State University Baker College
- Kimando, L. N., Njogu, G. W., & Kihoro, J. M. (2012). Factors Affecting the Success of Youth Enterprise Development Funded Projects in Kenya; A Survey of Kigumo District Muranga County. *International Journal of Business & Commerce*, 1(10), 61-81
- Kimani MW, Njoroge BNK, Ndunge D. (2014) "Review of Municipal Solid Waste Management: A Case Study of Nairobi, Kenya." *Research Inventory: International Journal Of Engineering And Science*.. 2014;4(2):16-20.

- Kirk, J., & Miller, M. L. (1986). Reliability and validity in qualitative research. *Qualitative Research Methods Series*, 1. Beverly Hills, CA: Sage Publications.
- Kirk, J., & Miller, M. L. (2015). Reliability and validity in qualitative research. *Qualitative Research Methods Edited Series*, 1. Beverly Hills, CA: Sage Publications.
- Klaus P. (2015). The Devil Is in the Details – Only What Get Measured Gets Managed. In: *Measuring Customer Experience*. Palgrave Macmillan, London
- KNBS (2016). Kenya National Bureau of Statistics: Kenya Population and Housing Census Report, KNBS. Available [online]: <http://www.knbs.go.ke/> (26/02/2018).
- Kouzes, J. M., & Posner, B. J. (2002). *Leadership challenge* (3rd ed.). San Francisco: Jossey-Bass.
- Kouzes, J. M., & Posner, B. Z. (1995). *The leadership challenge: how to keep getting extraordinary things done in organizations*. California: Jossey- Bass.
- Kouzes, J. M., & Posner, B. Z. (2012). *The leadership challenges* (5th ed.). San Francisco, CA:
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement* Vol.30, 607-610.
- Lam, Y. L. J. (2002). Defining the effect of transformational leadership on organizational learning: a cross-cultural comparison. *School Leadership & Management*, 22 (4), 439-452.
- Lantz Bjorn. (2013). *Equidistance of Likert-Type Scales and Validation of Inferential Methods Using Experiments and Simulations*. The Electronic Journal of Business Research Methods
- Lillian Keabetswe (2013) “Collect a word, add a word” *catalysing youth to sustain local languages*: Kuala Lumpur; Malaysia
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications
- Linda Dudar , Shelleyann Scott , Donald E. Scott (2017), Understanding the Theory of Change Processes, in Linda Dudar , Shelleyann Scott ,Donald E. Scott (ed.) *Accelerating Change in Schools: Leading Rapid, Successful, and Complex Change Initiatives (Advances in Educational Administration, Volume 27)* Emerald Publishing Limited, pp.27 - 43 Volume 11 Issue 1 2013 (pp 16-28), ISSN 1477-7029 16 ©ACPIL
- Lisa Wyatt Knowlton, and Cynthia C. Phillips (2013): *The Logic Model Guidebook: Better Strategies for Great Results - 2nd ed.* Thousand Oaks California: Sage Publications.

- Liu, M. (2003). Enhancing learner's cognitive skills through multimedia design. *Interactive Learning Environments*, 11(1), 23-39.
- Liu, M. (2003). Enhancing learner's cognitive skills through multimedia design. *Interactive Learning Environments*, 11(1), 23-39.
- Lonn Riesman (2013) Strategic Leaders to enhance the national reputation: Tarleton University
- Lopez, S.J. & McKnight, C.G. (2002). Moving in a positive direction: Toward increasing the utility of positive youth development efforts. *Prevention & Treatment*, 5(2). Retrieved January 19, 2007 from the Psyc Articles database.
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, North Carolina: Algonquin Books.
- Mark V. Redmond, "Social Exchange Theory" (2015). English Technical Reports and White Papers. [http://lib.dr.iastate.edu/engl\\_reports/5](http://lib.dr.iastate.edu/engl_reports/5); Iowa State University
- Maruping, L. M. (2002). Human capital and firm performance: Understanding the impact of employee turnover on competitive advantage. *Proceedings of the Academy of Management Conference, Denver*.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <http://dx.doi.org/10.1037/h0054346>
- Matula, K., & Guchuhi (2018). *Research Proposal Writing*; Applied Research and Nairobi: Training Services.
- Mauchi1, F. N.; Karambakuwa, R. T. Gopo, R. N., Kosmas, N., Mangwende, S. and. Gombarume, F. B. (2011) Entrepreneurship education lessons: a case of Zimbabwean tertiary education institutions. *International Research Journals*, Vol. 2(7) pp. 1306-1311.
- McKenzie, D. and C. Woodruff (2014). 'What Are We Learning from Business Training and McNamara, (July 10, 2009.) C. Basic Guide to Program Evaluation. (Retrieved from [http://managementhelp.org/evaluatn/fnl\\_eval.htm](http://managementhelp.org/evaluatn/fnl_eval.htm)).
- McNamara, C. (2009). Basic Guide to Program Evaluation. (Retrieved from [http://managementhelp.org/evaluatn/fnl\\_eval.htm](http://managementhelp.org/evaluatn/fnl_eval.htm)).
- Medium term Plan (MTP) 2008-2012; Kenya Vision 2030; Government of Kenya.
- Michael (2016) The Keys to Project Financial; Management McL; Managing Director Maxim Consulting Group, LLC; Boston

- Michael, B. (1994). *Monitoring and evaluating social programs in developing countries*, Washington D.C: World Bank:
- Micic, S. (2001). Testing New Methods for improving the effectiveness for Collaborative and Participatory
- Mogaka, H., Gichere, S., Davis, R. & Hirji, R. (2006). *Climate Variability and Water resources Degradation in Kenya – Improving water resources Development and management*, Washington DC: The World Bank.
- Mogoi, J, Obonyo E, Ongugo, P, Oeba V., & Mwangi, E. (2012). Communities, property rights and forest decentralisation in Kenya: Early lessons from participatory forestry management.
- Monroe, M. C. & Jacobson, S. K. (2005). Professional Development for Natural Resource Education: Florida's Wildland Fire Outreach Program." In Simmons, B. (ed.) *Preparing Effective Environmental Educators*. Washington, DC: NAAEE.
- Monroe, M., Cheng, J., (2010). Connection to Nature: Children's Affective Attitude toward Nature. *Environment and Behavior*, 44: 31-49.
- Murray, Leigh; Nguyen, Hien; Lee, Yu-Feng; Remmenga, Marta D.; and Smith, David W. (2012). "Variance Inflation Factors In Regression Models with Dummy Variables," Conference on Applied Statistics in Agriculture. <https://doi.org/10.4148/2475-7772.1034>
- Muthee, M.W. (2010). Tackling youth unemployment in Kenya. Retrieved December 21, 2010, from [http://www.wilsoncenter.org/index.cfm?fuseaction=4news.item&news\\_id=4634085](http://www.wilsoncenter.org/index.cfm?fuseaction=4news.item&news_id=4634085)
- Myrick, D. (2013). A Logical Framework for Monitoring and Evaluation: A Pragmatic Approach to M&E. *Mediterranean Journal of Social Sciences*, 4(14), 423-428
- Nairobi County Council; NCC (2010) Review of Municipal Solid Waste Management: *International Journal of Engineering and Science* Vol.4, Issue 2(February 2014), PP 16-20; A Case Study of Nairobi, Kenya
- Naomi Mumbi, Maina-Okori, Jada Renee, Koushik, Alexandria Wilson (2017); *Reimagining intersectionality in environmental and sustainability education*; Canada :DOI: 10.1080/00958964.2017.1364215.
- Naomi, M., Renee K., Alexandria, W. (2017). *Reimagining intersectionality in environmental and sustainability education*; Canada: DOI
- National Bureau of Statistics: Republic of Kenya. (2010b). The 2009 Kenya population and housing census: Volume1A:

- National Environment Management Authority (2014), National Solid Waste Management Strategy, Nairobi: Government Printers
- NEMA (2015). The National Solid Waste Management Strategy. Nairobi: National Environment Management Authority (NEMA).
- NEMA (2016). The National Solid Waste Management Strategy. Nairobi: National Environment Management Authority (NEMA).
- Nerdrum, L. & Erikson, T. (2001). Intellectual capital: A human capital perspective. *Journal of Intellectual Capital*, 2: 127-135.
- Njoroge, B. N., & Kimani, M. (2014). Review of Municipal Solid Waste Management: A Case Study of Nairobi, Kenya”, *International Journal of Engineering and Science* Vol 4, No 2, pages 2319–6483.
- Njoroge, B.; Kimani, M. and Ndunge, D. (2014). “Review of municipal solid waste management: a case study of Nairobi, Kenya”, *Research Inventory: International Journal Of Engineering And Science*, 4(2).
- Nkonge, N. A., Oloo, A. M., Kithinji, J., & Magambo, J. (2012). Knowledge, attitude and practice of health-care waste management and associated health risks in the two teaching and referral hospitals in Kenya”, *Journal of Community Health* Vol 37, No 6, pages 1172–1177.
- Norland, E. & Somers, C. (eds.) (2005). Evaluating Non formal Education Programs and Settings.
- North American Association for Environmental Education (NAAEE) (2004). *Guidelines for excellence in environmental education*. 3<sup>rd</sup>. ed., Washington, D.C.: NAAEE. North American Association for Environmental Education.
- Nyonje, R., Ndunge, D. & Mulwa, S. A. (2012) *Monitoring and Evaluation of Projects and Programs: A Handbook for Students and Practitioners*. Nairobi: Aura Publishers.
- Nyonje, R., Ndunge, D. and Mulwa, S. A. (2012) *Monitoring and Evaluation of Projects and Programs: A Handbook for Students and Practitioners*. Nairobi: Aura Publishers.
- OCDE (2010), “Horizontal Agreements in the Environmental Context”, DAF/COMP(2010)39
- Ochieng, F., Chepkuto, P., Tubey, R., & Kuto, L. Y. (2012) Effectiveness of monitoring and evaluation of CDF projects in Kenya. A case of Ainamoi Constituency, 1(6), 186-194
- Odhiambo Odera, Albert Scott, Jeff Gow, (2016) "Differential reporting of social and environmental disclosures between local and foreign oil companies in Nigeria", *Social Responsibility Journal*, Vol. 12 Issue: 3, pp.415-438, <https://doi.org/10.1108/SRJ-05-2015-0070>

- Oduol Stephen Okoth, Simeon Okelo, Fredrick Aila ,Abiud Ochieng Awiti, Maria, Onyango, Martin Odhiambo Odera, Ogotu (2013) *Effects of the Youth Enterprise Development Fund on Youth Enterprises in Kenya*; *Journal article*
- OECD (2017), *Youth Aspirations and the Reality of Jobs in Developing Countries: Mind the Gap*, Development Centre Studies, OECD Publishing, Paris. <http://dx.doi.org/10.1787/19900295>  
Gok session paper (2013) Kenya National Assembly
- Office of the Prime Minister/Kazi Kwa Vijana Initiative. (2011). Kazi Kwa Vijana programmes summary. Retrieved February 28, 2011, from <http://www.kkv.go.ke>
- Ogembo (2015) Promoting improved sanitation and hygiene practices through Community led social Programs: Nyamira County.
- Okot-Okumu, J. (2017). Solid waste management in African cities—East Africa. In L. F. Marmolejo Rebello; (Ed.), *Waste management—an integrated vision*. Available [online]: <http://www.intechopen.com/books/waste-management-an-integrated-vision/solid-waste-management/>. (16/02/2018).
- Olga, D. (2014) Active Learning Methods in Environmental Education of Students <https://doi.org/10.1016/j.sbspro.2014.04.086>.
- Ozden, M. (2008). Environmental Awareness and the Attitudes of Student teachers: An empirical study.
- Pasquier- Doumer, L. (2013): “Intergenerational transmission of self-employed status in the informal sector: a constrained choice or better income prospects? Evidence from Seven West African Countries”, in *Journal of African Economies*, Vol. 22, No. 1, pp. 73–111.
- Patton, M. Q. (1996). *Utilization focused evaluation: The new century text*. Newbury Park, CA: Sage.
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods*. 3rd edition. Sage Publications, Inc.
- Patton, M. Q. (2010). *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use*. New York: Guilford Press.
- Patton, M. Q. (2011). *Developmental Evaluation: Applying complexity concepts to enhance innovation and use*. New York: Guilford press.
- Paul Brest. (2010): The Power of Theories of Change, Stanford Social Innovation Review.
- Pedace, Roberto (2013). *Multicollinearity - Econometrics for Dummies*. Hoboken, NJ: Wiley.

- Petty, R. (2014). *Cognitive approaches in persuasion*; Amazon Hersch, P. (1998). *A tribe apart: A journey into the heart of American adolescence*. New York: The Random House Publishing Group.
- Phillip G. Payne (2017) *Ecopedagogy and radical pedagogy: Post-critical transgressions in environmental and geography education*: Monash University (Australia) pp. 175–190. ISBN 978 – 1 – 118 – 53384 – 0.
- Prime Minister Press Service.(2011). Sh4bn injection set to revive Kazi Kwa Vijana. Daily Nation.
- Prochaska, and DiClemente (1993); *Evaluative inquiry for learning in organizations*. Thousand Oaks, CA.:Sage
- Prof. Dr. Halimu Shauri (2017) *youth unemployment in Kenya: towards an exploratory employment and wealth creation framework*
- Quinn. (2008). *Utilization-Focused Evaluation, 4th edition*. Thousand Oaks, Ca: Sage Publications.
- Ramachandran, A. (2013). *Role of Youth for a Cleaner and Greener Environment*; Nepal: Nepal Publishers.
- Ramesh Sharda, Daniel Adomako, Asamoah, Natraj Ponna (2013) *Research and Pedagogy in Business Analytics: Opportunities and Illustrative Examples*; Published in CIT DOI:10.2498/cit.1002194
- Ranneberger, M. (2010, November 12). Youth can be engine to drive fundamental change. Abridged Version of remarks at the National Youth Forum Conference
- Rastogi, P. N. (2000). Sustaining enterprise competitiveness is human capital the answer? *Human Systems Management*, 19: 193-203.
- Ray. C. Rist (2007) *Carrots and Sticks and sermons: Policy Instruments and Their Evaluation* ; Transaction Publishers, New Jersey
- Rebecca S. (2016). *Environmental citizenship: What can political theory contribute to environmental education practice*: Article DOI: 10.1080/00958964.2015.1092417
- Rene, I. & Jan, J. (2013). *Developing an Effective Evaluation Report, Setting the Republic of Kenya. 2008. Kenya Vision 2030: First medium term plan (2008–2012)*, Nairobi: Republic of Kenya
- Republic of Kenya (2013) *Procurement Policy Paper*.

- Republic of Kenya (2013). County Government Act, Nairobi.
- Republic of Kenya (2017). The-National Waste-Management-Bill
- Republic of Kenya. (2005). *Kenya education sector support programme 2005–2010: Delivering quality education and training to all Kenyans*. Nairobi: Ministry of Education, Science and Technology.
- Republic of Kenya. (2006). *Kenya national youth policy*. Nairobi: Ministry of Youth Affairs and Sports.
- Republic of Kenya. (2007a). Kenya Vision 2030: A globally competitive and prosperous Kenya. Nairobi: Republic of Kenya.
- Republic of Kenya. (2007b). *Ministry of State for Youth Affairs – Strategic plan 2007–2012*. Nairobi: Office of the Vice President and Ministry of State for Youth Affairs.
- Republic of Kenya. (2008). *Kenya Vision 2030: First medium term plan (2008–2012)*. Nairobi: Government Printers
- Republic of Kenya. (2010c). The National Youth Council Act, 2009. Nairobi: Government Printers
- Republic of Kenya (2010a). 2009 Kenya Population and Housing Census, Volume I. Nairobi: Kenya National Bureau of Statistics.
- Republic of Kenya. (2010d). Youth empowerment project: Environmental and Social Management.
- Republic of Kenya. Republic of Kenya. (2010a). *Kenya: 2009 population and housing census highlights*, Kenya: Nairobi.
- Richard Bolden (2005) Leadership in Africa: Meanings, Impacts and Identities (contact author); Centre for Leadership Studies University of Exeter; United Kingdom
- Richard Odour (2017) Garbage in Nairobi. Image from <http://www.nation.co.ke/counties/nairobi/Garbage-chokes-Nairobi-s-CBD/1954174-3013246-m75agf/index.html>
- Rist, R. C., & Stame, M. (2006). *.From studies to streams: Managing evaluation systems; comparative policy evaluations volume XII*. New Jersey: Transaction publishers.
- Rist, R. C., Bolly, M. H., & Martin, F. (2012). Influencing change: Building of evaluation capacity to strengthen governance. Washington DC: World Bank.
- Samuel Tawiah, Baidoo, Elliot Boateng, Mary Amponsah, (2014) Does Financial Literacy Matter



- Sawyer Alan (2012). *The use of incremental goodness of fit indices in structural equation models in marketing research article*; University of Florida
- Saunders M., Lewis P., Ba & Thornhill, A. (2012). *Research Methods for Business Students* 6<sup>th</sup> edition, Pearson Education Limited Redmond, Mark V.,
- Sekaran U. (2003). *Research Methods for Business – A Skill Building Approach*. Wiley Publishers. 4th Edition
- Sophie Sapp Moore, (2017) Farm school pedagogy and the political ecology of the Agro ecological transition in rural Haiti; DOI: 10.1080/00958964.2017.1336977
- Tabachnick, B., & Fidell, L. (2007). *Using Multivariate Statistics (5 th ed.)*. Needham Heights, MA: Allyn & Bacon.
- The Constitution of Kenya* [Kenya], 27 August 2010, available at: <https://www.refworld.org/docid/4c8508822.html>
- Turton and Herrington, 2012, Factors influencing the development of youth entrepreneurship: the case of Ethekewini municipality, South Africa.
- Un Tabachnick, B., & Fidell, L. (2007). *Using Multivariate Statistics (5 th ed.)*. Needham Heights, MA: Allyn & Bacon.
- UNEP (2011). Africa Environment Outlook. United Nations Environment Programme, Nairobi
- UN-HABITAT (2016). Solid Waste Management in the World's Cities; Fourth Edition in UN-HABITAT's State of Water and Sanitation in the World's Cities Series; Scheinberg, A., Wilson, D.C., Rodic, L., Eds.; Earthscan: London, UK.
- United Nations Development Programme, (2010) Kenya National Youth Program
- United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2013). *United Nations Decade of Education for Sustainable Development 2005-2014. Draft International Implementation Scheme*. Paris: UNESCO
- United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2005). *Guidelines and recommendations for reorienting teacher education to address performance*. Paris: UNESCO:
- United Nations Evaluation Group (2016). Evaluation Competency Framework. New York: UNEG.
- Vagliasindi, F., Ancarani, A. Neves, E. (2008). Performance Assessment in the Solid Waste Sector, Chapter 10, pages 80 to 103, in the book. Performance Assessment of Urban Infrastructure

Services: the case of water supply, wastewater and solid waste”, Edit by Froydis Sjøvold, Paul Conroy and Eliane Algaard, COSR Urban Civil Engineering. Transport and Urban Development Domain, COST Office.

Van Engelen J. (2007), Performance Quotients and the Social Footprint, John

Villard, J. A. (2010). Use of Focus Group: An Effective Tool for Involving People in Measuring Quality and Impact. Leadership educators.org Villard retrieved on 6th March 2017 Vol. 29(1), 48 - 82.

Volk and Cheak (2003); *Impact of an environmental education program on students: Canadian Journal of Behavioural Science* 32(4):243-250 DOI: 10.1037/h0087121

Wagner, J.A. (1994): Participation’s effect on performance and satisfaction: A reconsideration of research evidence. *Academy of Management Review*, 19: 312-330.

Wehmeyer, M. L. (2001). Self-determination and transition. In P. Wehman (Ed.). *Life beyond the classroom: Transition strategies for young people with disabilities* (3rd ed, pp. 35– 60). Baltimore: Brookes

Wehmeyer, Agran, and Hughes, (1998). *The Effects of Peer Delivered Self-Monitoring Strategies on the Participation of Students with Severe Disabilities in General Education Classrooms; Sage Journals*

White, K. (2013). Evaluating to Learn: Monitoring & Evaluation Best Practices in Development INGOs. Master's project, Duke University. Retrieved from <http://hdl.handle.net/10161/6657>.

Wilson, P. M., Rogers, W. T., Rodgers, W. M., & Wild, T. C. (2006). The psychological need satisfaction in exercise scale. *Journal of Sport & Exercise Psychology*, 28, 231-251.

Winston, M. (2007). Forest Law Enforcement and Governance in Kenya. A paper prepared for the East African Community-led Regional Process in the Framework of the Ministerial; <https://www.crakenya.org/one-third-gender-rule>.

Wonsuk Yoo, Robert Mayberry, Sejong Bae, Karan Singh, Qinghua (Peter) He, James W. Lillard, Jr. (2014). Author manuscript; available in PMC 2015 Feb 5. Published in final edited form as: *Int J Appl Sci Technol*. 2014 Oct; 4(5): 9–19.

World Bank, youth unemployment Rate report 2017

World Vision International (2015). Urban Centre of Expertise: Urban Thinkers Campus: Healthy and Just Cities for Children and Youth, Wednesday October 28th, International Environment House Geneva.

Wright, P. M. & McMahan, G. C. (1992). Theoretical perspectives for human resource management. *Journal of Management*, 18: 295-320.

Yolande, (2010). Project Management Quotes to Inspire & Motivate Project Leaders; South Africa

Youth Enterprise Development Fund (2015) Report: <http://www.youthfund.go.ke/>

Youth Enterprise Development Fund (2012) Report: <http://www.youthfund.go.ke/>

Youth Enterprise Development Fund. (2016) Brief on the Youth Enterprise Development Fund: Fund status report as of 30 June 2016. Retrieved February 20, 2011, from <http://www.youthfund>

Yvan Petit (2012) Volume 30, Issue 5, July, Pages 539-553

## APPENDICES

### APPENDIX I: INTRODUCTION LETTER TO RESPONDENTS

Environmental youth group project,  
Directorate of Youth,  
Sub-county level,  
Nairobi County.

**Nderitu Wanjiru**  
Youth group members,  
P.O box, 53067, 00200  
Nairobi.  
Tel: 0728 257 277

Dear Respondent,

#### **RE: REQUEST TO PARTICIPATE IN ACADEMIC RESEARCH**

My name is Wanjiru Nderitu, PhD student pursuing a study at the University of Nairobi, School of Open Distance Learning (OdeL Campus) Project Planning and management- Monitoring and evaluation option entitled **Project Management Skills, Monitoring And Evaluation Practices And Performance of Youth Environmental Projects; A Case of Solid Waste Management Projects In Nairobi County, Kenya.**

Your youth group project has been identified to participate in this research. Your contribution in this regard will be of great assistance towards the accomplishment of this research. Please give your answers honestly. The information you give will be confidential and will be used for academic purpose only. I have attached research permit from NACOSTI for ease of reference.

Yours faithfully,  
Nderitu Wanjiru

**Wanjiru Nderitu**  
**L83/94048/2014**  
**PhD Student, UoN**

## APPENDIX II: QUESTIONNAIRE FOR THE YOUTH GROUPS

### Introduction

This questionnaire is a research instrument designed to collect information on the Influence of project management skills, monitoring and evaluation practices and the performance of Youth environmental project in Kenya. The information collected will be used for academic purposes only and it is expected that the findings from this study will make a significant contribution towards enhancing the implementation and performance of Youth environmental Projects in Kenya. The information collected will be handled with confidentiality and with academic professionalism. Kindly fill in the information as directed in the various sections provided.

### Section A: Demographic Information

1). Kindly Select your gender (Please tick).

Male	
Female	

2.) Please Tick the Age bracket you belong. (Please Tick or Mark on respective box)

Age Bracket	Below -20yrs	21-25yrs	26-30yrs	31- 35yrs	35-and above yrs
Kindly tick					

3). Marital status (Please Tick or Mark on respective box)

Marital status	Married	Single	Others
Kindly tick			

4). Select the Highest Level of Education you have attained (Please Tick or Mark on respective box)

Non formal education		Masters	
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K.C.S.E		Other	
Certificate			
Diploma			
Bachelors			

**Section B: Technical skills**

7. Kindly state your level of agreements or disagreements by Ticking or Marking respective box on a scale of 1-5: 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, 1-strongly disagree.

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
B1	You have oversight management schemes to oversee SWM schemes and landfill sites					
B2	Your SWM group environmental has ensured compliancy with current legislation in the transportation, handling and disposal of solid waste					
B3	You offer quality waste services in transportation of SW without contaminating air, land or water sources;					

B4	Level of SWM an control waste disposal Project tasks are well scheduled within formulated budget time frame					
B5	The size of the population receiving collection services is equivalent to solid waste collection bags distributed per household.					

**Section C: Financial Management skill**

Kindly state your level of agreements or disagreements by Ticking or Marking respective box on a scale of 1-5: 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, 1-stronly disagree

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
C1	All Project procedures are captured in every fiscal budget of the group budget depends on available government financial solutions					
C2	We spend our group savings when we run out of money before the next government					

	funding arrives					
C3	Group Members understand parameters that determine Services offered by banks and other financial intermediaries					
C4	My group have a robust Knowledge management system for all entries and expenditures					
C5	Our financial statements, and other aspects of youth project activities have been audited within the last two years by a either a governmental agency or independent public accountant					

### 10. Section D: Leadership skills

Kindly state your level of agreements or disagreements by Ticking or Marking respective box on a scale of 1-5: 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, 1-strongly disagree.

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
D1	A leader's best asset is the ability to motivate and inspire a team of professionals who can work together to achieve the goals of the organization. Performance management					



D2	A leader ought to have the right amount of positive and constructive feedback to help teams perform effectively.					
D3	Effective communication entails Problem solving and decision making, talking about the importance of the overall goal and the implications if teams didn't come together to achieve it					
D4	Self-determination, independence and competence are the conditions that increase my enthusiasm and motivation towards youth environmental projects.					
D5	The most important value that I have is my integrity. I demonstrate honesty and trust in all my actions to establish credibility as a leader					

### 11. Section E: Marketing Management skill

Kindly state your level of agreements or disagreements by Ticking or Marking respective box on a scale of 1-5: 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, 1-strongly disagree.

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
E1	Market segmentation is well distributed within Nairobi county to sell groups' products and services.					
E2	Group members are aware of Patenting and other intellectual property rights so to					

	increase their niche in the market place					
E3	Project products, tools and services are branded using the group's patents.					
E4	The project has a digital marketing platform for online selling					
E5	Solid waste recycled products are aligned to local and international market networks through teams personalised selling.					

## 12. Section F: Monitoring and Evaluation Practices and Performance of youth environmental projects

Kindly comment on your group monitoring and evaluation practices.

(Kindly tick per statement) Rating (3 =Most Excellent), (2 = More Excellent), (1 =Excellent)

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
F1	My group has impact evaluation reports over time on Project implementation processes.					
F2	The group holds evaluative consultative meetings on financial flows for shared profits and dividends					
F3	The most immediate results from our group projects are the outputs indicators which relates directly to our projects for continued improvement.					

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
F4	We often hold consultative evaluation dissemination meetings between the group members and key informants and other stakeholders on solid waste management					
F5	We have recorded actual benefits and success stories by our group members as a result of outcomes achieved over time following the implementation of our environmental projects.					
F6	Groups' strategic designs include allocation of time and budget framework for effective implementation.					
F7	Team leaders ensure information emerging from M&E is fed back into our ongoing projects implementation and future planning.					
F8	Our project promotes stakeholders participation in all our project related activities					
F9	Project funders (GOK) has provided a common reporting framework and a standard M&E guidance to systematically demonstrate project results					
F10	Customized application systems with project-specific indicators help team members track the project progress along a results chain to contribute to Vision					

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
	2030 social –economic pillars.					
F11	M&E capacity building should be embedded at the beginning of any given project cycle to develop youth project monitoring skills.					
F12	A systematic assessment of youth group projects implementation capacity and needs can inform government funding towards scaling up or replicating youth social- economic innovations.					

## 12. Section G: performance of youth environmental projects

Kindly state your level of agreements or disagreements by Ticking or Marking respective box on a scale of 1-5: 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree, 1-strongly disagree

No.	Statement	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
G1	My group has already realized profits in terms of Rate of Return on Investment invested in the group.					
G2	My group has acquired No. of solid waste management equipment's that are functional and reliable.					
G3	Percentage coverage of our service is wide enough to cover our designated residential areas.					
G4	We are remarkably popular for Quality services in this solid waste collection intervention.					

G5	My group solid waste project is well-grounded on sustainable structures with government support.					
G6	There are equal opportunities for employment creation within our youth environmental group with more youths gaining gainful employment through solid waste management projects.					
G7	Youths groups are well represented in all Levels of service delivery and decision making within Nairobi County.					
G8	There has been gradual Increase of recycled products within the groups as a major income generating project to members.					

**Thank you for your time and contribution!**

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**PUBLIC SERVICE; YOUTH DIRECTORATE. (KEY INFORMANTS)**

**Introduction**

The purpose for this voluntary interview is to collect information on the Influence Monitoring and evaluation practices on performance of Youths environmental projects from the Directorate of youth in Kenya. You will not be identified as a respondent without your consent. However, you reserve the right to refrain from answering any question/s though completing this interview will be understood that you consented to participate in the interview, including publication of findings since it is expected that the findings from this study will make a significant contribution towards enhancing the implementation and performance of Youths environmental projects in Kenya. The information collected will be handled with confidentiality and with academic professionalism. Kindly assist with the interview.

Date of the Interview.....

Location interview is conducted.....

Monitoring and evaluation practices on performance of youth environmental projects.

1. What is your role in Youth projects?
2. How long have you worked in the project? What are the outputs, outcomes, objectives, and goals of the project?
3. Do you use monitoring and evaluation information? For what purpose?
4. From your current list of project indicators, which are the most relevant for your work and why
5. Kindly discuss briefly your youth environmental projects Evaluation Framework, evaluation design, information gathering, and analysis and the use of findings
6. In your own words, describe the programme theory of change. Which elements are most critical to the success of the youth environmental projects?
7. What emerging issues around implementation might hinder progress towards the expected

8. Outcomes and the programme's ability to monitor and evaluate those outcomes? What challenges, if any, do you anticipate in gathering information?
9. Are there relevant publicly available data sources that could be useful for the project?
10. What type of training or capacity development related to monitoring and evaluation would be effective to improved performance of youth environmental projects?
11. How do you 'grow' the youth group teams who will be equipped to do good level of monitoring and evaluation in order to demonstrate impact?
12. With regards to youth environmental projects Funding, all the funders seem to want to do is check paperwork, they are not really interested in what you are doing and often very restrictive, in reporting . How does this limits effectiveness of the projects?
13. What did you like least about the youth environmental projects? In your opinion, what are the major challenges in relation to funding and youth groups? What are the lessons learned, or what should be done differently to enhance youth uptake of government funding?
14. How cost-effective is the youth environmental programs; the cost of the services or activities reasonable in relation to the benefits?
15. Are there alternative approaches that could have the same outcomes with less cost?
16. How scientific can Directorate of youth claims that the change that has taken place in funded projects is as a result of your intervention?
17. Do you have any questions, concerns or additional points you would like to raise?

### **Closing remark**

Thank you very much for your time and for participating in this interview. I will get back to you in case I may require more clarity on some questions during the transcription process of this interview. That is all I had, good bye!

## **APPENDIX IV: DOCUMENT ANALYSIS GUIDE FOR KEY INFORMANTS FROM THE DIRECTORATE OF YOUTH AFFAIRS**

- Youth environmental projects documents from Directorate of youth
- Environmental projects Youth group documents
- Directorate of Youth annual budget reports
- Monitoring and evaluation reports
- Youth entrepreneurial training manual
- Youth group projects annual reports

### **Section G. Specific Information from Key informants guide.**

1. Focus Group Discussion checklist guide
2. What other economic opportunities can you identify as a result of youth environmental project by the government?
3. Kindly comment on government funding effectiveness on Youth environmental projects towards the performance.
4. Do you refer a project manual adapted for youth project management for sustainability?
5. Has the level of coordination between the government and youth leadership influenced the impact of the youth environmental intervention in this area?
6. Is there a summary of the overall evaluation plans that includes information of the study, methods and techniques for data collection analysis and the general reporting strategies to be used on youth environmental projects
7. What changes could have been made at each stage to have improved performance?

**THANK YOU FOR YOUR TIME!**



**Section H. Observation guide (Scale of 1-3)**

Observation Checklist	Good (1)	Moderate (2)	Excellent (3)
a). Project technical skills- practical ways on waste disposal and transportation management. Observe their recycling techniques along their products value chain.			
b). Application of financial skills within the project processes and budgeting; noted documentation and tools including records observed from the groups			
c). leadership skills within the groups dynamics; communication with the clients, the way they handled clients complaints and provided feedback. How the group leaders carried themselves; note their general acquaintances.			
d). Marketing skills; observed outreach techniques to for more coverage for waste collection, branding of the groups collection materials, any observed branded uniform, group stickers, where are the stickers displayed			
e). Monitoring and evaluation practices; observe ways of youths capturing of data, group formation, implementation of their services and overall documentation. Observe if the groups have access to GOK M&E guidelines. What tools on data collection and their general project evaluation techniques?			

**APPENDIX V: DISTRIBUTION OF SUB-COUNTIES AND WARDS IN NAIROBI COUNTY**

<b>Constituency</b>	<b>Wards</b>
<b>Westlands</b>	Kitisuru Parklands/Highridge Karura Kangemi Mountain View
<b>Dagoretti North</b>	Kilimani Kawangware Gatina Kileleshwa Kabiro
<b>Dagoretti South</b>	Mutu-ini Ngand'o Riruta Uthiru/Ruthimitu Waithaka
<b>Langata</b>	Karen Nairobi West Ngumo South C Nyayo Highrise
<b>Kibra</b>	Laini Saba Lindi Makina Woodley/Kenyatta Golf Course Sarang'ombe
<b>Roysambu</b>	Roysambu Garden Estate Muthaiga Ridgeways Githurai Kahawa West Zimmermann Kahawa
<b>Kasarani</b>	Clay City Mwiki Kasarani Njiru Ruai
<b>Ruaraka</b>	Babadogo Utalii Mathare North Lucky Summer Korogocho
<b>Embakasi South</b>	Imara Daima Kwa Njenga Kwa Reuben Pipeline Kware
<b>Embakasi North</b>	Kariobangi North Dandora Area I Dandora Area II Dandora Area III Dandora Area IV

<b>Constituency</b>	<b>Wards</b>
<b>Westlands</b>	Kitisuru Parklands/Highridge Karura Kangemi Mountain View
<b>Embakasi Central</b>	Kayole North Kayole North Central Kayole. South Komarock Matopeni/ Spring Valley
<b>Embakasi East</b>	Upper Savanna Lower Savanna Embakasi Utawala Mihang'o
<b>Embakasi West</b>	Umoja I Umoja II Mowlem Kariobangi South
<b>Makadara</b>	Maringo/ Hamza Viwandani Harambee Makongeni Mbotela
<b>Kamukunji</b>	Pumwani Eastleigh North Eastleigh South Airbase California
<b>Starehe</b>	NairobiCentral Ngara Pangani Ziwani/Kariokor Landimawe Nairobi South
<b>Mathare</b>	Hospital Mabatini Huruma Ngei Mlango Kubwa Kiamaiiko

*Source: Nairobi city Council, 2010*

The City of Nairobi enjoys the status of a full administrative County. The Nairobi province differs in several ways from other Kenyan regions. The county is entirely urban. It has only one local council, Nairobi City Council. In 2010, along with the new constitution, Nairobi was renamed a County then with seventeen sub-counties (Nairobi city council, 2010).

**APPENDIX VI: KREJCIE AND MORGAN TABLE**

**TABLE**

**1**

*Table for Determining Sample Size from a Given Population*

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.  
*S* is sample size.

**APPENDIX IX: NACOSTI DOCUMENT**



**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/18/46307/26269

Date: **18<sup>th</sup> October, 2018**

Nderitu Wanjiru B  
University of Nairobi  
P.O. Box 30197-00100  
NAIROBI.

*WNL*

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on ***“Project management skills, monitoring and evaluation practices and performance of youth environmental projects. A case of solid waste management projects in Nairobi County Kenya”*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **17<sup>th</sup> October, 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.


*2/11/2018*  
COUNTY COMMISSIONER  
NAIROBI COUNTY  
P. O. Box 30124-00100, NAI  
TEL: 301000


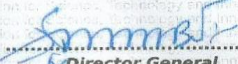
**APPENDIX X: RESEARCH PERMIT**

**THIS IS TO CERTIFY THAT:**  
**MS. NDERITU WANJIRU B**  
**of UNIVERSITY OF NAIROBI, 53067-200**  
**Nairobi, has been permitted to conduct**  
**research in Nairobi County**

**on the topic: PROJECT MANAGEMENT**  
**SKILLS MONITORING AND EVALUATION**  
**PRACTICES AND PERFORMANCE OF**  
**YOUTH ENVIRONMENTAL PROJECTS A**  
**CASE OF SOLID WASTE MANAGEMENT**  
**PROJECTS IN NAIROBI COUNTY KENYA**

**for the period ending:**  
**17th October, 2019.**

  
**Applicant's Signature**

  
  
**Director General**  
**National Commission for Science**  
**Technology & Innovation**

**Permit No : NACOSTI/P/18/46307/26269**  
**Date Of Issue : 18th October, 2018**  
**Fee Received :Ksh 2000**