

RISK MANAGEMENT PRACTICES AND PERFORMANCE OF JUA-KALI EMPOWERMENT PROGRAMMES IN NAIROBI, KENYA

Njue, Nicasio Gicovi; Mulwa, Angeline Sabina; Kyalo, Dorothy Ndunge; Mbugua, John Mwaaura
Department of Open Learning, School of Open and Distance Learning, University of Nairobi, Kenya

Corresponding Email Address: nicnjueg@yahoo.com

Abstract

As empowerment programmes continue to emerge as the resolute strategies towards building inclusive socioeconomic development, this research aimed at examining the influence of risk management practices on the performance of Jua-kali Demonstration and Training Empowerment Programmes (JDTEP) in Nairobi County, Kenya. System theory of organization and theory of constraints anchored the study. The study utilized cross-sectional correlational-survey design. The target population was 327 beneficiaries of JDTEP and a sample of 181 was selected using Krejcie and Morgan formula and simple random sampling. However, 10 JDTEP implementors above of supervisory level were selected for interview using purposive sampling. Data was gathered using structured self-administered questionnaire and informant interview guide. Both descriptive and inferential statistics were used in data analysis. The reliability of the questionnaire was tested using Cronbach Alpha Coefficient of reliability at 0.6668. Correlation analysis was done using Pearson` Correlation Coefficient and prediction of research model done using regression analysis. Hypothesis was tested using Fisher (F) test at $\alpha=0.05$. It was concluded that risk management practices have significant contribution to the performance of JDTEP. Future studies should focus on alienating the mediating and moderating roles of risk management practices on performance of empowerment programmes.

Keywords: Risk management practices, Performance of projects, Jua-kali Demonstration and Training Empowerment Programmes (JDTEP)

1.0 INTRODUCTION

1.1 Background to the Study

Risk management is one of the project knowledge management areas that every manager is building concern on. This is due to high level of uncertainties and detrimental repercussions associated with unforeseen events. In situations where effective risk management practices and procedures are put into place, the endeavors are very successful (Zwikael and Ahn, 2011; Teller and Kock, 2013). While risks are factors or uncertainties which have a probability of occurring and may have potential threats in the realization of projects (Bența, Podean and Mircean, 2011), the probability of occurring and consequences of risks is what matters in relation to a programme well-being (PMI, 2013). Hence risk is considered as a constituent to the uncertainty dimension of project complexity (Williams, 1999).

Different authors have conceptualized risks factors in different categories. For example, Na, Lee, Shim and Ahn (2008) categorizes risk factors into six categories based on the likelihood of occurrence and likenesses in mitigation strategy as institutional and administrative, economic and financial, social and cultural, participant and stakeholder and designing and technological. However, risks factors cause various ripple effects according to the type and occurrence frequency (Park, Cha and Hyun; 2016). Whereas untreated risks have adverse effects to the project health depending on the risk type and occurrence frequency, effectiveness in risk management process can be enhanced by robust and continuous process of risk identification, analyzing, treating and controlling process (Park, Cha and Hyun, 2016). Thus, risk management practices may be informed by the rationality of the risk management practices (March, 2005).

Past studies have explored the influence of risk management on project success with limited consideration to the practices and levels of risks involvement (Zwikael and Ahn, 2011; Carbone and Tippet, 2004). While there exists, theoretical taxonomy supporting the flow of risk management process right from risk identification, risk assessment, risk mitigation to risk control (PMI, 2013), adequacy of such practices is claimed to increase the probability of project success by adopting contingent effects of risk to project implementation and reducing chances of uncertainties and consequent failure of realizing the objectives of the organization by (Shenhar and Dvir, 2010). Hence, the rationale of risk management process is to explore uncertainties and employ appropriate practices in decision making processes in order to create value in the undertakings (Moller, 2011). Still, there exist empirical contradictions on the interaction effects of risk management on the project implementation and performance discourses. For example, while using a sample of 701 randomly selected project managers to examine the effectiveness of risk management on project success Zwikael and Ahn (2011) found that risk management moderates the relationship between risk level and project success. In contrast, risk management is claimed to be the limiting step to project success (Carbone and Tippet, 2004). While a limiting factor is a critical stage that controls another, this study considers risk management practices as having linear relationship between with the performance of Jua-kali Demonstration and Training Empowerment Programmes and as an independent variable with direct and linear relationship with the performance of Jua-kali Demonstration and Training Empowerment Programmes (JDTEP). Hence this study advances the recommendations of Oehmen, Olechowski, Kenley and

Ben-Daya, (2014) in their study on the effect of risk management on the performance of new product development programmes that future studies should focus on establishing how risk management influences project success for more generalizable conclusions.

From Kenyan perspective, Jua-kali is a Swahili word meaning "hot sun". Contextualized, Jua-kali refers to informal micro and small enterprises (MSEs) working in open spaces or under hot sun who are involved in the commercial production of commodities. The Jua-kali Demonstration and Training Empowerment Programmes (JDTEP) were MSE enabling project aiming at building the capacity of MSEs to greater productivity, growth and competitiveness through installation of work-spaces equipped with relevant tools and equipment for incubation services, capacity building through enhanced entrepreneurship trainings and enhancing MSEs access to a market through promotion of products (Republic of Kenya, 2013). As a result, the MSEs would derive greater management skills, enhanced production and accelerated business growth and expansion thus providing sustainable livelihoods, employment, income and economic growth as envisioned in Kenya's Vision 2030.

1.2 Problem Statement

A study to examine the establishment of micro and small enterprises in Kenya revealed that over 1.5 Million MSEs could neither thrive nor expand even after benefiting from empowerment projects and programmes thus contributing as low as 26% of total employment (KNBS, 2016). Past studies focusing on the welfare of micro and small entrepreneurs (MSE) have demonstrated that most of the MSEs about 86% of MSEs could still not market their products (Kithae, Gakure and Munyao, 2012) and that the contribution of MSEs to employment creation continue to fall below the required for competitive existence despite Government incentives (Nthuni, 2014; Bowen, Morara and Mureithi, 2009). Whereas the Jua-kali Demonstration and Training Empowerment Programmes (JDTEP) were initiated in the year 2012, the findings from KNBS cannot just be ignored owing to the reporting that about 3,836 Jua-kali entrepreneurs have benefitted from JDTEP (Republic of Kenya, 2017). Question arises as to why such huge investment in empowerment programmes could not derive beneficial outcomes and impacts to the beneficiaries (Afande, 2015). As suggested by various authors, poor management of risks can cost the performance and success of a programme undertaking. Equally Oehmen, Olechowski, Kenley and Ben-Daya, (2014) recommend for future studies to focus on the contribution of risk management to the success of a project endeavors. This is because effective risk management ensures that appropriate mitigation measures are put in place to avert adverse consequences of undesired events to the success of project. Hence this study took into consideration the emerging importance of risk management to examine the relationship between risk management practices and performance of JDTEP in Nairobi County in Kenya. Risk management practices are conceptualized by risk identification, risk analysis, risk treatment and risk control. The conceptual framework for the influence of risk management practices of the performance of empowerment programmes is presented in Figure 1 as illustrated below.

Risk Management Practices

Performance of JDTEP

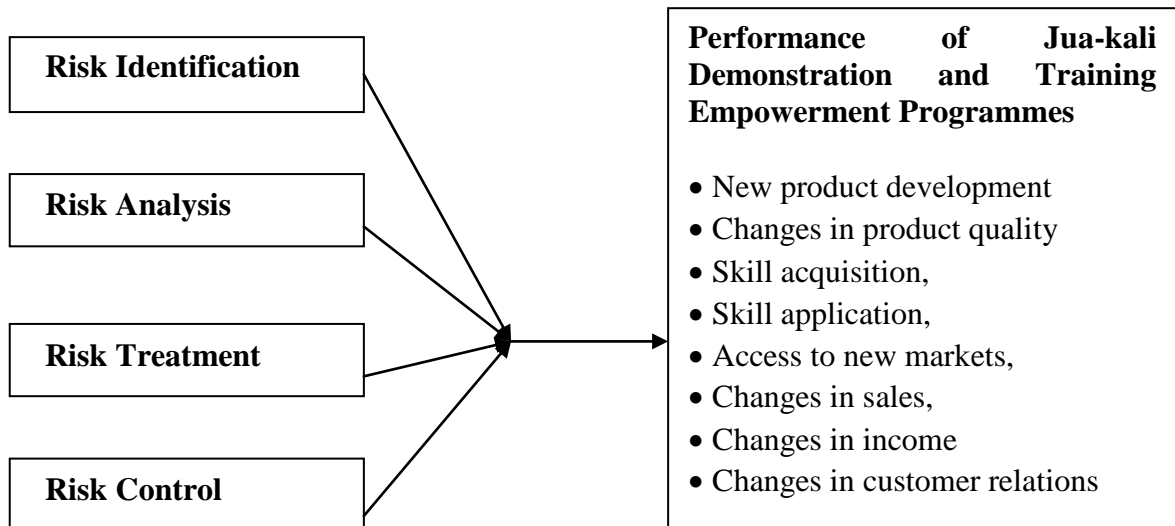


Figure 1: Conceptualization of the relationship between risk management practices and performance of JDTEP

1.3 Research Objective

The study aimed at examining the influence of risk management practices on performance Jua-kali Demonstration and Training Empowerment Programmes in Nairobi County

1.4 Research Hypothesis

The study aimed at testing the following hypothesis:

H₀₁: There is no significant influence of risk management practices on the performance of Jua-kali Demonstration and Training Empowerment Programmes

H_{A1}: There is significant influence of risk management practices on the performance of Jua-kali Demonstration and Training Empowerment Programmes

2.0 LITERATURE REVIEW

Risk management is a systematic process that entails application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context and identifying, analyzing, evaluating, treating, monitoring and reviewing risk (ISO 31000: 2016). As such, risk management is one of the project knowledge management that is claimed to influence major decisions in project implementation (PMI, 2013; Eskesen, Tengborg, Kampmann and Veicherts, 2004). According to ISO: 31000 (2016), the standard principles of effective risk

management in terms of identification, analysis, treatment and control. Effective risk management practices are strongly associated with successful projects (Zwikael and Ahn, 2011). This is because risk management decisions influence major decisions during project implementation (Eskesen, Tengborg, Kampmann and Veicherts, 2004). Equally, poor risk management practices are claimed to cause project failure in terms of meeting deadlines, cost targets and quality performance (Kululanga and Kuotcha, 2010). In this study the indicators of risk management practices are conceptualized as a) risk identification, b) risk assessment, c) risk treatment and d) control of risk treatment and are derived from the standard principles of effective risk management by ISO: 31000 (2016) and best practices to enhance risk management by ISO Guide 73 (2009).

2.1 Risk Identification

Risk identification entails detecting risks and finding their sources, cause, origins and types in order to build recognition of potential risk event conditions and clarification of risk responsibilities (Wang, Dulaimi and Aguria, 2004). Risk identification is the basis for analysis and control of risk management that ensure effective risk management and successful project implementation (Carbone and Tippet, 2004). Generically, risk factors that face performance of projects, product development and organization success are similar in terms of people, size, process, technology, tools, organizational, managerial, customer, estimation, sales, support. Studies suggest the best practices in risk identification entails: teamwork approach, holistic approach, participatory approach, documentation and continuous updating (Nderitu and Kwasira, 2016; Kipyegen, Mwangi and Kimani, 2012). The findings of a study by Tadayon, Jaafar and Nasri (2012) to examine the influence of risk identification in Iran construction projects supports that risk analysis helps find suitable risk management approaches. Similar findings are supported by a study Bakker, Boonstra and Wortmann (2014) to determine the relationship between risk identification and perceived and objective project success that risk identification sways the direction of project success.

2.2 Risk Analysis

Risk assessment is the most time consuming and important part of risk management (Merrit and Smith, 2004). It entails evaluating all risks identified in terms of likelihood and frequency of occurrence, where and how it will occur and the associated magnitude of impacts to the project outcomes in terms of schedule, scope, cost and customer requirements (Carbone and Tippet, 2004). This activity ensures informed ranking and prioritization risks for effective treatment responses (Dziadosz and Rejment, 2015; Zwikael and Ahn, 2011; Moller, 2011). Risk assessment conducted using quantitative, qualitative or hybrid of both depending on the level of objectivity or subjectivity of the methodology (Dziadosz and Rejment, 2015). While quantitative techniques like Delphi method, sensitive analysis, failure mode effect analysis, expected monetary value, SWOT analysis, decision tree analysis etc. numerically objective in nature, qualitative techniques like red-amber-green method, risk categorization as well as urgency analysis is all subjective means of risk analysis (Dziadosz and Rejment, 2015). However, for effective risk analysis PMI (2013) recommends for establishment of working tools such as risk register, risk management plan, status reports etc. where appropriate. There are numerous techniques for risk analysis which

including but not limited to historical data, brainstorming, workshops, checklists, nominal group technique, brainstorming, interview, Delphi technique, cause-effect-diagrams (Wet and Visser, 2013). However, there lacks scholarly concession on the most suitable and effective method to risk analysis due to uniqueness and context of each project.

2.3 Risk Treatment

Risk treatment is a limiting step in risk management. It involves selecting, devising and executing risks responses and putting into place prevention, avoidance, transference or contingency action plans in order to allay occurrence while minimizing severity of impacts to acceptable levels (Dziadosz and Rejment, 2015). When responding to risks, preventable risks are internal or operational risks arising from within the empowerment programmes like inadequate or unclear procedures of operation, inadequate schedules, scope of deliverables, employee behaviors etc. and can be prevented or avoided or reduced by allowing zone of tolerance for errors and monitoring them for compliance (Kaplan and Mikes, 2012). However, some undesirable and strategic risks like realization of strategic goals, project sustainability, stakeholders support etc. can be difficult to prevent and hence are accepted but risk-management system is established to reduce their changes of occurrence and associated impacts (Kaplan and Mikes, 2012). External risks like political instabilities, macroeconomic changes, natural hazards, are quite dynamic and therefore are difficult to influence, control or treat (Kaplan and Mikes, 2012). The most appropriate strategy to treating such risks is creating a strong system of risk research and development, communication and provision of continence measures like resource reserves, transferring to third parties like insurance companies among other alternatives (Kaplan and Mikes, 2012). However, the choice of risk response method depends on various factors including the nature of risk, cost of the method (Zwikael and Ahn, 2011).

2.4 Risk Control

Effective risk treatment involves monitoring and tracking of current and emerging risk issues through techniques like status meeting, reporting and communication, checklist, tracking chart, dashboard, risk maps, review of mitigation strategies and strengthening learning and improvement process (Flouris and Lock, 2008). Risk control entails profiling of risks, risk planning, risk mitigation, risk tracking, risk review, need identification and validation and preliminary budget and schedule development (Wallace and Blumkin, 2007). Risks factors are quite dynamic. Equally, risk treatment should be continuously being executed, tracked, monitored, evaluated and reviewed for continuous improvement of project outcomes. Hence, effective risk control is empirically demonstrated to be formal approach and procedure, independence and shared (Bedard, Curtis and Jenkins, 2008). According to Heldman (2013), the following are some of best practices during risk control; Risk audits, variance analysis, risk treatments schedules, documentation, participatory evaluation etc. The establishments of Oehmen, Olechowski, Kenley and Ben-Daya, (2014) that risk management are directly associated with improved decision-making, programme stability and problem solving and indirectly associated with project success raises questions on the exact role played by the risk control in the performance of a project. In support, Oehmen, Olechowski, Kenley and Ben-Daya,

(2014) recommends for future studies to focus on establishing how risk management practices relates to project success.

3.0 METHODOLOGY

3.1. Research Design

Cross-sectional survey design which aids simultaneous collection of data from the same population and establishing their relationship and predicting future models between variables was utilized in implementing this study. Cross-sectional survey has reliably been applied in both clinical and social studies when investigating risk factors influencing (Levin, 2006).

3.2 Target Population

In this study, the target population was the 327 entrepreneurs who had benefitted from the implementation of Jua-kali Demonstration and Training Empowerment Programmes (JDTEP) in Nairobi County, Kenya. The elements of the population were assumed to be homogenous and normally distributed since they owe same characteristics in terms of level of capital investment (Republic of Kenya, 2012). However, test of normality was carried out prior to data analysis.

3.3 Sample Size and Sampling Procedures

A sample size of 181 respondents was randomly picked from the target population using Krejcie and Morgan (197 table of sample determination. The use of probability sampling enhanced external validity essential for the generalization of research findings (Best and Kahn, 2009). However, purposive sampling was triangulated in order to generate a sample of 10 implementor of JDTEP of above supervisory level for interview.

3.4 Data Collection

While quantitative data was gathered using structured questionnaires, qualitative data was collected using open-headed informant interview guide to supplement the data. As Best and Kahn (2009) suggest, interview guide helps to garner in-depth qualitative data which helped to saturate the evidence gathered from the quantitative data thus enhancing the internal validity of the findings.

3.5 Validity and reliability

The content validity was boosted by seeking for supervisor's opinion and enhancing matching of research questions and the content of the data collection instruments. Using the recommendations of George and Mallery (2003), the reliability of the Likert-scale questionnaires was determined using Cronbach's Coefficient Alpha method at $\alpha = 0.80$.

3.6 Data Analysis Methods

Both descriptive and inferential statistics were used in the analysis of qualitative and quantitative data respectively. Content analysis was used to describe and derive the meaning of the qualitative data by assigning symbols that define the characteristics of the phenomenon. In addition, descriptive statistics such as percentages, mean and standard deviation were used to describe the quantitative data. Pearson's Product Moment Correlation Coefficient (r) and Regression analysis (coefficient of determination- R^2) were used in testing hypothesis and predicting the model respectively.

4.0 RESULTS AND DISCUSSION

4.1 Questionnaire Return Rate

The response rate was 145 respondents representing 80.1% of the 181-sample size. As recommended by Fincham (2008), a return rate of 80.1 % is fairly above the 80% minimum recommendation for analysis and conclusion of a survey findings and far above the 30% minimum requirement for statistical generalizations of research findings (Saunders, Lewis and Thornhill, 2009).

4.2 Descriptive Analysis of Risk Management Practices and the Performance JDTEP

To measure the influence of risk management practices on performance of JDTEP in Nairobi County, the following indicators were examined; risk identification, risk assessment, risk treatment and control of risk treatment. Fourteen (14) items were developed in the self-administered questionnaire and respondents were then requested to indicate the extent to which they agree with the statements. The items rated on a five-point Likert scale with the following scoring ranging from; 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) $4.2 < SA < 5.0$. The mentioned scales give an equidistance of 0.8. Table 4.1 shows the mean (M) and standard deviation (SD) of the responses on the influence of risk management practices on performance of JDTEP.

Table 4.1. Aspects of Risk Management Practices

Statements	SD f (%)	D f (%)	N f (%)	A f (%)	SA f (%)	Mean	Std. Dev.
I understand the basic practices in risk management	2 (1.4)	0 (0.0)	34 (23.4)	93 (64.1)	16 (11.0)	3.8345	0.6668
I regularly identify risks that may impact on my enterprise	0 (0.0)	2 (1.4)	22 (15.2)	113 (77.9)	8 (5.5)	3.8759	0.4984
I analyze the identified risks	2 (1.4)	0 (0.0)	32 (22.1)	101 (69.7)	10 (6.9)	3.8069	0.6157
I prioritize risks based on occurrence probability and impact	2 (1.4)	2 (1.4)	27 (18.6)	105 (72.4)	9 (6.2)	3.8069	0.6269

I also evaluate all alternatives to risk responses	2 (1.4)	4 (2.8)	39 (26.9)	87 (60.0)	13 (9.0)	3.7241	0.7215
I try as much as possible to turn risks into opportunities	0 (0.0)	0 (0.0)	40 (27.6)	91 (62.8)	14 (9.7)	3.8207	0.5853
I always avoid all risks with potential negative consequences	2 (1.4)	2 (1.4)	33 (22.8)	98 (67.6)	10 (6.9)	3.7724	0.6535
I employ diverse risk response strategies	0 (0.0)	7 (4.8)	28 (19.3)	101 (67.9)	9 (6.2)	3.1310	0.8917
I have insured my enterprise against potential risks	11 (7.6)	12 (8.3)	73 (50.3)	45 (31.0)	4 (2.8)	3.7586	0.7571
I regularly communicate risk decisions to my customers	4 (2.8)	2 (1.4)	33 (22.8)	92 (63.4)	14 (9.7)	3.7034	0.6783
My customers appreciate support all my risk decisions	0 (0.0)	6 (4.1)	43 (29.7)	84 (57.9)	12 (8.3)	3.6690	0.6016
I have got a risk plan in place	0 (0.0)	4 (2.8)	46 (31.7)	89 (61.4)	6 (4.1)	3.8345	0.6238
I regularly monitor and control the risk responses	0 (0.0)	2 (36.6)	36 (24.8)	91 (62.8)	16 (11.0)	3.7720	0.6324
I am always flexible when risk management	0 (0.0)	2 (1.4)	25 (17.2)	102 (70.3)	16 (11.0)	3.9103	0.5764
Composite results						3.7443	0.6521

N = 145, Composite Mean = 3.7443, Composite Standard deviation = 0.6521, Alpha Coefficient = 0.1757

As shown in Table 4.1, the overall composite mean (M) for risk management practices was 3.7443 and the overall composite standard deviation (STD) was 0.6521. The results imply that at M= 3.7443 and STD = 0.6521, a majority of the respondents agreed that risk management practices influences the performance of JDTEP. The results answer the research objective to examine how risk management practices influence the performance JDTEP in Nairobi County Kenya in that majority of the respondents agreed that risk management practices influence the performance of JDTEP.

The narrative data from interviews support the results presented in Table 4.1 in that, most of the programme implementors (interviewees) conceded that the installation of workspace facility and other deliverables were realizable owing to effective management of worksite related risks. “Besides maintaining safety standards in the worksites, the identified users were sensitized on maintaining high level of safety in the premises especially when handling machineries and chemicals”. When asked to explain the how the conducted risk management most of the respondents retorted that,

“We have intelligence surveillance system, instructors and even guards who help us in gathering intelligence and information risks related to the areas of assignment. After profiling the data, the data is transformed into vital information for planning for response measures whereby assignments are distributed to relevant desks. For example, we have

got quality assurance officer and quality controllers to ensure all quality standards are met. In addition, we have insured all our machineries in this site. All the users are also insured. We also gather information from environment for example changes in production technologies and change in user and customer taste. Information gathered is used for making appropriate adjustments...yes, we also inform our partners on the steps taken to address risks and the achievements realized and other future plans. We believe in prevention than treatment”

Risk management is the pivotal point for any organization survival. And as such, programmes too must be managed within such frameworks. From this basis, interviewees were asked about the benefits realized from the risk management practices majority said that,

“Well, we have hardly halted or postponed any programme activities due to unforeseen events. All the programme costs and schedules are planned in advance. All the challenges we have faced are normal in such a way that they posed no major jeopardy to the programmes. Our health and occupational measures have guaranteed the safety of the users and our staffs as well. We have progressed without much dangers or accidents. This has helped us safe costs by minimizing waste of resources. The products generated from this site are of quality and we ensure that Kenya Bureau of Standards have certified those products in order to guarantee the safety of the consumers. By doing so, out stakeholders and customers are satisfied beyond their expectations and we are also happy.”

The Complementary responses from both interviews and questionnaires suggest that risks management in the JDTEP programmes was an essential practice for the delivery of the of the programme goals. That’s why majority of the respondents conceded to understand the basic practices in risk management including risk identification, analysis, prioritization, treating and exploiting the risk, controlling the risk plans and communicating to the stakeholders.

4.2 Correlation between Risk Management Practices and the Performance JDTEP

Pearson’s Product moment technique was used to determine the correlation between of risk management practices and performance of Jua-kali Demonstration and Training Empowerment Programmes (JDTEP). Results of the correlation are presented in Table 4.2

Table 4.2. Correlation between Risk Management Practices and the Performance Jua-kali Demonstration and Training Empowerment Programmes

		Performance	Risk Management Practices
Performance	Pearson Correlation	1	.014
	Sig. (2-tailed)		.870
	N	145	145
Risk Management practices	Pearson Correlation	.014	1

Sig. (2-tailed)	.870	
N	145	145

Results from the Table 4.2 shows that $r = 0.014$ depicting a significant but weak positive relationship between risk management practices and Jua-kali Demonstration and Training Empowerment Programmes.

4.3 Testing of Hypothesis

Hypothesis H_{0I} : There is no significant influence of risk management practices on the performance of Jua-kali Demonstration and Training Empowerment Programmes.

Hypothesis H_{AI} : There is significant influence of risk management practices on the performance of Jua-kali Demonstration and Training Empowerment Programmes.

The regression model used to test the substantive hypothesis was as follows:

Performance of Jua-kali Demonstration and Training Empowerment Programmes = f (risk management practices)

$Y = \beta_0 + \beta_1 X_1 + \varepsilon$, Where;
 Y: Performance of JDTEP
 X_1 : Risk management practices
 β_0 : Constant term
 β_1 : Beta coefficient
 ε : Error term

Data was analyzed and the regression results for the influence of the risk management practices on the performance of JDTEP is presented in Table 4.3.

Table 4.3. Simple linear regression results for Risk Management Practices on the Performance of Jua-kali Demonstration and Training Empowerment Programmes.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change in R Square	Change in F	df1	df2	Sig. Change
1	.014	.000	-.007	.28917	.050	0.027	1	145	.000

Model	Coefficients ^a				Sig.
	Unstandardized Coefficients		Standardized Coefficients	t	
	B	Std. Error	Beta		
(Constant)	3.968	.194		20.505	.000
1 Combined project implementation factors	0.008	.051	.014	0.164	.870

Predictors: (Constant), risk management practices

Dependent Variable: Performance of JDTEP

F (1,145) = 0.027, t=20.505, at level of significance p=0.000<0.05, r= 0.014 and R square=0.000

The results in Table 4.3 shows that $r = 0.014$ implying weak positive slope between the independent variable (risk management practices) and the dependent variable (performance of JDTEP). R-Squared was 0.000 meaning that no variation in the performance of JDTEP was explained by variation in the risk management practices. The results indicate that at $p=0.000<0.05$, $r = 0.014$ and R square=0.000 and $F (1,145) = 0.027$ thus indicating the existence of a positive correlation. Since p-value of 0.000 is less than 0.05, the null hypothesis at the=0.05 level of significance was rejected as there was enough evidence to indicate that there was significant influence of risk management practices on the performance of JDTEP.

4.4 Predicting the Model

Using the statistical findings, the regression model

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

can then be substituted as follows; $Y = 3.968 + 0.014 X_5$

The beta value implies that for a one-unit increase in risk management practices, the performance of JDTEP increases by 0.014. This therefore, confirms that risk management practices influence the performance of JDTEP. The significance of risk management practices is demonstrated in Table 4.1 that shows that majority of the respondents agreed that risk management practices shaped the benefits they were enjoying from Jua-kali Demonstration and Training Empowerment Programmes (JDTEP). Equally, results from the informant interview interviews supported that the JDTEP was able to deliver owing to effective risk management practices.

The correlation analysis between relationship between risk management practices and performance of JDTEP (Table 4.2) suggest that risk management practices positively but weakly correlated with performance JDTEP. The findings support those of Junior and Carvalho (2013) and Nderitu and Kwasira (2016) that risk management contributes significantly to the performance of projects. The findings are anchored in the system theory of organization that claims that for project to survive and deliver, there is essence to operate in open, flexible, adjustable and adaptable approaches that ensure risks are adequately mitigated. Equally, the

findings enforce the theory of constraints which emphasizes on logical and systematic thinking when analyzing cause and effects of issues, problem and risks and verifying the basic assumptions and alternatives for process improvement (Goldratt, 1986).

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Findings

The objective of this study was to examine the influence of risk management practices on the performance of Jua-kali Demonstration and Training Empowerment Programmes (JDTEP) in Nairobi County, Kenya. The composite mean (M) and composite standard deviation (STD) for the fourteen items was 3.7443 and 0.6521 respectively. This shows that majority of the respondents agreed that risk management practices influences the performance of Jua-kali Demonstration and Training Empowerment Programmes (JDTEP) with regard to risk identification, risk assessment, risk treatment and control of risk treatment.

The alternative hypothesis tested stated that there is a significant influence of risk management practices on the performance of JDTEP. Further, the results indicate that at $F(1,145) = 0.027$, $t=20.505$ and at significance levels of $p=0.000 < 0.05$, $r= 0.014$ and $R\text{ square}=0.000$. Hence based on these findings the substantive hypothesis was won rejected and concluded that there is a significant influence of risk management practices on the performance of JDTEP with regard to risk identification, risk assessment, risk treatment, and control of risk treatment.

5.2 Conclusion

From the findings, it can be concluded that risk management practices have significant contribution to the performance of Jua-kali Demonstration and Training Empowerment Programmes (JDTEP). A positive correlation between risk management practices and performance of JDTEP in Nairobi County shows that risk management practices determine how the programme is going to perform. Hence it is concluded that it is critical to appropriate risk management practices when implementing Jua-kali empowerment programmes.

5.3 Recommendations

Based on the research findings the following recommendations are made for the improvement of practice, policy and future study methodologies.

1. Recommendation for Practice: risk management is essential part of project planning. Project managers should ensure adequate mitigation of project risks by employing effective and vigorous approaches towards risk identification, analysis, treatment and control
2. Recommendation for Policy: the organizations supporting empowerment programmes should develop adequate policy guidelines towards effective risk management in the strive towards delivery of sustainable impacts.

3. Recommendation for Methodology: using pragmatic paradigm, this research employed descriptive correlational survey research design that allows for triangulation of methods and approaches in order to enhance the validity of the findings. Equally, future studies should triangulate research methodologies so as to foster legitimacy of the findings.

5.4 Suggestions for Further Research

Based on the limitation of this study, the following future studies can be advanced:

1. Influence of individual management elements on the performance of empowerment programmes
2. Influence of risk management practice on performance of other programmes apart from empowerment
3. The mediating and moderation roles of risk management practices on the performance of projects.

References

- Afande, F. O (2015). Factors Influencing Growth of Small and Micro-enterprises in Nairobi Central Business District. *Journal of Poverty, Investment and Development* Volume 9.
- Bedard, J., Deis, D., Curtis, M., & Jenkins, G. (2008). Risk monitoring and control in Audit firms: A research synthesis. *Auditing: A Journal of Practice & Theory*, 27 (1), 187- 218.
- Bența, D., Podean, I. M., & Mircean, C. (2011). On Best Practices for Risk management process in Complex Projects. *Informatica Economică* Vol. 15 (2).
- Best, J. W. & Kahn, J. (2009). *Research in education*, New Delhi & Prentice Hall of India
- Bowen, M., Morara, M. & Mureithi, S. (2009). Management of Business Challenges among SME in Nairobi-Kenya. *KCA Journal of business management*. Vol. 2(1).
- Carbone, T. A., & Tippet, D. D. (2004). Project Risk management process Using the Project Risk, FMEA. *Engineering Management Journal*, 16(4), 28-35.
- Dziadosz, A., & Rejment, M., (2015). Risk analysis in construction project - chosen methods. *Procedia Engineering* 122 (2015) 258 – 265
- Eskesen, S. D., Tengborg, P., Kampmann, J., & Veicherts, T. H. (2004). Guidelines for tunneling risk management process, *International Tunneling Association* (19(3)).
- Fincham, J. E. (2008). *Response Rates and Responsiveness for Surveys, Standards and the Journal*. Am J Pharm Educ. 2008 Apr 15; 72(2): 43.

- Flouris, T. & Lock, D. (2008). *Aviation project management*, 2008
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 11.0 update (4th ed.). Boston: Allyn & Bacon
- Goldratt, E. M. & Cox, J. (1986). *The goal: a process of ongoing improvement*. [Croton-on-Hudson, NY]: North river press, ISBN 0-88427-061-0.
- Heldman, K. (2011). *PMP Project Management Professional Exam Study Guide*. New York, NY: John Wiley & Sons.
- ISO 31000: 2016, Risk management – *A practical guide for SMEs* (2016)
- ISO Guide 73: 2009, *Risk Management-Vocabulary*, First Edition, 2009
- Junior, R. R., & Carvalho, M. M. (2013). Understanding the Impact of Project Risk management process on Project Performance: An Empirical Study. *Journal of Technology Management Innovation* Vol. 8.
- Kaplan, R. S., & Mikes, A., (2012). Managing Risks: A New Framework. *Harvard Business Review*, Issue (June, 2012)
- Kenya National Bureau of Statistics (KNBS, 2016). *Micro, Small and Medium Establishment (MSME) Survey*.
- Kipyegen, N., Mwangi, W., & Kimani S. (2012). Risk management process adoption framework for software projects: A case study for Kenyan software project managers and developers. *International Journal of Computer Science Issues*, 9 (3), 365- 374
- Kithae, P. P., Gakure, R.W. & Munyao, L. M. (2012). The Place of Micro and Small Enterprises in Achievement of Kenya's Vision 2030; *Journal of US-China Public Administration*, Vol. 9, No. 12.
- Krejcie, R.V. & Morgan, D.W., (1970). *Determining Sample Size for Research Activities Educational and Psychological Measurement*, Vol. 30(608), Sage Publishers.
- Kululanga, G. & Kuotcha, W. (2010). Measuring project risk management process for construction contractors with statement indicators linked to numerical scores", *Engineering, Construction and Architectural Management*, Vol. 17 (4).
- Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-Based Dentistry* Vol 7
- Lewis, J. P. (2000). Project planning, scheduling and control, *A Hands-on guide to bringing projects in on time and on budget*, New Delhi: McGraw-Hill.

- March, J. G. (2005). *Valg, vane og vision*. København: Forlaget Samfundslitteratur.
- Merrit, G. M. & Smith, P. G., (2004). *Techniques for managing project risks*. Originally published in Field Guide to Project Management, Eecond Edition, David, I. Clerand, Editor, 2004, by John Wiley & Sons, Inc. ISBN 0-471-46212-8
- Moller, R. Y., (2011). Drivers of risk management process. Adapting risk management process to organizational motives, *Research executive summary series Volume 7(7)*.
- Na, I., Lee, S., Shim, G., & Ahn, K. (2008). Risk Breakdown Structure of Multi-Level and Mixed-Use Development in Urban Renaissance Project”, *Spring Conference Urban Design Institute of Korea, Urban Design Institute of Korea*, 399-408 OGC. (2001).
- Nderitu, J. M. & Kwasira, J. (2016). Influence of Risk management process on Successful Implementation of Projects in Public Secondary Schools in the County Government of Kiambu, Kenya. *The International Journal of Business & Management*, Vol. 4(3).
- Nthuni, S. K. (2014). Influence of social capital on the growth of SMEs in Kenya, *International journal of social sciences and entrepreneurship* Special Issue 2,
- Oehmen, J., Olechowski, A., Kenley, C. R., & Ben-Daya, M. (2014). Analysis of the effect of risk management practices on the performance of new product development programmes. *Technovation*, Vol 34(8), 441–453.
- Park, J., Park, B., Cha, Y., & Hyun, C. (2016). Risk Factors Assessment considering Change Degree for Mega-Project: *Procedia - Social and Behavioral Sciences* 218 (2016)50 –55
- Project Management Institute. (PMI, 2013). *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*, Fourth Edition. Newtown Square, PA
- Republic of Kenya (2012). *Micro and Small Enterprises Act of 2012*, Government printer.
- Republic of Kenya (2013). Micro and Small Enterprises Authority Entrepreneurship transforming Kenya. *Strategic plan 2013-2017*.
- Republic of Kenya (2017). *Achievements of the Ministry for the period July 2013 to July 2014*, Nairobi, Kenya.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*, 4th edition, Prentice Hall
- Shenhar, A.J., & Dvir, D. (2010). Reinventando gerenciamento de projetos- A abordagem diamante ao crescimento einovação bem-sucedidos. M.Books, Harvard Business Sch Prs

- Teller, J., & Kock, A. (2013). An empirical investigation on how portfolio risk management process influences project portfolio success. *International Journal of Project Management*, 31(6)
- Wang, S. Q., Dulaimi, M. F., & Aguria, M. Y. (2004). Risk management process Framework for Construction Projects in Developing Countries. *Constr. Mngt. Economics*, 22(3),
- Wet, B., & Visser, J. (2013). An evaluation of software project risk management process in South Africa. *The South African Journal of Industrial Engineering*, Vol. 24 (1), 131- 144
- Wilkinson, M. & Akenhed, R. (2013). Violation of Statistical Assumptions in a Recent Publication? *International Journal of Sports Medicine*, March 2013
- Williams, T. M. (1999). The need for new paradigms for complex projects. *International Journal of Project Management*, 17(5).
- Zwikael, O., & Ahn M. (2011). The effectiveness of risk management process: an analysis of project risk planning across industries and countries. *Risk Anal*, Volume 31(1)