Effect of Technical Capability on Implementation of Family Planning Projects by Non-Governmental Organizations in Kenya

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Abstract

Purpose: The study sought to establish the effect of technical capability on implementation of family planning projects by Non Governmental Organizations in Kenya. In Kenya, there is a high level of unmet need for family planning and this led to the study hypothesis that technical capabilities may have affected the implementation of family planning projects.

Methodology: This study adopted a descriptive survey design. The population of the study was all the 750 registered NGO’s in the health sector in Nairobi, Kenya. The study adopted simple random sampling technique to select a sample of 225 NGOs (30% of the population). Primary data was collected using a semi structured questionnaire. Descriptive statistics included the mean and standard deviation while the inferential statistics included a multiple linear regression and bivariate correlation.

Results: Technical capabilities and implementation of family planning projects are positively and significant related (r=0.568, p=0.000). The coefficient of determination also known as the R square of 32.2% indicated that the variation in technical capability explains 32.2% of variation in implementation of family planning projects in Kenya. Regression coefficients results show that there is a positive and significant relationship between technical capability and project implementation as supported by beta coefficients of 0.306. Specifically, the results show that increased technical capability by one unit would result to increased implementation of family planning projects by 0.306 units.

Unique contribution to theory, practice and policy: From the study findings, it is recommended to NGO managers (practitioners) that technical capability in terms of training should be increased. Policy makers such as NGO Coordination Board should advocate and implement policies geared towards improving technical capabilities of NGOs. The study validates the Lewin change management theory and its applicability in the NGO sector. The revised conceptual framework may offer a fertile ground for developing and improving related studies.

Keywords: Family Planning, Technical Capability, Non Governmental Organizations
1.0 INTRODUCTION

Effective family planning programs enhance rapid spread of voluntary modern family planning methods possible in any country. Such programs help people achieve their personal reproductive goals (Robey et al., 2014). Contraceptive use has increased in many parts of the world, including countries in sub-Saharan Africa. Many women in developing countries use family planning methods to prevent unwanted and unplanned pregnancies (WHO, 2013). However, despite the recent increase in contraceptive use in sub-Saharan Africa, the region is still characterized by high levels of fertility and considerable unmet need for contraception (Babalola et al., 2011).

In Kenya, there is a high level of unmet need for family planning. In the year 2014 15.9% of women ages 15-49 had an unmet need for family planning. These challenges can be attributed to fear of the adverse side effects associated with the various family planning methods as well as reservations to culture and religion (Fotso & Mukiira, 2015).

Past studies have sought to identify the factors that affect the implementation of family planning projects. For instance, Sileo (2014) carried out a study to investigate the determinants of family planning service uptake and use of contraceptives among postpartum women in rural Uganda. The study by Sileo (2014) reveals a methodological gap since it did not use a regression model while this study used a regression model. The study also reveals a contextual gap since it was based in Uganda while this study was based in Kenya.

A study by Okech, Wawire and Mburu (2011) sought to find out contraceptive use among women of reproductive age in Kenya’s city slums. The study found out that contraceptive use among women of reproductive age in Kenya’s city slums is low. The study reveals an objective gap. A study by Toberet et al., (2012) on review of contraception use for newly arriving immigrants and refugees revealed that approximately half the Hazara women who had four or five children used Depo-Provera injections, a method not easily detected by their husbands as a way of family planning. The fact that the women used the methods that are not easily detected by their husbands is evidence that culture affects use of contraceptive. This study also posits an objective gap as it did not focus on implementation of FP projects. This study therefore seeks to determine the factors affecting implementation of FP projects by non-governmental organizations in Kenya.

1.2 Specific Objectives

The specific objectives of the study are to assess the effect of technical capability on implementation of family planning projects by non-governmental organizations in Kenya.

2.0 LITERATURE REVIEW

2.1 Lewin’s Change Management Theory

Many health care organizations have used Kurt Lewin’s theory to understand human behaviour as it relates to change and patterns of resistance to change. Also referred to as Lewin’s Force Field Analysis, the model encompasses three distinct phases known as unfreezing, moving and freezing or refreezing (Bozak, 2003). The intention of the model is to identify factors that can impede change from occurring; forces that oppose change often called restraining or ‘static forces’ and forces that promote or drive change, referred to as ‘driving forces’. When Family
Planning Projects fully understand what behaviours drive or oppose change, then work to strengthen the positive driving forces, change can occur successfully.

In Lewin’s first ‘unfreezing’ stage, understandings of the difficulties related to the identified problem are sought and strategies are developed to strengthen the driving forces and weaken or reduce the restraining forces. Unfreezing involves identifying key players that will be affected by the change and gathering them together to communicate ideas and create lists of all driving and static forces that will affect the project (Bozak, 2003).

The second ‘moving’ stage is where the actual change in practice takes place as a result of equalization of the opposing forces, thereby allowing the driving forces to support the change. In this stage, implementation of the project produces the change desired, so it is important to continue to keep lines of communication with the FP staff providers open. Finally, once the desired change has occurred, the ‘refreezing’ stage can be used to evaluate the stability of the change and the overall effectiveness within practice.

This theory is linked to this study since it outlines the various stages of strategy implementation. For successful project implementation there is need for acquisition of the required skills. In this case successful implementation of family planning projects requires that the implementers have the right technical capabilities.

2.2 Conceptual Framework

The study seeks to determine the factors affecting implementation of FP projects by Non-governmental organizations in Nairobi, Kenya. The independent variables are the factors affecting implementation of FP projects which include technical capability while dependent variable is implementation of FP projects.

<table>
<thead>
<tr>
<th>Technical Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in project management skills</td>
</tr>
<tr>
<td>Training in communication skills</td>
</tr>
<tr>
<td>Training in family planning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementation of Family Planning Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals participating in Family planning.</td>
</tr>
<tr>
<td>Increased Family planning activities.</td>
</tr>
<tr>
<td>Continued use of Family planning</td>
</tr>
</tbody>
</table>

Figure 2.1: Conceptual Framework

2.3 Technical capabilities

In many countries, inadequate human resources are a major barrier to the expansion of comprehensive reproductive and sexual health services, and to better quality of care. Weaknesses include the severe shortage of personnel, inadequate skills of available personnel, rapid turnover and loss of skilled workers, and the inefficient use and distribution of those who are already in the system. Low or unpaid salaries and poor training, supervision and working conditions are root causes of poor performance and high turnover of health-care professionals (WHO, 2010).
Strategic planning for building and retaining an appropriately skilled health workforce, including for instance skilled birth attendants, is crucial to progress in reproductive and sexual health care. Successful project management requires planning with a commitment to complete the project; careful appointment of a skilled project manager; spending time, define the project adequately; correctly planning the activities in the project; ensuring correct and adequate information flows; changing activities to accommodate frequent changes on dynamic; accommodating employees’ personal goals with performance and rewards; and making a fresh start when mistakes in implementation have been identified (Kerzner, 2013).

Many factors related to the skills and characteristics of project managers and team members are proposed for the successful implementation and completion of projects. It is important to select project managers who possess the necessary technical and administrative skills for successful project implementation. Project managers who show commitment and competence become most critical during the planning and termination stages. The competence of the team members is also found to be a critical factor during the implementation stages. Note that these factors not only affect project performance but they also have an impact on client satisfaction and project acceptance (Panos, 2010).

3.0 RESEARCH METHODOLOGY

This study adopted a descriptive survey design. The population of the study was all the 750 registered NGO’s in the health sector in Nairobi, Kenya (KENPO, 2014). This was the unit of analysis. The unit of observation was the top managers who report to the CEO. As defined by Mugenda and Mugenda, (2008) any meaningful study of 10% -30% of the sample is adequate. This implies that a sample size of 30% of the population was adequate for this study. This constituted a sample size of 225 registered NGO’s in the health sector in Nairobi, Kenya. One top manager who reports to the CEO was selected to represent each registered NGO’s in the health sector that was selected. The study adopted simple random sampling technique to select 225 NGOs that are involved in Family Planning projects to represent the target population as shown in Appendix III. Purposive sampling was used to sample one respondent from each of the 225 NGOs that are involved in family planning projects. Primary data was collected using a semi-structured questionnaire. Questionnaires are chosen as data collection tools since they are easy to administer and save time. The questionnaires were self-administered with the help of research assistants. A pilot study of 2 NGO’s was conducted in order to establish the validity and reliability of data collection instruments.

SPSS generated both descriptive and inferential statistics. Descriptive statistics included the mean and standard deviation used to capture the characteristics of the variables under study. Inferential statistics included a multiple linear regression and bivariate correlation. The multiple linear regression and bivariate correlation was used to analyze the relationship of the dependent variable; implementation of family planning project and independent variable which was technical capabilities. The multiple linear regressions to be used in this model was:

\[ Y = \alpha + \beta_1X_1 + \epsilon \]

Where:
Y= Family Planning Project Implementation  
α = Constant Term,  
X₁= Technical capability  

In the model, β₀ = the constant term while the coefficient βᵢ= 1…2 was used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables. µ is the error term which captured the unexplained variations in the model.

Findings were presented in use of pie charts and frequency tables.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

The number of questionnaires that were administered was 225. A total of 174 questionnaires were properly filled and returned. This represented an overall successful response rate of 77.3% as shown on Table 1. According to Babbie (2010) also asserted that return rates of above 50% are acceptable to analyze and publish, 60% is good, 70% is very good while above 80% is excellent. Based on these assertions from renowned scholars, 77.3% response rate is very good for the study.

Table 1: Response Rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned</td>
<td>174</td>
<td>77.3%</td>
</tr>
<tr>
<td>Unreturned</td>
<td>51</td>
<td>22.7%</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.2 Demographic Characteristics

This section consists of information that describes basic characteristics such as gender of the respondent, age, level of education and the duration period their organization have been in operations.

4.2.1 Gender of the respondents

The respondents were asked to indicate their gender. Results in Figure 1 show the results.
Results in Figure 1 shows that majority (57%) of the respondents indicated that they were females while only 43% were males. This implies that majority of the target group were respondents from the family planning departments that involve more of females than males.

**4.2.2 Age of the respondents**

The respondents were asked to indicate their age. Results are shown in figure 2.

![Age of the Respondents](image)

- **Over 50 years**: 10%
- **30 years and below**: 40%
- **41 – 50 years**: 20%
- **31 – 40 years**: 30%

**Figure 2: Age of the Respondents**

The results show that forty percent (40%) of the respondents indicated that they were age 30 years and below. Another 30% of the respondents were aged between 31-40 years. Further, 20% of the respondents indicated that they were age between 41-50 years while only 10% of the respondents indicated that they were over 50 years. This implies that majority of the respondents were at their middle age.

**4.2.3 Level of education**

The respondents were asked to indicate their level of education. Figure 3 shows the results.

![Level of Education](image)

- **Any other**: 40%
- **Postgraduate**: 13%
- **Degree**: 15%
- **Diploma**: 32%

**Figure 3: Level of Education**

Results in Figure 3 above show that 40% of the respondents indicated that they had “Any other” which could mean secondary and certificate level of education. Another 32% said they had level
of education up to diploma level, 15% had degree level of education while 13% had postgraduate studies.

### 4.2.4 Duration of Working in the Organization

The respondents were asked to indicate the duration they have worked in the organization. Results are as shown in Figure 4.

![Figure 4.4: Duration of Working in the Organization](image)

Results revealed that majority of the respondents who were 53% had worked in the organization for less than 5 years, 25% had worked in the organization for 5-10 years, 12% had worked in the organization for 11-15 years while only 10% had worked in the organization for above 15 years. This implies that majority of the respondents had not worked in the organization for a long period.

### 4.4.1 Technical Capabilities

The study sought to find out the extent to which technical capabilities influence the implementation of family planning projects in Kenya. To establish this, the study sought to find out the number of training in project management, communication and family planning. Further, the study sought to establish the budget that is allocated for training.

#### 4.4.1.1 Project Management Skills Training

The study sought to establish the number of trainings in project management skills has your organization organized in the year 2014. Results are as indicated in Table 2.

<table>
<thead>
<tr>
<th>Number of Trainings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 trainings</td>
<td>83</td>
<td>47.4</td>
</tr>
<tr>
<td>Between 2-5 trainings</td>
<td>63</td>
<td>36</td>
</tr>
<tr>
<td>More than 5 trainings</td>
<td>29</td>
<td>16.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>175</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Results in Table 2 show that 47.4% of the respondents indicated that they had less than 2 trainings, 36% said they had between 2-5 trainings while only 16.6% said they had more than 5
trainings. This indicates that the number of trainings organized for project management skills is still very low.

The findings are consistent with those of Ntuala (2010) who in his study found out that trainings were inadequate to equip PMCs with adequate and relevant management skills and this could affect implementation of CDF funded projects. Moreover, fewer respondents were trained in key management areas like financial administration (29.27%) and bookkeeping and accounting (12.20%).

### 4.4.1.2 Communication Training

The respondents were asked to indicate the number of trainings on communication their organization held in the year 2014. Results are as presented in Table 3.

<table>
<thead>
<tr>
<th>Number of communication</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 times</td>
<td>89</td>
<td>50.9</td>
</tr>
<tr>
<td>Between 2-5 times</td>
<td>58</td>
<td>33.1</td>
</tr>
<tr>
<td>More than 5 times</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>175</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Results revealed that majority (50.9%) said they had training on communication for less than 2 times, another 33.1% said they had training on communication between 2-5 times while only 16% said they had training on communication more than 5 times. This therefore implies that the number of trainings on communication about family planning project implementation is still very low. The findings can be supported by those of Thuva (2011) who found out that CDF staff had inadequate skills for project monitoring and evaluation and that there was a strong positive correlation of 0.8 between staff training and project implementation.

### 4.5 Inferential Statistics

Inferential analysis was conducted to show the relationship/association between the dependent and the independent variables. These comprised regression and correlation results. The regression results include the model of fitness, and analysis of the variance and regression coefficients.

#### 4.5.1 Correlation Analysis

The Table 4 presents the results of the correlation analysis. The results presented in the shows that technical capabilities and implementation of family planning projects are positively and significant related \( r = 0.568 \), \( p = 0.000 \).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Implementation of family projects</th>
<th>Technical capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of family planning projects</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4: Correlation Matrix
Regression Analysis

The results presented in Table 5 present the fitness of the regression model in explaining the study phenomena. Technical capability was found to be a satisfactory variable in explaining implementation of family planning projects in Kenya. This is supported by coefficient of determination also known as the R square of 32.2%. This means that variation in technical capability explains 32.2% of variation in implementation of family planning projects in Kenya. This result further means that the model goodness of fit was satisfactory.

Table 5: Model Fitness

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.568</td>
</tr>
<tr>
<td>R Square</td>
<td>0.322</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.301</td>
</tr>
</tbody>
</table>

Table 6 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of implementing family planning projects in Kenya. This was supported by an F statistic of 51.706 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. The F\text{cal}=51.706 > F\text{critical }=2.424 \text{ at } \alpha \text{ 0.05} which imply that overall, the model linking technical capability to the implementation of FP projects was significant.

Table 6: Analysis of Variance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>83.64</td>
<td>5</td>
<td>16.728</td>
<td>51.706</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>54.675</td>
<td>169</td>
<td>0.324</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>138.315</td>
<td>174</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regression of coefficients results in Table 7 shows that there is a positive and significant relationship between technical capability and project implementation as supported by beta coefficients of 0.306. These results show that an increase in the independent variables would result to increase in family planning projects in Kenya. Specifically, the results show that increased technical capability by one unit would result to increased implementation of family planning projects by 0.306 units.
Table 7: Regression of Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.065</td>
<td>0.348</td>
<td>0.188</td>
<td>0.851</td>
</tr>
<tr>
<td>Technical capability</td>
<td>0.306</td>
<td>0.057</td>
<td>5.335</td>
<td>0.000</td>
</tr>
</tbody>
</table>

5. CONCLUSIONS AND CONTRIBUTION TO POLICY PRACTICE AND THEORY

The first objective was to assess the effect of technical capability on implementation of family planning projects by non-governmental organizations in Nairobi, Kenya. Results indicated that trainings on project management were low. Results also showed that the number of training in communication was still low. Further, results indicated that the number of trainings on family planning and budget allocated on family planning was low.

The correlation results revealed that technical capability had a positive and significant effect on implementation of family planning projects in Kenya as supported by a p value 0.000. Further regression results revealed that technical capability had a positive and significant effect on implementation of family planning projects in Kenya. This was supported by a beta coefficient of 0.306 and a p value of 0.000. This implies that technical capability would result to increased implementation of FP projects by 0.306 units. These results agree with those of Kimwele (2011) who in his study established that effective use of the system is affected largely by sabotage and resistance. The study also established that management support is lacking and top management does not inspire the user. The capacity and technical knowhow was found to be low due to lack of training and the hurried implementation of the system. The study recommended that the Government employs a change agent to oversee the implementation of the IFMIS system and those users of the system to undergo on the job training in order to improve their skills and capabilities to use the system.

5.1 Conclusions

Based on the findings the study concluded that technical capability has an effect on the implementation of family planning projects in Kenya.

5.2 Recommendations for policy, practice and theory

From the study findings, it is recommended to NGO managers (practitioners) that technical capability in terms of training should be increased. Policy makers such as NGO Coordination Board should advocate and implement policies geared towards improving technical capabilities of NGOs. The study validates the Lewin change management theory and its applicability in the NGO sector. The revised conceptual framework may offer a fertile ground for developing and improving related studies.

5.3 Suggestions for Further Research

The study recommends that future studies should aim to broaden the causes of low implementation of family planning projects not identified in this study. The study also suggests that a study on the factors that affect the use of family planning among women should be conducted. This would assist to establish more factors that family planning projects
implementers should take into consideration for enhanced family planning project implementation.

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