INFLUENCE OF EXTERNAL ORGANIZATIONAL ENVIRONMENT ON PERFORMANCE OF COMMUNITY-BASED HIV AND AIDS ORGANIZATIONS IN NAIROBI COUNTY, KENYA

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Abstract
As the external organizational environment continue to be turbulent, affecting activities for both profit and non-profit organizations, organizations are becoming more concerned with their performance so as to ensure that the available but limited resources are utilized efficiently and effectively. Over time, attention has been focused on profit-making organizations with little emphasis on performance of community-based organizations (CBOs) especially those located in Sub-Saharan Africa. Theoretically, scholars in management discipline indicate that the external environment of an organization influences its performance. Thus, an organization’s level of performance is dependent on dynamism and complexity of the external environment, heterogeneity as well as capacity and domain consensus of the existing organizations. This paper examines the impact of the external organizational environment on performance of community-based HIV and AIDS organizations in Nairobi County, Kenya. The authors empirically assess the predicted relationship using survey data from 163 Community Based HIV and AIDS Organizations, in Nairobi County, Kenya between January and March 2013. The study findings indicate that the external environment of an organization has an impact on an organization’s effectiveness, efficiency, relevance and financial viability with higher impacts on the relevance performance indicators. External environment was evaluated from dimensions of uncertainty, domain consensus, heterogeneity, capacity and dynamism. The findings of this study indicate statistically significant positive relationship between external environment and CBOs external environment and effectiveness (beta 0.541, p-value=0.000),
efficiency (beta 0.695, p-value=0.000), relevance (beta 0.707, p-value=0.000) and financial viability (beta 0.578, p-value=0.000) leading to an argument that proper scanning of external environment influences all activities of an organization from planning to implementation. However, extra attention should be paid to external environment in program identification and planning as this shapes implementation. This study has important implications for managers of CBOs on the relevance of proper scanning of external environment as it influences all activities of an organization from program conceptualization to implementation.

**Keywords:** External environment, Performance, community-based organizations

**INTRODUCTION**

The Social-economic challenges facing countries and societies ranging from poverty, environmental protection, scarce resource as well as disease control and management such as HIV and AIDS, have grown more complex at global, continental and national levels. For instance, Kenya has the fourth largest HIV epidemic in the world. In 2012, an estimated 1.6 million people were living with HIV and roughly 57,000 people died from AIDS related illnesses (NACC, 2012). The existing agencies including private companies, inter-governmental agencies as well as non-governmental organizations often have not sufficiently addressed these problems effectively. Hence, the role of CBOs have been elevated as they become important mechanisms in the delivery of social services and implementation of other development programs, especially in areas where other channels are unable to succeed. Kenya’s Vision 2030 and the current devolved government entrenched in the new constitution have brought a new governance structure which requires participation of citizens at community levels which is easily achieved through CBOs (GoK, 2010). Even with this elevated role, performance of these CBOs in Kenya has not been substantially documented.

As the resources available to organizations such as Non-Governmental Organizations (NGOs), CBOs and other CSOs decrease due to the changes occurring in the external environment, such as the recent economic depressions; donor and other funding agencies have become keen to monitor and evaluate the use of the funds advanced to these organizations. As such, this has led to an increased focus and emphasis on better governance, accountability, efficiency and transparency in the use of resources both by government agencies and CSOs. This has further pushed many stakeholders to be concerned with CBOs performance particularly because the NGOs, CBOs and other CSOs receive a large proportion of
funding from different funding agencies. However, success of any organization and achievement of the desired level of performance for any organization is dependent on its environment; more so external environment which lies outside the control of the organization.

Palmer and Bob (2002) posit that external environment comprises all forces and events outside the organization that impinge on its activities. External environment consists of two interrelated sets of variables that play a principal role in determining the opportunities, threats and constraints that firms face and obviously that affect their performance. First, variables originating beyond a firm’s operating situation such as economic, political, social and technological forces, form the external environment. These are also referred to as macro environment (Pearce and Robinson, 2007). Second, variables influencing a firm’s immediate competitive situation also referred to as micro environment or industry factors. These constitute the external operating environment. The micro-environment includes labour markets, customers, suppliers, creditors, and trade unions. Industry environment includes the five forces model which highlights threat of new entrants, bargaining power of suppliers and buyers, substitute products or services and rivalry among firms as the key variables. These factors are said to either promote or restrict the achievement of set goals and also affect the main internal functions of the organization and possibly its objectives and strategies (Gupta, 2009).

Tolbert and Hall (2009) conceptualize external environment from five main dimensions of environment capacity, heterogeneity, environmental concentration, domain consensus and, environmental uncertainty. Environment capacity focuses on the level of resources available to an organization. Heterogeneity refers to the degree to which the organization faces different demands from different stakeholders (Dowell, 2006). Environmental concentration is the distribution of resources used by the organizations (Aharonson, Baum and Feldman, 2007), while domain consensus represents the degree to which there is agreement among related organizations and other groups in the society which organizations have the right to provide particular goods/services. Environmental uncertainty relate to environmental instability/change that is associated with broad environmental aspects such as the technology, political-legal and demographics (Tung, 1979).

Other scholars including Scott and Meyer (1983) classify external environment into task and general environments. Task environment consists of the specific individuals and organizations that interact directly with the organization and can affect goal achievement, such as suppliers. General environment consists of all external forces that can influence an organization, such as technology. Pfeffer and Salancik (1978) see
organizations as constantly striving to reduce their dependence on the environment by acquiring control over their resources. Therefore, environmental scanning plays a central role in the organization's decision-making processes and its strategic adaptations. Although this is true for many organizations, performance of CBOs in Kenya remains wanting due to constraints originating from external environment and lack of expertise in monitoring and analyzing external environment (Odindo, 2009). Moreover, constant pressures of fundraising, weak management skills and difficulties in scaling-up operations can limit CSOs’ effectiveness and accountability.

The authors ascribe to the argument that proper scanning of external organizational environment can lead to better performance of CBOs as it would improve their ability to identify opportunities especially those that would lead to attracting sustainable financial support as well as understanding environment of implementation of the designed and planned programs. In this study, we seek to answer the question ‘what is the effect of external environment on performance of community based HIV and AIDS organizations in Nairobi County, Kenya? Through this knowledge, managers of CBO would be able to understand the role of environmental scanning, understanding environmental uncertainty, building capacity and domain consensus in enhancing performance of their organizations. The findings from this study also provide useful guidelines to donors and government agencies, on how to build capacity of CBOs as well as facilitate them to understand their environment, leading to proper program design, planning and implementation. Such training would enable these partners to efficiently and effectively utilize the limited resources advanced to them within the context of changing environment.

The rest of the paper is organized as follows: Theoretical framework of the study; methodology section; presentation and discussion of findings and finally conclusion and recommendations for future research. This is followed by methods used to accomplish the study, presentation of the findings and discussion. The paper closes with implications of the study, conclusions and recommendations for future research.

THEORETICAL FRAMEWORK

Different authors perceive organizational performance differently based on the theory adopted. In this study four main models or approaches were adopted to describe performance of CBOs, these include: Resource Based View (RBV), Sink and Tuttle Model, Balanced Scored Card and Logical Framework Analysis (LFA). RBV regards the firm as a bundle of resources and suggests that their attributes significantly affect the firm’s competitive advantage; and by implication performance (Barney, 1986 &1991; Penrose, 1959; Peteraf, 1993; Wernerfelt, 1984). The RBV looks at
internal resources as a source of competitive advantage and aims to explain why firms in the same industry differ in performance. The basis of this competitive advantage lies primarily in the application of the bundle of valuable resources at the disposal of the firm (Barney, 1991). Accordingly, the firm has to identify the key potential resources which should fulfill the criteria of being valuable, rare, in-imitable and non-substitutable by the firms’ competitors. Penrose (1959) posited that the manner in which organizational resources are deployed can be a source of competitive advantage. The RBV makes the proposition that resources contribute to a firm’s competitive position if they are exploited in such a manner that their potentially valuable services are made available to the firm (Helfat and Peteraf, 2003; Barney, 1991; Penrose, 1959). Thus, researchers believe that a firm’s resources are closely linked to its size and have been found to influence firms’ performance (Boateng and Glaister, 2002).

The Sink and Tuttle Model (1989) describes organizational performance as a complex interrelationship between effectiveness, efficiency, quality, and productivity, quality of work life, innovation and profitability. Sink and Tuttle link organizational improvement initiatives to organizational vision. That is, the organization must first define a vision and strategy, and link the measures to the vision. The process is continuous, and is applicable to all levels of the organization. Further, the process treats the organization as a system, where inputs and outputs are linked through an organizational transformation process. Kaplan and Norton’s (1996) Balanced Scored Card proposes performance measurement to include both financial and non-financial measures such as customer satisfaction and retention, internal aspects of the organization, innovation and learning of an organization.

Logical framework models also referred to as program matrices are a management tool widely used in the non-profit sector in program design and evaluation. They are created to show how measurable impact (desired objectives and outcomes/goal) will be achieved and how achievement will be verified (McLaughlin & Jordan, 2010). Typically, logic models show the logical relationships between the resources, activities, outputs and outcomes of a program, which in turn lead to impact. While there are many ways in which logic models can be presented, the underlying purpose of constructing a logic model is to assess the "if-then" (causal) relationships between the elements of the program; if the resources are available for a program, then the activities can be implemented, if the activities are implemented successfully then certain outputs and outcomes can be expected.

Logical Framework Analysis (Logframe) is the most widely used logical approach in the non-profit sector. It is a problem solving approach which takes into account the views of all stakeholders and also agrees on the
criteria for project success and lists the major assumptions. It highlights project activities, outputs or results, purpose and goals as the key areas of evaluation in projects (Rolstada, 1998). Key performance indicators for non-profit organizations as well as CBOs include efficiency, effectiveness, impact, influence and financial leverage (Silverman, 2008; Marta, 2008). These indicators were adopted for this study. The performance of non-profit organizations, such as CBOs, may be conducted at the overall organizational level, individual program level and their impact on the community.

Organizational effectiveness measures the degree to which a business achieves its goals or the way outputs interact with the economic and social environment. Usually effectiveness determines the policy objectives of the organization or the degree to which an organization realizes its own goals (Zheng, Yang, & McLean, 2010). Heilman and Kennedy-Philips (2011) posit that organizational effectiveness helps to assess the progress towards mission fulfillment and goal achievement. To improve organizational effectiveness management should strive for better communication, interaction, leadership, direction, adaptability and positive environment.

UNDP (2010) defines organizational effectiveness as the extent to which a program or a project achieves its immediate objectives or produces its desired outcomes (UNDP, 2010). Scott (2003) posits that organizational effectiveness is a measure of performance against a set of standards. Measuring organizational effectiveness requires a set of standards, indicators, work sampling size, and evaluation of the samples against a defined standard. According to him, indicators to be used in evaluating organizational effectiveness have to be chosen from among several possible types. Although several representations for differentiating among these concepts have been proposed, Scott (2003) suggests that the three paradigms of organizational perspectives; the rational, natural, and open systems perspective, account for much of the variances in measures of effectiveness.

Organizational efficiency is the optimal transformation (activities) of inputs into outputs. It focuses on rational use of resources at tactical level, meeting timelines and emphasizes least costs and maximum results (UNDP, 2010). Organizational efficiency measures relationship between inputs and outputs or how successfully the inputs have been transformed into outputs (Low, 2000). It is a ratio that reflects a comparison of outputs accomplished to the costs incurred for accomplishing these goals. Organizational efficiency reflects the improvement of internal processes of the organization, such as organizational structure, culture and community (Pinprayong and Siengthai, 2012). Two aspects of efficiency exist. The first is the units of production or services that relate to the organizational purpose, and the second is how much it costs to produce those goods and services (Barker, 1995). This
implies that to attain efficiency, an organization must ensure that maximum outputs are obtained from the resources it devotes to a program, operation or department (Tavenas, 1992). Conversely, efficiency is achieved when the minimum level of resources is used to produce the target output or to achieve the objectives of a program, operation or department.

Organizational relevance denotes its ability to meet the needs and gain the support of its priority stakeholders in the past, present and future. It is an organization’s ability to innovate and create new and more effective situations as a result of insight and new knowledge. To perform well, an organization must also pay attention to its ability to generate the resources it requires. This means not only having the ability to pay its operational bills, but also having some excess of revenues over expenses (profit or surplus). Financial viability is the ability of an organization to raise the funds required to meet its functional requirements in the short-, medium- and long-term (Lusthaus, Adrien, Anderson, Carden & Montalvan, 2002). Financial viability is a key short- and long-term concern for all organizations in different sectors. There are three dimensions to assessing the financial viability of an organization. The first relates to the ability of an organization to generate enough cash to pay its bills, and in the case of not-for-profit organizations, to be financially sustainable. In private sector private sector, profits are a measure of financial health (Booth, 1996). In NGOs it is access to unrestricted funds to cover expenses and institutional development costs. Resources are generated through an organization’s ability to create, supply and deliver products, services or programs useful to customers, clients or beneficiaries (Henke, 1992).

The second dimension of assessing financial viability deals with the sources and types of revenues on which the organization bases its costs. Traditionally, in government agencies, the source of revenue is anticipated taxes. Poorer countries and government departments also rely on various donors to provide funds for their work. The concern addressed by this dimension is the reliability of the flow of funds. In the not-for-profit organizations context, financial viability refers to the diversity and reliability of the different funding sources is analyzed. Organizations that rely on a single funding source without a legal (contractual) or moral funding obligation encounter more difficulty than organizations with multiple, reliable funding sources (Lusthaus et al., 2002). The third dimension defines an organization’s ability to live within its allocation. This dimension focuses on the actual ability to manage a budgeting process, as well as the results of the process. Financial viability depends on good financial management practices. This is true for both private and public sector organizations. In a general sense, an organization is financially viable if it
generates enough value (both internally and from external sources) to keep stakeholders committed to the organization’s continued existence.

**External Environment and Performance**

The environment is the key factor in determining the level of available resources and the ease with which an organization can carry out its activities. For example, poor macroeconomic policies lead to high interest rates, fluctuating currencies, and a host of conditions that make it difficult for some organizations to perform well. The characteristics and quality of the environment such as poor infrastructure in terms of roads, electricity and phone lines can also hinder performance (Lusthaus et al., 2002). Any effort to diagnose and improve the performance of an organization requires an understanding of the forces outside the organization that can facilitate or inhibit that performance (Savedoff, 1998). Both traditional and emerging notions of organizational performance are influenced by external environments. Variation in the variables existing in the external environment, such as political, legal and competitive environment causes environmental uncertainty (Pearce & Robinson, 2002). It is believed that superior firm performance is assured when an organization responds to environmental uncertainty; this can be done through constant adoption of technology to facilitate an organization in improving its service delivery. In addition, changes in economic situation affect a company’s performance and profits (Priem, Rasheed and Kotulic, 1995).

Environmental and organizational characteristics can have a strong impact on the ability to adapt strategically as well as on organizational performance. For example, population density and per capita income represent environmental resources that can sustain organizations (Mick, Morlock, Salkéver, et al. 1994). Furthermore, although some studies indicate competition induces hospitals to lower their costs and to be more price competitive (Zwanziger and Melnick 1996), others contradicts these findings and indicate the opposite (Gruber 1994).

Several previous studies indicate that the organizational external environmental uncertainty level has some effect on Organization Performance. Davidsson, Delmar & Wiklund (2006) indicate that the external environmental uncertainty level influences organizational performance regardless of chosen strategy and the context of operation. In contrast to these three studies, other studies found no association between external environment and organizational performance (Pagell and Krause, 2003) and no direct relationship between the external environment and organizational performance was found (Pelham, 1999; Rivard, Raymond & Verreauld., 2005; Parnel, Donald & Michael., 2000; Adriany & Djumahir, 2013). Contradictory results of these studies provide an opportunity to
further explore the relationship between the environmental uncertainty, manifested in competition level and changes in market demand on organization performance. The authors therefore argue that external environment influences performance of community-based HIV and AIDS organizations. This perspective indicates a direct relationship between the external environment and performance of community-based HIV and AIDS organizations, as illustrated in Figure 1.

<table>
<thead>
<tr>
<th>External Environment</th>
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<tbody>
<tr>
<td>Complexity</td>
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<tr>
<td>Dynamism</td>
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<tr>
<td>Heterogeneity</td>
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<tr>
<td>Capacity</td>
</tr>
<tr>
<td>domain consensus</td>
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<table>
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<tr>
<th>Performance of CBOs</th>
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<tbody>
<tr>
<td>Effectiveness</td>
</tr>
<tr>
<td>Efficiency</td>
</tr>
<tr>
<td>Relevance</td>
</tr>
<tr>
<td>Financial viability</td>
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</tbody>
</table>

Source: Authors, 2013.

Figure I: A Model Linking External Environment and Performance of CBOs

On short term, the organization stability will impact on its value resulting in high organizational performance. However, in the long term, organization stability would make organization difficult to adjust to their environment (Judge and Blocker, 2008). Accordingly, Welch (2005) in Judge and Douglas (2009) an organization’s capability to make changes is key to winning the 21st century competition and as well as development of a new strategy for the organization (Lawler and Woley, 2006).

Hence, this study proposes the following hypothesis: $H_1$: External Environment has a significant influence on the Performance of Community Based HIV and AIDS Organizations in Nairobi County, Kenya.

METHODS

The study adopted a descriptive cross-sectional survey design. Zikmund (2003) posits that surveys provide a quick and accurate means of accessing information on a population at a single point in time. A descriptive cross-sectional survey collects data to make inferences about a population of interest (universe); this information provides snapshots of the populations’ from which researchers gather data. A survey assists the researcher to establish whether significant associations among variables exist at one point in time, depending on the resources available and the target population (Owen, 2002). A descriptive cross-sectional survey affords the opportunity to capture a population’s characteristics and test hypotheses quantitatively
and qualitatively. Consequently, the researcher has no control on the variables thus could not manipulate them making it inappropriate to use other research designs such as experimental research design. Drawing on the foregoing insights, we considered descriptive cross-sectional research design a suitable design.

The sample of this study was 183 CBOs which was selected based on area and random sampling techniques. The respondents comprised Chief Executive Officers (CEOs), Chairpersons and Directors, or those familiar with the HIV and AIDS activities within their organization. The population consisted of 350 CBOs operating in Nairobi County, Kenya identified from a list of active CBOs was provided by the National Aids Control Council (NACC) based on each organization’s return of Community Based Program Activity Reports (COBPAR) to NACC offices. Data were collected using both semi-structured questionnaires and interviews. To enhance response rate and the quality of data collected, the authors contacted NACC headquarters for official communication to Constituency Aids Committee (CAC) officials. Following this, two research assistants were trained and 163 usable questionnaires were received yielding a response rate of 89%. Data were analyzed using correlations and simple regression analysis methods.

RESULTS

Foremost, tests of reliability and validity of the measurements were carried out at the onset of the study. Reliability of the measures was assessed using three approaches. First, a pilot study to pre-test the questionnaire was conducted using 20 CBOs randomly selected from the list of active CBOs with similar characteristics as the target population but who were not to participate in the final survey. The instrument was also discussed with content experts and practitioners, redesigned and then distributed. Second, Cronbach’s Alpha (α) test, a measure of internal consistency, was also used to evaluate extent to which a set of items can be considered to be measuring a single latent variable. The Cronbach’s Alpha reliability coefficients indicated high levels of reliability of the instrument with the values ranging from 0.8290 (Effectiveness) to 0.9615 (strategic social marketing). These values are above the acceptable minimum value of 0.50 (Cronbach, 1951) and above the recommended value of 0.7 (Nunnally & Bernstein, 1994; Polgar & Thomas, 2008). The internal consistency of the measures used was therefore considered to be sufficiently high and to have adequately measured the relevant study variables. Third, a confirmatory factor analysis using PCA technique with Varimax rotation (Kaiser, 1974) was carried out to verify unidimensionality, that is, actual scale item on an instrument, (Gefen, 2003, Gerbing & Anderson, 1988). Prior to subjecting the data to factor analysis, all data relating to various variables measured
using multiple items were subjected to Keiser-Meyer-Olkin (KMO) and Bartlett’s test of sampling adequacy. KMO values were greater than 0.5 (>0.5) which is the recommended value (Malhotra, 2008). Barlett test of Sphericity was $p= 0.01$ which is less than the level of significance of 0.05. The results confirmed the theorized dimensionality of the study constructs.

In this study, construct validity was assessed through convergent validity tests. Convergent validity refers to the degree to which the scale correlates in the same direction (converges) with other measures of the same construct implying that the items exhibit homogeneity within the same construct. Items are only valid when they demonstrate high item to total correlations, high loadings on the intended factors (above 0.60), and with no substantial cross-loadings (Hair, Anderson, Tatham & Black, 1998; Zikmund, 2003). Results of these tests revealed that most of the items had loading in excess of 0.5, thus providing support for convergent validity of the measures used in the study.

An analysis of the CBOs surveyed revealed 41% of the participating CBOs had been in existence for two years and below while only 7% had been in existence for more than 14 years. These results indicate that many CBOs are started but few last long enough to continue their activities over a long period of time. This raises questions of the sustainability of these types of organizations. In terms of geographical distribution of the CBOs, Dagoretti Constituency had the highest number of participating CBOs forming 23% of the sample, followed by Embakasi and Langata both at 13%. The least number of CBOs came from Westlands with only 8%. Sources of funding for CBOs varied across organizations with 62% getting funding from community members and 36% receiving funding from local donors and private organizations. Only 31.9% of the surveyed organizations got funding from international donors. Regarding the HIV and AIDS interventions that each surveyed CBO was involved in, the findings indicate that 94.5% were involved in HIV and AIDS awareness campaigns while 73.6% participated in HIV and AIDS prevention activities. However, only 14.1% provided treatment access and literacy services suggesting that more information is provided on prevention but little or not enough has been done.

**Correlations**

To evaluate if a relationship exists between external environment and performance of CBOs, a Pearson’s product moment correlation analysis was conducted. The results are reported in Table 1.
### Table 1: Correlations for External Environment and Performance of CBOs

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Environment</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>.541(**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>.695(**</td>
<td>.557(**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relevance</td>
<td>.707(**</td>
<td>.593(**</td>
<td>.791(**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Viability</td>
<td>.578(**</td>
<td>.467(**</td>
<td>.621(**</td>
<td>.673(**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>.749(**</td>
<td>.762(**</td>
<td>.877(**</td>
<td>.922(**</td>
<td>.813(**</td>
<td>1</td>
</tr>
</tbody>
</table>

Method: Pearson Product Moment Correlations
**. Correlation is significant at the 0.05 level (2-tailed).
Sig. (2-tailed, for all was 0.000 less than the P- value = 0.01 and 0.05.
Sample (n) =163

The correlation results presented in Table 1 point out that external environment and relevance are significantly correlated (r=0.707, p<.01; sig. 2-tailed =0.000<0.05). This high correlation suggests that program determination and identification is shaped by the existing external environment. The findings also indicate that external environment is significantly correlated with efficiency (r=0.695, p<.01; sig. 2-tailed =0.000<0.05). This suggests that an organization’s ability to use resources with minimum wastage is determined by the level of uncertainty and dynamism in the external organizational environment. At the same time, determination and designing of programs that add value to the society are determined by an organization’s internal capacity, such as the skills available to carry out environmental scanning. External environment is depicted to have a low positive correlation with effectiveness indicating that though external environments might hinder organizations from determining correctly what is to be done and when it should be done, the level of interference is low. These results therefore point out that definition of outputs and outcomes of specific projects and programs though determined by implementing organizations, funding agencies also play a key role in determining where they want their funds to be put. This supports the ideas that have been put forward by other authors such as Weinreich (2011) that outputs and outcomes of specific projects and programs are highly influenced by the funding agencies. External environment is also shown to have a high correlation with overall aggregate mean scores of performance (r=0.749, p<.01; sig. 2-tailed =0.000<0.05).

**Hypothesis Testing**

The hypothesis tested stated that External Environment has a significant influence on the Performance of Community-Based HIV and AIDS Organizations in Nairobi County, Kenya. This hypothesis was tested
through simple linear regression analysis using the enter method. External environment (predictor variable), was regressed against each performance indicator (dependent variable) and then against aggregate mean scores of Performance. Multicollinearity (the linear inter correlation among variables) in the study was tested using Variance Inflation Factor (VIF). This shows the levels of correlation between independent variables displayed in SPSS regression outputs as well as examination of correlation coefficient among variables. These results are presented together with hypotheses test results in Table 2 and 3.

**Table 2: Results of Goodness-of-fit of the Regression of CBOs’ Effectiveness, Efficiency, Relevance and Financial Viability on External Environment**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>.541</td>
<td>.293</td>
<td>.288</td>
<td>.53815</td>
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</tr>
<tr>
<td>a. Predictors: (Constant), External Environment</td>
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**Dependent Variable: Effectiveness**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<tbody>
<tr>
<td>1</td>
<td>.695</td>
<td>.483</td>
<td>.480</td>
<td>.54641</td>
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<td>a. Predictors: (Constant), External Environment</td>
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**Dependent Variable: Efficiency**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
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<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<tbody>
<tr>
<td>1</td>
<td>.707</td>
<td>.499</td>
<td>.496</td>
<td>.500580</td>
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<tr>
<td>a. Predictors: (Constant), External Environment</td>
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**Dependent Variable: Relevance**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.578</td>
<td>.335</td>
<td>.330</td>
<td>.71541</td>
<td></td>
</tr>
<tr>
<td>a. Predictors: (Constant), External Environment</td>
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**Dependent Variable: Financial Viability**

Source: Primary Data
<table>
<thead>
<tr>
<th>Table 3: Significance of the Regression of CBOs’ Effectiveness, Efficiency, Relevance and Financial Viability on External Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coefficients</strong></td>
</tr>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>1 (Constant)</td>
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<tr>
<td>External environment</td>
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<tr>
<td><strong>a. Dependent Variable:</strong> Effectiveness</td>
</tr>
<tr>
<td><strong>Coefficients</strong></td>
</tr>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>External environment</td>
</tr>
<tr>
<td><strong>a. Dependent Variable:</strong> Efficiency</td>
</tr>
<tr>
<td><strong>Coefficients</strong></td>
</tr>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>External environment</td>
</tr>
<tr>
<td><strong>a. Dependent Variable:</strong> Relevance</td>
</tr>
<tr>
<td><strong>Coefficients</strong></td>
</tr>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>External environment</td>
</tr>
</tbody>
</table>

When external environment (independent variable) was regressed separately against effectiveness, efficiency, relevance and financial viability, the simple regression results presented in Table 2 indicate an $R^2$ of 0.293, 0.483, 0.499 and 0.335. This implies that external environment score explains more variation in relevance at 49.9% while it least explains variation in effectiveness at 29.3%. These results suggest that external environment determines how resources available to an organization will be used, that is, if the external environment is uncertain, more resources will be applied in dealing with external challenges rather than implementing the
planned projects or programs. This is consistent with the findings of Priem, Rasheed and Kotulic (1995).

The regression results in Table 3 reveals a statistically significant positive linear relationship between external environment and Effectiveness (beta 0.541, p-value=0.000), Efficiency (beta 0.695, p-value=0.000), Relevance (beta 0.707, p-value=0.000) and Financial Viability (beta 0.578, p-value=0.000). These results indicate that external environment contributes more to the changes in relevance as a unit change in external environment results in 0.707 changes in relevance. Therefore, we accept the hypothesis at α=0.05 and conclude that external environment impacts on effectiveness, efficiency, relevance and financial viability of CBO. The statistically significant positive relationship between external environment and CBOs effectiveness, efficiency, relevance and financial viability suggests that proper scanning of external environment influences what an organization does, how it achieves it, relevance and acquisition of funding for that activity and future activities. Table 3 also indicates the value of Variance Inflation Factor (VIF) to be 1.000 indicating that there is no problem of multicollinearity between the variables tested as the value is lower than 3, which is the value above which the problem of multicollinearity arises. To further evaluate the impact of external environment on performance of CBOs, aggregate mean scores of performance were regressed against mean scores of external environment. The results of this analysis are presented in Table 4 and 5.

**Table 4:** Results of Goodness-of-fit of the Regression of CBOs’ Performance on External Environment

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted Square</th>
<th>R</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.749</td>
<td>.561</td>
<td>.558</td>
<td>.41379</td>
<td></td>
</tr>
</tbody>
</table>

* a. Predictors: (Constant), Internal Environment

**Dependent Variable:** Performance

Source: Primary Data

**Table 5: Significance of the Regression of CBOs’ performance on External Environment**

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internal environment</td>
<td>.442</td>
<td>.205</td>
</tr>
<tr>
<td></td>
<td>Internal environment</td>
<td>.750</td>
<td>.052</td>
</tr>
</tbody>
</table>

* a. **Dependent Variable:** Performance

Source: Primary Data
Regression of aggregate mean scores of performance against external environment produced an $R^2$ of 0.561 as shown in Table 4. This implies that external environment explains 56.1% of the variation in Performance scores. The results also revealed a statistically positive relationship between external environment and performance ($\beta=0.749$, p-value=0.000). Therefore, we fail to reject the hypothesis at $\alpha=0.05$ and conclude that external environment influences performance of CBOs. The statistically significant positive relationship between external environment and performance of CBOs suggests that external environment have an implication on the organization’s ability to achieve its objectives resulting to better performance.

Based on the results in Tables 4 and 5, a simple regression equation can be used to estimate performance of Community Based HIV and AIDS organization in Nairobi County as follows:

$$Y = 0.442 + 0.749 \text{ EE}$$

Where

- $Y$= Performance of CBOs
- EE= External environment
- 0.442=y-intercept; constant
- 0.749= an estimate of the expected increase in performance of CBOs corresponding to an increase in external environment.

From the results presented in Table 5 and the model above, external environment contributes significantly to the prediction of performance of CBOs. The regression coefficient of 0.442 under constant indicates the value of performance when external environment is at zero. The regression coefficient of 0.749 implies that a unit variation in external environment would lead to a 0.749 variation in Performance of CBOs.

**DISCUSSION AND CONCLUSION**

Regression results of external environment against performance indicators revealed statistically significant positive linear relationships between external environment and effectiveness (beta 0.541, p-value=0.000), efficiency (beta 0.695, p-value=0.000), relevance (beta 0.707, p-value=0.000) and financial viability (beta 0.578, p-value=0.000). These results imply that external environment have more implication on relevance than other measure of performance. This is can be argued to be true as proper determination of projects is well informed from external sources especially participation of the community not projects originating from the organization designing the project. This supports community organization theory which emphasis community participation in community activities especially in identifying their needs and identifying the interventions that can bring solution. This supports Resource Based View of organizations which postulates that superior performance is based on evaluation of strategic
industry factors (Dharanaj and Beamish, 2003). Further external environment is shown to have a statistically significant positive linear relationship with efficiency. These results imply that external environment determines how resources are used within the organizations. This is especially true where external donors are involved as they determine how the resources they provide will be used.

Further, regression of external environment scores on aggregate mean scores of performance revealed a statistically significant positive relationship between external environment and performance. The statistically significant positive relationship between external environment and CBOs effectiveness, efficiency, relevance, financial viability and performance lead to an argument that proper scanning of external environment influences all activities of an organization from planning to implementation. However, extra attention should be paid to external environment in program identification and planning. Nevertheless, for proper external environment scanning, an organization should have appropriate internal systems and structures that can support environmental analysis. This implies that internal factors such as proper organizational structure, staff and skills can facilitate proper external environment scanning.

The goal of this study was to examine the effect of external environment on the performance of community-based HIV and AIDS organizations in Nairobi County, Kenya. The significant relationship established between external environment and performance of CBOs indicate that the nature of an organization’s external environment in the form of dynamism, complexity, heterogeneity, capacity and domain consensus, have impact on the performance of organizations as suggested in the literature (Tolbert & Hall, 2009; Aharonson, Baum & Feldman, 2007; Dowell, 2006; Tung, 1979). This implies that if CBOs are to achieve their objectives, they have to ensure that they have understood their external environment especially the uncertainty level and influence of players outside their control. Based on this, it can be concluded that proper analysis and evaluation of an organization’s external environment is a requirement if an organization is to succeed in achieving its objective. That is, CBOs should have proper knowledge of the external environment including the market, the level of uncertainty, and change in the political, legal, technological, social and cultural factors as these influence what they can do. At the same time, CBOs should establish a network with other players to have clear distinction of what each participant in the field does to avoid saturation as well as conflict and excessive competition. If these are followed through, the desired level of performance can be attained.
IMPLICATION TO THEORY AND PRACTICE

The findings of the study make several recommendations that have theoretical and practice implications. Theoretically, the findings of this study reinforce the view that external environment plays a major role in influencing performance of community-based HIV and AIDS organizations. By linking external environment to performance of CBOs, this study provides empirical support to resource-based view theory that evaluates organization’s performance based on its capabilities which can emanate from internal environment, external environment or natural environment. These results also support the Integrated Theory Framework which suggests that for social objectives to be achieved, biological, psychological, social and environmental factors (French et al., 2011) have to be considered. To the practitioners, the positive effects of external environment on performance implies that in order to enhance performance of such organizations, managers of such organizations and other organizations should carry out a thorough analysis of the external environment before embarking or pursuing activities leading to achievement of organizational goals. In addition, project selection and implementation by CBOs should be based on the existing conditions of the external environment as well as CBOs’ ability to implement them efficiently. The findings also point out that government agencies involved in the implementation of HIV and AIDS programs should focus on building management capacity of CBOs so as to improve efficiency and performance especially in areas of external environmental scanning and developing viable strategies of dealing with changes in the external environment. This paper also recommends future research on the evaluation of the implication of operating environment on the performance of CBOs in Kenya and in the world as a whole.

References:


