EFFECTS OF ORGANIZATIONAL STRUCTURE ON ORGANIZATIONAL PERFORMANCE AT THE NURSING COUNCIL OF KENYA

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ABSTRACT

The purpose of this study was to investigate the effects of organizational structure on organizational performance at the Nursing Council of Kenya. The study adopted a descriptive research design. Data was collected through a questionnaire and interview guide from forty employees at the council. The study findings revealed that centralization, decentralization, communication and functional structure influenced the organizational performance of the Nursing Council of Kenya. The study recommended that a similar study should be carried out to investigate the other factors that have not been captured in this study.

Key Words: Centralization, Decentralization, Span of control, Communication, functional structure

Introduction

Different models of organizational structures abound with several scholars defining organization structure differently. Wolf (2002) defines structure as the architecture of business competence, leadership, talent, functional relationships and management. Organizational structure is how job tasks are formally divided, grouped and coordinated. It can therefore be said that organizational structure is a formally defined framework of an organization’s task and authority relationships or the way a company is set up. These include vertical and horizontal differentiation, control and coordination mechanisms, formalization and centralization of power. Tiernan, Flood, Murphy &
Carroll (2002) assert that vertical and horizontal differentiations describe the vertical communication linkages addressing efficiency and control while the horizontal communication linkages fill organizational needs for coordination and collaboration.

Scholl (2003) concurs and asserts that control and coordination are two essential functions performed by an organizational structure and that control ensures that decision makers at all levels use the managerial or hierarchical constraint as one of the criteria in making their decisions. He identifies four generic types of control mechanisms as: Centralization- decisions made at the top of the organization; Formalization-decision authority delegated using policies that guide decision-making; Outputs- established goals and objectives; and Cloning- sharing values and expectations as a basis for control. He asserts that outputs and cloning are associated with organic, highly structured organizations.

However, Sablynski (2003) differs with Scholl (2003) on the definition of formalization and centralization and opines that formalization is the degree to which jobs are standardized and that decentralization is the process of pushing decision authority downward to lower level employees. He posits that centralization and formalization are commonly associated with mechanistic or bureaucratic organizations. Coordination, according to Scholl (2003) is determined by how an organization differentiates its activities. He describes two coordination methods as functional structures and divisional structures. In his view, functional structures group knowledge, skills and abilities by activity. Scholl (2003) further argues that divisional structure is based on output of products, geography, customer and service. Seven cross-functional integration mechanisms identified by Scholl include hierarchy, direct contact, liaison role, task groups, integrating role, integrating department and matrix structure.

For any organization, the organizational structure is a chain of command of people and its functions. Structure is the framework around which a group is organized. Any organization should have its own structure to operate efficiently. While the need for structure is clear, the best organizational structure depends on its internal and external factors (Ledbetter, 2003). The internal factors include policies, strategies, leadership, and communication patterns and how far it has come in its development process. External factors are technology, government laws and the competition. A structure provides guidelines and a means for the people to maintain order, resolve disputes, and what roles the people are involved in so that its work can be performed and goals met.

Various types of organizational structures have linked organizational structure to purpose and goals of an organization. Common determinants of organizational structure include environment and technology (Scholl, 2003 and Underdown (2003). Penguin (2003) argues that organizational size, strategy and philosophy, control and coordination mechanisms, formalization and centralization influence organizational structure and choice.
Concept of organizational performance

Performance is the achievement of organizational goals in pursuit of set strategies. Bernardin (2003) asserts that to measure organizational performance more completely, one might use an approach similar to the balanced scorecard, which elevates non financial measures to a level consistent with a traditional focus on financial measures. In this age of global competition, technological innovation, turbulence, discontinuity, even chaos, change is inevitable and necessary. The organization must do all it can to explain why change is essential and how it will affect everyone.

Nursing Council of Kenya being a regulatory body, is mostly involved in policy and not a profit making entity. Its measures of performance would be determined by the extent to which it achieves the set objectives and goals that relate to its mandate: to make provision for the training, registration, enrollment and licensing of nurses; to regulate their conduct and ensure their maximum participation in the healthcare of community; and for connected purposes. It is therefore clear from the argument that performance is related to the extent to which an employee or organization is able to accomplish assigned tasks and how the accomplished tasks contribute to the realization of the organizational goals.

Most organizations have formalized hierarchical structures and communication systems that affect their performance. Human resource professionals and researchers have been making a lot of efforts aimed at structuring workplace so that best performance outcomes can be achieved (Kessler, 2007). According to Bucic and Gurdergan (2004), different structures adopted by different organizations affect employees’ behaviour and their performance.

The NCK is a regulatory body of the Ministry of Health established under an Act of Parliament Cap 257, Laws of Kenya. The organization has a functional structure based on specialization. It is faced with an inevitable need for devolution of services to the counties in line with the requirements of chapter eleven of the constitution on devolved government. This will inevitably alter its current structures with resultant effect on reporting relationships and performance.

Article 8 (1) of the Nurses Act which sets the quorum for board meetings expressly states that “notwithstanding that there is a quorum, unless the Registrar/CEO or his deputy is present, no meeting shall be held or continued”. This research aimed to assess whether the current structure, centralized functions and decisions, communication processes, and span of control at the Nursing Council of Kenya affect its performance. A report carried out by Outward Bound Trust of Kenya in December 2011 to gauge levels of employee motivation to perform their jobs, found out that “there is a manifestation of the desire among staffs to be as fully involved as possible on the day to day affairs of the organization but culture of ownership ingrained in them is lacking”.

A baseline survey report on job analysis done by IntraHealth International, Capacity Kenya project in August 2012, regarding reporting relationships and number of staffs reporting to a
supervisor indicated that subordinate staff reported directly to their respective heads of departments despite the existence of middle level managers and supervisors. The report further indicated dual reporting relationships and frustration among employees who receive instructions from multiple bosses. Based on the above, this research set to offer concrete solutions for appropriate structure for the Nursing Council of Kenya that would have a positive effect in its performance even in the post devolution era.

Objective of the study
The general objective of this study was to evaluate the effects of organizational structure on organizational performance at the Nursing Council of Kenya.

Specific objectives
Specifically, this study sought to achieve the following objectives:
1. To find out the influence of centralization on organizational performance at the Nursing Council of Kenya (NCK).
2. To determine the influence of functional structures on organizational performance at the NCK.
3. To establish the influence of communication on organizational performance at the NCK.
4. To find out the influence of span of control on the organizational performance at NCK.
5. To establish the influence of decentralization on organizational performance at the NCK.

Literature Review
Functional structure
A functional structure comprises of activities that are grouped together by common functions from the bottom to the top of the organization (Anand & Daft, 2007). According to them, each functional activity – accounting, engineering, human resources, manufacturing, is grouped into a specific department. They assert that most small companies use functional structure, as do many large government organizations and divisions of large companies. Scholl (2003) describes functional structure as a set of people who work together and perform the same type of tasks or hold similar positions in an organization. He asserts that functional structure applies to several groupings of people. The Scholl (2003) definition of functional structure may give insight to organizations like Nursing Council of Kenya (NCK) that uses it while at the same time trying to embrace divisional structure in its endeavour to spread its services to all 47 counties by the end of its strategic plan 2012-2017.

The classical theorists raised issues such as division of work, the establishment of hierarchy of authority and the span of control to be of utmost importance in the achievement of effective organizations (Cole, 2004). Fayol and Taylor as practicing managers laid the foundations of ideas about the organization of people at work and the organization of work itself. Weber developed a theory of authority structures in which he identified a form of organization to which he gave the name ‘bureaucracy’ (Cole, 2004). The distinctive features of a bureaucracy were a
definition of roles within a hierarchy, where job-holders were appointed on merit, subjected to rules and were expected to behave impartially. Weber believed that bureaucracies staffed by bureaucrats represented the perfect organization. Therefore, any meaningful effects of organizational structure should be measured in terms of its relationship with organizational performance.

Centralization and decentralization
Centralization can be defined as the extent to which decision making is centralized to the upper level of management and is usually measured in terms of hierarchy of authority and the degree of participation in decision-making (Mansoor, Aslam, Barbu Capusneanu & Lodhi, 2012). O’Toole and Meier (2004) argue that the extent to which decision making is centralized or decentralized in any organization determines that organization’s policies and how it is going to allocate its resources. They portend that as mechanistic organizations operate in stable environment, so centralized decision making is preferred.

Mechanistic organizations which are highly centralized usually show a high degree of hierarchical authority (the extent to which decision-making authority is exercised at the upper levels of the organizational hierarchy) and low degree of participation in decision making (Mansoor et al., 2012). According to (Tariq, Aslam, Siddique, & Tanveer, 2012) companies operating in highly dynamic environment should go for organic or decentralized structures due to the fact that they have lesser degree of formalization. In organic structures, open communication, empowerment and delegation of authority exist which create the path for innovation and result in high performance of an organization.

However, (Simmons, 2000) argues that empowerment and delegation is usually very less in highly formalized (centralized) structures that definitely slow down the process to respond to different market concerns which can also undermine a decentralized organizational performance. The contention is that an organization which has extensive rules and regulations often requires many layers of review and approval from upper management to take desired actions. Riccucci, (2005) posit that decentralized organizations usually show a low degree of hierarchical authority and high degree of employee participation in decision making. Ruccucci (2005) asserts that decentralized decision making works well in private sector in terms of performance as well as effectiveness since low level of hierarchical authority exists whereas centralized decision making works well in public sector like NCK.

Communication
According to communication theory, communication can be viewed as a transmission process through a channel (mode), that conveys messages through a channel that provides feedback and communication effects (Teixeira, Koufteros & Peng, 2012). Conceptualizing communication inside organizations, Grunig, Grunig and Dozier (2002), define internal communication as a specialized sub-discipline of communication that examines how people communicate in organizations and the nature of effective communication system in organizations. Organizational
structure is known by many authors to have effects on the level of internal communication (Grunig, 2002). However, this study looked at communication as a process of disseminating information within and outside the organization through the existing organizational structures.

In a research conducted by Holtzhausen (2002), organizational structure changes result in information flow and face-to-face communication improvements. He argues that organizational structure determines the patterns of communication as well as the formal lines of interaction between individuals within the organization. Grunig et al., (2002) show that decentralized structures have symmetrical systems of internal communication while centralized structures have asymmetrical systems of internal communication. Similar results were found in the study conducted by Kim (2005), in which a decentralized structure is positively correlated with symmetrical communication and negatively correlated with asymmetrical communication.

Span of control
Organizational structures reciprocally influence and are influenced by factors contributing to organizational abilities. Penguin (2003) asserts that structure is influenced by environment, strategy and goals, culture, technology and size. He portends that the number of staffs, their span of control, and their responsibilities may contribute to the choice of organizational structure. Is there any published standards stating the number of staffs a supervisor should have? Hassel (2002) answered this question in her study of “influencing factors on organizational structure and their impact in the Grand Prairie Fire Department, Texas” and notes that “there is no data that gave any specific number of staff that the command officers at the fire department should have and that there are trade-offs involved in deciding how to organize sub-units”.

According to Ledbetter (2003), span of control is contingent on the responsibilities or functions of an organization and the personnel in management positions, adding that organizational positions should be staffed by functions and not by rank. He affirms that determining the number of required personnel, who is responsible for what and how they interact influences the choice of structure. Gillespie (1994) as cited in Ledbetter (2003) in reference to Max Weber’s bureaucratic theory identifies four components of an effective organization as; unity of command, span of control, division of labour and discipline. This study can then make a proposition that span of control influences the choice of structure and performance of an organization.

Research Methodology
The study adopted a descriptive research design and used questionnaires to obtain data. The target population comprised of all staff working at the nursing council of Kenya. This research adopted the census technique as the target population was small with a total number of 40 employees. This was 100% of all staffs in the departments. Ruane (2005) suggests that for populations less than 200, a census should be done; up to 500, 50% be selected; for 1000, 10%; 100,000, 1 % and 1 million, 0.025. The study involved all the 40 staffs at the Nursing Council of Kenya.
To establish validity, the research instrument was given to four experts to evaluate the relevance of each item in the instrument in relation to the objectives. The same were rated in the scale of 1 (very relevant) to 4 (not very relevant). Validity was computed by use of content validity index (CVI). CVI of 0.802 was computed. Liptak (2005) recommends a content validity index of above 0.5, indicating that the validity of the instrument was acceptable.

The questionnaires used had Likerts scale items that were to be responded to. For reliability analysis, Cronbach’s alpha was calculated using SPSS. According to Avison, Jones, Powell, Wilson (2004) the value of the alpha coefficient ranges from 0 to 1 and may be used to describe the reliability of factors extracted from dichotomous (that is questions with two answers) and/or multi-point formatted questionnaires or scales (i.e., rating scale: 1=poor, 5= excellent). A higher value shows a more reliable generated scale. Cooper and Schindler (2008) indicated 0.7 to be an applicable reliability coefficient. The pilot study involved questionnaires from four respondents. Since the alpha coefficients were all greater than 0.7, a conclusion was drawn that the instruments had an acceptance reliability coefficient and were appropriate for the study.

Table 1: Reliability results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Centralization</td>
<td>.7069</td>
<td>5</td>
</tr>
<tr>
<td>ii. Decentralization</td>
<td>.7111</td>
<td>2</td>
</tr>
<tr>
<td>iii. Functional structures</td>
<td>.8390</td>
<td>4</td>
</tr>
<tr>
<td>iv. Communication</td>
<td>.7110</td>
<td>3</td>
</tr>
<tr>
<td>v. Span of control</td>
<td>.8298</td>
<td>5</td>
</tr>
</tbody>
</table>

Discussion

The respondents from which data were collected, majority 21 (61.8%) were female and 13 (38.2%) were male. 25% were ranging between 31-35 years, followed by 21.4% ranging between 26-30 years, 17.9% were aged between 51-55 years while only 3.6% were aged between 56-60 years.

The effect of organizational culture on organizational performance

The study sought to establish the extent agreement based on decision making at NCK with regard to organizational performance. The study used a Likerts scale where 1 was strongly disagree, 2 was disagree, 3 was neutral, 4 was agree and 5 was strongly agree. The results presented from the table 1 revealed that majority of the respondents agreed that all decisions at NCK emanated from the top management as shown by a mean of 3.8, also the respondents
agreed that the management has empowered employees to determine their performance targets and that employees are normally afraid to speak up during meetings with supervisors and management as shown by a mean of 3.7 respectively. Further, the respondents agreed that their supervisors periodically evaluate their performance objectives as shown by a mean of 3.6 and lastly the respondents agreed that managers always communicate performance objectives as shown by a mean of 3.5.

**Communication**

The study sought to establish the extent to which the respondents agreed to statements related to communication at NCK and organizational performance. The study used a scale where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree. The study showed that majority of the respondents strongly agreed that communication in NCK is top-down; from management to employees as shown by a mean of 4.8, also the respondents agreed that NCK has an open door communication system as shown by a mean of 4.7. The respondents also agreed that the purpose of communication in NCK is to let employees do whatever the management wants them to do and that most of the communication between the managers and employees is a two-way communication as shown by means of 4.6 respectively. Further, the respondents agreed that employees always feel free to communicate their opinions to management and that managers communicate freely with the staff members as shown by means of 4.2 and 3.8 respectively. Lastly, some respondents were indifferent that employees in NCK are always afraid to speak up during meetings with the managers and supervisors as shown by a mean of 3.9.

**Functional Structures**

The study sought to establish the extent to which the respondents agreed to statements on functional structure in regard to NCK performance. The study used a scale where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree. From the study findings, the respondents strongly agreed that NCK has a clear organizational chart as shown by a mean of 4.8, also the respondents strongly agreed that each department in NCK has its distinct roles as shown by a mean of 4.6. The respondents strongly agreed that this organization has a strategic plan which clearly spells out organizational goals and objectives as shown by a mean of 4.8. Further, the respondents agreed that employees in NCK share ideas across departments as shown by a mean of 3.9 and all employees strictly follow the organizational structures while reporting their performance outcomes as shown by a mean of 3.6. The respondents strongly disagreed to the statements that their supervisors don’t care how they are doing and that employees in each department seldom know what happens in other departments as shown by means of 2.2 respectively.
Span of Control and NCK Organizational Performance

The study sought to establish the extent to which the respondents agreed to statements on effects of span of control on NCK performance. The study used a scale where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree. Results from the study as shown in table 2 revealed that majority of the respondents agreed that at NCK, objectives are set by departmental teams and managers guide employees in setting departmental objectives as shown by means of 3.9 respectively. Lastly the respondents were neutral that at NCK, employees clearly know who they report to. In essence, this may imply that effective communication on reporting relationships and functions are not effected as may be required. Clear communication of individual job descriptions is paramount at NCK.

Regression model summary of the effect of independent variables on the dependent variable

From the results shown in table 2, the model shows a goodness of fit as indicated by the coefficient of determination $r^2$ with value of .724. This implies that independent variables explain 72.4% of the variations in the performance of Nursing Council of Kenya. 37.6% of variations are brought about by factors not captured in the objectives. Durbin Watson value of 2.220 was established illustrating lack of auto correlation in the model residuals.

Table 2: Regression model summary of the effect of independent variables on the dependent variable

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.851(a)</td>
<td>.724</td>
<td>.676</td>
<td>.77048</td>
<td>2.220</td>
</tr>
</tbody>
</table>

Table 3: Regression Coefficient of Determination of the effect of independent variables on the dependent variable ANOVA

<table>
<thead>
<tr>
<th></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>35.775</td>
<td>4</td>
<td>8.944</td>
<td>15.066</td>
<td>.000(a)</td>
</tr>
<tr>
<td>Residual</td>
<td>13.654</td>
<td>29</td>
<td>.594</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.429</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), centralization, decentralization, span of control, communication and functional structure
Coefficient of determination
The study conducted a multiple regression analysis and from the above regression model, holding centralization/decentralization, span of control, communication and functional structure) constant at zero the performance of NCK will be 1.147. A unit increase in decentralization will lead to an improvement in the performance of NCK by a factor of 0.071; A unit increase in communication will lead to an improvement in the performance of NCK by a factor of 0.488; a unit increase in span of control will lead to an improvement in the performance of NCK by a factor of 0.049. Further, a unit increase in functional structures will lead to an improvement in NCK performance by a factor of 0.269 while a unit increase in centralization will lead to an improvement in NCK performance by a factor of 0.384. This shows that there is a positive relationship between (centralization/decentralization, span of control, communication and functional structure) and performance of NCK.

Table 4: Regression analysis results

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.147</td>
<td>3.93</td>
<td></td>
<td>2.915</td>
</tr>
<tr>
<td>Communication</td>
<td>.488</td>
<td>.221</td>
<td>.186</td>
<td>1.908</td>
</tr>
<tr>
<td>Centralization</td>
<td>.384</td>
<td>.106</td>
<td>.663</td>
<td>3.608</td>
</tr>
<tr>
<td>Span of Control</td>
<td>.049</td>
<td>.223</td>
<td>.042</td>
<td>1.222</td>
</tr>
<tr>
<td>Decentralization</td>
<td>.071</td>
<td>.158</td>
<td>.096</td>
<td>2.018</td>
</tr>
<tr>
<td>Functional Structures</td>
<td>.269</td>
<td>.135</td>
<td>.387</td>
<td>1.991</td>
</tr>
</tbody>
</table>

The Unstandardized beta coefficients column in table 4 were used to obtain the overall equation as suggested in the conceptual framework. When these beta coefficients are substituted in the equation, the model becomes:

\[ Y = 1.147 + 0.384X_1 + 0.269X_2 + 0.0488X_3 + 0.071X_4 + 0.049X_5 + 0.00 \]

\[ Y = \text{NCK Performance}, \ X_1 = \text{Centralization}, \ X_2 = \text{Functional Structures}, \ X_3 = \text{Communication,} \ X_4 = \text{Span of control and} \ X_5 = \text{Decentralization} \]

The results also show the unique contribution to the explaining of the independent variable. The standardized coefficients assess the contribution of each independent variable towards the
prediction of the dependent variable, since they have been converted in the same scale to show comparison.

The result indicates that centralization having the highest beta of 0.663 has the largest influence on performance. The second most important variable was functional structure with a beta of 0.387. The third most important variable was communication with a beta of 0.186. Decentralization had a beta of 0.096. The least important predictor of these five variables is span of control with a beta of 0.042. The t-test statistic shows that all the B coefficients of centralization, decentralization, span of control, communication and functional structure are significant (since $p<0.05$).

**Conclusions and Recommendations**

In as much as centralization is concerned, organizations should involve employees in decisions making process. Holtzhausen (2002) postulates that empowering employees makes them confident and hardworking; organizations should therefore have a more open door communication system that aim at letting employees share ideas and do whatever the management wants them to do. According to Anderson and Brown (2010) communication between the managers and employees should be improved so that employees are free to communicate their opinions to management hence improved job performance.

The study investigated the influence of organizational structure on the performance of Nursing Council of Kenya, and established that centralization; communication and functional structure are aspects of organizational structure that influence the performance of Nursing Council of Kenya to a great extent. The study therefore recommends another study to be done with an aim of investigating the other structural factors that have not been captured in this study.

**References**


