Transformational Leadership and Organisational Citizenship Behaviour among Healthcare Professionals in Ethiopia: A Structural Equation Analysis

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ABSTRACT

Previous research shows that transformational leadership is an influential factor in stimulating organizational citizenship behaviour in many industries eventhough the effect of specific transformational leadership variables are not the same. Our study filled this gap by evaluating the effect of idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration on employee’s organizational citizenship behaviour. A sample of 800 nurses and medical officers were selected from ten hospitals across Ethiopia as the case study. The study was opened to all clinical staff of the hospital hence respondents were randomly picked for the study. We observed that all dimensions of transformational leadership were positively correlated with organizational citizenship behaviour. Policy implications for the healthcare sector in Ethiopian have been provided to support the next phase of the health sector development programs.

Keywords: Transformational, Leadership, Organisational, Citizenship, Behaviour, healthcare, Ethiopia

INTRODUCTION

One of the most often written about subject in management is the concept of leadership and how it affects organizational development. A critical review of the management literature on leadership suggests that even though leadership is needed whenever a group of people come together to perform tasks, the understanding of leadership is not the same among different people (Avolio, et al, 2003). The differences span from the actual definition of leadership where the different ones have been proffered to the different concepts and the style of the leadership. To begin with one has to consider the debate about the theoretical conception of leadership and the different perspectives which have been examined in the existing literature. Firstly, the argument the trait theorist such as Adair (1988) is that leaders have peculiar traits and characteristics which other people do not have, it is further the contention of Campbell (1990) that such traits are usually naturally given of inborn hence proposing that leaders are actually born of people are born leadership hardly do they acquire their traits in this work considering the fact that most traits are naturally given. The implication of this approach to understanding leadership is that it is not everybody who can become a leader since not everybody is born with such peculiar traits and characteristics.

In his ground breaking work on the traits, Carlyle (as cited in Bass et al, 2000) identifies the skills, talents and physical characteristics of specific men and women who rose among their colleagues to become
leaders of powerful national and organisations and found out that most of the people share similar traits and characteristics most of which were inborn attributes of the individual. His work which he titled hereditary also went further to look at the very powerful leaders and their family background and concluded that leadership was inherited hence justifying the conviction that leaders were born and not made or developed on earth (Crawford, 2005).

In essence the traits theories provide emphasize that the personality of the leader is very important in successful leadership. Some of these traits such as being dauntless, tough, reliable, courageous, fearless, daring, brave, playful, wild, affectionate, zany, rough stubborn, rowdy, fidgety, shy, submissive, funny, lively, talkative, ambitious, boorish, domineering, persuasive, bossy, disparaging, cold-hearted, self-centred, conceited, picky, sly, rude and conceited all shape the nature and kind of leadership style in an organisation and these can bring in different results (Zaccaro, 2007).

Over the years the value in the use of the trait theories has weaned even though it is still an important or popular concept upon which a number of modern leadership studies have emerged. Perhaps the aspect which has received significant academic disapproval is the fact that leaders are born and not made and not the fact that leaders must have unique personal characteristics (Zweifel, 2008). There are an empirically tested argument that supports those who believe that leaders are not born all the time and that it is also possible to make leaders through organised method of teaching and learning.

The next area of leadership which emerged and which is of importance is what Torbert (2004) describes as the situational leadership theories. By situational leadership theories the interest is to suggest that by and large each situation or organizational context or industrial context bring up its own leaders with unique characteristics with to be able to solve the challenges within the sector. Motowidlo (2003) argues that the situational leadership theory came in reaction to the trait leadership theory based on studies of great men and women who had arisen in response to peculiar crisis of their time and when those crisis were over they could no longer function effectively in any particular environment this view is summarized in the assertion of Yukl (2006) Herbert Spencer who explains that generations and times produces persons to solve their own crisis and challenges and not persons produced to solve generational challenges.

This notion has thus being extended by studying industries or people who could function in one particular area of business or leadership and yet could not function in other areas. For example Morgeson (2005) explains that there are some people who are very good leaders when it comes to economic system however when such people are put into political system they do not replicate the excellence in that light because they are meant for specific leadership context. The implication of situational leadership theories as it is applied today is more related to the specialization that is needed in the management of different aspect in leadership context. The management of sport club is different from the management of the hotel business and this is also different from the management of transitional team and other forms of teams that leadership must respond to each of these specific factors in order to function effectively and efficiently.

In other words, no single optimal psychographic leader exists. According to the theory, "what an individual actually does when acting as a leader is in large part dependent upon characteristics of the situation in which he functions (Laubach, 2005). Despite the seeming antagonism between the trait theories and situational theories as far as the management of organizations are concerned several other studies have rather looked at the positive relationship between them and have disclosed that they can work together without any conflict. The first of such studies was by Lewin et al (2005) who argue that specific traits work within specific context of an organization. Additionally each of the levels of the organizations development also requires different leadership traits to manage effectively. These differences in leadership theories have contributed the whole concept of differences in leadership styles (participatory, laissez-faire, autocratic on one hand and transformational and transactional leadership on another hand) used in different organizational context and with different impact on employee performance. In the last decade, the notion of organizational citizenship and its relationship with leadership has come up. Especially in the healthcare sector, the worker’s passion performing beyond work boundaries; a completely sincere and devoted service to the organization must be shown by selfless, unsolicited and unalloyed behavior. Organization’s formal method of performance appraisal cannot suffice for the rewards deserved by this behavior (Batt and Valcour, 2003) and the traditional leadership (initiating structure and consideration) has some predictive control on OCB dimensions of altruism, conscientiousness, sportsmanship, courtesy, and civic virtue (Schnake, Dumler, & Cochran, 2003). This inspires the research that other leadership concepts are related to OCB, transformational leadership should also demonstrate this relationship.
In the Ethiopian healthcare especially, the need to meet the leadership resource demands of a growing economy requires motivated workforce to support the sector. Ethiopia experiences a heavy burden of disease mainly attributed to communicable infectious diseases and nutritional deficiencies. Shortage and high turnover of human resource and inadequacy of essential drugs and supplies have also contributed to the burden. The major health problems of the country remain largely preventable communicable diseases and nutritional disorders.

Despite major progresses made to improve the health status of the population in the last one and half decades, Ethiopians still face a high rate of morbidity and mortality and the health status remains relatively poor. The recently implemented BPR of the health sector has introduced a three-tier health care delivery system which is characterized by a first level of a Woreda/District health system comprising a primary hospital (with population coverage of 60,000-100,000 people), health centers (with population coverage of 15,000-25,000 people) and their satellite Health Posts (with population coverage of 3,000-5,000 people) that are connected to each other by a referral system. Table 1, shows the total number of available Human Resource for Health by region in 2015.

Table 2: Total number of available Human Resource for Health by region in 2015

<table>
<thead>
<tr>
<th>Region</th>
<th>Physicians</th>
<th>Physician Assistants</th>
<th>Health Officers</th>
<th>NURSING OFFICERS</th>
<th>All Nurses</th>
<th>Midwives</th>
<th>Total Multi-factor Leadership Scale</th>
<th>Transformational Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addis Ababa</td>
<td>101</td>
<td>260</td>
<td>368</td>
<td>1,254</td>
<td>3,121</td>
<td>1,944</td>
<td>185</td>
<td>1,260</td>
</tr>
<tr>
<td>Amhara</td>
<td>10</td>
<td>190</td>
<td>209</td>
<td>583</td>
<td>1,843</td>
<td>1,069</td>
<td>212</td>
<td>1,292</td>
</tr>
<tr>
<td>Oromia</td>
<td>87</td>
<td>221</td>
<td>309</td>
<td>1,033</td>
<td>2,162</td>
<td>1,275</td>
<td>247</td>
<td>1,209</td>
</tr>
<tr>
<td>SNNPR</td>
<td>71</td>
<td>175</td>
<td>246</td>
<td>739</td>
<td>1,938</td>
<td>1,235</td>
<td>315</td>
<td>1,055</td>
</tr>
<tr>
<td>Tigray</td>
<td>55</td>
<td>110</td>
<td>165</td>
<td>381</td>
<td>909</td>
<td>521</td>
<td>201</td>
<td>729</td>
</tr>
</tbody>
</table>

The above table shows the total number of available Human Resource for Health by region in 2015. Anchored in the recent reports, numbers of health professionals in different parts of the country are lower than what is standard; especially worsened in agrarian and pastoralist regions. Faced with this challenging medical situation, healthcare professionals in Ethiopia ought to develop the spontaneous self-motivating factors that stimulates them to behave with a greater sense of sacrifice and social welfare even without direct reward. It has been suggested that transformational leadership holds a high key to unleashing this potential in employees especially healthcare professionals. The term transformational leadership” was first coined by Downt (1975). In transformational leadership practices employees are made to own the visions of the organization as strategic partners instead of looking at the reward that they will get from their work. They are made to deposit their whole self into the task to seek more satisfaction in their accomplishment of work hence the need to devote all their personal resource and time to support the leader to achieve the desired ends (Kotlyar & Karakowsky, 2006). In transformational leadership, the leader plans the future for a team or organization and motivates members to achieve the desirable future (Conger, 1992). Great leaders such as Steve Jobs and James Dyson all play extremely essential role in the strategic processes that led to employees developing strong organizational citizenship of their companies. As proffered by Northouse (2007) transformational leads lead and motivate the members to fulfill their collective objectives. Gesell (2010) further explains that transformational leaders demonstrate idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management-by-exception (active) and laissez-faire strategies to get change to move in the right direction. In these studies, it is proven that a transformational leaders with innovative approach is vital for an organization to successfully promote change (Gesell, 2010), stimulate honesty, credibility, fairness, interpersonal skills, confidence and similar others necessary to improve employees’ performance, earning employees’ trusts and therefore promote strategic changes (Kouzes and Posner, 2007). Evidence of the influence of transformational leadership and organizational citizenship behavior abound in the current literature but very few have been noted in the case of Ethiopia and the entire sub-Saharan African region. As job satisfaction is a major factor in determining effective organizational citizenship behavior, Negussie et al (2017) examined the relationship that exist between the leader styles of nursing matrons of managers and the satisfaction of nurses in Jimma hospital. In the June 2012 study, the authors used a non-experimental correlation design among all the full time non-supervisory nurses with an experience of more than one year in nursing profession, the multifactor leadership scale herein used in this study were applied. The authors noted that transformational leadership were preferred over transactional leadership approaches and had moderate-level intrinsic (M=2.72, SD=0.71) but low level of extrinsic job satisfaction (M=1.83, SD=0.68). Furthermore, from transactional leadership, only contingent reward was found to be statically significant and correlated with extrinsic (B=0.45,
The authors concluded that nurses tended to be more satisfied with the transformational leadership than transactional leadership style. Therefore, nurses' managers should use transformational leadership style in order to increase nurses' job satisfaction. On another hand, Hayati et al (2014) also evaluated the relationship between transformational leadership and work engagement in governmental hospitals nurses in a study. The authors adopted a descriptive, correlational, cross-sectional design based on data collected from 240 nurses chosen through stratified random sampling method. The same multifactor leadership questionnaire was used and simple and multiple correlation coefficients were computed. The study indicated that the effect of this type of leadership on work engagement and its facets is positive and significant. In addition, the research illustrates that transformational leaders transfer their enthusiasm and high power to their subordinates by the way of modeling. This manner can increase the power as a component of work engagement in workers. Idealized influence among these leaders can result in forming a specific belief among employees toward those leaders and leaders can easily transmit their inspirational motivation to them. Consequently, it leads to make a positive vision by which, and by setting high standards, challenges the employees and establishes zeal along with optimism for attaining success in works. The outcome of these studies provides the curiosity to investigate related effects of transformational leadership and one of missing areas in the extant literature is the degree to which the transformational leadership can stimulate organizational citizenship behavior particularly in the healthcare sector in Africa.

**MATERIALS AND METHODS**

**Data Collection and Analysis**

The items of transformational leadership were adapted but modified from the most popular multifactor leadership scale. An important advantage of using a predesigned standard multifactor leadership questionnaire is that it is helps in organizing and simplifying the analysis process since it has predesigned sequence for analyzing the data. Firstly, the information transformational leadership is grouped under major headings which include measuring the degree of idealized influence, inspirational motivation, intellectual stimulation, individualized consideration and contingent reward. A sample of 800 nurses and medical officers were selected from ten hospitals across Ethiopia as the case study. The study was opened to all clinical staff of the hospital hence respondents were randomly picked. Of importance to the researcher was the need to ensure a fair representation of male and female and respondents working in the different units of the hospital. These differences were necessary to evaluate gender and departmental differences and their respective influence on the outcome. The questionnaire went through period of pretest and retest to fine tune before the data collection was conducted. Before analyzing the results, there was the need to conduct reliability and validity test and other factor analysis. The first activity was to determine the appropriateness of the data for factor analysis using the Bartlett’s Test of Sphericity and Kaiser–Meyer-Olkin measure of sampling adequacy (KMO-MSA). The Bartlett’s Test of Sphericity value recorded was significant while a KMO value of more than 0.60 was recorded. The next level was to check the correlation among the constructs of transformational leadership (first set of questions) and also in the impact of transformational leadership (second set of questions) to check the factor loading scale using the VARIMAX rotation. With respect to first set of questions, the highest total variance of the item loading represented 75.55% was recorded in the construct and these had good discriminant and convergent properties. Additionally, all the subcomponent items of the five transformational leadership dimensions (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward) were found to have significant and low multicollinearity. A test of correlation revealed the self-determining relationship between variables. All the off-diagonal elements were close to zero signifying a strong independence of each construct. The inter-item correlation matrix gave evidence to validate the fact that the constructs were reliable in relation to the multifactor leadership scales used.

This important observation confirms the general applicability of the multifactor leadership scale in different research settings as is being perused in the current research. The next was to create a compositied score by summing up all the scores for the set of questions under the five multifactor dimensions for each respondent and tested for reliability of the constructs (how well the items in the construct were measuring the same construct). The Cronbach’s Alpha method and Inter-Item Correlation Matrix were used to and the result obtained was a high reliability coefficient or internal consistency over and
above the 0.70 benchmark proposed by Pallant et al (2003). Our analytical model uses the structural equation model which is a departure from the traditional form of regression analysis. The structural equation model is explicitly formulated as a causal model, not just a predictive model with column vector, y, containing p dependent variables. The vector y is understood to represent an arbitrarily chosen observation from the population, maybe the ith. In SEM (Structural Equation Model) terms y is said to contain the endogenous variables and x contains the exogenous variables. An endogenous variable is one that appears at least once as the dependent variable in an equation. On the other hand, variables that do not appear on the left hand side are exogenous, or "given." In other words, all variances of, and covariances between, exogenous variables are determined outside of the system. The variances and covariance of the endogenous variables are being modeled as a function of the exogenous variables. This is mathematically expressed as follows:

\[ y = Bx + \Gamma x + \zeta. \]

where for each of the causal parameters, the \( \gamma \)'s and the \( \beta \)'s, the subscripts follow the same pattern. The first subscript refers to the equation, in other words the y variable which is the effect. The second subscript refers to the cause. The p by p B matrix contains the coefficients of the regressions of y variables on other y variables with 0's on the diagonal which implies that a variable cannot cause itself. The p by q matrix \( \Gamma \) contains the coefficients of the y's on the x's. The error vector, \( \zeta \), is p by 1. These errors are different than factor analysis errors; they represent errors-in-equations, in the way that these equations are specified. Thus they are also called specification errors. To get to a point to estimate the model, some assumptions were added. For example, it was assumed that \( E(y) = 0 \) and \( E(x) = 0 \), which has absolutely no impact on the variances or covariances of these variables. We then assume that the x and \( \zeta \) vectors are independent. Further we employed a second order factor model. In effect, the factors themselves may form a higher order factor. In other words, if the correlations amongst the factors have the right structure, these may be the result of a latent variable. A path diagram of this model appears below:

\[ \begin{bmatrix} y_1 \\ y_2 \\ \vdots \\ y_p \end{bmatrix} = \begin{bmatrix} 0 & \beta_{12} & \ldots & \beta_{1p} \\ \beta_{21} & 0 & \ldots & \beta_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ \beta_{p1} & \beta_{p2} & \ldots & 0 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ \vdots \\ y_p \end{bmatrix} + \begin{bmatrix} y_{11} & y_{12} & \ldots & y_{1q} \\ y_{21} & y_{22} & \ldots & y_{2q} \\ \vdots & \vdots & \ddots & \vdots \\ y_{q1} & y_{q2} & \ldots & y_{qq} \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ \vdots \\ x_q \end{bmatrix} + \begin{bmatrix} \zeta_1 \\ \zeta_2 \\ \vdots \\ \zeta_q \end{bmatrix} \]

\[ y = By + \Gamma x + \zeta. \]

where \( d_1 = \text{idealized influence}, \ n_2 = \text{inspirational motivation}, \ s_3 = \text{intellectual stimulation}, \ g_4 = \text{individualized consideration}, \ t_5 = \text{contingent reward} \). The AMOS software was used to analyze the data for the effect of each of the factors on organizational citizenship behavior. Note that the d, n, t, s and g have their own loadings and their own unique factors. Here, the variable \( \xi_1 \) serves as the higher order factor. In general terms, the second order factor analysis model can be written as:

\[ y = \Lambda_y \eta + \epsilon \]

\[ \eta = \Gamma \xi + \zeta. \]

We can write the model more compactly as:

\[ y = \Lambda_y \Gamma \xi + \zeta. \]

With the internal part in the brackets being the V(\( \eta \)). Figure 1 represents the configuration of the model used in our study.

RESULTS

Among others, the contributions of the predictor variables on the outcome variable were examined and the findings indicated that idealized influence, inspirational motivation, intellectual stimulation, individualized consideration and contingent reward significantly influences all the attributes of organizational citizenship behaviour at 95% confidence interval. This position is premised upon the effects estimates and their probability values observed.

Specifically, idealised influences means the extent to
which the employee in an organisation believe that their leaders have their trust or have faith in them and respect them as well as show dedication to their course. It is also a measure of the extent to which employees believe that their leaders appeal to their dreams and hopes hence allowing them to see the leaders as role model for their career as much as possible. This was determined to have significant relationship with Altruism (0.45), Conscientiousness (0.391), Courtesy (0.312), Sportsmanship (0.267) and Civic Virtue (0.037). In an environment where the idealized influence is strong employees are expected to be more committed to the organisation by virtue of the quality leadership which they have hence helping to make positive impact on their lives. The data shows further shows that inspiration motivation as a transformational leadership factor influences Altruism (0.23), Conscientiousness (0.084), Courtesy (0.038), Sportsmanship (0.078) and Civic Virtue (0.041). This inspirational motivation measures the strength or weakness to which employee believe that the leadership being provided by their leaders is visionary. It also seeks to examine whether leaders make use of appropriate symbols and images to help them get a better focus on their work. In addition the essence of inspirational leadership is also to measure the degree to which employee feel that their employers offer them an atmosphere which make everybody feel the work they are doing is considered significant hence get the required level of attention, resources and respect that every other person gets in the organisation despite the fact that in a typical organisation some work are more important than others.

Inspirational leadership consists of the fact that when employees feel that they are equally valued they are more likely to put in their very best. In addition it removes level of discrimination and creates level playing field of employees to relate to each other and that has the propensity to take out any element of envy and hatred for each other that can create disharmony due to envy and backbiting hence is an important element in the organisation development. Regarding intellectual stimulation, the analysis shows that it influences altruism (0.643), conscientiousness (0.128), courtesy (0.002), sportsmanship (0.137) and civic virtue (0.033). This implies a positive correlation between intellectual stimulation and organizational citizenship behavior. This behavior is stimulated by the fact that employees feel that their leaders or superiors actually encourage them and their other colleagues to be as creative as possible when it comes to analyzing and solving old problems so that they get new solution or develop new approaches to solving them in an easier way. An important part of stimulating employee interest and sustenance in an organisation is to create an environment that is tolerant of seemingly extreme positions, and nurture people to question their own values and beliefs and those of the organization. The data shows that a change intellectual stimulation by one unit reflects a positive and significant change in organizational citizenship behavior. This information also goes to enforce the importance of intellectual stimulation as far as leadership is concerned. When employees are offered such an environment they become more creative and willing to take more responsibilities in an organisation towards achieving the overall goals of the organisation. In that regard analyzing to see if this is present in hospitals in Ethiopia. The meaning and importance of individualized consideration as far as transformational leadership is concerned is the measure or the degree of extent which employees believe that their leaders are sincere or show sincere interest in their personal well-being and success as well as those of their colleague employees and how this impact on their commitment and motivation to work for the organisation. Additionally, the individualized consideration is also a critical measure of the extent to which the leaders understand individual employee strength and weakness hence assign projects individually, and pay attention to those who seem less involved in the group. When employers or leaders understand employee personally they are able to design measured and policies which are tailor made or which address each of them at the point of their need hence not lumping all of them together thereby missing some of the essential weakness and strengths of employees. The analysis shows that individualized consideration reflects a positive and significant change in organizational citizenship behavior; altruism (0.12), Conscientiousness (0.309), Courtesy (0.781), Sportsmanship (0.301), Civic Virtue (0.041). Further contingent reward also reflects a positive relationship with organizational citizenship behavior within the context of Ethiopian healthcare sector. This is evidenced by the high impact on Altruism (0.54), Conscientiousness (0.180), Courtesy (0.352), Sportsmanship (0.909) and Civic Virtue (0.042)

CONCLUSIONS AND POLICY IMPLICATIONS

Previous research results shows that transformational leadership is an influential factor in stimulating organizational citizenship behaviour in many industries eventhough the effect of specific transformational leadership variables are not the
According to Bass and Avolio (2014), contingent reward involves leaders who give subordinates what they want in exchange for their support and make clear what the latter can receive if performance meets prescribed standards. In our study, the mean scores of transformational that medical personnel appeared to be more satisfied with transformational leadership style especially with inspirational motivation and idealized behavior influence. Leaders adopting inspirational motivation behavior have an ability to strengthen their followers' responses and explain important ideas in simple ways. Idealized Influence (behavior) also helps the leader to instill pride and faith in the follower by overcoming obstacles and confidently expressing dissatisfaction with the status quo satisfaction. Findings of previous studies revealed that medical practitioners working in public hospitals in Sub-Saharan African countries did not have extrinsic job satisfaction due to low remuneration, lack of educational opportunity and poor working conditions. The result of this research also revealed that all dimensions of transformational leadership were more positively correlated with organizational citizenship behaviour. This finding is consistent with the finding of a study done in a Jordanian private hospital (Malik, 2014). Transformational leadership promotes employees' empowerment in implementing organizational functions and employees' empowerment has played a significant role on employee self-efficiency which in turn promotes employees' organizational citizenship behavior. On the other hand, all dimensions of transformational leadership style were significantly and positively correlated with both intrinsic and extrinsic job satisfaction. The result of this study indicates that nurses and doctors in Ethiopian hospitals prefers managers who are transformational leaders. This implies that transformational leadership style promotes job satisfaction of nurses leading to improved performance and reducing the turnover of nurses since they have acquired strong organizational citizenship. Therefore, hospital managers in Ethiopia should ensure that mission and vision of the hospital is clear to each employee in order to enable him/her transform the mission and vision into ward objectives. The staff should understand the jointly set goals and the hospital manager should foster innovative thinking to consider the existing working standard in a new way so as to improve individual and team productivity. Hospital managers in Ethiopia should develop more trust and confidence in their nurses and it is necessary that the former strive to empower the latter. Furthermore, hospital administrators in Ethiopian should facilitate training programs for nurse managers on leadership styles and their effects on job satisfaction in order to enable them to understand the components of effective nursing leadership style. Finally, further investigation on the relationship between transformational and transactional leadership styles and nurses' job satisfaction in private and public hospitals in Ethiopia in order to critically examine the effects of these two leadership styles on employees' job satisfaction is recommended.

List of References