# THE EFFECT OF THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP, ORGANIZATIONAL CULTURE AND PERFORMANCE:
## Empirical Findings from Four Public Sector Organizations in the United States Virgin Islands

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## ABSTRACT

*Scholars and practitioners in social sciences have argued that there is some association between leadership and performance, but empirical evidence has yet to prove the effect of leadership, performance and culture on public organizational performance. This study has investigated the effect of transformational leadership styles, organizational culture types and performance in four public sector organizations. The argument that there is no association between the three fundamental pillars of public sector organization: leadership, performance and culture, has become an ongoing debate in social sciences. This study investigated the effect of transformational leadership traits, organizational culture types and performance in four public sector organizations. The objective of this research was to examine the effect of individual leadership traits, and culture types on performance in public organizations. The behavior elements examined in this study were idealized influence behavior, inspirational motivation, intellectual stimulation, individualized consideration, idealized influence and effectiveness. Performance outcomes variables were hiring decisions, performance measurements, job satisfaction, and structured reward system respectfully. The cultural variables used were clan culture, adhocracy culture, market culture, and hierarchal culture. This study utilized a survey designed and implemented a quantitative methodology. The analysis used primary data produced by the Multifactor Leadership Questionnaire (MLQ) to administer on 200 respondents from four of the largest public sector organizations in the United State Virgin Islands to examine the relationship of transformational leadership, organizational performance and organizational culture. The responses were scaled and coded to enable the segmentation of the data into dependent and independent variables based on the leadership, performance and culture variables. The study utilized the multiple regression models and correlation statistical analyses to determine the degree of commonality among the components. The results showed that while transformational leadership were strongly correlated with organizational performance with consistency and adaptability, organizational culture had a positive significant relationship with performance management practices. The study concluded that transformational leadership and organizational culture have positive effects on facilitating performance in mature public sector organizations, and recommended transformational leadership styles to actualize the culture types best suited in public sector organizations.*

**Keywords:** *Leadership traits, Organizational culture, Performance, Public sector*
**JEL Classification: D23, M41, L25, L32**

## I. INTRODUCTION

An examination of the concepts of leadership traits and organizational culture types has attracted significant interest in the field of organization and management from scholars and practitioners alike. Recent study proved that there must be a synergistic fit between leadership styles and performance (Bass, 2003; Howell and Avolio, 2006), and between organizational culture and performance (Lim, 2015) if organizations were to successfully achieve their mandated objectives. The fact that transformational leadership is commonly seen as an important factor in facilitating both organizational performance and corporate culture, there is a need, however, to explore further research focusing on specific leadership traits to determine the synergistic fit with the three-phenomenon mentioned. While it appears as though organizational practitioners continue to explore a strategic link in the private sector, and in some cases, are able to select leaders who have demonstrated the ability to improve organizational effectiveness, researchers in the public sector must provide a continuum of literature addressing the challenges of accomplishing the mandates of key stake holders of the organization in effectuating changes

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within the context of organizational performance (Wilderom, Glunk & Maslowski, 2000). As Wilderom (2000) asserted, with any aspect of organizational functioning, it should focus on organizational performance, and most important, effectiveness in achieving desired out-comes. It was pointed out that a number of scholars have questioned the management theory practices in the western hemisphere, while calling for more investigation into the phenomenon associated with organizational culture as a significant ingredient in performance management practices in non-western countries (Linnenluecke, Griffiths (2009).

Practitioners and scholars have argued that the topics of leadership and organizational culture have attracted considerable interest, and the arguments are based on the explicit and implicit assertions that both leadership and culture are linked to organizational performance. It should be pointed out however, while the relationship between leadership and performance have been extensively investigated independently in the private sector, Parry (2012) pointed out that few studies have investigated the relationship between the three concepts in public sector organizations. Thus, the purpose of this study was to fill the gap by examining the relationship between specific transformational leadership styles with organizational culture traits and assess their effects employee's performance in public sector organizations. The second purpose of this study was to present empirical evidence which suggest that the effectiveness of an organization's relationship between its leadership style and performance is contingents upon the form of organizational culture that exist within the organization's internal environments. This study used the Cameron & Quinn (2006) culture model to effectively assess impact of culture and leadership on performance. The four culture types that will be discussed and used to evaluate this phenomenon are namely: Clan Culture leadership role; Hierarchy Culture leadership role; Adhocracy Culture leadership role; and Market Culture leadership role which are key determinants of organizational performance. The study also used the Bass and Avolio (2003) transformational leadership traits model which include Idealized Influence Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, and Idealized Influence Attributes. The attributes of organizational performance are (Petty, 2012) model of performance management variables: Hiring Decisions, Performance Measurement, Job Satisfaction, and Reward System. This study is divided into the following sections: the introduction of the study, a review of relevant literature, the research methodology of the study, the data and results and conclusion and recommendations for implementation.

## II. REVIEW OF RELATED LITERATURE
### Transformational leadership and performance
The transformational leadership theory was first introduced by Burns (2005) who was analyzing political leadership in public sector organizations (Barbuto, 2005; Llies, Judge & Wagner, 2006). The theory suggests that some leaders, through their personal traits and their relationships with followers, go beyond a simple exchange of resources and productivity but seek to develop and empower individuals to their fullest potential (Nahavandi, 2006). Transformational leadership is a process that changes and transforms followers. It focuses on individual's emotions, values, ethics, standards, and long-term goals (Avolio, Bass & Jung, 2003); and it assesses the motives of followers with an aim of satisfying their needs, and in treating them with dignity and respect (Black, 2003; Barbuto, 2005; Bass, 2003). From the views of scholars and practitioners, transformational leadership has the elements of a wider range of applicability. The leadership theory can be employed to influence followers on an individual and group level, and it can also be instrumental in influencing an entire organization and its culture (Burns, 2005). Campbell (2013) further asserted that while the styles of laissez-faire and transactional leadership, which are based on passive and active aspects of the leader and his environments, the transformational leadership, which is based on personal relationships, intellectual challenge, inspirational motivation and behavioral charisma are also seen as effective traits in enhancing organizational outcomes.

It was further argued that leadership is not limited to executives at higher levels within organizations. Hersey and Blanchard (2011); Northhouse (2004) argued that leaders at all levels of the organization should have the diagnostic ability and adaptability if they are to be successful in leading across diverse situations. An important contribution to the theory of leadership came from Burns (2005) and Bass (2003) when a comprehensive analysis was made from the research findings into the behaviors of political leadership. Their research showed that political leadership can be defined as transactional or transformational. Additionally, Bass (2003) argued that transformational leaders act as role models for their followers, motivate and inspire followers through team efforts, challenge and stimulate their followers intellectually, and facilitate personal development and growth in their followers.

Blackwell (2006) asserted that the link between leadership and performance has created scholarly debates with practitioners and scholars alike. Although it can be argued that research on the relationship between different leadership styles and organizational performance have yielded negative results, Bass and Avolio (2003) found a

high correlation between transformational traits and the organizational productivity specifically relating to performance. Avolio, Waldmaqn, Yammarino (2004) also found that this association with the leadership performance phenomenon was more impressive than the positive relationship between the leader's transactional style and the organizational effectiveness. Other literature on the theory of leadership pointed out negative correlation between the transactional leadership style and organizational performance (Parry, 2003). Shilbury Annmore (2006)) argued, on the other hand, that employees exert more interest and take initiative to perform their duties if they support the appointment of the leader or have stake in the organization in which they work. This synergy of employee and leader interaction contributes to the increase productivity and level of performance within the organization. According to Casimir, Waldman, Bartram (2006), Gadot (2015), and Parry (2012), they asserted that resent studies in leadership styles in public sector organizations found that leaders that demonstrated transformational leadership traits have positive effects on the innovation of their employees and their organizations, overall performances.

The literature reviewed provided some semblance of the leader performance phenomenon. What was not clear was what specific leadership traits or style contributed to organizational performance. This study will address the effect of the specific leadership traits on performance. Clearly, the gap needs further assessment as there remains a high degree of uncertainty regarding the relationship amongst the variables. This study is intended to investigate the leadership culture and performance relationship thereby contributes to the body of knowledge in the field of social sciences.

**Organizational Culture and Performance**

Howard (2009) argued that the concept of organizational culture has evoked serious research into the behavioral sciences of organizations' performances, and scientists from the field of anthropology and sociology have been studying the impact of culture on organizational effectiveness for many years. However, the arguments postulated by Schein (1992) asserted that organizational culture is an abstract and complex phenomenon, thus many definitions of culture exist and that the concept of organizations is ambiguous. As a result, scholars in organizational behavior (Ogbonna, Harris, Rudd, Grrnly, Beaston, Lings (2008); Rowden, 2002) presented two schools of thought conceptualizing the meaning of organizational culture. One school defined organizational culture as observable traits focusing on the physical characteristics of the organization such as architecture, artwork, dress patterns, language, stories, myths, behavior, formal rules, rituals, ceremonies, and appearances.

A number of studies have been conducted on the relationship between organizational culture and performance in both the public and private sector organizations (Naidoo, Coopoo and Surujlal (2015). Three of such researches are summarized below. First, Cameron and Quinn (2006) hypothesized that an institution with strong, congruent cultures shows significant strength over those with weaker cultures and sub-cultures. However, his study did not corroborate this hypothesis (Brown, 2007; Scott, 2003). Rather, his study showed that dominant culture types and not cultural strength, was the real predictor of organizational performance (Cameron and Quinn (2006); Vigoda-Gadot (2006). Further examination of his initial research findings revealed that the data also showed that each of the four cultural elements had a particular characteristic that was consistent with this model (Cameron and Quinn 2006). Second, Kotter and Heskett (2004) conducted several research studies to examine the link between organizational culture and economic performance in government organizations. The researcher implemented a mixed methods study to test the hypothesis on the relationship between organizational culture and long term performance. In summarizing their findings, Kotter and Heskett (2004) were able to identify with similar trends presented in Cameron and Quinn's (2006) research. Four conclusions were drawn from this study: First, it was interesting to note that an organizational culture is more important that its subcultures. Second, an organizational performance is facilitated by a well-entrenched culture (Kotter & Heskett, 2004). Third, organizational performance is greatly enhanced when it is adaptable and focuses on strategies that facilitate organizational customers, and employees' needs. Finally, Kotter and Heskett (2004) found that an adaptive culture has three major elements: Shared vision and strength; a common understanding of the mission, goals and objectives; and mutual support and trust.

Denison and Mishra (2005) conducted a series of studies using quantitative and qualitative methods to examine the continued impact of organizational culture on organizational performance. Thirty supervisors from two government organizations were surveyed. In the continued evaluation of the performance theory, the four hypotheses were subjected to further research by Denison and Mishra (2005) and ultimately incorporated into the Denison's Culture and Performance Model. Extrapolating the results from these two studies, Denison and Mishra (2005) hypothesized that organizational involvement is an aspect of culture that will be positively related to performance, the degree of shared norms and consistency is an aspect of culture that will be positively related to performance; adaptability or the ability to respond to external conditions by changing internally is an aspect

of culture that will be positively related to performance; a sense of mission or long-term vision is an aspect of culture that will be positively related to performance.

**Transformational Leadership and Organizational Culture**

The literature review on organizational culture types and leadership styles supported the arguments that both constructs have a significant positive impact on organizational performance. The purpose of this section, however, is to review the related literature and research that many of the authors in the field of organizational leadership, culture and behavior have accomplished; and the studies that substantiates the relationship between organizational culture types and transformational leadership styles in improving performance in public sector organizations.

Blackwell (2006) and Hooijberg, Petrock (2004) noted the importance of culture and leadership by arguing that organizational culture influences organizational behavior, and helps frame and shape the use of leader behavior. Bass and Avolio (2003), on the other hand, asserted that a purely transformational culture is conceptualized as having a close net relationship with organizational members. In this relationship, commitments are long-term; individuals share mutual interests; and there is a sense of shared fates and interdependence across divisions and departments.  However, Blackwell (2006) further argued that in an effort to enhance a commonality among organizational performance, supervisors serve as mentors, coaches, role models and leaders. Thus, there is a sense of interpersonal communication at all levels within the organization about purposes, vision, goals and objectives. Further, Block (2003) and Harrigan (2005) noted that the concept of leadership and culture are extremely central to understanding organizations and making them effective, and that the combined phenomenon cannot be taken for granted.

According to Scott, Davies, and Marshall (2007), the late 1980s have seen a series of studies showing the link between dominant organizational culture types and organizational performance. In fact, Yuk (2009) argued that transformational leadership and organizational culture have become increasingly important over the last decade resulting in more than 5,000 studies on leadership. Further, Hendricks (2006) asserted that the phenomenon of leadership and culture continues to draw interest of academics and practitioners in many fields, including sport management, public sector organizations and the health care industry.  Yukl (2009), Hartog, Jaap, Koopman (2001) asserted that transformational leader work to influencing major changes in the mindset of followers thereby effectuating changes in     follower's personal personality traits). Block (2003) produced a seminal research on organizational leadership culture connection, and argued that "the leadership and culture are so central to understanding organizations and making them effective that students of organizational behavior cannot afford to be complacent about either one" (p.  2). Additionally, it was argued that current models of organizational performance and change suggest that leadership and organizational culture are central explanatory constructs (Ogbonna & Harris, 2000; Cadden, marshall, Coa (2013).

**III. METHODOLOGY**

This research implemented a quantitative, non-experimental, correlation study using a survey as the method of data collection (Creswell, 2003; Yin, 2003). The research methodology complemented the purpose of the study adequately in that it seeks to verify the coexisting factors between transformational leadership traits; organizational performance and organizational culture types. The survey instrument of choice that was used to determine the leadership style was the MLQ Form 5X from Mind Garden. The survey included the Organizational Culture Assessment Instrument (OCAI) which defines each respondent organizational culture types. There were questions concerning the demographics to include the respondents' age, gender, and tenure with present employer, rank within organization, leaders' position within the organization and work history of the respondents.

All four sections of the survey to include demographics, leadership, performance and organizational culture were administered by individuals assigned to each organization mainly for distributing the survey instrument and collecting them upon completion. Permission was requested to use this survey instrument from Cameron and Quinn (2006) and Bass and Avolio (2002). The data analysis used was SPSS Statistical Software package. A regression analysis was performed to determine if there were any significant statistical relationship between transformational leadership traits, organizational performance and organizational culture types. The intent of this analysis was to test the hypotheses stated earlier to a level significant to $p < .05$.  Further, a correlation analysis was used to determine the relationship between the variables, and the significant of the identified relationship (Cooper and Schindler 2006).

The target population for this survey comprised of employees working-full time in various government organizations or agencies in the Virgin Islands. Fifty surveys were distributed to four agencies creating a total

sample size of 200. The goal of this survey was to obtain a return of 90 % to 95% responses. This research strategy or methodology is consistent with the findings of Zikmund (2000) and Formbrun (2011), who asserted that the objective of the researcher is to obtain a 95% confident level for a population of 725 with a reliability of +/- 3%. The respondents include directors, managers, supervisors, and support staff. The Organizational Culture Assessment Instrument (OCAI), measuring organizational culture type, and the Multifactor Leadership Questionnaire (MLQ) Form 5X measuring leadership traits as transformational and organizational performance or effectiveness were implemented in this study. Surveys were distributed to four government agencies with 800 employees in the Virgin Islands. The researcher collected the completed survey instruments from the respondents by traveling to the respective target organizations.

This study utilized a survey instrument in the form of a Multifactor Leadership Questionnaire (MLQ) Form 5X to collect data on leadership behavior, and organizational performance, and the Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn (2006) to measure organizational culture types.  A review of the literature revealed that there are several instruments designed to assess transformational leadership, and the best-known and most rigorously assessed instrument is the Multifactor Leadership Questionnaire (MLQ) Form 5X (Javidan & Waldman, 2003).   The MLQ is psychometrically tested for reliability and validity (Bass and Avolio, 2002).

The MLQ Form 5X by Bass and Avolio (1990), is a self-reporting questionnaire consisting of 45 questions regarding leaders' behaviors. Bass and Avolio (1990) stated that form 5X consist of five sub-scales consisting of four items each assessed the characteristics of transformational leadership to include idealized influenced behavior, inspirational motivation, intellectual stimulation, and individual consideration. Form 5X also contains three sub-scales of four items measuring the transactional leadership component of contingent rewards, active management by exception, and passive management by exception (Avolio, 2007; Bass, 2003; Hater & Bass, 2005; Schimmoeller, 2006).  Avolio (2003) further noted that the MLQ Form 5X measures specific leaders' behavior by using a 5- point Likert Scale. This statement was corroborated by (Howell & Avolio 2006; Louis and Griffith 2009) who stated that the 5-point Likert Scale responses ranging from "not at all" to "frequently if not always". The 5- point scale approach was incorporated into the research instrument to be used in this study (Avolio & Bass, 2003). Three sub-scales of five items also measuring hiring decisions, performance measurement, job satisfaction and reward system were also embedded in the survey to measure performance or organizational effectiveness.

Cameron & Quinn (2006) also justified the OCAI instrument by stating that the instrument used a response scale in which individuals divide 100 points among alternatives. According to Cameron & Quinn (2006), this instrument was designed with six, key dimensions to assess the sample received from the respondents ranging from dominant characteristics, organizational leadership, management, strategic emphasis, organizational glue, and the criteria for success. Each of the six items created four possible results which were divided into 100 points, known as an ipsative rating scale. However, the instrument in this study used the Likert scale in which respondent rate each alternative in each question on a scale of 1 to 5 or 1 to 7- ranging from strongly agree to strongly disagree. The rating for each of the dimensions was analyzed and summed up. Thus, the results were plotted to determine the strength of each competing culture within the organization. It is argued that each response in the Likert's scale create a degree of independence, which ensures objectivity in the research process (Cameron & Quinn, 2006). The anticipated time it takes for the questionnaire to be completed was 20 minutes.
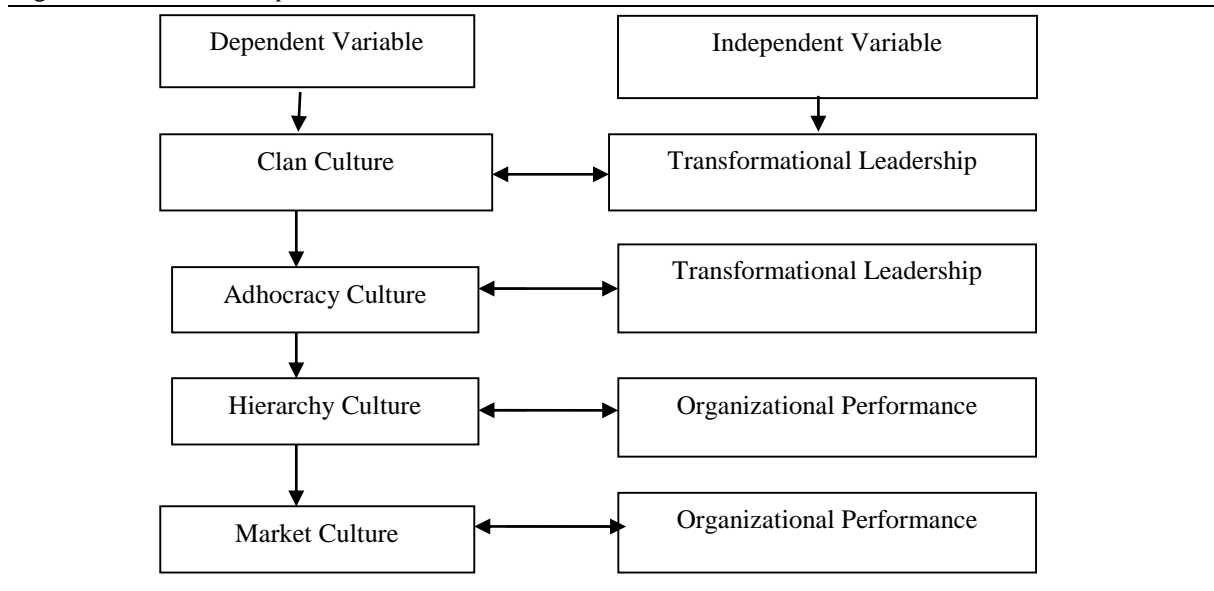
### Research Hypotheses

The hypothesis in this study tested transformational leadership traits and organizational performance as the independent variables to determine if there is a relationship between organizational culture types as defined by Avolio, Bass, Jung (2003) as the dependent variable as defined by the CVF (Cameron & Quinn, 2006, Ogbonna & Harris, 2000, Selden & Sowa, 2004).  Each element of transformational leadership types and organizational performance was correlated with the four constructs of organizational culture discussed previously.

This research suggests that leadership styles affects an organization's culture and its performance, and proposed that:

H1      There is no relationship between transformational leadership traits, and organizational performance and organizational culture type as defined by the Competing Values Framework.

H2      The relationship between transformational leadership traits and organizational performance is mediated by the nature and form of organizational culture as defined by the Competing Values Framework.

Figure 1 depicts the relationship between the variables and provides the Conceptual Value Framework that was used to plot the arrangement of activities graphically in a continuous and progressive manner through the research process (Naidoo, Coopoo and Surujlal, 2015).

Figure 1: *The relationship between the variables*
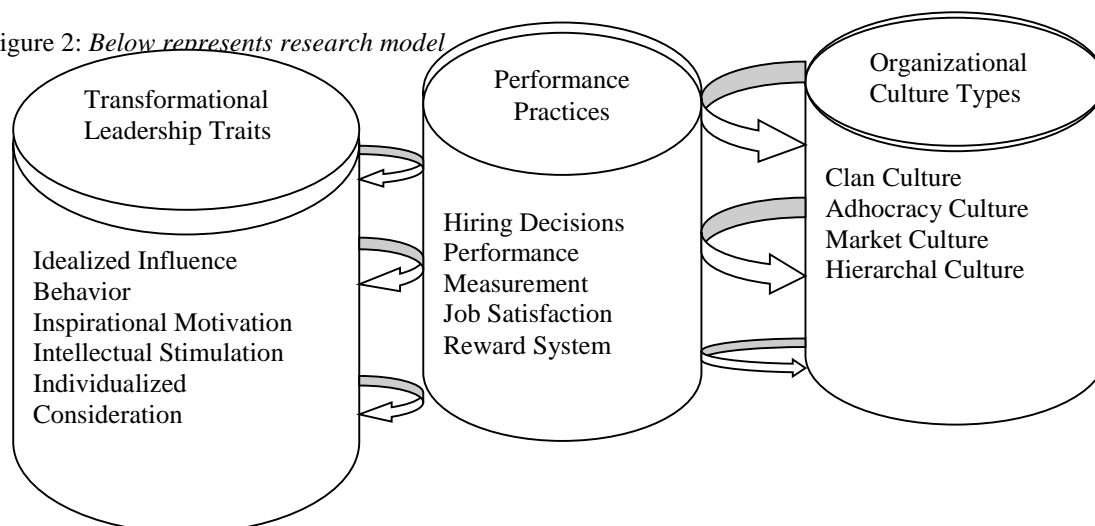


*The relationship between variables*

**Research Questions**

Figure 2 below depicts the investigation of the relationship that exists between transformational leadership style, performance and organizational culture type seeks to answer the following questions:

1. Is there an association between clan culture and a specific leadership style as the dominant leadership style in public sector organizations?
2. Is there an association between adhocracy culture and a specific leadership style as the dominant leadership style within public sector organizations?
3. Is there an association between hierarchy culture and a leadership style as the dominant leadership style within public sector organizations?
4. Is there an association between market culture and a specific leadership style as the dominant leadership style within public sector organizations?
5. Which organizational culture type is directly associated with transformational leadership and is most conducive to organizational performance in public sector organizations?

The research framework provided a procedural process of the research questions that will be answered in this study.

Figure 2: *Below represents research model*

## IV. DATA ANALYSIS AND DISCUSSION OF RESULTS

This study utilized descriptive statistical analysis to corroborate the data. A combination of two statistical packages were implemented, namely, SPSS Statistical Software package 14.0 and Microsoft Excel Software package to transform primary data into information that is understandable. In order to fully represent the data analysis, the information was summarized, categorized, and calculated using the mean, median and the mode methods (Cooper & Schindler, 2006). The standard deviation and the percentage of distribution were factored into the analysis in order to accomplish the analytical task (Creswell, 2003; Barnes, 2016). The data were also analyzed using the chi-square tests of significance to evaluate the difference between the observed frequency and the frequency of nominal data (Cooper & Schindler, 2006; Avolio, 2007). Emphasis was also placed on testing cross-tabulation of nominal data between selected variables. The statistical significance difference targeted was $p < .05$. alpha levels which is typical in most research (Cooper & Schindler, 2006; Hendricks, 2003).

The data was analyzed in three stages: demographics, factor analysis, and regression analysis. First, the data was examined using descriptive statistics to understand the samples without testing the hypotheses. The age of the respondents ranges from 22 to 55. The mean age was 42.3 years with a standard deviation of 11.72. Gender was 34% male and 65% female. 98 % of the respondents reported full-time tenure with their agencies with a mean of 9 years. 5% of the respondents reported tenure with less than 5 years, while 3% reported tenure with less than 1 year. Although the demographics were incorporated into the data set, they were only used to better understand the sample, and were not used in the analysis of the questionnaires. The results of the sample showed that the respondents were mostly females, well-experienced and have a long tenure with their organizations.

An aggregated variance analysis was also conducted on transformational leadership traits and organizational performance to identify those items that were appropriately correlated to organizational culture types using variance procedures. First, the mean score for each of the six transformational leadership scales was calculated, then a comparison of the means was conducted for each item to evaluate the appropriateness of each score (i. e statistically significantly higher on the appropriate definition utilizing t-tests; $p < 0.05$). The analysis indicated that the sample size was adequate for assessing the practical significant differences between the means which is consistent with each observation represented in Table 1 below. The analysis also indicated that the mean scores of Organizational Performance (Org. PF.) = **37. 50;** Idealized Influence Behavior (IIB) = 37. 50; and Inspirational Motivation (IM) = **43.75**; are significant when compared to Hierarchal Culture types. Intellectual Stimulation (IS); Individualized Consideration (IC) and Idealized Influence Attributes (IIA), also showed strong correlations, but less significant with scores of **29.88; 30.42**; and **29.17** respectively.

TABLE 1
A Comparison of Means Culture Types with Leadership Traits

| L. Traits | Clan | Adhocracy | Market | Hierarchal |
|---|---|---|---|---|
| Org. PF. | 14.17 | 32.5 | 10.83 | ***37.50** |
| IIB | 14.17 | 32.5 | 10.83 | ***37.50** |
| IM | 14.72 | 16.72 | 19.22 | ***43.72** |
| IS | 23.52 | 18.08 | 23.07 | *29.88 |
| IC | 7.50 | 19.16 | 36.25 | *30.42 |
| IIA | 16.67 | 19.00 | 25.83 | *29.17 |

*Correlation is significant at the 0.05 level*.

Table 2 illustrated the correlation between culture types and organizational performance. As depicted in Table 2, when the sig. value (p - value) was compared to the significant level .05 the analysis showed that the p-value was less than .05 which indicates that there is a correlation between organizational performance and culture types. The correlation coefficient was strong at -0.315; -0.265; -0. 543; -0.484, but significant at 1.00; 0.194. This finding was consistent with Cameron and Quinn, (2006) who asserted that the existence of a strong hierarchal and clan culture in public sector organizations facilitates increased performance.

TABLE 2

Pearson Test of Correlation of Organization Performance with Culture types

|  | Clan | Adhocracy | Market | Hierarchal |
|---|---|---|---|---|
| Clan Correlation | 1.000 | 0.315 | 0.315 | 0.265 |
| Sig (2-tailed) | . | 0.000 | 0.000 | 0.000 |
| Adhocracy Correlation | 0.315 | 1.000 | 0.194 | 0.543 |
| Sig (2-tailed) | 0.000 | . | 0.008 | 0.000 |
| Market Correlation | 0.315 | 0.194 | 1.000 | 0.484 |
| Sig (2-tailed) | 0.000 | 0.008 | . | 0.000 |
| Hierarchal Correlation | 0.265 | 0.543 | 0.484 | 1.000 |
| Sig (2-tailed) | 0.000 | 0.000 | 0.000 | . |

*\*\*Correlation is significant at the 0.05 level (2-tailed)*

This study also found a strong existence of adhocracy and market culture in public sector organizations. These findings are best explained by the approaches that government is now taking to promote their services and to collaborate in joint venture projects which are more evident in private sector organizations).

Table 3

Correlation of Organizational Culture and Transformational Leadership Traits

|  | Clan | Adhocracy | Market | Hierarchal |
|---|---|---|---|---|
| **Idealized Influence Behaviour** |  |  |  |  |
| Correlation coefficient | 3.333* | 0.367* | 0.257 | 0.268 |
| p-value | 0.000* | 0.022* | 0.142 | 0.114 |
| **Inspirational Motivation** |  |  |  |  |
| Correlation coefficient | 0.362* | 0.339* | 0.322* | 0.328* |
| p-value | 0.002* | 0.001* | 0.005* | 0.003* |
| **Intellectual Stimulation** |  |  |  |  |
| Correlation coefficient | 0.226 | 0.419* | 0.447* | 0.358* |
| p-value | 0.176 | 0.006* | 0.008* | 0.028* |
| **Individualized Consideration** |  |  |  |  |
| Correlation coefficient | 0.476* | 0.459* | 0.169 | 0.232 |
| p-value | 0.001* | 0.001* | 0.241 | 0.096 |
| **Idealized Influence Attributes** |  |  |  |  |
| Correlation coefficient | 0.196 | 0.538* | 0.078 | 0.530* |
| p-value | 0.160 | 0.000* | 0.579 | 0.000* |

Note. *Highlighted values are significant at p-values that are less than .05

As exhibited in Table 3, it is important to note that this investigation found strong correlations with transformational leadership traits and organizational culture types in public sector organizations. The links were positively related with Clan 3.333; Adhocracy 0.476; and Hierarchal culture .268, .232 respectively. What was surprising, however, is the positive link between Market culture .322, and .447, and transformational leadership traits in public sector organizations which Cameron and Quinn (2006) asserted is more prominent in private sector organizations. It should be noted that the links are related significantly at the stated .05 level of significance, and the P-values were also significant between the correlations coefficients. The implications of these findings from the standpoint of management, and their impact on organizational performance will be discussed further.

TABLE 4
*Factor Analysis: Total Variance Explained*

| Component | Initial Eigen Value | % of Variance | Cumulative % | Extraction Sums of Squared Loadings | % of Variance | Cumulative % |
|---|---|---|---|---|---|---|
| 1 | 5.034 | 50.34 | 50.34 | 5.034 | 50.34 | 50.34 |
| 2 | 2.058 | 20.576 | 70.916 | 2.058 | 20.576 | 70.916 |
| 3 | 1.208 | 12.082 | 82.998 | 1.208 | 12.082 | 82.998 |
| 4 | 0.702 | 7.019 | 90.017 | | | |
| 5 | 0.332 | 3.323 | 93.34 | | | |
| 6 | 0.291 | 2.914 | 96.255 | | | |
| 8 | 0.086 | 0.856 | 98.931 | | | |
| 9 | 0.059 | 0.587 | 99.518 | | | |
| 10 | 0.048 | 0.482 | 100.00 | | | |

*Factor Analysis explained*

A factor analysis was also conducted in this study using the components of transformational leadership traits and culture types yielding a cumulative percentage of 97.36 for the Kaiser-Meyer-Olkin Measure of Sampling adequacy and a significant Bartlett's Test of Sphericity. As depicted in Table 5, the total variance explained by the factors of Clan, Adhocracy, and Market Culture are 50. 3%; 20. 5% and 12. 0% with only three components extracted. Reliability reported in this scale is .96 which further supports the theory that the components of transformational leadership and culture types are not independent of each other in this study (Flemming, 2009). A multiple regression analysis was performed to determine if there were any significant statistical correlations between transformational leadership traits, organizational performance, and organizational culture types. When the $R^2$ values were evaluated, the result showed high at .102%, .147%, and .112% respectively indicating that there is overall satisfaction with the correlation of components of transformational leadership traits and organizational performance in public sector organizations. Table 5 also shows whether the proportion of variance is significant. The intent of this analysis was to test the hypotheses stated earlier to a level significant to $p < .05$.

It was evident that the traits of transformational leadership (Idealized Influences (Behavior), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, and Idealized Influence Attributes) have a sig or p-value of .00 which is below the .05 level; therefore, it is reasonable to assume that the overall model is statistically significant, hence significant related to organizational performance. It was concluded that the overall fit of the transformational leadership variables has a significant correlation effect on organizational performance, thus the hypothesis H2: The relationship between transformational leadership traits and organizational performance is mediated by the nature and form of organizational culture as defined by the Competing Values Framework was validated.

TABLE 5
*Summary of Leadership, Performance and Culture Regression*

| | R | R Square | Adj. R Square | t | sig |
|---|---|---|---|---|---|
| Organizational Performance | .320 | .102 | .073 | 11.793 | .159 |
| Idealized Influence Attributes | .383 | .147 | .124 | 3.771 | .000** |
| Individualized Consideration | .306 | .094 | .089 | -4.425 | .000** |
| Inspirational Motivation | .197 | .039 | .023 | -2.650 | .009** |
| Intellectual Stimulation | .308 | .95 | .075 | 2.774 | .006* |
| Idealized Influence Behaviour | .335 | .112 | .103 | -4.803 | .000** |

There were five critical dimensions that were imbedded in the questionnaires. The first dimension was represented by four Idealized Influence Behavior (IIB) and four Idealized Influence Attributes items. These items were primarily associated with a leader's ability to behave in ways that reflect strong ethics, possesses strong role-model principles, is admired, respected and trusted (Bass & Avolio, 2003). A second dimension included four Intellectual Stimulation items suggesting that transformational leaders stimulate their followers' efforts to be innovative and creative by questioning assumptions; reframing problems; developing new and

innovative ways to resolve old problems (Bass & Avolio, 2003). The third dimension was represented by four Inspirational Motivation items suggesting that transformational leaders behave in ways that motivate and inspire their followers by providing meaning and challenge to their followers' work. The fourth dimension evaluated the ability of transformational leaders to address the needs of their followers for achievement and growth by acting as coach or mentor (Bass & Avolio, 2003). The final dimension consisted of four items that measure the ability of transformational leaders to effectively represent their followers by enhancing their ability to achieve organization's goals and objectives.

Previous research has found transformational leadership to be positively correlated with the leader's satisfaction, effectiveness of the leader, role clarity, mission clarity, and openness of communication (Hinkin & Tracey, 2013). Similarly, Yukl (2009) described transformational leadership as influencing major changes in public sector, organizations' members and building commitment for the organizational objectives. Consistent with the findings of Timothy et al. these studies should lead us to question whether or not more emphases should be placed on evaluating the mindset of political employees when they are appointed to leadership roles in public organizations. Finally, this study found organizational performance to be positively correlated with transformational leadership traits and organizational culture types which is consistent with the research conducted by Hinkin and Tracey (2013) that also found transformational leadership to be positively correlated with satisfaction and leader's effectiveness. Further research is required to investigate a wider sampling frame and to examine the relationship between leadership and culture behaviors and relevant organizational outcomes. This study hypothesized and proved that transformational leadership traits are dependent on organizational culture types and that performance is dependent on the style of leadership and culture types existing in the organization. Although this study confirmed that Transformational leaders possess the ability to effectively enhance organizational performance, this research did not examine the correlation of other leadership styles such as Transactional, and Laissez-Faire with different organizational culture types. Further study is recommended using other leadership styles so that leaders can fully understand and appreciate the appropriate methodology that will effectively enhance performance in specific public sector organizations.

## V. CONCLUSION AND RECOMMENDATIONS

There are several important managerial and leadership implications derived from this research for public sector organizations and that can contribute to the body of knowledge. First, this study supported the empirical research by Cameron and Quinn (2006) who asserted that hierarchy culture is present in large organizations and government agencies, as evident by standardized procedures, multiple hierarchical levels and an emphasis on rule enforcement. However, this study adds to the body of knowledge by discovering that transformational leadership traits are strongly embedded in Hierarchy, Clan, Adhocracy and Market cultures, hence supporting the assumption that these leaders exhibit visionary and inspirational behaviors. This finding also supports Avolio et al. (2003); and Bass and Avolio (1994) research that successfully argued the case that transformational leaders are effective change agents and followers are more motivated to perform by an inspiring vision from transformational, charismatic leaders than by just the premise of rewards based on performance. Second, from a practical standpoint, it is useful for leaders in public sector organizations to understand the positive correlation between organizational leadership and the organizational culture. The understanding of this framework, as discovered by this study, can greatly enhance organizational performance by articulating a clear and aggressive strategy which ultimately will lead to productivity and efficiency. The implementations of these findings will also enable leaders to communicate on where the organizations are going; develop the skills and abilities of subordinates; and encourage innovative problem-solving. Similarly, with this framework, Gordon and DiTomaso (2003) conceptualized that it is these leadership behaviors that can truly transform organizations from a static environment to a more efficient and effective workplace.

There was insufficient evidence, however, to conclude that effectiveness depends on organizational culture types with $p > .05$. Future research should involve a closer examination of the correlation between organizational performance and transformational leadership traits in public organizational environments. Further research is also required to investigate a wider sampling frame and to examine the relationship between leadership and culture behaviors and relevant organizational outcomes. Any design and restructuring of an existing organization must consider the ramifications associated with the external and internal political environments, and the vested interest of the stakeholders and shareholders before implementing any findings based on this research. This study concludes that transformational leadership style is positively correlated with organizational performance in mature public sector organizations and is more effective in aligning the organization's culture in public sector to achieve efficiency and policy mandates. As a result of these findings, the study recommends transformational leadership style to facilitate improves performance in mature public sector organizations.

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