LEADERSHIP STYLES AND COMPETENCY DEVELOPMENT IN TECHNICAL AND VOCATIONAL TRAINING INSTITUTIONS IN KENYA

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| Leadership Styles and Competency Development in Technical an | d |
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| Vocational Education and Training Institutions in Kenya | |
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DECLARATION

DEDICATION

This degree is dedicated to my wife Esther, our children Kipkemei, Jemutai, Jepkoech and Jeptoo who always gave me support and encouragement during the entire period of studies; my dear parents who nurtured me and provided all the required resources which enabled me to accomplish my primary and secondary school education successfully; and my classmates whom we sat the Certificate of Primary Education (CPE) examination in 1980 at Bartolimo Primary School, the first registered KNEC examination center (57001) in the former Baringo District now Baringo County.

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ABBREVIATIONS

ANOVA Analysis of Variance

EPZ Export Processing Zone

CCS Communicative Competence Scale

CEO Chief Executive Officer

CHS Community Health Services

CIRN Competency Inventory for Registered Nurses

CMA Capital Markets Authority

GoK Government of Kenya

ESCI Emotional and Social Competency Inventory

HRM Human Resource Management

HSM Health Services Management

ICT Information Communication Technology

ISTE International Society for Technology and Education

KCSE Kenya Certificate of Secondary Education

KCB Kenya Commercial Bank

KEMI Kenya Management Institute

KICD Kenya Institute of Curriculum Development

KMC Kenya Meat Commission

KWS Kenya Wildlife Service

LMX Leadership Member Exchange

MCAP Managerial Competency Assessment Partnership

MLQ Multifactor leadership Questionnaire

MoE Ministry of Education

MSQ Minnesota Satisfaction Questionnaire

MLQ Multifactor leadership Questionnaire

NACOSTI National Council for Science, Technology, and Innovation

NGO Non - Governmental Organization

NSE Nairobi Stock Exchange

OCB Organizational Citizenship Behaviour

OCC Organizational Change Capacity

OLS Ordinary Least Squares

PACE Professional and Community Engagement

PMCD Project Manager Competency Development

SEM Structural Equal Modelling

SMEs Small Medium Enterprises

SPSS Statistical Program for Social Sciences

TVET Technical and Vocational Education and Training

TVETA Technical and Vocational Education and Training Authority

TNA Training Needs Assessment

UN United Nations

UNEP United Nations Environmental Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

VIF Variance Inflation Factor

VTE Vocational and Technical Education

DEFINITION OF TERMS

- Autocratic and Bureaucratic leadership is an extreme form of transactional leadership, where a leader exerts high levels of power over his or her employees or team members. Bureaucratic leaders work "by the book", ensuring that their staff follow procedures exactly. (Ngambiet al., 2010).
- **Competency Development** is defined in terms of what job holders should be capable of doing upon establishing the gap between what they should be able to do and what they can do so as to be trained in to enable them deliver superior performance in each job, role, or situation (Kopish, 2017; Njenga, 2018).
- Laissez-faire leadership, also known as delegative leadership, is a type of leadership style in which leaders are hands-off and allow group members to make the decisions. Researchers have found that this is generally the leadership style that leads to the lowest productivity among group members (Chen & Barnes, 2006). Leader is a person who influences, directs, and motivates others to perform specific tasks and inspire his subordinates for efficient performance towards the accomplishment of the stated corporate objectives (Ngambiet al., 2010)
- Leadership is a process of influencing others' commitment towards realizing their full potential in achieving a value added, shared vision, with passion and integrity. It has a direct cause and effect relationship upon organizations and their success. Leaders determine values, culture, change tolerance and employee motivation. They shape institutional strategies including their execution and effectiveness (Ngambiet al., 2010).
- **Leadership Style** is the manner and approach of providing direction, implementing plans, and motivating people (Jeremy et al., 2011).
- **Organizational Culture** is the desirable behaviors proscribed for members as per their norms and values as guided by the roles performed within that institution (Raihan, 2014).

- Organizational Performance refers to as the transformation of inputs into outputs for achieving certain outcomes. Regarding this content, performance informs about the relation between minimal and effective cost (economy), between effective cost and realized output (efficiency) and between output and achieved outcome (effectiveness) (Chen & Barnes, 2006).
- **Servant leadership** is the type of leadership in which the leader desires to motivate spiritually the followers or employees, create hope & love, and behave ethically so that they grow towards the success of the organization (Robertson and Plessis, 2015).
- **Theoretical Framework** provides the researcher with a lens to view the world. A theory is an accepted fact that attempts to provide a plausible or rational explanation of cause and effect (causal) relationship among a group of observed phenomena (Adamov, 2012).
- **Transformational leadership** is a style of leadership where a leader works with subordinates to identify needed change, creating a vision to guide the change through inspiration, and executing the change in tandem with committed members of a group (Adamov, 2012).
- **Transactional leadership,** also known as managerial leadership, focuses on supervision, organization, and performance; transactional leadership is a style of leadership in which leaders promote compliance by followers through both rewards and punishments (Jeremy et al., 2011)

ABSTRACT

The purpose of the study was to examine the influence of leadership styles on competency development in Technical and Vocational Education and Training Institutions in Kenya. The study was guided by the following specific objectives: To establish influence of transformational, transactional, laissez-faire and servant leadership on competency development in Technical and Vocational Education and Training Institutions (TVET) in Kenya. The study also sought to examine the moderating effects of organizational culture on the relationship between the leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya. The study was anchored to the trait theory of leadership, path- goal leadership theory, behavioral leadership theory, leadershipmember exchange theory and institutional leadership theory. A conceptual framework was developed which was used in the study and depicts the interrelationship between the study variables. The independent variables were transactional leadership style, transformational leadership style, servant leadership style and laissez-faire leadership style. The leadership styles were moderated by the organizational culture. The dependent variable was competency development in the TVET institutions. The study adopted descriptive, exploratory, and correlational research design. The study population was 796 (Principals and Academic Registrars) of the TVET institutions. The Slovin's Formula was used to determine the sample size of 262 respondents to be used during the research study. The study population was justified because the Principals and Academic Registrars were the ones mandated to carry out leadership and decision making in the TVET institutions in Kenya. The study used primary data, which was collected using questionnaires. The questionnaires were both open and close ended. A pilot study was conducted to establish the reliability and validity of the research instruments. A coefficient of above 0.7 was obtained and this indicated that the data collection instruments were valid. The gathered data was analyzed using computer aided IBM Statistical Package for Social Scientists (SPSS) version 24 premium. Both descriptive and inferential statistics were used to analyze the data collected. Descriptive statistics involved computation of mean scores, standard deviation, percentages, cross tabulation, and frequency distribution which described the demographic characteristics of the organization and the respondents. Inferential statistics was used to determine the relationships and significance between independent and dependent variable. The results were presented using tables and graphs. To draw conclusions on the relationship among the variables, the study tested the hypotheses by use of regression models at .05 level of significance. The results indicated that the overall model was satisfactory. This meant that leadership styles (transactional, transformational, servant and laissez-faire) variables explain 72.10% of the variations in competency development in the TVET institutions. Overall, the study concluded that leadership styles (transactional, transformational, servant and laissezfaire) had a positive contribution on competency development in the TVET institutions. Specifically, the study established that transformational leadership style made the most positive contribution, among the independent variables investigated. This study addresses the existing knowledge gap by determining the relationship between leadership styles and competency development in TVET institutions which is not direct but rather through adopted leadership styles of transactional, transformational, servant and laissez-faire leadership styles. Organizational culture had a moderating effect on the relationship between leadership styles and competency development in TVET institutions. The findings of this study therefore have implications for theory, practice, and policy.

CHAPTER ONE

INTRODUCTION

This section presents the background of the study and defines the statement of the problem. The study seeks to establish the relationship between leadership styles and competency development in Technical and Vocational Training (TVET) institutions in Kenya. The chapter explains why and how the issue under study a problem is. The study's general and specific objectives, research hypotheses, justification, scope, and limitations of the study are also presented in this chapter

1.1 Background to the Study

Tertiary education institutions are increasingly aware of industry expectations regarding the work-ready graduate. Grosch (2017) asserts that institutions worldwide are accused of producing graduates deficient in the 'soft' skills deemed essential for enhanced productivity and innovation in the workplace (that is competency skills) (Paryono, 2015; Jayalath & Esichakul, 2016). A useful definition of competency skills is "a set of attributes, skills, and knowledge that all labour market participants should possess to ensure they have the capability of being effective in the workplace to the benefit of themselves, their employer, and the wider economy (Ismail & Mohammed, 2015; Wahba, 2013). Grosch (2017) contends that employers seek graduates who demonstrate self-efficacy (confidence to succeed) and agency (ability to act), which support a range of beliefs and attitudes that enable critical reflection and adaptation to contextual variations.

The changes in higher education paradigms have placed at the forefront the development of knowledge, skills, and attitudes (Okoye & Michael, 2015; Pavlova & Huang, 2013) that will equip students with the competencies necessary to succeed in the workplace. In leadership pedagogy, a learning approach in which students could be educated and become innovative members of learning organizations is paramount since this also brings on board the social aspects of working and learning (Njenga, 2018; Jebungei, 2020; Njeru & Mugi, 2018). Tertiary and Vocational Training

Institutions (TVET) form group processes where learning happens in multidisciplinary teams which are an essential part of learning (Oiro, 2019; Jahonga, Ngure & Muramba, 2015). The aim of leadership pedagogy is to generate environments in which a competitive advantage can be created by combining different kinds of know-how (Maringa, 2014). Competency development by leadership styles are the keys to acquiring new competitive advantages via know-how.

The tertiary education institutions are shifting their thinking about how to produce work- ready graduates (Okoye & Michael, 2015; Paryono, 2015). Aligned with this objective, there has been a surge in the use of effective leadership styles in TVET, in recognition of them being the superior choice for developing generic and competency skills (Ridzwan et al., 2017; Grosch, 2017; Paryono, 2015). Competency development in TVET broadly refers to job enrichment that has an intrinsic mechanism to motivate an employee to accept and play challenging organizational tasks (Mat-som et al., 2015; Kemmis, Hodge & Bowden, 2014). Specifically, Parkhouse (2016) argued that competency development in TVET involves activities that enable an employee to perform organizational tasks comfortably and conveniently.

Jayalatha and Esichaikul (2016); Beckles (2018) have pointed that there are various leadership styles which can enhance competency development in TVET and that each can contribute maximally if appropriately applied. Verger and Pages (2018) reiterated that the most significant direct benefits leadership styles and competency development in TVET have includes clarity in job duties and responsibility as well as increases in employee's competence among others. According to Pavlova and Huang (2013); Grosch (2017) and Johnson (2018) the reasons and advantages for embarking on appropriate leadership styles in TVET and competency development include efficiency in trainee employability and performance. Similarly, Lees and Uri (2018) argues that leadership styles can enable an employee to produce efficiently sooner, prepares him for a higher position (advancement), enhances employee self-respect and increases his feeling of security and economic independence among others. The training institutions in recent occasions are seen as agents of social change and

development (Ridzwan et al., 2017; Hadi et al., 2015; Kemmis, Hodge & Bowden, 2014). They're heroines of innovation and are likely to play a vital role in marketing sustainable economic, social, and cultural development (Ismail & Mohammed, 2015). They are the major drivers of monetary knowledge driving the global economy (Saglum & Aydomus, 2017).

Currently, Tertiary and Vocational Training Institutions are structuring their educational system to be able to meet competency developments (Jebungei, 2020; Musyimi, 2016; Omwenga, Mugambi & Mautla, 2016). To achieve such development and have the ability to face the difficulties, educational configurations is calling for prime quality leadership using the administration and management abilities (Mbarushimana, Role & Allida, 2017; Maiana, Ogalo & Mwai, 2016; Ongaro, 2015). Within the light of these, training institutions are needed to be managed effectively through effective competency (Omwenga, Nyabero & Okioma, 2015) to be able to adjust to the alterations and effect continuous improvement (Kwanya, Stilwell & Underwood, 2012; Grosh, 2017). The training institutions would find it important to stimulate their staff to use and take advantage of their abilities and capabilities effectively to become more lucrative about the competency development (Njenga, 2018; Isamil & Mohammed, 2015; Wahba, 2013).

1.1.1 Concept of Leadership Styles

Leadership is the life blood of any organization, and its importance cannot be underestimated. According to Bratton (2020) definition, leadership is the interaction process which occurs between a leader and other workers and the goal of which is to reach the determined aims of management. Leadership is among the fundamental and many important needs of every organization. It's frequently regarded as the solution to most organizational problems (Pavlova & Huang, 2013; Zakaria et al., 2012). It can direct human assets toward the proper objectives of the organization and be sure that organization functions are aligned using the exterior atmosphere (Anindo, Mugambi & Matula, 2016; Omwenga, Nyabero & Okioma, 2015). Furthermore, effective leaders can predict the long run odds and style choice methods to fulfil uncertainties (Kopish, 2017). As communities become more science oriented today,

persons with quality leadership abilities becomes the convincing order of making people in the environment reach the determined aim (Bonzet & Frick, 2019; Bratton, 2020).

According to Rus et al. (2020) and Njoroge (2015), cited in Okoye and Ukwuoma (2020) leadership is a process of influencing others' commitment towards attainment of goals by each member, as well as for the group to achieve a contingent reward. The relationships between the leader and employee, as well as the quality of employees' performance are significantly influenced by the leadership style adopted by the leader (Murimi & Omondi, 2014; Njenga & Kidombo, 2017). Leaders ought to realize their full potential in achieving a value-added shared vision, with passion and integrity. The nature of this influence is such that the members of the team cooperate voluntarily with each other to achieve the objectives which the leader has set.

Leadership style in an organization is one of the factors that play significant role in enhancing or retarding the interest and commitment of the individuals in the organization (Amran et al., 2020; Rohanai et al., 2020). The leadership styles which most leaders practice consists of autocratic, laissez-faire, democratic and bureaucratic (Ehrhart, 2015; Anand, 2020). Macharia, Chui and Edabu (2020) focused on the leadership style of an organization by which one can obtain the desired goals and objectives of the organization (Gandolfi & Stone, 2018) through creating the vision for the organization according to the setup of the organization, aligning the staff for the achievement of the goals of the firm rather than personal goals, providing assistance which requires use of intellect in resolving complicated things and clarifying expectations of the organization from the team (Murgor, 2017; Okoye & Ukwuoma, 2020).

The issue of leadership and leadership development in TVET institutions arise from the fact that there are series of changes that are rapidly and significantly altering the educational and economic environment in which public training institutions exists (Murimi & Omondo, 2014); Murgor, 2017; Njoroge, 2015). The nature of work is changing; technology keeps changing rapidly; there is increased public demand on

tertiary public training institutions education system to produce individuals with more opportunities for present and future prospects in multiple industries and offer the individuals with enough skills for personal development and success in the changing society (Bonzet & Frick, 2019; Rohanai et al., 2020).

Technical and Vocational Training institutions are changing in terms of structures, programs, processes, and practices to be effective in improving the quality of learning outcomes (Njoroge, 2015; Macharia, Chui & Edabu, 2020; Florah & Ongati, 2013; Njenga & Kidombo, 2017), making it more accessible and attractive to all and ensuring it is relevant and connected to the world of work (Anand, 2020; Bonzet & Fr ick, 2019; Florah & Ongati, 2013). This new direction requires Technical and Vocational Training Institutions to function in new and different ways. An effective leadership style therefore becomes a vital issue if these training institutions are to adapt constructively to the challenges now presented. As Rus et al., (2020) stated, it is the effective leader in organizations experiencing change who initiates a vision and motivate followers to collectively develop and personally adopt the vision. It is the effective leader who empowers others to translate intentions into reality and then sustain it (Gandolfi & Stone, 2018; Bonzet & Frick, 2019).

Okoye and Ukwuoma (2020) observed that TVET institutions just like any other organization are faced with leadership challenges. These include the management and utilization of human and capital resources both financial and non-financial (Yang, 2015; Bratton, 2020; Ehrhart, 2015; Vitanova et al., 2015), co-ordination of various departmental activities, meeting stakeholders' demands and ensuring set quality standards are met (Murimi & Omondi, 2014; Cheruiyot & Munyi, 2019; Murgor, 2017). This has resulted in these institutions experimenting on a variety of modern leadership methods. The success of these institutions is dependent upon the leadership styles being adopted by the organization (Njenga & Kidombo, 2017; Florah & Ongati, 2013). According to Cheruiyot and Munyi (2019) a democratic leader permits his subordinates to participate in the process of decision making. The leader leads by the consent of the group rather than by use of authority.

1.1.2 Concept of Competency Development

Harshmann, (2016) defined competency as an underlying characteristic of a person which enables them to deliver superior performance in each job, role, or situation. Competences are defined in terms of what job holders should be capable of doing (Jebugei,

2020; Musyimi, 2016). Furthermore, competency means the power of human physical strength in terms of the workers available to perform a particular task in any organization (Ongaro, 2015; Mutua & Muriithi, 2019), be it educational service or industrial organization. It is the gap between what people should be able to do and what they can do. Upon establishing the gap, areas for personal development, learning and training are identified (Kopish, 2017; Njenga, 2018).

Competency refers to human power supplied by physical and or mental work of people rather than machines (Njeru & Mugi, 2018; Mulongo & Amod, 2017). It also refers to power in terms of number of people needed or available in a particular country for social and economic development (Maringa; Abugre & Kpinpuo, 2017). Natural and material resources are harnessed by competency to develop the economy of the nation (Oiro, 2019; Jahonga, Ngure & Muramba, 2015). Capital alone cannot move itself except with the involvement of competency (Mbarushiman, Role & Alida, 2017). No wonder Ongaro, 2015 observed that managing money, materials and machines requires continual study, high performance and righteous self-discipline as influenced by the appropriate leadership styles in the organization. According to Ferrira (2013); Mukundi and Njoki (2019); Wafula, Ferej and Kitainge (2013), managers must be in a continual state of education and training throughout their working lives.

According to Mbarushiman, Role and Alida (2017), the central idea underlying competency development in any sector, including the tertiary training institutions, is how best to keep learners current, vibrant, and versatile. This will make them to continuously perform their roles effectively in this age of rapid socio-economic, political, scientific, and technological changes and globalization as stated by Kwanya, Stilwell & Underwood, (2012) and supported by Omwenga, Nyabero &

Okioma, (2015); Maringa, (2014) and Mulongo & Amod, (2017). In tertiary institutions, development programmes are considered very critical (Maina, Ogalo & Mwai, 2016; Jahonga, Ngure & Muramba, 2015; Anindo, Mugambi & Matula, 2016). They are planned activities which focus on increasing and enlarging the capabilities, improving the technical and conceptual skills of learners (Musyimi, 2016; Jebungei, 2020) so that they can possess the necessary skills and abilities to handle complex situations and better perform their job (Mbarushiman, Role & Alida, 2016; Maringa, 2014).

Being successful in the knowledge economy requires mastering a new set of knowledge and competencies. These includes basic academic skills, such as literacy, foreign language, mathematics and science skills, management courses and the ability to use these skills effectively, act autonomously and reflectively (Oiro, 2019; Mukundi & Njuki, 2019; Zakaria et al., 2012). When such resources or inherent power is developed through education and training, individuals would be in a better position to make contribution to the group and or the society he or she belongs (Mbarushimana, Role & Alida, 2017; Jahonga, Ngure & Muramba, 2015).

Development of competency in TVET is undertaken through formal and non-formal education to make learners useful to themselves and the group they are working for (Maringa, 2014). The emerging challenge of developing competency not only support the acquisition, sharing and management of knowledge that currently resides in individuals in an organization, but also the creation and application of new knowledge for improving business practices and processes (Jebungei, 2020; Nganga, 2016). Competency developments in TVET enhance the improvement in knowledge, skill, attitude, and endowment of labour force to bring about sustained economic growth in a nation (Omwenga, Nyabero & Okioma, 2015; Wafula, Ferej & Kitainge, 2013; Oiro, 2019). Human beings are the active agents used in accumulating capital, tapping natural resources, building social, economic, and political organization for national development (Ongaro, 2015; Maina, Ogalo & Mwai, 2016; Harshammnn, 2016).

1.1.3 Global Perspective of Competency Development in TVET

Globally, the issue of competency development in technical and vocational education and training (TVET) has attracted the attention of many researchers, particularly those with interests in alleviating poverty, promoting economic development (Maclean, Jagannathan,

& Sarvi, 2013) and meeting the employment needs of the workforce through human resource management (Winterton, 2017; Remington, 2018). United Nations Sustainable Development Goals (SDG) 4 aims at ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. The SDG 8 states that by 2030, there is achievement and full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. For a broader perspective the competency needs of the labour market must be matched by those developed within the vocational learning processes (Hamisu et al., 2017; Jayaram et al., 2017; Zirkle & Martin, 2012). The major aim of TVET is to become an instrument of selfemployment to the individual who has been empowered not only by subject matter inhibition but who through experimental learning perceived it as real-life solution to problems and can make use of his initiative in labour market (Remington, 2018). The major thrust of TVET thus can be described not just as knowledge or facts but also includes the practice and comprehensive command of one "peculiar ability after training in solving human problems" (Farrugia & Sanger, 2017).

In the United States, formal Technical and Vocational Education and Training (TVET) programs aims at enhancing competency development. This has been part of the United States educational landscape for almost 100 years, since the first U.S. federal legislation, the Smith-Hughes Act, which was passed in 1917 to approve funding for these programs (Farrugia & Sanger, 2017). In the United States, TVET is an elective form of education that students are not required to participate in to earn a high school diploma or a college/university degree. Historically, in United States, TVET competency development has focused on job preparation for entry-level positions and is defined as educational courses and programs offered at less than the baccalaureate level (Remington, 2018; Maclean, Jagannathan & Panth, 2018).

Many other nations such as Association of Southeast Asian Nations (ASEAN) member countries are struggling with a lack of skilled labor which is slowing down economic growth and jeopardizing their further economic and social development (Grosch, 2017; Arifin et al., 2017). One of the key issues to tackle this challenge is the development of Technical and Vocational Education and Training (TVET). The improvement of teachers' competence is seen as one of the most crucial areas of action (Maclean, Jagannathan & Sarvi, 2018). Especially in TVET, the quality and qualification of university and college teachers are intensely discussed topics and TVET training is considered to be the most important success factor for delivering skilled labor which enhances economic growth (Mustapaha, 2015; Schroeder, 2019).

European TVET institutions have been identified as key institutions to enhance competency and focus more on skills than ever before (Gareis et al., 2014; Axmann, 2015). Skills to adapt and to shape the jobs of tomorrow are essential for Europe's citizens and businesses to speed up economic recovery (Hauschildt & Wittig, 2015). Equally, adequate skills are needed to respond to long-term challenges to compete in the global market and sustain innovation in ageing societies (Hamisu et al., 2017; Jallade, 2011). TVET is promoted within European action programmes that cover different target areasthat link the theme 'training' to European labour markets (Alagaraja, Kotamraju & Kim, 2014; Moses, Muladi, & Wibawa, 2017).

In the Middle East and North African (MENA) countries, comprehensive policies and capacity building initiatives in TVET have been enhanced to improve competency (Wheeler, 2017; Ismail & Abbidin, 2014; Rajadurai, Sapuan, & Abidin, 2018). These includes improving the quality of TVET curricula and teaching, reforming TVET finances through partnerships between private and public TVET providers, companies and government agencies and establishing national regulatory and support institutions for more decentralized and demand-driven TVET systems (Angel-Urdinola, Kuddo, & Semlali, 2013; Akinyoade, 2019). The Gulf countries are already quite deliberate in building their TVET systems and guiding young people into training for positions in the oil and gas industries and in national security (Sultana, 2017; Dimova, Elder & Stephan, 2016). Action is also being taken to redress key problems in TVET for people living in marginalized areas to access

TVET education such as Palestine and for population groups not traditionally served well by TVET, such as women and girls (Wedekind & Watson, 2016; Barakat & Milton, 2015).

In Carribean countries, it is widely acknowledged that the quality of any educational programme, including Technical, Vocational Education and Training (TVET), is largely dependent on the quality of the training institutions to enhance competency (Morris, 2013; Yussuff & Soyemi, 2012). The competency in the training institutions in turn is a function of the quality of linkages and collaboration it establishes with other stakeholders in the sector (Ogbunaya & Udoudo, 2015). Morris (2013) noted that many Carribean countries have adopted Public Private Partnership for effective TVET delivery. They however noted that in most countries, the partnerships are loose and lack appropriate policy guidelines to provide a framework for solid sustainable partnerships (Black & Powell, 2017). Despite the various linkage and collaboration between the public and private sectors in Carribean countries, the quality of TVET seems to be declining affecting competency development in the institutions (Dixon, 2013; Hutton & Dixon, 2016).

In light of low educational and employment outcomes, policy in Latin America has focused on competency development through the technical and vocational education and training (TVET) sector (Hanni, 2019; Triraharjo, Aima & Sutawijaya, 2019). The primary objective of these policies is to significantly improve competency for the youth and young adults to participate in these programs. The role of technical and vocational education and training (TVET) in this process is key, especially as the Latin America economy undergoes significant changes. The world of work is evolving rapidly, as productive structures adapt to the shifts induced by the emergence of new technologies and new business models (Waight, Ernesto & Lopez, 2016). Skills in this environment tend to depreciate quickly and therefore must be continually updated (Marta et al., 2017; Alvarado, 2017).

The Organization for Economic Co-operation and Development (OECD) countries have renewed focus on competency development in TVET (Asadullah & Ullah, 2018; Valiente & Scandurra, 2017) which is important for human resource

development, as it expands current understanding of its role in economic development through workforce training. National Human Resource Development (NHRD) perspectives recognize the role of TVET in linking regional and national economic development strategies (Japheth & Dimo, 2019; Marra, 2015). Furthermore, TVET's focus on literacy education, poverty alleviation and inclusion of marginalized and vulnerable populations by emphasizing competency for social development outcomes that is critical for NHRD (Kingombe, 2012; Alagaraja, Kotamraju & Kim, 2014).

India has recognized the role of TVET on competency development in terms of skills and knowledge which are the engines of economic growth and social development of the country (Mehrotra, 2014; Majumdar, 2016). The Indian government has enhanced competency development in TVET with higher and better levels of knowledge and skills to respond more effectively and promptly to challenges and opportunities of globalization (Young & Allais, 2013; Ajithkumar, 2016). The TVET institutions in India are transition to knowledge-based economy (Balakrishnan, Sheshadri, Unnikrishnan & Bhavani, 2018), and its competitive edge will be determined by the abilities of its people to create, share, and use knowledge more effectively (Malhotra, & Malhotra, 2015).

The Vocational Education and Training (VET) sector in Russia is made up of two major types of institutions (Remington & Marques, 2020) whose aim was to improve competency development. These institutions are the initial VET schools and lyceums (ISCED, level 4) and TVET colleges and technicums (ISCED, level 5B). VET schools are all State schools that serve both to provide young people with basic technical skills making them employable on the labour market and to accommodate the social support needs of youngsters from disadvantaged families. Both levels provide access to TVET training to access skills and knowledge (Dimova, Elder & Stephan, 2016).

1.1.4 Regional Perspective on Competency Development in TVET

TVETs are growing in several African countries and are undergoing or have undergone promising reforms that are designed to build on the inherent strengths of

the system (Obwoge & Obwoge, 2016). The major reforms concern the setting up of national training bodies and the enactment of laws to strengthen national vocational training programmes (Ismaeil, et al., 2018). The need to link training to employment (either self or paid employment) is at the root of all the best practices and strategies observed worldwide. The African governments have passed laws that establish development of TVET which have overall responsibility for skills development in the countries (Van der & Taylor, 2016).

TVET is seen in Egypt as a key policy priority which enhances competency development significantly. They have started implementing reforms in TVET institutions with a strong support and influence by international partnerships and donors (Mohammed, 2016). The Egyptian government has been active for more than a decade in attempting to raise the profile of TVET to foster youth employment (Papier, 2017). The key focus of policy is to harmonize and bring coherence to TVET to improve competency development (Youssif,

2016). Workplace exposure or industry training is recognized and desirable particularly for technical and practical instructors to improve competency development in the training institutions (Mahmoud, 2018).

TVET institutions in South Africa have emphasized the importance of 'market efficiency' in determining national education and training policies based on competency development. Notions of market efficiency in education have had a bearing on TVET educational policies in South Africa (Ngcwangu, 2015; Blom, 2016). In 2013 the South African Department of Higher Education and Training (DHET) published its Policy on Professional Qualifications for Lecturers in Technical and Vocation Education and Training (DHET, 2013), which determined qualification requirements for learning facilitators (lecturers) to enhance competency development in country's TVET system. The qualifications were to be implemented from 2016, separate qualification requirements for TVET college lecturers from those of schoolteachers to improve competency in the training institutions (Maclean, Jagannathan, & Sarvi, 2018; Van der Bijl & Taylor, 2016).

The government of Namibia came up with an Education and Training Sector Improvement Programme (ETSIP), which represents the education and training sector's response to the call of Vision 2030 (Hategekimana, 2014). Its key purpose is to substantially enhance the TVET sector's contribution to the attainment of strategic national developmental goals and to facilitate the transition to a knowledge-based economy (Galguera, 2018). One of the strategic objectives for the restructuring was to improve the quality of TVET, by establishing a Competency Based Education and Training (CBET) Programme. This was one way of addressing the burning issue of skills shortages and unemployment in Namibia (Gessler & Peters, 2020; Galguera, 2018).

Botswana's government has made crucial reforms regarding TVET system in terms of its ability to develop competence-based skills that are relevant for the needs and demands of the labour market (Koobonye, 2020; Galguera, 2018). A general approach is pursued with the focal point on Botswana's ability, whether the established structures support the development of skills that meet the demands of labour market (Mmo lotsa, 2013). Botswana government has ensured that through competence based TVET, it is possible to link demands of the world of work better to supply-side and be responsive to workforce needs and challenges (Odora, 2016). In Botswana, a demand driven TVET is regarded as a preparation for occupational fields and supports students to participate effectively in the world of work (Hondonga & Ramaligela, 2020).

Technical Vocational Education and Training (TVET) has been gaining recognition and popularity in Zimbambwe (Shereni, 2019; Makochekanwa, Mahuyu & Pindiriri, 2016). The TVET education system is designed in line with the national economic blueprint of the country (Hondonga & Ramaligela, 2020; Wilson, 2016). There is substantial government private sector investment in TVET education (Katuli-Munyoro & Mutula,

2016) and there are industry wide skills standards to improve competency development (Mutambanengwe & Dambudzo, 2019). The skills taught in TVET or thereafter should be in line with technological advancement of the time and national

manpower developmental needs to bolter national economic development of the country (Mutambanengwe, 2015).

Technical and Vocational Education and Training (TVET) is an indispensable aspect of the educational system of Nigeria (Ismail & Mohammed, 2015). This is because unlike other forms of Education, TVET is aimed at the acquisition of practical and applied skills as well as basic scientific knowledge for the development of the country. The major aim of TVET is to become an instrument of self-employment to the individual who has been empowered not only by subject matter inhibition but who through experimental learning perceived it as real-life solution to problems and can make use of his initiative in labour market (Okoye & Michael, 2015). Nigerian TVET graduates are not equipped with the employability skills needed by the industries and as a result, they are not ready to enter workforce (Hamisu et al., 2017).

Ghanaian government has come up with several agencies mandated to carry out TVET policies (Boahin, 2019). Most TVET agencies are responsible for the training of employable skills to enhance the competency of the youth in their communities to prevent rural-urban drift as well as to alleviate poverty to the minimum (Pongo, et al., 2014; Aboko & Obeng, 2015). The need to develop key competencies to meet the changing demands of industry has made the introduction of competency-based training (CBT) reforms in the Vocational Education and Training (VET) system a priority in Ghana (Boahin & Hofmann, 2014).

Ethiopian TVET curriculum development process is focusing on the procedures with different competency based TVET curriculum development processes in some countries (Geleto, 2017; Geressu, 2017). Ethiopia has mainly adopted its current TVET curriculum experiences from countries such as Australia and Philippines (Likisa, 2018). Under this system, industries and TVET institutions share the responsibility of providing the trainee with the best possible job qualifications, the former essentially through practical training and the latter by securing an adequate level of specific, general, and occupation-related theoretical instruction (Yamada, Otchia, & Taniguchi, 2018).

The Government of Rwanda is committed to investing in the development of human resources to meet the major objective of Vision 2020 which is to create a knowledge-based and technology-led economy through TVET institutions (Kim, Shin, Woo, & Kim, 2019). Rwanda's economy is characterized by a serious lack of qualified people in the workforce, particularly in the technical sectors (Mbarushimana & Allida, 2017). They further stated that the goal of education and TVET is therefore to fight ignorance and illiteracy to produce competent human resources for economic and social development. To address the critical shortage of qualified technical and vocational manpower in the labour market, there is progress to link TVET policy with employment and other sectors development policies.

Leadership styles have been used minimally to enhance competency development in the technical education training sector in Uganda (Moses, 2016). This may be due to lack of knowledge on trainers on role of TVET to enhance employability skills and developments or lack of ability by the government to implement these developments in technical education training (Kintu, Kitainge & Ferej, 2019). The possibility of integrating leadership and governance with implementation of Competency Based Education Training (CBET) to counter challenges that are likely to be faced by Technical Vocational Education Training (TVET) institutions require immediate attention (Okware & Ngaka, 2017).

Tanzania government is improving technical education with the aim of preparing more labour market responsive technical graduates given that they undergo competency-based training which puts emphasis on knowledge, understanding, skills, attitude, and wider attribute (UNICEF, 2015). Contrary to the above expectation, currently, employers in Tanzania are still concerned about the alarming lack of relevant job competencies among the technical education graduates (British Council, 2014; World Bank, 2016). Indeed, technical knowledge is not keeping pace with economic growth (World Bank, 2014). The availability of key competencies among graduates in Tanzania including those from technical education backgrounds is extremely low (Tambwe, 2019), warning that this situation denies economies the skills they need to drive economic growth. This situation, consequently, renders

higher learning institutions less relevant in the context of labour market (Mwaduma et al., 2015; Nkondola & van Deuren, 2017; Woo, Kim & Yoon,

2018).

1.1.5 Kenyan perspective of Technical and Vocational Education and Training

The Kenyan TVET sector comprises of National Polytechnics, Technical Training Institutes (TTIs), Vocational Training Centers (VTCs) and Technical Trainer Colleges. To operationalize the TVET training and development, the Directorate of Technical Education (DTE) is responsible for promoting access, equity, relevance, and quality training in TVET. The Technical and Vocational Education Training Authority (TVETA) is responsible for regulation, co-ordination, and quality assurance of the TVET system of education while TVET Curriculum Development and Assessment and the Kenya National Examinations Council is responsible for the assessment and certification.

Kenya's Vision 2030 lays emphasis on competency development in TVET as a crucial pillar for economic growth and this enabled the Kenyan government to enact the TVET Act (2013) which placed a premium on quality Competency Based Education and Training (CBET) according to Alagaranja et al. (2014) and Florah et. Al (2016). The aim of the Kenyan government is to ensure the TVET institutions supply human resource needs of the industry. The government increased the number of public TVET institutions from fifty-two (52) in 2013 to two hundred and thirty-eight (238) in 2021. Beginning July 1, 2018, Kenyan government reduced tuition fee for students joining National Polytechnics and Technical Training Institutes by sending capitation grants to the institutions for every student admitted (MoE 2021). The above measures were meant to make TVET more accessible to the Kenyan youths searching skills for employment or self-employment (Cheruiyot & Munyi, 2019).

TVET institutions are expected to change in terms of structures, programs, processes, and practices to be effective in improving the quality of learning outcomes (Kidombo et al, 2017) since there are still many graduates from TVET institutions who are not

able to master the skills and competencies needed to succeed in today's workforce in Kenya (UNESCO, 2016). Employers are critical of this historical system in that it insufficiently prepares young people for the requirements of employment. These institutions have not achieved the set goals and objectives of the training, Hamisu, Salleh and Sern (2018). The Kenya National Examinations Council results for the last five years from 2017 to 2021 can confirm this low performance as shown in the table below. (KNEC, 2021) which shows that 40% of the trainees do not meet the pass mark and are referred to re-sit the examinations or fail in the course.

Table 1.1: Technical Examination Overall performance from 2017 to 2021

| Year | Candidature (Entry) | Pass (%) | Referrals (%) | Fail (%) |
|------|---------------------|----------------|----------------|----------------|
| 2017 | 78,767 | 45,879 (58.24) | 34,098 (30.59) | 8,790 (11.16) |
| 2018 | 99,566 | 58,757 (59.01) | 31,398 (31.53) | 9,411 (9.45) |
| 2019 | 117,413 | 62,529 (53.26) | 39,616 (33.74) | 15,268 (13.00) |
| 2020 | 105,096 | 57,871 (55.06) | 39,511 (37.60) | 9,454 (9.00) |
| 2021 | 146,402 | 86,720 (59.23) | 46,644(33.23) | 11,038 (7.54) |

The TVET institutions are being re-structured to meet the new requirements of competency developments. These training institutions would find it important to adopt a leadership which stimulate staff to use and take advantage of their abilities and capabilities effectively by encouraging them to become more lucrative with regard to the competency development (Nganga, 2016).

1.2 Statement of the Problem

Globally, competency development in Technical and Vocational Education and Training (TVET) is seen as an avenue of alleviating poverty, promoting economic development (Maclean, Jagannathan, & Sarvi, 2013). According to UNESCO-UNEVOC (2017), TVET is concerned with the acquisition of knowledge and skills for the world of work. The trainees are agents of social change and development (Ridzwan et al., 2017); heroines of innovation driving the global economy (Saglum

& Aydomus, 2017). The Kenyan government enacted and implemented the TVET Act (2013) which placed a premium on quality Competency Based Education and Training (CBET). This was meant to address the challenge of TVET institutions producing TVET graduands who are deficient in the 'soft' skills deemed essential in the workplace Grosch (2017).

To achieve such development and have the ability to face the difficulties, educational configurations is calling for prime quality leadership using the administration and management abilities (Mbarushimana, Role & Allida, 2017. effective leaders can predict the long run odds and style choice methods to fulfil uncertainties (Kopish, 2017). Effective leadership styles in TVET institutions have taken on increasing importance in the competency development discourse in the TVET institutions. Azevedo et al. (2012); Jackson (2014) and Osmani et al., (2015) stated that leadership style enhances competency development and has a positive impact on training and productivity in technical and vocational institutions since the students acquire greater competencies. Verger and Pages (2018) and Lees and Uri (2018) reiterated that the most significant direct benefits leadership styles and competency development in TVET have includes clarity in job duties and responsibility; enhancement of self-respect and economic independence of oneself. The World Bank (2016) report highlighted inappropriate leadership styles as a major contributing factor hindering competency development in TVET institutions in Africa.

The government has injected over 30 billion Kenya Shillings to modernize and expand the TVET institutions since 2013. This effort aimed at meeting the industrial need for relevant skills and know-how required in various fields. These measures were meant to make TVET more accessible to the Kenyan youths searching skills for employment or self-employment (Cheruiyot & Munyi, 2019). Despite the government intervention and allocation of funds to TVET training about 40% of the candidates from these institutions fail or get referred when they are examined by the Kenya National Examinations council (KNEC, 2021). The question now remains; is the appropriate leadership styles the actual missing factor especially for improving competency development among TVET institutions in Kenya? If it has been affected,

how has it contributed to the development of competencies among TVET institutions in Kenya?

Further, the existing empirical studies have primarily focused on the role of Technical and Vocational Training Institutions on competency development (Were & Ahmed, 2018). These studies have in most cases adopted a case study approach (Wheeler, 2017, Nganga,2016; Zakaria, Jizat & Zakaria, 2015; Yusof, 2015; Van Der Bilj & Taylor, 2016; Sultana, 2017) or a descriptive research design (Schroeder, 2019; Songa, 2015; Rohanai et al., 2020; Ratnata, 2015; Papier, 2017). Methodologically, a descriptive research design presents the possibility of error and subjectivity since questions are restricting and prescriptive (Terblanche & Bitzer, 2018; Salleh & Puteh, 2017; Shereni, 2019).

Moreover, Osman and Kamis (2019) and Ongaro (2015) studies on leadership styles and competency developments were narrow and suffered from conceptual gaps since they only addressed merits and demerits of leadership and governance in technical training institutions. Therefore, from the afore mentioned empirical studies which have yielded methodological, conceptual, and contextual gaps this study seeks to fill as it focuses on relationship between leadership styles and competency development in TVET institutions in Kenya. The trend informed the need to examine the influence of leadership styles on competency development in TVET institutions in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

The purpose of this study was to examine the influence of leadership styles on competency development in Technical and Vocational Education and Training Institutions in Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

- To establish the influence of transactional leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya;
- To examine the influence of transformational leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya;
- iii. To examine the influence of servant leadership on competency development in
- iv. Technical and Vocational Education and Training Institutions in Kenya;
- v. To assess the influence of laissez-faire leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya;
- vi. To examine moderating influence of organizational culture on the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya.

1.4 Research Hypotheses

The study was guided by the following research hypotheses:

- Ha1: There is a significant relationship between transactional leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.
- Ha2: There is a significant relationship between transformational leadership and competency development in Technical and Vocational Education Training Institutions in Kenya;

Ha3: There is a significant relationship between servant leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.

Ha4: There is a significant relationship between laissez-faire leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.

Ha5: Organizational culture moderates the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya.

1.5 Justification of the Study

Competency development is an important function in any organization as it involves motivating, inspiring, and influencing others towards a common organization goal. The Kenyan government, multiple stakeholders and leaders have consistently pointed out that the skills that are being produced by the TVET institutions do not address the demands of the industry and are unable to respond to changing global challenges. Each style of leadership and approach in competency impacts organizational performance differently necessitating this study on how competency development has influenced TVET institutions in Kenya. According to Ndile (2018), weak or poor competencies in organizations are usually witnessed in TVET institutions in Kenya. Thus, developing good competency qualities in these institutions has a positive effect. The number and scope of collapse or dismal performance of state corporations including TVET institutions in Kenya is alarming making this study of necessity. Thus, the study would be beneficial to the following groups of persons due to its informational value.

1.5.1 Technical and Vocational Education and Training Institutions

The study aims at improving the competency development in TVET institutions in Kenya which will enhance student performance. In Kenya, due to poor competencies, government institutions which require technical expertise from the TVET are at the verge of collapsing due to lack of adequate technical competencies. The findings and recommendations of the study were an eye opener to these training institutions since it provided them with the opportunity of improving competencies in their trainees through effective leadership. The findings of this study provided information to the Ministry of Education (MoE), other government regulatory and supervisory bodies on the required leadership styles to be adopted. The study also provided invaluable input on leadership styles of training institutions which they will adopt in formulating guidelines, rules and regulations affecting their leadership.

1.5.2 General Public

Strengthening competencies at TVET institutions level is a viable option for Kenya as a country which is faced by major competencies challenges characterized by corruption and misallocation of resources. Better performing good competencies identified from this research would contribute to improved pedagogical implementation and acquisition of required competencies which are beneficial to the entire country. This will eventually lead to better, efficient, and effective training of skilled human resource from the TVET institutions in Kenya leading to improved service delivery for the citizenry.

1.5.3 Donor Communities

Additionally, bilateral, and multilateral donor organizations and creditors through this study have been informed on the competencies acquired from the TVET institutions thus will make informed decisions on whether to finance them or not. The study informs the leadership style to be adopted by TVET institutions which can be nurtured. Through this the donors and the government will partner together to identify fields which require sponsorship and funding for the improvement of required competencies and skills for human resource development. These doner communities will realize value for money.

1.5.4 Researchers and Scholars

Since learning is an ongoing process, this study is of great significance to the academicians and leadership and governance consultants as they seek to increase their knowledge on the influence of leadership styles on competency development in TVET institutions. The study was an eye opener on the areas of leadership and governance which scholars can venture into using this as a baseline study.

1.6 Scope of the Study

The study examined the influence of leadership styles on competency development in TVET institutions in Kenya. The study was undertaken at TVET institutions in Kenya, and it involved all the Principals and Academic Registrars of TVET institutions. The unit of analysis was technical and vocational training institutions. The unit of observation was the Principals and Academic Registrars. The target population was seven hundred and ninety-six (796) respondents. The sample size was two hundred and sixty-two (262) respondents. The study specifically gathered data on the influence of transactional leadership, transformational leadership, laissez-faire leadership, and servant leadership on competency development in the TVET institutions in Kenya. The study was undertaken within a period of ten months from June 2019 to March 2020.

1.7 Limitations of the Study

Several limitations were encountered during the study; it was quite hard to get all historical information on aspects of competency development from a few TVET institutions that did not keep proper documentation. The researcher however managed to get secondary data from the Ministry of Education and Kenya Bureau of Statistics libraries where substantial historical information on the TVET institutions is documented and stored.

The study faced incidences of no response and inaccurate information from the respondents. Where such data was forthcoming, they were majorly in hard copies which became very difficult to retrieve. The researcher made arrangement to engage additional research assistants who were able to get the required information in time.

Arrangements were made to approach alternative institutions and use key informants to validate the information gathered. In addition to the above, certain institutions appeared to be operating in secrecy and not willing to divulge information about their institutions. This limitation was however resolved by the researcher personally reassuring the principals the purpose of the study.

The respondents in this study were in managerial positions thus were difficult to access due to the unpredictability of their diaries. Effort was however made to follow up the respondents to get responses. This was noted specifically with the principals who felt that they were too senior to be engaged in academic research or any activity which will unravel issues bedeviling their institutions. The researcher was able to convince them that the findings could make contributions to policy on TVET training and programmes.

The limitation of the study is included in the methodology in that the method established internal and external validity of findings. This includes the error drawing descriptive or inferential conclusions from sample data. Data drawn from a representative sample allowed the study to generalize from the randomly selected respondents. To overcome this limitation, the study used 70% of the population in calculating the sample size which was large enough to ensure normal distribution.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The first part discusses the theoretical literature review of leadership styles and competency development in the TVET institutions from the formulated research objectives. The postulated leadership styles include transformational leadership, transactional leadership, laissez-faire leadership, and servant leadership associated with competency development in the TVET institutions. The second part of this chapter describes the conceptual framework and the empirical findings relating to leadership styles and their implications on competency development in the TVET institutions.

2.2 Theories Relevant to the Study

A theoretical framework is a collection of interrelated concepts. It guides research to determine what things to measure and what statistical relationships to look for (Baruah, 2012). Dobberfuhl-Quinlan (2018) emphasized that good research should be grounded in theory. This study was built on the underpinning theories of leadership which includes trait theory, path goal theory, behavioral theory, leaders-member theory and institutional theory.

2.2.1 Trait Theory of Leadership

Trait theory of leadership is one of the earliest theories of leadership, which can be traced back to Thomas Carlyle's 1849 assertion that "the history of the world was the biography of great men". It is the idea that there are certain inborn traits that make people more likely to succeed as leaders: in essence, it states that leaders are born, not made. The trait theory of leadership is an early assumption that leaders are born and due to this belief, those that possess the correct qualities and traits are better suited to leadership (Nzembe, 2017). This theory often identifies behavioral characteristics that is common in leaders which includes talents and skills. The trait

theory of leadership is based on the characteristics of many leaders – both successful and unsuccessful – and is used to predict leadership effectiveness (Nicholas & Cottrell, 2014). The inborn leadership qualities alone are necessary and sufficient for a leader to exercise influence over his followers and to become successful (Bonzet & Frick, 2019). Leadership qualities and effectiveness are independent variables. Situational factors like the nature and needs of followers, the demands of task and the general socioeconomic environment have little or no influence on a leader's emergence or effectiveness; the theory discounts the belief that individuals can be trained for assuming leadership positions and roles. Leadership qualities cannot be transmitted through education and exposure (Kedir & Galetu, 2017).

The traits approach gives rise to questions: whether leaders are born or made; and whether leadership is an art or science. However, these are not mutually exclusive alternatives. Leadership may be something of an art; it still requires the application of special skills and techniques. Even if there are certain inborn qualities that make one a good leader, these natural talents need encouragement and development (Muhammad & Jafaar, 2015). A person is not born with self-confidence. Selfconfidence is developed, honesty and integrity are a matter of personal choice, and motivation to lead comes from within the individual. While cognitive ability has its origin partly in genes, it still needs to be developed (Badenhorst & Radile, 2018). None of these ingredients are acquired overnight. The trait model of leadership is based on the characteristics of many leaders - both successful and unsuccessful - and is used to predict leadership effectiveness. The resulting lists of traits are then compared to those of potential leaders to assess their likelihood of success or failure. The trait theory attempts to identify specific physical, mental and personality characteristics associated with leadership competencies (MCGehee, Knollberg & Kmorowski, 2015).

The trait theory gives constructive information about leadership. It can be applied by people at all levels in all types of organizations. Managers can utilize the information from the theory to evaluate their position in the organization and to assess how their position can be made stronger in the organization (Peeny, Kelloway & O'Keefe,

2015). They can get an in-depth understanding of their identity and the way they will affect others in the organization. This theory makes the principals aware of their strengths and weaknesses and thus they get an understanding of how they can develop their leadership qualities. This theory argued that leaders are people who can fully express themselves while others cannot, and this is what makes them different from other people. A leader has the right combination of traits which makes him a good leader (Weiss, 2014). The meaning of this theory is that the same leadership styles attributes are applicable for leadership competencies on a battlefield, non-profitable organization, and profitable organizations (Ayele & Hamaraya, 2013).

This theory is relevant to this study since it elaborates the characteristics of a good leader. For instance, the theory posits that the character of a leader is what determines whether he/she will be a good or a bad leader. The trait theory consists of concepts that are easy to understand and apply across a wide variety of work situations. The leader selects the appropriate style according to the situation and readiness level of the followers for a particular style of leadership. The trait theory of leadership is anchored in the part of the style of leadership that focuses on supervision, organization or performance. Transactional leadership is a style of leadership in which managers of TVET institutions promote compliance by staff and students through both rewards and punishments for failure to improve competency development in their institutions. Through a rewards and punishments system, principals can keep students motivated for the short-term. In the TVET institutions principals take the initiative in contacting students for the purpose of an exchange of valued things (competency development). It is on this premise the current study adopted trait theory of leadership to expound the relationship between transactional leadership style and competency development in TVET institutions in Kenya.

2.2.2 Path-Goal Leadership Theory

The path-goal leadership theory was first introduced by Martin Evans (1970) and was further developed by House (1971). It is a theory based on specifying a leader's style

or behavior that best fits the employee and work environment to achieve a goal (Robertson & Frick, 2018). The goal is to increase employees' motivation, empowerment, and satisfaction so they become productive members of the organization. In the field of organizational studies, the path-goal theory considers the impact of a leader's behavior on workers' job satisfaction, motivation, and effectiveness (Lam & Hassan, 2018). In the 1990s, the theory underwent subsequent revision from its original 1971 formulation by Robert J. House. The theory is identified by four leadership behaviors. Each leadership behavior aims to maximize worker outcomes by recognizing the impact of both environmental factors and worker characteristics in job performance (Terblanche & Bitzer, 2018).

The path-goal theory can best be thought of as a process in which leaders select specific behaviors that are best suited to the employees' needs and the working environment so that they may best guide the employees through their path in the obtainment of their daily work activities (Northouse, 2013). The path-goal theory is complimentary to transformational theory in as far as this study is concerned as it describes the way that leaders should encourage and support their followers in achieving set goals by making their path clearer ((Lam & Hassan, 2018). The leaders should do this by clarifying the path for their subordinates to know the way, by removing any roadblocks that hinder performance and finally by increasing their rewards when goals are achieved. Transformational leadership is a leadership style in which leaders encourage, inspire, and motivate employees to innovate and create change that will help grow and shape the future success of an institution. This is accomplished by setting an example at the executive level through a strong sense of institutional culture, employee ownership and independence in the workplace. The independent variables of path-goal theory are the leader's behavior – the leader adjusts the style of behavior to the employee and task characteristics so that the employee's motivation is to excel at their goal (Arshad, Abid & Torres, 2020).

In the TVET institutions, transformational leaders inspire and motivate their workforce and students without micromanaging — they trust trained tutors and students to take authority over decisions they make. Tutors and students are always

on the path that is on the leadership track being prepared to become transformative leaders themselves through mentorship and training (Terblanche & Bitzer, 2018). It's a management style that's designed to give students and tutors more room to be creative, look to the future and find new solutions to old problems. This will facilitate competency development in the TVET institutions. Although the concept of transformational leadership can apply to TVET institutions, it's increasingly important for these institutions leadership to embrace transformational leadership style. Adapting to rapidly changing business and work requires students to be competent in terms of innovation and strong leadership to stay ahead of the curve and to remain competitive. This study therefore sought to operate within the framework of transformational leadership with path goal theory. Thus, path goal theory assisted the study to expound the relationship between transformational leadership style and competency development in TVET institutions in Kenya.

2.2.3 Behavioural Leadership Theory

This theory is based on the principle that a leader's behaviors can be conditioned in a manner that one can have a specific response to specific stimuli. Behavioral theories of leadership, also known as "The style approach to leadership" focuses on the behavior of the leader and what leaders do and how they act. Behavioral theory of leadership is a leadership theory that considers the observable actions and reactions of leaders and followers in each situation (Lam & Hassan, 2018). Behavioral theories focus on how leaders behave and assume that leaders can be made, rather than born and successful leadership is based on definable, learnable behavior. Behavioral theories of leadership are classified as such because they focus on the study of specific behaviors of a leader. For behavioral theorists, a leader's behavior is the best predictor of his leadership influences and as a result, is the best determinant of his or her leadership success (Terblanche & Bitzer, 2018).

Behavioral theory promotes the value of leadership styles with an emphasis on concern for people and collaboration. It promotes participative decision making and team development by supporting individual needs and aligning individual and group objectives. It helps managers evaluate and understand how their behavioral style as a manager affects their relationship with the team and promotes commitment and contribution towards organizational goals. This theory helps managers find the right balance between different styles of leadership and helps them decide how to behave as a leader, depending on concerns for people and for productivity (Arshad, Abid & Torres, 2020). This theory promotes the idea that all leaders are capable of learning and developing through adopting beneficial behaviors and performing them in their workplace. Behavioral leadership theory also encourages leaders to be self-aware of their behavior and to recognize how it affects the productivity and morale of their team (Robertson & Frick, 2018).

According to behavioural leadership theory, at the core of leadership is an individual's ability to influence, motivate and inspire followers. Contemporary writers affirm this by emphasizing leadership being built upon forming positive open relationships with others (Nzembe, 2017; Buli & Yessuf, 2015; Bonzet & Frick, 2019). Throughout history, behavioural leadership theory and practice has shifted and developed to present different models through which individuals can lead. One such philosophy and model is servant leadership. Servant leadership provides focus on the leader-follower relationship by putting the followers first.

Another important servant leadership element is stewardship because it introduces the idea of servant leader's role in and interaction with the broad global society (Kedir & Geleta, 2017). This means servant leadership exists at both interpersonal and global levels. The concept of stewardship brings in the element of being accountable for the wellbeing of the larger community by operating in the service of those around us (Badenhorst & Radille, 2018). Principals of TVET institutions act as stewards, servant leaders and regard their students and tutors as people who have been entrusted to them to be elevated in their better selves and to be what they can become. It is on this premise, this study adopted behavioural leadership theory to expound the relationship between servant leadership style and competency development in TVET institutions in Kenya.

2.2.4 Leadership-Member Exchange (LMX) Theory

This theory was developed by Grain and associates (1975). It focuses on supervisor-employee relationships that can either empower or detract from the work of an organization as a whole, influence employees in their group (referred to as members) through the quality of the relationships they develop with them; develop relationships of varying quality with their subordinates; dynamic interaction between the leaders and subordinates. Leader–Member Exchange (LMX) theory is a relationship-based, dyadic theory of leadership. Unlike behavioral leadership theories that focus on what leaders do, such as transformational, authentic, servant or empowering leadership theories, LMX theory rests firmly on the assumption that leaders influence employees in their group (referred to as members) through the quality of the relationships they develop with them. A high-quality relationship is characterized by trust, liking, professional respect and loyalty (Little, Gooty & Torres, 2020).

One of the early findings of the LMX theory is that leaders develop relationships of varying quality with their subordinates and such differentiation characterizes a wide majority of the work groups studied (Llyod, Boer & Voel pel, 2017). LMX theory provides a framework for researchers to evaluate the impact of superior-subordinate relationships (Usadolo, Usadolo & Makwambeni, 2019). LMX theory is grounded in the belief that there are differences in the quality of relationships between leaders and their subordinates, referred to as members (Bonzet & Frick, 2019). The value of the theory resides in the hypothesis that relationships quality is predictive of outcomes at the individual, group, and organizational levels (Mrwebi, 2019). Specifically, higher-quality relationships are associated with more positive organizational and member outcomes as well as fewer work-related problems.

LMX theory can be considered a process approach since it stresses the importance of the dynamic interaction between the leaders and subordinates. It can also be characterized as a transactional approach, because both the leader and the followers are seen as active participants (Usadolo, Usadolo & Makwambeni, 2019). LMX

theory stressed the possibility that leaders treat their various subordinates differently ((Harrisson, 2018). The central concept of LMX theory is that leadership is more effective when leaders and followers can develop maturity (partnerships) and thus gain access to the many benefits these relationships bring (Erdogan & Bauer, 2015). LMX focuses on the dyadic relationship between leaders and individual followers, as opposed to the organizational group (Erdogan & Bauer, 2015).

LMX theory has been utilized as a foundation for evaluating the outcomes of superior- subordinate relationships in a variety of professional and paraprofessional fields (Nie & Lamsa, 2015). Bonzet & Frick, (2019) stated that the LMX theory focuses on the construct of relationship quality as the degree to which trust, respect and mutual obligations exist within a dyad. A central characteristic of this theory is its focus on the working relationship between

the principals of TVET institutions and the various members of the training institutions. Since the tutors are more knowledgeable and experienced in their respective subject areas and are required to impart the required competencies to the students, the principals can adopt laissez- faire leadership style which is anchored too in the LMX theory. This is consistent with the findings of Usadolo, Usadolo & Makwambeni, (2019) who described superior- subordinate relationship which enhances consistency in organizational performance. It is on this premise, the study adopted LMX leadership theory to expound the relationship between transactional and laissez-faire leadership styles and competency development in TVET institutions in Kenya.

2.2.5 Institutional Theory of leadership

Institutional theory proponents were Meyer and Rowan (1977). They opine that often these "institutional myths" are merely accepted ceremoniously for the organization to gain or maintain legitimacy in the institutional environment. Institutional theory examines ways in which "organizational structures, norms, practices, and patterns of social relationships are connected to the broader social and cultural environment" (Anagnostopolous et al., 2015). According to Voronov and Weber (2020) institutions

are composed of cultural-cognitive and regulative elements that together with the associated activities and resources, give meaning to organizational performance. Ashari, Azman and Rasul (2019) further explain the three pillars of institutions as regulatory, normative, and cultural cognitive. The regulatory pillar emphasizes the use of rules, laws, and sanctions as enforcement mechanism, with expedience as basis for compliance. The normative pillar refers to norms that is, how things should be done and values, that is, preferred or desirable, social obligation being the basis of compliance.

This theory examines how company operations are influenced by external pressures. Organizations operate within a social network and a strong motivating force behind firm behavior is socially based and that it is embedded within institutions and interconnected organizational networks (Nduati & Mbugua, 2020). The theory recognizes the embedment of institutional leadership (actors) in an environment of formal and informal rules (Suh & Lee,

2018). Institutional theorists suggest that organizational actions and processes are driven by their leadership (actors) to justify and plausibly explain their actions (Bowen & Kimencu, 2019). According to this perspective, leadership styles and implementation are rationally accounted for by organizational leadership (actors) and rooted in the normative and social context that motivates leadership (actors) to seek legitimacy (Kariuki & Nafula, 2020).

Through various cognitive, normative, and regulative forces organizations adopt a standardized set of practices where, traditional institutional theory believes that organizational fields become structured by powerful influences within organizations (Awino, Ayuya, Machuki & Wanaina, 2017). The adoption of a system such as strategy is highly dependent on the extent to which it is institutionalized by legitimacy. Organizational leadership (actors) concerns lead organizations to adopt practices that "conform to the mandate of the institutional environment (Rugami & Sheila, 2018).

This theory aligns well with the study since, institutional theory argues that all TVET institutions take the shape they do because they "draw the influence from the leadership style of the organizational leadership value-based notions of how things should be organized" and that institutions are run by people, regimes with authority and by the culture of leadership within. This gives meaning to running and the conventional institutional daily life (Nduati & Mbugua, 2020). TVET institutions run by principals provide accounts of the social and legal constructions of individual identity thereby influencing decision making within an organization and the choice of strategies to improve competency development. The theory was used to expound the relationship between leadership styles and competency development in TVET institutions in Kenya.

2.3 Conceptual Framework

Conceptual framework can be defined as a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation (Ravitch & Carl,

2019). Figure 2.1 shows the conceptual framework which was used in this study and depicts the interrelationship between the study variables. The independent variables are transactional leadership style, transformational leadership style, servant leadership style and laissez-faire leadership style. The leadership styles were moderated by the organizational culture. The dependent variable is the competency development. These variables and hypothetical causal paths and relationships are presented in Figure 2.1 below.

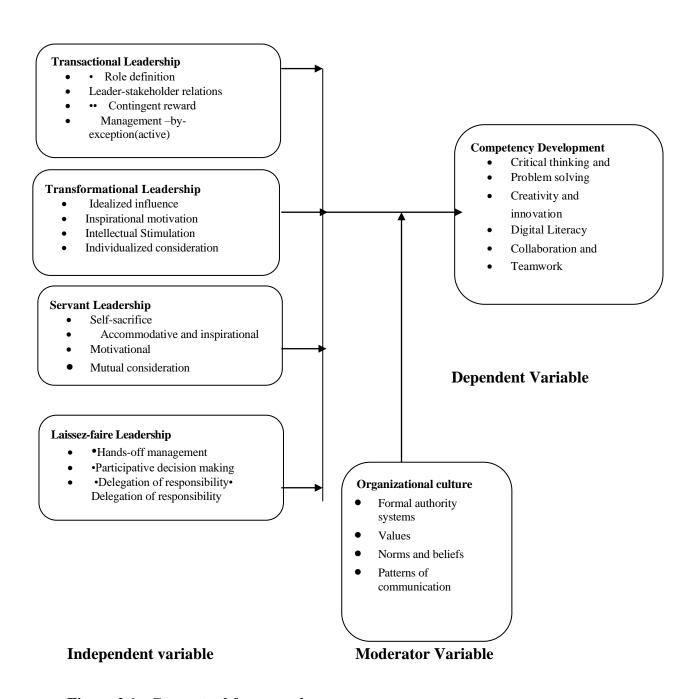


Figure 2.1: Conceptual framework

2.3.1 Transactional Leadership Style

The locus of the relationship is on an exchange. Each party to the exchange recognizes the value of the exchange as well as the value of the relationship, but these bargainers have no reason to remain together after the exchange. There is nothing enduring about their relationship; no actual engagement has occurred. That is, transactional leaders expect certain work behaviors from their subordinates who are compensated for these behaviors by both monetary and nonmonetary rewards (Chagi, 2020). Transactional leadership involves determining the tasks, rewarding goal achievement, and punishing failure in attaining goals (Rahman & Rashid, 2018). Djangone and El-Gayore (2020) claim that the effectiveness of this leadership style is dependent on two conditions: the first being that the current differences in organizational hierarchies and structures are totally accepted by subordinates; the second being that all the employees can work towards mutual exchange of benefits and where they are rewarded for achieving the determined goals (Chagi, 2020).

The transactional leadership style plays a very critical role in an organizational setting. For example, organizations can gain a competitive advantage by using employees' ideas regarding how to improve processes, products, and services (Mesfin & Van Niekerk, 2019). Effective leadership helps in building successful work-based teams. Transactional leadership is a traditional leadership style. Transactional leadership refers to the practice of motivating followers through an exchange process involving extrinsic rewards, rules, and compliance. Thus, the aim is to motivate employees (Zelew, 2014).

Transactional leaders are those who lead by exchanging or offering a reward for desired outcome, for example financial rewards or promotional opportunities for attaining performance targets. Therein appealing to lower-level needs as pay and security. Such exchange processes are also illustrated in public choice theory, the norm of reciprocity, and social exchange theory, which are replete in administrative literature (Demmissie, 2017). Leadership is a key issue. Questions revolving around issues of effective leadership-leaders' success in mobilizing and motivating followers have been on the behavioral research agenda for over a hundred years. Yet leadership

research has scarcely engaged with what is arguably one of the bigger challenges of leadership in organizations. Therefore, the study hypothesized that;

Ha₁: There is a significant relationship between transactional leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya

2.3.2 Transformational Leadership

Transformational style of Leadership comprises of the components of idealized influence, inspiration, intellectual stimulation, and individualized consideration as has been suggested widely as the optimum style for managing change. Smothers and Lawton (2017) discovered that leaders scoring higher on transformational leadership factors have followers who display greater levels of transformational behaviors. The goal of transformational leadership is to "transform" people and organizations in a literal sense to change them in mind and heart; enlarge vision, insight, and understanding; clarify purposes; make behavior congruent with beliefs, principles, or values; and bring about changes that are permanent, self-perpetuating, and momentum building (Chagi, 2020).

Transformational leadership style is an inspirational way through which one can motivate and use that motivation thinking ability to achieve performance. Organizational performance can be measured in terms of return on assets, return on equity, net growth rate, and return on sale (Djangone & El-Gatayore, 2020). Empirical research relating to performance of organizations about transformational leadership style will enrich the understanding. Research advances can also use conceptual models to test whether changes in leaders' conduct affects followers' performance of an organization (Smothers & Lawton, 2017). Keeping in view the utmost importance of leadership in any organization, this study will provide an ample chance for managers at the Technical and Vocational Educational Training Institutions in Kenya to enhance their relationships with employees and to improve their organizational performance.

Transformational leadership affects the overall behavior and thinking of followers in any organization, forming a unified understanding to achieve learning. Transformational leadership draws intellectual consideration to problems at hand. It promotes learning and innovation thus enhancing overall performance. There is a shared belief that leadership can enhance performance of organizations. Transformational leadership is a people-oriented leadership style. Its relationship with organizational learning has been established by many researchers (Kedir & Geleta, 2017; Ibrahim & Ahmad, 2017). The style of leadership is also considered to be very crucial in achieving organizational goals, learning, and performance (Mesfin & Van Niekerk, 2019). Transformational leadership is an ethical leadership style that involves a leader's capabilities to promote intellectual stimulation through inspiration. Transformational leadership is guidance through individualized consideration, intellectual stimulation, inspirational, and idealized influence (Osman & Kais, 2019).

What leaders say, and what leaders do, often provides critical insights into interpersonal, group, or organizational issues. Recent economic crises, business scandals, and financial disasters are often more leadership style problems than either ethical or technical problems (Demmissie, 2017). That the study of leadership Styles across different contexts and historical time periods can augment our understanding of the processes that underlie outcomes that are not commonly examined from the lens of leadership (Kodir & Geleta, 2017). Language in transformative leadership has long been recognized to form a critical foundation for leadership process, and several scholars have argued that the relationship between business leaders and their employees is fundamentally rooted in communication processes and discourse (Smothers & Lawton, 2017).

Leadership is always about change, whether on individual, team, organizational, or societal levels, or a combination thereof. Leaders, whether by appointment, dedication, or accident, influence followers (stakeholders) and vice versa, which leads to realization of certain objectives. Reaching the objective implies a change process-thus transformation (Ibrahim & Ahmad, 2017). At an individual-level

phenomenon, transformational leadership entails a process of building commitment and empowerment among followers to accomplish organizational goals and thus enhance follower performance. Research on transformational leadership considers some contextual factors, such as country culture or organizational culture, but it does not explicitly discuss "leadership in the context of contemporary stakeholder theory" (Osman & Kamis, 2019).

According to Djangone and El-Gayayore (2020), regarding the emphasis of leadership, transformational leaders influence followers for the instrumental purpose of enhancing performance and accomplishing organizational objectives (e.g., improving the economic bottom-line, satisfying shareholders), at least in the prevailing approach proposed by Bass and colleagues. Research on transformational leadership asserts that the leader's ethical or unethical behavior depends on his or her motivation. Transformational leaders qualify as moral leaders with moral values, social motivations, and a lack of coercion or manipulative influence. Transformational leadership includes notions of change and transformation in the leadership style. However, transformational leaders may not necessarily employ change to achieve a higher social goal (Chagi, 2020). Based on this, the study hypothesized that;

Ha₂: There is a significant relationship between transformational leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya

2.3.3 Servant Leadership

The servant leadership theory firstly defined and explained by the Robert K. Greenleaf in 1977 stated that servant leadership reveal a well judgment of ethical and social responsibility and admiration for the employees or followers who should be highly motivated to be able to handle future job challenges effectively (Greenleaf, 1977). The servant leader's desires are to motivate spiritually and effectively lead the followers or employees, create hope & love, and offer more helpful experience during set up of honorable associations (Ibrahim & Ahmad, 2017). The main

responsibility of the servant leaders is doing work for the provision of necessities and desires to the employees by taking the personal interests (Osman & Kamis, 2019).

Servant leadership is centered on the core values of "caring" and "serving others," and focuses on the values of trust, appreciation of others, and empowerment (Kgatle, 2016). The same characteristics lend the servant leadership model to be considered the most appropriate leadership style for increased organizational performance and enhanced employee satisfaction through improved focus on the customer (Demmissie, 2017). The first feature of servant leadership frameworks is services to others "the servant leaders perceive as a servant and to do work for the employees' growth and wellness rather than establish the power distance between them". It is the key to the greatness of the servant leader to serve for the other (Omar, Rashid & Puad, 2018). Second feature is Holistic approach to work "to give more personal and integrity value to the person as employee to perform willingly in the organization and keep work life balance". The work survives for the individual as to a great extent as the individual survives for the work". Third is promoting a sense of community "establishing this logic of community amongst employees may for the successful accomplishment of the organization's objectives and goals and the theory pursuits that this logic of community can take place only from the dealings of individual servant leaders (Terblanche & Bitzer, 2018). Finally, is sharing of power in decision making in which it states "supporting participatory, empowering environments and encouraging the skills, knowledge and abilities of employees, the servant leader establishes more effective, motivated employees and eventually thus making the organization successful.

The Leaders facilitate the employees to perform not by using the authority which they have but supporting the employees (Ekpo & Onweh, 2012).). This framework was introduced by Greenleaf which was recently enhanced by Demmissie (2017) who anticipated the two main elements or attributes of servant leadership as ethical behavior and concern for subordinates. Robertson and Plessis, (2015) described the seven dimensions for the servant leadership as conceptual skills, emotional healings,

empowering, behaving ethically, valuing the community, helping the subordinates growing towards success, and making the concerns for subordinates first.

Servant leadership has the advantage of building effective teams, galvanizing support around causes, and creating a culture of unity Triraharjo et al (2019). At the same time servant leadership is applicable to both social good, entrepreneurial, and public causes which make it dynamic (Demissie, 2017). One would also argue that servant leadership naturally fosters continuous growth both in skills building and people relations and finally even though rare and difficult to cultivate nurtures continuity and smooth transitioning in teams, causes and organizations (Smothers & Lawton, 2017). The disadvantages of this leadership style are that it takes longer to cultivate cohesion and it is dependent on trust which is precarious and not so definite as a value. Servant leadership for the most part is not the most popular and hence it is difficult to articulate. Therefore, the study hypothesized that;

Ha₃: There is a significant relationship between servant leadership style and competency development in Technical and Vocational Education and Training Institutions in Kenya

2.3.4 Laissez-Faire Leadership Style

Laissez-faire leadership is also known as delegative leadership. It's a leadership style in which leaders are hands-off and allow group members to make the decisions. Researchers have found that this is generally the leadership style that leads to the lowest productivity among group members. The laissez-faire leadership is the extreme loose principle which includes non- interference policy that allows complete freedom to all the employees and has no way of attaining goals (Mesfin & Van Niekerk, 2019). This style of leadership is people centered and the leaders leave the group to make its own decision without participating or even setting a deadline for the decision. In this style the leader hopes that the group will make the right decision. The main advantage of this style is that it lets the team members bond and can lead to successful decisions if group members take ownership and responsibility of the task. However, the main disadvantage is that employees will often perceive the leader as

indifferent to the organization and they might make the wrong decision without even realizing it. Since there is absolutely no control or guidance in this style of leadership, wrong decisions can impose devastating effects on organizations (Razak et al., 2015).

Laissez faire leadership is characterized through managing the situation where a problem has occurred (Harun, Khadijah & Mom, 2014)) and leaders take a reactive approach to correct mistakes or to overcome problems. This style of leadership has been critiqued in the literature as leaders are not concerned with proactively identifying or preventing problems. They do not advocate for knowledge sharing and joint problem solving with subordinates (Yusof, 2015). Hence, it is rational to state that laissez-faire leaders do not possess high commitment in seeking the proposed solutions jointly with their subordinates.

Mom (2014) described the laissez-faire style as a situation where the subordinates are left on their own to work. The leader does not interfere in the subordinate's activities even though he makes himself available for consultation when the need be. According to Yusof (2015) the leader delegates his responsibility to take decisions to the subordinates and gives them all the authority and control to go about their actions and accomplishments. Laissez-faire can also be considered as a destructive leadership behavior because in the absence of the leader's control some individuals can dominate group decisions and bully other members in the group (Ekpo & Onweh, 2018). Laissez-faire leadership can be effective in situations where group members are highly skilled, motivated, and capable of working on their own (Kgatle, 2016).

While the conventional term for this style is 'laissez-faire' and implies a completely hands-off approach, many leaders remain open and available to group members for consultation and feedback (Murimi & Omondi, 2014). Laissez-faire leadership is not ideal in situations where group members lack the knowledge or experience, they need to complete tasks and make decisions (Engda, 2015). Some people are not good at setting their own deadlines, managing their own projects, and solving problems on their own. In such situations, projects can go off- track and deadlines can be missed

when team members do not get enough guidance or feedback from leaders. Thus, the study hypothesized that;

Ha₄: There is a significant relationship between laissez-faire leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya

2.3.5 Organizational Culture

The definition of culture has long been a source of debate among anthropologists, cross-cultural psychologists, and political scientists, with over one hundred and sixty definitions of culture having been identified decades ago. Perhaps not surprising, definitions tend to reflect scholars' training and experience, with importance placed on mechanisms ranging from symbols (Harun, Khadijah & Mom, 2014) to scheduled reinforcements (Alagaraja, Kotamraju & Kim, 2014). Culture specifies what behaviors are desirable or proscribed for members of the culture (norms), for individuals in the social structure (roles), as well as the important goals and principles in one's life (values). Culture also specifies how things are to be evaluated. This implies that people of different cultures will have greater difficulty in interaction, in understanding, and in valuation (Raihan, 2014).

This description of culture is useful within this study because it asserts that culture not only impacts individuals' values and goals but also what one thinks others expect as acceptable behaviors, and thus dictates organizational performance. Leaders make decisions about organizational performance (Osman & Kamis, 2019). Culture will shape their perceptions of leadership and performance. There are several approaches to exploring the relationship between culture, leadership, and organizational performance. The most common approach is to test the impact of specific cultural values on leadership and organizational performance. Cultural differences may be one method for inferring social identity, in that cultural difference may signal ingroup or out-group status. When cultural differences are small, it fosters co-operation (Ibrahim & Kamis, 2019).

The broad ideological framework of a country, corporation, or situation is the most important determinant of the cultural identity that people develop in each locale. The 'melting pot' ideology suggests that each cultural group loses some of its dominant characteristics to become mainstream. Cultural stability helps to reduce ambiguity and leads to more control over expected behavioral outcomes. For instance, most existing models of culture and work behaviors assume cultural stability and emphasize the fitness between a give culture and certain managerial and motivational practices. High fit means high adaptation of managerial practices to a given culture and therefore, high effectiveness (Nwachukwu & Yabal, 2014). The assumption of cultural stability is valid if there are no environmental changes that precipitate adaptation and cultural change. Yet, the end of the 20th century and beginning of the new millennium have been characterized by turbulent political and economic changes, which instigate cultural changes. Organizational changes as a reaction to environmental changes have been subjected to considerable conceptual analyses (Gamble, 2013). Therefore, the study hypothesized that;

Ha₅: Organizational culture moderates the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya

2.3.6 Competency Development

The term competency is not unified and has several meanings in the research literature. It is applied to the individual as the unit of analysis to indicate how well an individual performs required work and has been applied at all levels of the organization and for different kinds of work according to Grosch (2017). The levels include the highest managerial level which is applied to leaders and executives. At the level of middle level, it has been applied to managers (Okoye & Michael, 2015) and at the lower level it has been applied to individuals' performing specific tasks (Paryono, 2015; Ismael et al., 2018).

Developing competency of personnel in an organization or leaning institution is regarded as one of the important missions of every organization. Competency is a significant factor in the development of an organization's personnel (Hamisu et al., 2017). Administering a learning institution in accordance with its mission requires its administrators to have vision, knowledge, ability, and skills in administration with appropriate leadership styles (Hadi et al., 2015; Lam & Hassan, 2018). Supporting-line administrators with effective leadership styles is important since such people help coordinate administration tasks and lead higher educational institutions to academic excellence and long-term self-reliance through achievement of expected competency (Arifin et al., 2017; Ridzwan et al., 2017; Obwoge, 2016).

Ismail, Hassan, and Rosli (2017) indicated that competency development may be collectively achieved by the staff through pre-service education, in-service training and work experience. Competency evaluation should be consistent with ability, readiness to work on the assigned job to provide quality service to the customers. Although recruiting staff on experience is the first criteria, periodical evaluation on performance-based protocol will give added benefits to the organization. Knowledge can be tested through a written test, seminar, and analytical skill (Acakpovi & 2015). It concerns everything Nutassey, that can be learned from educational/formative systems and training courses and everything which involves cognitive processes (i.e., perception, learning, communication, association, and reasoning (Njenga, 2018). It represents the theoretical understanding of something such as a new or updated method or procedure, among others. The skills can be tested in terms of comprehension, organizing, and coordinating skills, new initiative, communication and presentation skills, correspondence, analytical skills to identify and resolve issues. It is related to personal experiences and working conditions (Paleocrassas, 2019). It is learned by doing, by practice, by experience (Woo et al., 2018). It is the practical knowledge consisting of "how to get something done". Attitude can be evaluated in terms of interaction with colleagues, subordinates, updating, maintaining time frame in completing assignments among others (Geleto, 2017). It is referred to individual characters, talents, human traits, or qualities that drive someone to act or react in a certain way under certain circumstances (Jin, 2014).

According to Songa (2015) competence is a dynamic construct in which expertise, established on habitual forms of practice, requires accommodation to the continuous advance of knowledge in the field. Competency is viewed as a stock of resource which can be invoked for specific business projects and innovation work (Kasman, et al. 2018). The debate on competency concerns the result expected of learners, in other words the organizational purpose that competency serves (Diep & Hartmann, 2016). In rationalist epistemology, competence is seen as constituted by specific set of attributes, such as knowledge and skills used in performing work (Likisa, 2018). It is used by some practitioners to mean the competency standard base to complete organizational work. Ratnata (2015) opines that two units of analysis for competency are identifiable in the literature; the competency of the individual and organizational competency. Ismael and Mohammed (2015) recognize that the concept of organizational core competency is derived from individual competency however, competency highlights a close relation to strategic thinking; therefore, this concept can be related to organizational level even though it is originated at individuals' level (Poonam, 2013). Competence or competences is used to define job requirements that the individual needs to know or to possess to be able to perform a task required by that specific occupation (Jules, 2015). In another word, it is the ability of an individual to perform a required task in their job. Some authors have also attempted to describe competency as an input or a performance contract and described competence as an output that reflects the job requirement of that individual (Mat Som, Duggan, Tracy, & Stott, 2015).

The first definition focuses on observable performance of individuals (Haolader, 2015). The focus is on the tasks of the job to be done. Individuals are expected to be as competent as the written standards, and the focus here is on the output or the task that the individual must complete within their standards (Sern, Adamu, & Salleh, 2018). The organization then measures the individuals' tasks to assess their performance and may suggest training to enable employees to be more competent, whether these employees are new or old in their job (Lai et al., 2019). These tasks are called competencies for the individual to perform and meet. The second definition focuses on work or quality of outputs which pursue gains in productivity and/or

efficiency at work. The third definition focuses on individuals' attributes such as knowledge, skills, and abilities (Ajithkumar, 2016). This definition is based on the input of individuals, based on their attributes, to produce competent performance. The focus is on the kind of attribute needed for the job; hence organizations train their employees based on the attributes required to meet the job requirements (Mukhtar & Ahmad, 2015).

Therefore, competency development influences individuals' ambition and role in the organization. Ansari and Wu, (2013) relate competency development to an individual's initiative and capacity to achieve recognition. This recognition can be achieved by doing more than what is required by their organization; being able to understand new emerging situations and being able to take control of them; being able to acquire knowledge to act or to decide based on the current situation and at the same time take responsibility for their actions and decisions. In fact, organizational competencies are only materialized through people and their competencies (Pongo et al., 2014).

Organizations are increasingly focusing on human capital as a competitive advantage in a rapidly changing environment (Kim et al., 2019). To achieve business success, companies are expecting their employees to perform at higher levels, to be more customer-responsive, more process-oriented, more involved in shared leadership and more responsible for creating the knowledge that adds value to an organization's distinguishing capabilities (Jebungei, 2020). Adjusting to these challenges has profound implications for human capital management (Sharipova & Wesseler, 2018). In particular, learning institutions are now charged with developing and sustaining methods for: predicting, in advance, aligning individual and team behavior with organizations vision and strategy; integrating performance development systems; distributing "just in time" learning and development in the work environment (Ismail & Abbiddin, 2014). Competencies enable an individual in an organization to have a clear understanding of the behaviours to be exhibited and the levels of performance expected to achieve organizational results (Sern, Hamisu, & Salleh, 2018). They provide the individual with an indication of the behaviours and actions that will be

valued, recognized, and rewarded regarding decision making and risk taking developing a good relationship (Mahmood, Ali, & Bilal, 2018), problem solving that is analyzing attention to detail, innovation resilience customer service and strategic perspective in terms of teamwork leadership (Odondi, Maina & Muhia, 2020).

2.4 Empirical Review

The study sought to establish the influence of leadership styles on competency development. The variables under study are namely: transactional leadership, transformational leadership, servant leadership, Laissez-faire leadership and organizational culture on competency development and this section explores the empirical reviews.

2.4.1 Transactional Leadership

Nazim (2017) objective of the study was to find out the relationship between leadership styles of principals and job satisfaction of college teachers. In this connection, survey research methods were used. The population for this study comprised all teachers at public degree colleges of Punjab in Pakistan. By using random sampling technique, 10% of the colleges in the province were sampled. There were 43 colleges excluding the mixed colleges and from sampled colleges, five teachers from each college were selected as the sample. The four variables dealt with the transactional leadership style. Pearson r and t -test were used to analyze the data. The findings of the study showed that there was a significant relationship between transactional leadership style and job satisfaction.

Kalsoom, Khan and Zubair (2018) study was about transactional leadership style having impact on employee's performance in FMCG industry of Pakistan. Data was collected from 318 employees. Pearson correlation and Linear Regression Analysis was used to predict the contribution towards employees' performance. The study noted a strong positive correlation between transactional leadership style and performance of the employees. The study concluded that the leadership style was having positive relation with employee performance. It recommended that if Pakistan

FMCG industry focused on transactional leadership style through trainings and different manuals, then it could develop such leaders in a better way. Spitzbart (2013) study examined the impact of transactional versus transformational leadership on job satisfaction. Data was collected through a 69-item questionnaire for employees and a 70-item questionnaire for leaders to investigate their perceptions of their own leadership style and those of their direct leaders. Completed questionnaires were collected from 43 employees and 43 leaders. Consistent with earlier findings, a strong positive impact of both transactional and transformational leadership on job satisfaction was detected. Results suggest the need for making leaders aware of their own leadership style and the expectations and perceptions of their employees.

Kateb and Ramanathan (2019) study examined the mediating role of communication competence on the relationship between transactional leadership and job satisfaction of the employees in Syrian Private Universities. Quantitative method was used in data collection. A random sampling technique was conducted which comprised of 283 faculty members and staff from Seven Private Universities in Syria. A total of three different sets of instruments were used, namely Multifactor leadership Questionnaire (MLQ), Communicative Competence Scale (CCS) and the Minnesota Satisfaction Questionnaire (MSQ). PLS-SEM technique was used to analyze the direct and indirect relationships between the variables in this study. The results of the study indicated that there was a significant relationship between transactional leadership and communication competence. The results showed that there was a significant relationship between transactional leadership and job satisfaction. The findings had revealed that the indirect effect of transactional leadership on job satisfaction through communication competence was very high.

Obiwuru, Okwu and Akpa (2011) investigated the effects of leadership style on organizational performance in small scale enterprises. The major objective was to determine the effect of leadership styles on performance in small scale enterprises. Transactional leadership behaviours and performance/outcome variables were constructive/contingent reward and corrective/management by exception and effort, productivity, and loyalty/commitment, respectively. The result showed that

transactional leadership style had significant positive effect on performance. The study concluded that transactional leadership style was more appropriate in inducing performance in small scale enterprises.

Hussain et al., (2017) study examined the role of transactional leadership in creating organizational creativity through knowledge sharing behavior between employees and leaders. The study explored the contingent reward as for knowledge sharing for organizational creativity in organization, because many studies had been conducted for encouraging the knowledge sharing through contingent reward system. The study explored whether contingent reward system through transactional behavior creates organizational creativity. Data was collected from the telecom sector targeting a population of 360 employees. A total of 308 questionnaires were collected from the sampled population but the usable questionnaires were 300 for data analysis. The results of the study showed that transactional leadership and knowledge sharing had a positive relationship with creativity and knowledge sharing being the mediating role between transactional leader and organizational creativity.

Koech and Namusonge (2012) investigated the main effects of leadership styles on organizational performance at state-owned Corporations in Kenya. It specifically sought to determine the impact of transactional leadership styles on organizational performance at state- owned corporations in Kenya. To discover the leadership styles that influence organizational performance, correlation analysis was employed. Correlations between the transactional leadership behaviors and organizational performance were established to be relatively high.

Aarons (2006) study was to expand these findings by examining the association between leadership and mental health providers' attitudes toward adopting evidence-based practice. Participants were 303 public-sector mental health service clinicians and case managers from 49 programs who were providing mental health services to children, adolescents, and their families. Data was gathered on providers' characteristics, attitudes toward evidence-based practices and perceptions of their supervisors' leadership behaviors. Zero-order correlations and multilevel regression analyses were conducted that controlled the effects of service providers'

characteristics. The transactional leadership was positively associated with providers' having more positive attitudes toward adoption of evidence-based practice.

Saasongu (2015) sought to determine the effect of leadership Style on organizational performance in Small and Medium Scale Enterprises in Makurdi Metropolis of Benue State, Nigeria with reference to Water First Rehoboth Limited, Steam Fast Restaurant and Panet Technologies Limited. Data was collected from 70 staff of the sampled population of the organizations and analyzed with Friedman's Chi-Square Statistics using the Statistical Package for Social Sciences. The results showed transactional leadership style had a positive significant effect on employee performance. It concluded that transactional leadership style was more appropriate in inducing performance in small scale enterprises in Makurdi Metropolis. It recommended that small scale enterprises should adopt transactional leadership style at the initial stage of entry into business but should strategize to transit as the business grows and matures.

Azadehdel and Naghdibibalan (2015) study aimed to evaluate the relationship between transformationist and transactionist styles of Bank Managers and Employees` Burnout of Mellat Bank of East Guilan Province. Descriptive and applied research methods were used during the study. Data was collected using standard questionnaires given to the 181 employees of Mellat Banks of Guilan Province. Considering the statistical society in terms of the Morgan Table, the numbers of sample volume measured 123 people. The analyzed data recognized that transformational leadership had a significant relationship with decreasing personal capability and emotional exhaustion. The study established an extensive relationship which existed between transactional leadership style and creation of personal competence and depersonalization. The study also noted that there was no relationship between transactional leadership and emotional exhaustion.

Brahim, Ridic and Jukic (2015) study investigated the impact of transactional leadership style on employees' performance in Algerian Banks. The main objective of the study was to determine the relationship between transactional leadership style and employee's performance. A quantitative survey instrument was designed to

analyze their opinions. Convenience sampling method was utilized. As far as the research time frame was concerned, it was performed in a cross-sectional manner, in the summer of 2014. Out of a sample of 174 respondents using questionnaires sent out surveys, 132 responses were received for data analysis. The collected data was analyzed with descriptive statistics. The analysis of variance (ANOVA) was utilized as the tool of inferential statistics to determine differences in leadership between multiple groups of respondents, by age groups and employment within the organization. The study established a significant relationship between transactional leadership style and employees' performance in Algerian Banks.

Ahmad and Ejaz (2019) aimed to examine the impact of leadership styles on organizational performances in the Textile Industry of Pakistan. Previous studies suggested that leadership had a significant consequence on the performance of any business venture. The study focused on transformation and transactional leadership styles. A descriptive research design was used to identify leadership styles practiced in Textile Industries of Pakistan. Questionnaires were used for data collection. The target population was 140 individuals. The results indicated that both leadership styles had significant impact on organizational performance though at varying levels. Transactional leadership had the highest impact on the performance of the organization followed by transformational leadership style.

2.4.2 Transformational Leadership

Teymournejad and Elghaei (2016) study was to determine the effect of transformational leadership involving idealized influence, intellectual stimulation, inspirational motivation, and individualized considerations on organizational creativity of employees in the Maskan Bank in Tehran. Data was collected by use of questionnaires and analysis done by use of descriptive analysis. Correlation was used to analyze the hypotheses. Using Cochran formula, 127 employees are selected as the sample. Validity and reliability of the questionnaire were calculated by using expert opinion and Cronbach Alpha. The normal distribution of variables was determined by using Kolmogorov-Smirnov test and confirmatory factor analysis. The hypotheses

were tested by using linear structured relationships. All hypotheses were confirmed, and the findings showed that transformational leadership as a whole and each of its dimensions, such as idealized influence, intellectual stimulation, individualized consideration, and inspirational motivation had a significant and positive effect on creativity of Maskan Bank employees.

Gachingiri (2015) study sought to identify the leadership style(s) practiced and its effects on organizational performance in the United Nations Environmental Programme (UNEP) headquarters in Nairobi. The study addressed the effect of transformational leadership style on organizational performance at UNEP. Research findings illustrated that the majority of the respondents (36.59%) indicated that transformational leadership was being practiced. Findings further illustrated that the respondents considered leadership style practiced by overall management at UNEP as valid regarding its effect on organizational performance. The researcher therefore concluded that transformational leadership style significantly affects organizational performance at UNEP.

Ayacko (2017) study sought to analyze the influence of transformational leadership style on the performance of Judicial Staff in Kenya. Descriptive correlation research design was used to conduct the study. The target population of the study consisted of 770 Judicial Staff in Nairobi County. The study used stratified random sampling technique to select a sample of 385 Judicial Staff from the target population. The research instrument for collecting data was a structured questionnaire. Out of the total sampled respondents, 312 returned dully filled questionnaire representing a response rate of 81%. Regression analysis revealed that all the four independent variables positively and significantly predicted the performance of Judicial Staff i.e., individualized consideration followed by intellectual stimulation, then idealized influence and lastly inspiration motivation.

Saxe (2011) study examined the predictive relationship between the emotional and social competence and transformational leadership behaviours of School Principals. Principals participating in the study completed the five transformational sub-scales of the Multifactor Leadership Questionnaire and the Emotional and Social Competency

Inventory (ESCI), while their superintendents completed the rater versions of the MLQ and ESCI. The relationship between the transformational scales on the MLQ and scores from the ESCI were calculated using Spearman's rho coefficients. A multiple regression analysis was conducted to assess the predictive relationship between the dispositional skills and transformational leadership behaviours of the school principals. Findings from the study suggested that the ability of the school leader to manage relationships, understand thoughts, feelings, and perspectives of others, recognize the bigger picture, control disruptive impulses and being flexible in the face of change, predicts behaviours that can lead to meaningful reforms efforts and positive school outcomes. Given that these skills can be taught and learned across the lifespan, research findings offer implications for leadership preparation and training programs, administrator evaluation, professional development and hiring practices.

Jyoti and Dev (2015) study explored the relationship between transformational leadership and employee creativity. In addition, the study intended to find out the moderating role played by learning orientation in the relationship between transformational leadership and employee creativity. Data was collected from employees working at the Airtel and Airtel Call Centres of India. A two-step approach to structural equation modelling was applied. Confirmatory factor analysis was conducted to assess the proposed measurement model fit and construct validity. The structural model was generated to test the significance of the theoretical relationships. The results revealed that there was a positive relationship between transformational leadership and employee creativity when it was moderated by learning orientation.

Orabi (2016) sought to establish the impact of transformational leadership style on organizational performance in some identified banks in Jordan. Research indicates that this type of leadership can collectively impact employee behavior and commitment leading to improvements in the work climate and knowledge sharing. When combined, these changes can positively influence the performance of the organization. Using this as a foundation for investigation the research considered the

role of transformational leadership and its four components—idealized influence, inspirational motivation, intellectual stimulation and individual consideration and their influence on organizational performance in three banks operating in Jordan. The results indicated that transformational leadership and three of its components—inspirational motivation, intellectual stimulation and individual consideration contributed 81.6% of the variance in organizational performance. The study recommended that leaders may need to focus on these elements of transformational leadership to improve outcomes for organizational performance

Wang, Jen and Ling (2010) examined the relationships among the leadership style, the organizational performance and the human resource management strategy in Kaohsiung's Nanzi Export Processing Zone in South Taiwan. In addition, the study also explored the effects of the interaction of both the leadership style and the human resource management strategy on organizational performance. The study reviewed 246 valid questionnaires sent to the corporate owners, executors, and operators of Kaohsiung's Nanzi Export Processing Zone in South Taiwan. The study found that transformational leadership style positively related to organizational performance. The interaction of the transformational leadership style and the human resource management strategy significantly contributed to the organizational performance.

Dola (2015) study aimed at analyzing the effects that transformational leadership had on the employees of an organization in terms of their performance rating. The main objective of the study was to investigate the changes in leadership that had been achieved within the organization and the extent to which a leader's intervention on situations affected overall performance. The research aimed at looking at how transformative leadership impacted on employee performance at Kenya Wildlife Services (KWS) and if it yielded the same results as other researchers had shown in other parts of the world. The study established that there exists a significant relationship between transformational leadership and employee performance.

Limsila and Ogunlana (2008) study explored the linkage between personal competencies and leadership behaviours as well as their influences on leadership outcomes and subordinates' work performance in a Construction Projects in

Thailand. Personal competencies were measured using the Project Manager Competency Development (PMCD) tool. Leadership behaviours and outcomes were measured using Multifactor Leadership Questionnaire (MLQ). Data was collected from employees of the construction projects in Thailand. Findings revealed that leadership outcomes had significant positive relationship with all personal competencies specified in the PMCD framework, every factor in the transformational style and contingent reward factor in the transactional style. The study establishes that transformational leaders tend to produce high quality work and high work quantity. They also had problem solving creativity from subordinates. The findings further verified that all PMCD personal competencies had a significant positive relationship with every factor in the transformational style. It implied that project managers who applied transformational leadership style and had high personal competencies indicated in PMCD framework were likely to generate greater leadership outcomes and work performance on construction projects.

Chege (2018) study examined the crucial role of transformational leadership on organizational performance of Commercial Banks in Kenya. The study focused on variables which included visioning managers, inspiring managers, stimulating managers, coaching managers, and the moderating effect of corporate governance on the relationship between transformational leadership and organizational performance in Commercial Banks. The study involved all the Commercial Banks currently in Kenya. The research design adopted in the study was a cross sectional survey design. The study thus reached a total of 384 employees, sampled by use of stratified random sampling method, from the two strata of top and middle cadre employees. The study concluded that the organization managers usually had a vision to improve the financial performance of the commercial banks and that the organization chooses transformational leaders from internal and external labour markets. The recommendation of the study was that transformative leadership style behaviours had a strong positive relationship with organizational performance and thus should be put into practice.

Lian and Tui (2012) study sought to test a theory-based model predicting the relationships between leadership styles, subordinates' competence, downward influence tactics and outcome of organizational citizenship behaviour in Malaysian-Based Organizations. Data was collected from 347 respondents that represented major industries like Services, Manufacturing, Mining and Construction Companies. Path analysis technique was used to test the model developed. The results showed that transformational leadership style had significant positive relationship with subordinates' organizational citizenship behaviour, whereas the transactional leadership style negatively related to organizational citizenship behaviour. The result illustrated the direct effects of leadership styles on the subordinates' outcome. In addition, inspirational appeals and consultation tactics, as downward influence tactics, were found to mediate the relationship between transformational leadership and organizational citizenship behaviour. Likewise, subordinates' competence mediates the relationship between transformational leadership and consultation tactics.

2.4.3 Servant Leadership

Al Hila and Al Shobaki (2017) study examined the role of servant leadership in achieving excellence performance from the perspective of workers in Palestine Technical College, and the University College of Science and Technology. The researchers used the descriptive and analytical approach. The study identified with questionnaires. A total of 111 120 respondents who were issued questionnaires were returned giving a response rate of 92.5%. The results of the study showed the presence of a statistically significant relationship at the level of $(\square < 0.05)$ between the servant leadership and excellence performance in technical college's governorates of Gaza Strip. There were statistically significant differences at (□<0.05) among respondent's responses about servant leadership and excellence performance in Technical Colleges Governorates of the Gaza Strip due to faculty variable in favour of the University College of Science and Technology.

Brohi et al., (2018) primary aim of the study was to test if servant leadership style of managers reduces turnover intention of employees directly and indirectly through psychological safety and also to find out if regulatory focus of employees moderates the relationship between servant leadership and psychological safety. The research was aimed at analysing if servant leadership as a stand-alone style was the source of reducing the turnover. The study was carried out among the schoolteachers working in private and public schools in Pakistan. A questionnaire-based survey was conducted, and responses collected from 255 teachers. A co- variance-based structural equation modelling approach was used to analyse the data. The salient findings of the study were that servant leadership had a negative relationship with turnover intention. Psychological safety mediates the relationship between servant leadership and psychological safety moderates the relationship between servant leadership and psychological safety.

Malingkas (2018) study was to examine the effects of servant leader and integrity on principal performance in Catholic Senior High Schools in North Sulawesi, Indonesia. The quantitative research used a questionnaire to gather data from 5 teachers of 11 Senior Schools. The results of the research showed that the servant leader approach had significant positive effects on principals' performance (sig. =0,000< 0.05; R2=0,799); the integrity of a principal can also have an effect on her/his performance in school (sig. =0,000 < 0.05; R2=0,758) and then there were noteworthy effects of the servant leader approach and integrity working simultaneously to improve the performance of the principals (R2=0,788; sig=0,000). This study showed how servant leader and integrity can support a positive impact on principal performance.

Mukonoweshuro, Sanangura and Munapo (2016) explored the role of an integrated servant leadership and emotional intelligence leadership skills program in enhancing leadership performance in Zimbabwe's Commercial Banking sector. A mixed method research triangulation concurrent design was adopted for the research study. A survey questionnaire was used to collect quantitative data from 211 middle, senior and executive managerial staff in the Commercial Banking sector. The findings showed that servant leadership and emotional intelligence characteristics

complement each other and both constructs can be integrated into a managerial leadership program used to develop leader-ship soft skills or competencies. The findings also showed that both servant leadership and emotional intelligence skills had a positive influence in enhancing the managers' effectiveness in undertaking leadership responsibilities and leadership qualitative performance measures such as articulating vision and strategy, building and sustaining productive organizational culture.

Mahembe and Engelbrecht (2014) study was to analyse the relationships between servant leadership, Organizational Citizenship Behaviour (OCB) and team effectiveness in the South African School System. A non-probability sample of 288 teachers was drawn from 38 schools in the Western Cape in South Africa. Item analysis and confirmatory factor analysis were conducted on the data. The team effectiveness and refined servant leadership questionnaires displayed high levels of internal consistency. The organizational citizenship behaviour scale exhibited moderate reliability coefficients. Good fit was found for the structural and measurement models of the latent variables through confirmatory factor analysis and structural equation modelling. Positive relationships were found between servant leadership, team effectiveness and OCB. The study established that servant leadership practices also played a critical role in team effectiveness and OCB.

Hussain and Ali (2012) aimed at investigating the impact of servant leadership on followers' job performance. The effects of five servant leadership dimensions, namely Agape love, empowerment, vision, humility, and trust, on employee's job performance had been measured in the study. Data had been collected from 400 engineering employees of a defense organization. Respondents had been approached personally for filling-up a well-structured questionnaire consisting of different measurement item statements. After the data was collected, it was entered into SPSS and different statistical tools such as Confirmatory Factor Analysis, Reliability Analysis and Structural Equation Model were applied for data analysis and hypotheses testing. It was reported that vision had insignificant contribution in increasing employee's job performance.

Harwiki (2013) sought to investigate the influence of Servant Leadership to Organization Culture, Organizational Commitment, OCB and Employees' Performance on outstanding cooperatives in East Java Province. Samples were collected from 249 employees as unit samples. Thirty (30) Managers as informant were asked to answer Employees' Performance variable. Servant Leadership, Organization Culture, Organization Commitment and OCB variables were answered by employees. Structural Equal Modelling was used as a technique of analysis. The research findings showed that servant leadership significantly influences organization culture, organizational commitment, and employees' performance but not OCB; organization culture significantly influences OCB and employees' performance; organizational commitment significantly influences OCB but not employees' performance; OCB significantly influences employees' performance. The study also established that servant leadership encourages employees to conduct their tasks easily by building better organizational values and embrace virtues like honest thus increase their performance.

Triraharjo, Aima and Sutawijaya (2019) study was to analyse the influence of servant leadership and breakthrough leadership on organizational performance with employee satisfaction as an intervening variable in Coal Mining Companies listed on the Indonesia Stock

Exchange. Respondents from the study were 12 Coal Mining Companies listed on the Indonesian Stock Exchange. The type of research used was quantitative methods. The research respondents were 113 people in the position of supervisors to directors. The results showed that servant leadership did not have a positive impact on employee satisfaction but had a positive impact on organizational performance, while breakthrough leadership had a positive impact on employee satisfaction but did not have a positive impact on organizational performance.

Chiniara and Bentein (2016) proposed that a servant leader's attentive focus on employees' development helps fulfil employees' three basic psychological needs, namely for autonomy, competence, and relatedness. In turn, satisfaction of each of these three needs fuels employees in a distinct way, either producing an increase in

task performance, organizational citizenship behaviours (OCBs) or both. The study collected information from 247 supervisor—employee dyads from a large Canadian technology design and manufacturing company. Structural equation modelling results indicated that servant leadership strongly predicted all three needs' satisfaction; autonomy need satisfaction mediated servant leadership's effect on task performance, OCB-Individual (OCB-I) and OCB-Organization (OCB-O); competence need satisfaction mediated servant leadership's effect on task performance only and relatedness need satisfaction mediated servant leadership's effect on both OCB-I and OCB-O.

Coetzer, Bussin and Geldenhuys (2017) study explored the interrelationships between servant leadership, job demands, job resources, work engagement and burnout in a construction company. A quantitative research design was applied, and four quantitative surveys were used to collect data. Two hundred and twenty-four sets of questionnaires were completed by employees in a South African construction company. The results indicated that job resources mediated a positive relationship between servant leadership and work engagement and a negative relationship between servant leadership and burnout. Servant leadership had a positive significant relationship with job resources and significantly explained a proportion of the variance in job resources. Job resources, in turn, significantly explained a proportion of increase in work engagement levels and a proportion of reduction in burnout levels. An insignificant relationship was found between job demands and servant leadership.

2.4.4 Laissez-Faire Leadership

Ogalo (2013) study sought to determine the influence of principals' leadership styles on students' academic achievement in K.C.S.E in Awendo District in Kenya. Specifically, the study sought to determine the influence of principals' laissez-faire leadership styles influence on students' achievement in KCSE. The study was conducted using the ex-post facto design where the principals' leadership styles and students' performance were assumed to have occurred and could not therefore be

manipulated by the researcher. The target population consisted of the 18 public day secondary schools in the district which consisted of form one to form four classes. This study targeted 18 schools that had done KCSE for at least two years. A total of 180 teachers and 18 head teachers were the targeted respondents for the study. The study established that principals' laissez-faire leadership styles influenced students' achievement in KCSE to a moderate extent.

Basit, Sebastian and Hassan (2017) sought to identify the impact of leadership style on employee performance. A sample size of 100 employees was used from one private organization in Selangor, Malaysia using convenience sampling technique. The study used quantitative approaches. A five-point Likert scale questionnaire was used to determine the impact of leadership style on employee performance. SPSS software was used in analysing the data. Demographic analysis, normality test, reliability test (Cronbach's Alpha), descriptive analysis and regression analysis were presented. Descriptive statistics showed that the most significant value associated with employee performance is democratic leadership style followed by laissez-faire leadership style. Democratic leadership style had the highest mean value corresponding to 3.784 and standard deviation value of 0.8124; laissez-faire leadership style scores the second highest mean value corresponding to 3.416 and standard deviation value of 0.5858 and had a significant impact on employee performance.

Ojokuku, et al. (2012) conducted research on the impact of leadership style on organizational performance: A case study of Nigeria Bank in Nigeria. The study contained twenty of randomly picked banks in Ibadan, Nigeria. A structured questionnaire was used to collect data from a sample of sixty respondents comprising heads of accountants, heads of operations and branch managers on face-to-face basis. Inferential statistical tool was used, and one hypothesis was formulated to analyze data. Regression analysis was used to study the dimensions of significant effect of leadership style on followers and performance. The findings showed that there was positive and negative correlation between performance and Laissez-faire leadership style. There was 23% variance of performance found in leadership

style jointly predict organizational performance. The study concluded that laissezfaire leadership styles had a positive effect on both performance and followers. This style of leadership is highly recommended to banks, especially in this global competitive environment.

Kagwiria (2016) study established the influence of leadership on employee productivity at KCB Bank Kenya Ltd. To achieve the objective of the study, the study used a descriptive survey research design to determine the influence of leadership on employee productivity. The target population of the study included all the managers and employees of KCB Bank Kenya Ltd. A sample size of 225 was selected from a population of 450 managers and employees' managers of KCB Bank. The study used primary data which was collected by a semi-structured questionnaire. The data was collected from managers and employees of commercial banks using a drop and pick-later method. Data was analysed using descriptive statistics and regression analysis. The study found that a unit increase in Laissez-faire leadership style leads to an increase in employee productivity.

Grzesik and Piwowar-Sulej (2018) study presented the issue of project manager competencies and project leadership styles which occur in different types of project-oriented organizations. These were strictly project-oriented organizations implementing projects for external clients and organizations that manage projects for internal purposes. The subject literature studies and empirical research results conducted in 100 enterprises were used to accomplish the above-defined goal. The authors discussed the specific nature of project-oriented work and the specificity of project team management. A literature review on project manager competencies and project leadership styles was conducted. Three important competencies were identified that differentiate project managers between those working in strictly project - oriented organizations and those working in organizations which perform project-based management for internal purposes, that is achievement orientation, sensitivity teamwork and cooperation. The analysis of applied and desired leadership styles indicated a preference by project team members for a laissez-faire leadership

style, during the project implementation phase, in both types of project-oriented organizations.

Buch, Martinsen and Kuvaas (2015) study set to test the assumption that laissez-faire leadership behaviour is not a type of zero-leadership, but a type of destructive leadership behaviour that shows systematic relationships with workplace stressors, bullying at work and psychological distress. A survey of 2,273 Norwegian employees was conducted and analysed. Laissez-faire leadership was positively correlated with role conflict, role ambiguity, and conflicts with co-workers. Path modelling showed that these stressors mediated the effects of laissez-faire leadership on bullying at work and that the effects of laissez-faire leadership on distress were mediated through the workplace stressors, especially through exposure to bullying. The results supported the assumption that laissez-faire leadership behaviour is destructive leadership behaviour.

Related studies by Yasir (2016) examined the role of leadership styles (laissez-faire) and employees' trust toward organizational change capacity. Data was collected from a convenient sample of managers, coordinators, officers, community facilitators, social organizers, and activists through questionnaires. Results revealed an insignificant relationship between laissez- faire and employees' trust and were found to be negatively associated. Chaudhry and Javed (2012) study were based on Laissez faire leadership style and its impact on motivation. The study was conducted in banking sector of Pakistan to identify the leadership style which was good for the employee to increase their motivation level with the organization. When conducting this research, the research question was to be used. The population size sample was 278 bank employees. Descriptive study and correlational study were used during data analysis. At the end of the study, it was established that Laissez Faire was low because of non-interference by management. Laissez-faire also had positive relations but due to insignificance relation it indicates that this leadership style was not an important style that boost the motivation level of workers as compared to other leadership styles.

Yang (2015) study focused on the dominant view of laissez-faire leadership has so far been avoidant or regarded as zero leadership. Consequently, it had been suggested that laissez-faire leadership was likely to lead to negative consequences in subordinates' performance and attitudes. The study argued that this conventional view is biased from the start as it is burdened with the concept that laissez-faire leadership is non-strategic and therefore implied negative consequences. This study further argues that to be able to unveil the real outcomes of laissez-faire leadership, focus should shift to the behavioural aspect of laissez-faire leadership, or non-involvement of a leader/leadership.

Li et al. (2019) while drawing on social exchange theory predicted that leader-Member Exchange (LMX) explains the negative influence of laissez-faire leadership on employee performance. In addition, the relationship between laissez-faire leadership and LMX is moderated by individual power distance and collectivism orientation as well as team power distance and collectivism composition. The study collected data from 339 full-time employees and 88 supervisors from Multiple Automobile Manufacturing Pharmaceutical Companies. Results of multi-level first stage moderated mediation generally supported the hypotheses. LMX explained the negative associations between laissez-faire leadership and supervisor-rated employee performance (that is task performance, organizational citizenship behaviour and counterproductive behaviour).

Zeb and Ali (2015) conducted a study with an objective of investigating the impact of Laissez- faire leadership style on organizational performance in the Bacha Khan University Charsadda in Pakistan. The target population of the study included faculty members of the university. A sample size of 110 respondents was selected from the population of 140 faculty members which included lecturers, assistant professors, associate professors, and professors. Laissez- faire leadership was measured with a 5-item MLQ and organizational performance was measured with 7-item MLQ, multifactor leadership questionnaire. Correlation and regression analysis was applied. The findings of the study suggested a significant relationship between Laissez-faire leadership style leads to increase in organizational performance.

Wanjala, Njoroge and Bulitia (2017) sought to establish the effect of laissez-faire leadership style on organizational commitment as moderated by employee participation in technical institutions in Kenya. The study population was all the 3,114 lecturers in the 47 technical institutions in Kenya. Both stratified sampling and simple random sampling techniques were adopted. To get the sample, twenty-two gender-based members from each institution were included in the study. Questionnaires were administered to a sample of 343 respondents with 278 completing and returning the questionnaires. Data analysis was done by use of descriptive statistics and correlation analysis. In addition, multiple regression was applied to analyze the effect of laissez-faire leadership style on organizational commitment as moderated by employee participation. The study findings revealed that laissez-faire leadership style had a significant effect on organizational commitment. The findings further showed that there was no moderating effect of employee participation on the relationship between laissez-faire leadership style and organizational commitment and its dimensions.

Martin (2009) study examined the relationship between the leadership style of principals and school culture as perceived by faculty. A total of 250 teachers from 50 elementary, middle, and high schools located in five school districts in the state of Georgia were selected to participate in this study. Data for this quantitative study were collected using the school culture survey, which assessed the following six factors of school culture: collaborative leadership, teacher collaboration, unity of purpose, professional development, collegial support, and learning partnership. In addition, the Multifactor Leadership Questionnaire Form was used to classify the leadership styles of principals as transformational, transactional, or laissez-faire. On the contrary, a negative relationship existed between all the factors of laissez-faire leadership and all the factors of school culture.

2.4.5 Organizational Culture

Alharbi (2012) study examined the relationships between leadership styles (transformational, transactional, and laissez-faire), and quality management practices

in Saudi Public Hospitals. The study also examined the moderating effect of organizational culture on these relationships. This study adapted and integrated a deming-based quality management model with a multi- dimensional leadership model. It tied the foregoing to the organizational culture to reveal how organizational culture is related to leadership styles and quality management practices. A quantitative research design was adopted to collect data, test hypotheses, and answer the research questions. A cross-sectional survey method was used to conduct the study. A survey package was sent to 182 public hospitals in Saudi Arabia, and 140 were returned, giving a response rate of 77%. Results of the study revealed that the transformational leadership style had a significant, positive relationship with quality management practices. However, the transactional and laissez-faire leadership styles were found to relate to quality management practices significantly and negatively. Furthermore, the results showed that organizational culture has a moderating effect on the relationship between leadership styles and quality management practices.

Toha and Katoningsih (2018) conducted a study on the effect of leadership, organizational culture, and competency on teachers' performance in Ibu Kartini Vocational High School Semarang, Indonesia. The purpose of the study was to know the effect of leadership, organizational culture, and competency on teachers' performance. The objective of the research was leadership, organizational culture, competency, and teachers' performance in Ibu Kartini Vocational High School. The study results indicated that leadership, organizational culture, competency and performance run well and had significant effect on teachers' performance.

Oyaya (2016) sought to examine the moderating influence of organizational culture on the relationship between leadership styles and performance of Housing Construction Projects. The study respondents comprised construction project managers and employees in ongoing construction projects in Westland's Sub-County in Nairobi, Kenya. The study used descriptive survey design targeting a population of 78 ongoing construction projects within the study area. Questionnaires were administered to one project manager and one project team member from each project selected from the sampled 65 projects identified using stratified random

technique. The study found that organizational culture plays an important intervening and moderating role respectively to leadership styles (transformational and transactional leadership styles to influence performance of constructions projects.

Rijal (2010) study focused on the leadership style and organizational culture in learning organization: a comparative study. The study proposed hypotheses to understand the impact of transformational leadership and organizational culture on the development of learning organization. Data was collected from the pharmaceutical sector and a comparison was drawn between India and Nepal. Results indicated transformational leadership and organizational culture had a positive influence in the development of learning organization.

Zehir (2011) established that firms can achieve effective business performance when they develop a strong organizational culture and effective leadership. The empirical research investigated the association between the three concepts of leadership, culture, and performance. The research helped to fill the gap in the literature using the association between the leadership, culture and performance using the data collected from national and global firms with several sectors (manufacturing, finance, and telecommunication) in Turkey. The survey was carried out on 295 employees who agreed to respond to the questionnaires. The outcomes of the statistical analyses of the study demonstrated the effects of culture and leadership over firm performance. The confirmed reliability analyses of the scales used in the study showed significant results. Research findings through the completion of regression analyses for testing the hypotheses were consistent with literature.

Yıldırım and Birinci (2013) study aimed at finding out the organizational cultural and leadership characteristics of a High-Tech Telecommunication Company in Turkey which was successful in protecting its competitive position and business performance despite the challenges of cultural and organizational change brought by the acquisition phase. In the study, elements of leadership and culture were identified with relevance to transformational leadership and culture through surveys detailing advantages and disadvantages of such elements during organizational restructuring.

The case study pointed out that transformational culture and transformational leadership stood as critical strengths for achieving the desired business performance during major organizational changes such as mergers and acquisitions.

Hamzah (2013) study examined the validity of the leadership competency construct and how organizational culture moderates the effects of the leadership competencies and employees' job performance. Data was gathered from 530 respondents from academicians in major Malaysian Public Universities. Descriptive statistics were reported, followed by factor analysis, reliability analysis, Pearson correlation and hypotheses testing using hierarchical multiple regression. The study found that each organizational culture dimension had moderating influence on the relationship between the leadership competencies and employees' job performance.

Ko and Kang (2019) study examined the effect of leadership style and organizational climate on employees' food safety and hygiene behaviours in the institutional food service of schools. In the study, 400 questionnaires were distributed, and 324 valid questionnaires were collected thus giving a valid return rate of 81%. The results showed that leadership style and organizational climate positively correlate with employees' behaviours with respect to food safety and hygiene. Transactional and transformational leadership had significant positive effects on organizational climate. Organizational climate had a significant positive impact on employees' food safety and hygiene behaviours. Transactional and transformational leadership had significant positive effect on employees' food safety and hygiene behaviours, but the difference between the two factors was not obvious. Organizational climate had complete mediating effect on the process of transactional and transformational leadership affecting food safety and hygiene behaviours.

Rehman, Bhatti and Chaudhry (2019) study objective was to see the mediating effect of innovative culture and organizational learning between leadership styles and organizational performance in Malaysian SMEs. Questionnaires were used to collect data from owners/managers. A total of 950 questionnaires were distributed by use of postal and email strategy. Out of 950 questionnaires distributed, only 409 were returned. 25 questionnaires had missing values and were eliminated from the sample

and only 384 questionnaires were used for final analysis. Findings revealed that leadership styles had significant influence on organizational learning, innovative culture and organizational performance. Innovative culture and organizational learning had significant influence on organizational performance. Moreover, innovative culture and organizational learning significantly mediated leadership styles and organizational performance.

Kim (2011) examined the moderating effects of organizational culture on the relationships between leadership style of middle level management and the learning organization in the Korean Business Settings. For the purpose of this study, the middle managers, and subordinates' perceptions regarding the seven dimensions of the learning organization in their organization were taken as the dependent variables and the leadership style (transformational and transactional leadership) of the middle managers were taken as independent variables. Four types of organizational culture (clan, adhocracy, hierarchy, and market culture) served as moderator variables. The results of the study were as follows: transformational leadership and adhocracy culture had positive significant effects on the development of the learning organization; organizational culture (hierarchy culture) had a moderating effect between transformational leadership and the learning organization; the effects of leadership style and organizational culture on the development of the learning organization did not differ between middle managers and subordinates; leadership components (idealized influence attributes, idealized influence behaviour and individual consideration) in transformational leadership had significant effects on the learning organization and leadership style, organizational culture and learning organization were different among the industry type.

Asiimwe (2015) sought to establish the moderating effect of organizational culture on the relationship between leadership styles and SMEs growth in Kenya. The target population was 553 owners and managers of the top 100 SMEs of 2013. Two samples were drawn for this study. The first sample consisted of 227 managers for quantitative data. This sample was drawn using stratified proportionate random sampling technique. Descriptive statistics were

used to describe and summarize the data while inferential statistics where used to make inferences and draw conclusions about the quantitative data. Inferential statistics included Pearson's correlation to test the association between the variables; regression analysis was used to make predictions about the dependent variable, and chi-square test used to test the research hypotheses. The study results indicated that organizational culture moderated the relationship between leadership styles (transformational leadership, transactional leadership and laissez faire leadership) and growth of SMEs in Kenya.

Paus (2019) conducted a study on the analysis of organizational culture on competency of Educators Community Learning Activities Centre in Minahasa District, Indonesia. Quantitative inferential research method was used in the study. The study used population determined by census as many as 37 people. Data was collected by use of questionnaire technique (using a Likert scale). During data analysis validity and reliability was tested following proof of homogeneity, normality, and linearity. The data analysis technique used was the Correlation of Product Moments from Pearson. The results of data analysis found correlation coefficients of r=0.66 and the degree of relationship is r2=.43. The study concluded that there was relationship between organizational culture and Educators Community Learning Activities Centre competencies in Minahasa District. There was also a degree of relationship between Organizational Culture and Community Learning Activities Centre competencies Competence in Minahasa District.

2.4.6 Competency Development

McLachlan, Yeomans and Lim (2017) conducted a study on a competency development approach to learning for employment. The study focused on the theoretical and practical development of a competency development approach to learning for employment using an Assessment Centre process model currently embedded in the curriculum of professional and Community Engagement (PACE) program at Macquarie University. The study identified the difficulties that students experienced in self-assessing employability skills which was developed and

coordinated by post-graduate psychology students. The model provided a set of behavioural criteria used to assess the student's employability skills. The study established that there was little evidence in the literature of the use of Assessment Centres for enhancing undergraduate employability. Preliminary research and evaluation findings suggested that the Assessment Centres process can have a positive influence on the development of the 'soft' skills of employability.

Vitanova et al. (2015) study focused on the factors affecting the development of ICT competencies of teachers in primary schools. The study was conducted in order to ensure valid and reliable assessment of the extent of ICT knowledge and skills of teachers in primary schools, to identify the factors in terms of teachers affecting the development of ICT competences, and to identify strategies to improve the development of effectiveness in the future. The research surveyed 220 teachers from 10 primary schools in Macedonia. The Technique SEM was used to determine the relative strength of influence of factors on ICT competencies of teachers. The results showed that 25% of the teachers had below basic ICT Competency, 17% had basic knowledge and skills to operate a computer and the highest percentage, 58% were proficient in ICT competence.

Louw, Muriithi and Radloff (2017) purpose of the study was to empirically test the relationship between strategic thinking competency and leadership effectiveness in Kenyan Indigenous Banks. The study was based on a positive research paradigm which was quantitative in nature, and it utilized survey methods to collect data. Both probability and non- probability methods were used to determine the target population. The research instrument was self-administered closed-ended questionnaire. From a target population of 494 individuals, a total of 257 responded and the data was analyzed. The analysis was performed using structural equation modelling with confirmatory factor analysis, Cronbach's alpha and goodness-of-fit indices being used for analysis and testing relationships. The overall findings were that there was a positive relationship which existed between strategic thinking competency and leadership effectiveness in Indigenous Banks in Kenya

Muchira (2018) study's objective was to determine factors influencing competency-based curriculum reforms in Kenya. The study was undertaken at KICD in Ngara area, Nairobi. The objectives of the study included establishing how the ongoing competency-based curriculum-based reforms undertaken by the Kenyan Government is influenced by the effect of youth unemployment concerns, life skill considerations and national development goals. The research design was descriptive design. This research design was justified in that it helped to answer the research questions. The target population was 120 subjects comprising top management, curriculum technical committee and curriculum reform support staff at KICD during gathering the information. Analysis of the information gathered employed both descriptive and inferential techniques. Findings indicated a positive relationship existed between youth unemployment, life skills education, national development goals and adoption of competency-based curriculum reforms in Kenya.

Ikram, Mahalakshmi, Abirami and Swaminathan (2019) carried out an investigation on the effect of training on competency development in a Diagnostic Centre in Chennai. The study primarily focused on evaluating the competencies of both laboratory technologists and those officers who oversaw assessing the competency in terms of knowledge, skills, and attitude. A pre and post assessment was done with training as an intervention tool. The results showed that there was significant improvement in all three parameters. Among laboratory technologists, knowledge improved from 63% to 84% and skill level increased from 62% to 90%. In the case of laboratory-in-charges, knowledge level rose from 71% to 96% and skill elevated from 70% to 84%.

Chaipha (2017) study examined the factors affecting the staffs' competency development of Sub-District Municipalities in NongPhok District, Roi Et Province, Thailand. The samples were 134 officials which were calculated by Taro Yamane's formula at the confident level at 95%. The instruments used in the research were questionnaires. Statistical tools employed were percentage, mean, standard deviation, one sample t-test, and stepwise multiple regression. The findings of the research concluded that the development level of staff competency was high with 70% at .05

level of statistical significance. The factors affecting the staff competency development was job position which was totally explained by the dependent variables at 43 (R2 = .430) with .01 level of statistical significance.

Mwaniki (2016) study sought to determine the effectiveness of competencybased performance review systems at Mantrac Kenya Limited. The study adopted a descriptive research type of approach to enable comparative analysis to be done. The researcher targeted all the ninety-five (95) employees of Mantrac Kenya Limited as a census survey. The researcher collected primary data which was used to make inferences about competency-based performance review system at Mantrac Kenya. The quantitative data was analyzed with descriptive statistics such as mean scores and standard deviations. The study was supported by findings presented in graphs, pie charts, bar graphs and tables for a quick glimpse. From the answers given by respondents, the process and understanding of the competencies was thorough and well communicated. The conclusions from the analyzed data were that the competency-based performance review system was effective at Mantrac Kenya Limited. The findings also supported the need to ascertain in the recommendations for companies to seriously adopt competency-based performance management systems.

Hansen-Salie and Martin (2014) study focused on the perceptions and factors influencing the competency of newly qualified professional nurses working in Private Hospitals in the Western Cape, South Africa. The study was aimed at determining the perceptions of newly qualified professional nurse's competency as well as factors that influence competence. A quantitative approach using a descriptive survey design was employed, using 34 experienced professional nurses working in selected private hospitals in the Western Cape. Data were collected by means of a peer evaluation questionnaire, namely the Competency Inventory for Registered Nurses (CIRN). The results of the 55-item CIRN indicated that newly qualified nurses were perceived as highly competent in clinical care, leadership, interpersonal relations, legal/ethical and professional development. Newly qualified nurses were perceived as low in competency in teaching/coaching and critical

thinking/research aptitude. All the factors identified using literature were perceived as having an influence on competence.

Yewah (2015) study assessed the influence of institutional factors on quality training in Technical, Vocational and Entrepreneurship Training (TVET) in Siaya Sub-County, Kenya. The study objectives included assessment of the relationship between physical facilities in TVET and the quality of training, how industrial attachment affect the quality of training and carry out an examination of how the courses offered affect the quality of training. This study employed a descriptive survey design. The sample was composed of 22 teachers and 32 students who were random and purposefully selected respectively. Questionnaires and interview schedules were used for collecting data. Qualitative and quantitative techniques were used for data analysis. The findings revealed that skills acquired and developed in technical training institutions did not match labour market demands and needs and that the physical facilities in these institutions were inadequate and inappropriate. Hence, this contributed to a great extent the production of low quality of graduates from TVET institutions.

Abou-Shouk, Abdelhakim and Hewedi (2014) study focused on the factors affecting the development of target competencies among final-year tourism and hospitality students in Egypt. The study investigated the contribution of each dimension in the educational process to the development of target competencies that tourism and hospitality employers seek in graduates. The study used a sample of 506 senior students in 7 public universities. Using structural equation modelling, it was found that 5 out of 8 dimensions in the educational process significantly affected the development of target competencies. In turn, these target competencies significantly affected the ability of students to get a job in the tourism and hospitality market. It was found that staff members, teaching methods and facilities provided to support the teaching process were still below students' expectations.

Mureithi et al., (2013) study aimed at investigating the influence of school factors on development of academic and moral competence of Secondary School Students in Embu West District, Kenya. Descriptive survey research design was used for the

study. The target population was 6,500 students and 277 teachers in 26 secondary schools in the district. Data was collected using three sets of questionnaires. The findings indicated the following factors as influencing students' academic competence; teacher motivation, teaching and learning resources, syllabus coverage, free interaction between students and teachers, absenteeism of teachers and participation in academic forums. Factors found to influence students' moral competence included punctuality of teachers, teacher commitment, guidance and counselling programs, competent school administration, friendly interaction between teachers and students, clear rules and regulations and the integrity of the teachers.

Chansiri (2008) study aimed at analysing and determining the core competency and the structure of programs used for the development of core competency of public university line administrators when performing their tasks. The research included a thorough study of five components necessary for successful job performance which is applicable to agencies in Thailand or any other foreign country. Three mixed methodologies were used when conducting the study: document syntheses, quantitative research, and qualitative research.

Quantitative research involved 300 copies of questionnaires that were used to collect data from involved persons. The study established that core competency; methods of developing core competency and the structure of programs were put in place thus enhancing the development of competencies in the public university line administrators.

Umo-Udofia and Andera (2018) study examined the English language learners' attitude towards competence in English Grammar in selected Secondary Schools in Ngong Sub- County of Kajiado County, Kenya. The specific objective that guided the study was to establish the kind of attitude English language learners have towards learning English grammar in Secondary Schools in Kajiado County. The study adopted a descriptive survey design. Six public secondary schools were selected and the sample for the study was 120 students. For the purposes of the study, the schools and the students were stratified based on gender and category of school. Random sampling technique was used to identify the study sample. To elicit responses, the

study used a questionnaire as a tool of data collection. The responses gathered from the data collected were ordered, coded, and analysed using descriptive statistics. The study found that most students had a positive attitude towards learning English Grammar.

Dilla (2016) study sought to assess factors affecting clinical practice competence of Undergraduate Health Science Student, Hawassa University, Ethiopia. The study used institutional based cross-sectional study. The method used for data collection was structured questionnaire and focus group discussion. Simple random sampling was applied to select study subjects among 345 students. Bivariate and multivariate logistic regressions were used to identify independent predictors. The study established 87 participants had prevalence of clinical practice competency which represented 25.2% of the total sample. Students who had adequate clinical case in practical placement were 4 times more clinically competent than those students with inadequate clinical case in practical placement with (AOR=3.958, 95% CI 1.238, 12.65). Students with clinical instructor support were clinically competent by 2 times with (AOR=2.064, 95% CI 1.042, 3.694) than students with no clinical instructor support.

Nderitu (2014) observed that Technical and Vocational Education had been looked upon as a catalyst of economic development and social transformation. It was meant to supply artisans, crafts, technicians required for industrialization of a nation. The training in TVET needs to ensure that there is adequate supply of properly trained human resources to enable industries to perform in line with their vision 2030 of acquiring a suitable economic growth (MoEST, 2007).

Alainati (2015) sought to establish the factors affecting individuals' competency in organizations using knowledge creation model and human resource management practices. An exploratory sequential mixed methods and triangulation approach was used. The first phase qualitative research explores individual competencies from employees' perspective. The findings of this phase are used in the second quantitative phase to develop quantifiable variables. That needs to be further explored. The findings of both phases are triangulated; data consistency between the

two phases indicates that the measuring instruments are accurate, which strengthened the thesis argument. The research data was collected from Kuwait, which like any other country suffers from incompetent employees. Forty-one interviews were conducted for the qualitative phase and 763 survey questionnaires were collected for the quantitative phase. Empirical results of the hypothesis showed a statistically significant positive effect for each of the four factors on individual competencies and that the effect was holistic. The findings supported the development of individual competencies model. Therefore, the research hypotheses were accepted, and the individual competencies model was proven to be fit.

Chansirisira (2012) study aimed to investigate the core competency elements and the factors affecting the performance efficiency of the Civil Service Teachers in the North-Eastern region, Thailand. Data was collected using a questionnaire with the reliability (Cronbach's Alpha) of .90. The sample size was specified based on Krejcie and Morgan's table and 352 samples were selected using the simple random sampling technique. The questionnaire results revealed that there were 11 elements of 4 core competencies. There were 2 elements for the achievement motivation competency, 3 elements for the service mind competency, 3 elements for the teamwork competency and 4 elements for the self-development competency. The findings thus emphasized that all core competencies affected the performance efficiency of the civil service teachers and educational personnel in the North-Eastern region of Thailand. Moreover, the results also supported the hypothesis, which stated that all core competencies helped predict the performance efficiency of the civil service teachers and educational personnel.

Basmawi and Usop (2016) sought to determine the factors that contributed towards employee competency in Kuching, Sarawak. There were four variables involved, personality, peer support, work life balance and employee competency. The study used 302 respondents selected through simple random sampling from telecommunication, food, and beverage industry. Questionnaires were used as a research instrument. Reliability and validity test carried out indicated all the construct reliability was above 0.80. The study was only restricted to personality,

peer support and work life balance. Therefore, it was unable to cover other soliciting factors such as technical and non-technical competency factors. On top of that, ergonomic factors, and the usage of tools to perform work also needed to be considered when exploring and analyzing the underpinning factors that may contribute towards employee competency.

Liang et al., (2018) study focused on an evidence-based approach to understanding the competency development needs of the Health Service Management workforce in Australia. The study set to assess competence of Australian Health Service Management workforce to identify managerial competence levels, training, and development needs. The study results showed a mean competency score from both self and combined colleagues' assessments indicated competence (scores greater than five but less than six) without guidance, but many Healths Service Management workforce had not had extensive experience. Around 12% of the Health Service Management workforce was unable to demonstrate the competency of 'evidence-informed decision-making' and 4% of Health Service Management workforce were unable to demonstrate the competency of 'enabling and managing change'.

2.5 Critique of existing Literature Relevant to the Study

The prominent role of competency development in enhancing the success of students and organizations has drawn the attention of practitioners, leading them to introduce competency development as a central part in the learning institutions. Unfortunately, the strong managerial interest in competency development has not fully translated into the academic world, creating a gap between theory and practice. Various research has been carried out on leadership and its effects within the organizations but not on how it influences competency development in training institutions. Cetin, Karabay and Efe (2012) study focused on the notion of leadership styles and the communication competency of bank managers and depositors of banks in Turkey established that interactive leadership style and communication competency have a stronger relationship. Heti (2013) investigated the factors that influence the demand for TVET in Nyeri County. The study sought to achieve this by investigating the

influence of growth in technology, rural electrification, subsidized secondary school education as well as introduction of new TVET courses on the demand for TVE and training. This study focused on the influence of leadership styles on competency development in the TVET institutions.

Ndile (2018) conducted a study on how competency based technical training influence youth employability in Nairobi County. Contextually the study focused on youth employability in the technical training institutions in Nairobi. The findings of the study cannot be generalized to other TVET institutions in Kenya thus the need for the current study to focus on the influence of leadership styles on competency development in the TVET institutions in Kenya.

Kintu, Kitainge & Ferej (2019), sought to find out the factors influencing the attitude towards TVET in Uganda. Results indicated that there is a positive attitude to technical and vocational careers. The study established that the factors influencing the attitude of people positively towards TVET are the economic benefits derived from TVET skills. It was further found out that a drastic change of attitude in favour of women participation in TVET had taken place in Uganda. The study further revealed policy challenges the government was facing to elevate the status of TVET. Conceptually, the study focuses on the attitude towards technical vocational education and training in Uganda. The political environment in Uganda is different from that of Kenya thus the findings may not be applicable in the technical vocational education in Kenya. The study had focused on the attitude towards technical vocational education and training while the current study seeks to examine the influence of leadership styles on the competency development in TVET institutions in Kenya.

Diwakar and Ahamad (2015) presented the concept and meaning of Vocational Education and Training (VET) by linking it to lifelong learning. The study focused on the importance of VET for under-privileged, marginalized groups and women, as a powerful weapon against poverty and hunger as a way of women empowerment. By focusing on the need for VET for women, it was felt that VET can make a big difference for many women in the rural by improving household productivity,

employability, and income-earning opportunities, enhancing food security, -and promoting environmentally sustainable development and livelihoods. This study focused on the meaning of Vocational Education and Training by linking it to lifelong learning while the current study establishes the relationship between leadership styles and competency development in TVET in Kenya.

The literature review on the influence of leadership styles on performance reflects that leadership styles enhance competencies and are critical in ensuring good organization performance (Ali, 2017). Although the researchers focusing on leadership styles and competencies have described the importance of different competencies, they have not often been explicit about the process by which the leadership styles influence the competency outcome. These have had adverse effects on the competency of many organizations since they are not informed on which leadership styles match an organization in a particular sector. This mismatch has resulted in the poor performance of these organizations (Baruch & Bui, 2012). The current study will examine the influence of leadership styles on competency development in the TVET institutions.

2.6 Research Gaps

Mwithi (2016) conducted a study on the influence of self-awareness leadership competencies on transformation of public service reform initiatives. There exists an objective gap since their study did not address leadership styles variables such as transformational leadership, transactional leadership, laissez- faire leadership and servant leadership. In addition, there exists a contextual gap in that this study focused on the public service while the current study focused on TVET institutions.

Zakaria and Taiwo (2013) conducted a study on the effect of team leader skills and competencies team based on the assumption that self-management leadership competencies do affect team performance. The study was conducted in Universiti Teknologi Petronas (UTP) using a survey method. There exists an objective gap since the study did not address other variables such as transformational leadership, transactional leadership, laissez-faire leadership, and servant leadership. Similarly,

there exists a conceptual gap in that this study used a survey research design while the current study used descriptive research design. In addition, there exists a contextual gap in that the study focused on a university while this study focused on TVET institutions.

Sabir, Iqbal, Rehman, Shah and Yameen (2012) conducted a study on the impact of corporate ethical values on social awareness leadership competencies and employee performance in the context of Pakistan. There exists an objective gap since their study did not address other variables such as transformational leadership, transactional leadership, laissez- faire leadership and servant leadership. In addition, there exists a contextual gap in that the study was conducted in Pakistan while this study was conducted in TVET institutions in Kenya.

O'Reilly, Caldwell, Chatman & Tushman (2011) conducted a study on the effects of leaders' alignment on strategy implementation. The study was conducted in the context of large health care organization physicians in eight specialty departments – emergency. There exists an objective gap since their study did not address other variables such as leadership styles, transformational leadership, transactional leadership, Laissez-faire leadership, and servant leadership styles. In addition, there exists a contextual gap in that the study focused on large health care organizations while this study focused on TVET institutions.

Moreover, most studies have limited their investigation of competency development to training and formal education, thereby ignoring other leadership styles that might stimulate competency development (Zelewi, 2014). However, on-the-job learning and career management are essential human resource practices in the development of employees and are equally important in the process of competency development during training and formal education (Zakaria et al., 2013; Yang, 2015; Vitanova et al., 2015). Therefore, in this study the integrated approach, initiatives concerning best leadership styles to be adopted have been considered. Furthermore, investigation on the interrelationships between these leadership styles, since previous authors had noticed that little is known about the connections between leadership styles and how

they should be geared to one another to improve competency development (Zelewi, 2014; Yang, 2015; Yasir et al., 2016).

From the afore mentioned studies which shows that leadership styles enhance competency development and evidence from the local studies which indicates that there is no relationship between leadership styles and competency development in technical vocational education training, this poses confusion as to what is the truth thus need to conduct a further study. Therefore, this study will re-examine the influence of leadership styles on competency development in technical vocational education training in Kenya.

2.7 Summary of the Reviewed Literature

This review of relevant literature has presented a theoretical, empirical review and a critique of existing literature relevant to the current study. This chapter has reviewed the various theories that explained the independent, dependent, and moderator variables. Theories reviewed are trait theory, path goal theory, institutional theory, behavioral leadership theory and LMX theory. The chapter also presents the conceptualization of the independent, the dependent and moderator variables by analyzing the relationships between the three sets of variables. The chapter also discusses various leadership constructs including transactional, transformational, servant, and Laissez –faire leadership styles. In addition, empirical review, critique of existing studies and research gaps are discussed.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used in undertaking the study. The section covers the research design, the target population, data collected, sampling frame, sample, and sampling techniques. The data collection instrument, data collection procedure, validity and reliability of the instrument and the data processing and presentation are also discussed. Lastly, the analytic techniques used for data analysis are presented.

3.2 Research Design

Yin (2017) asserts that research design is, a "blue-print" that enables the researcher to come up with solutions to problems and guides in the process of collecting, analyzing, and interpreting the data and observations. Creswell and Creswell (2017) argue that a flexible research design which provides opportunity for considering many different aspects of a problem is considered if the purpose of the research study is that of exploration. When the purpose happens to be an accurate description of a situation or of an association between variables, the suitable design will be one that minimizes bias and maximizes the reliability of the data collected and analyzed (Lewis, 2015 and Glaser & Strauss, 2017). Given this advice and the nature of this study, a non-experimental hypothesis testing design was adopted since it was the most appropriate for this study. The study sought personal views, opinions, attitudes, and perceptions about the influence of leadership styles on competency development in TVET institutions.

The research design adopted in this study was both descriptive and exploratory. Descriptive study is concerned with finding out the what, where and the how of a phenomenon according to lewis (2015). Exploratory research design was used when oral interviews, guided questionnaires and observations from institutions were used

to collect data. This was used to gain a better understanding and insightful interpretation of the results from the quantitative study on the influence of leadership styles on competency development in the TVET institutions in Kenya.

3.2.1 Research Philosophy

Research philosophy relates to the development of knowledge and the nature of that knowledge and contains important assumptions about the way in which researchers view the world (Maxwell, 2012). There are two extreme philosophical views regarding knowledge and reality. These are positivism (sometimes referred to as deduction research) and phenomenology (also known as induction research). For the positivist, minds are scientific and must therefore be the focus of any meaningful scientific study. A study by Al-Hamdan and Anthony (2010) observed that principal positivist methods often involve statistical analysis in order to generate findings and to test hypotheses. This implies that the focus must be on that which is observable. This orientation is characterized by operational definitions, objectivity, hypothesis testing, causality, and reliability.

On the other hand, the phenomenologist focuses on the immediate experience. Indeed, phenomenology is an inextricable part of ordinary experience. The phenomenological researcher is open and trusts his/her experience. Phenomenology has the advantage of providing an account of unique human characteristics and gives more prominence to cognition. To achieve an effective understanding of human behavior one must enter the mind of the individual which is rarely value-free in content or motivation.

This study was anchored on the positivist philosophy of science to achieve its objectives. The study sought to verify the propositions through empirical tests by operationalizing variables in the conceptual framework to allow for measurement. Enough samples were selected for the purpose of generalizing the results.

3.3 Target Population

A population is the aggregate of all cases that conform to the same designated set of specifications (Mugenda, 2012). Creswell and Creswell (2017) defined population as the aggregate of all cases that conform to designated set of specifications and refer to the entire group of individuals, events or objects having a common observable characteristic. According to Glaser and Strauss (2017), a population is a well-defined set of people, services, group of things or households being investigated. As per records at the Directorate of Technical Vocational Education and Training in 2018, there are three hundred and eighty-four (384) technical training institutions in Kenya registered with the Ministry of Education. According to Brymann (2016), target population is the entire set of units for which the study will be used to make inferences. Thus, this study used these 384 TVET institutions to make inferences. The unit of analysis was the Technical Vocational Education and Training institution. The unit of observation was the Principals and Academic Registrars of the TVET institution in Kenya. This population was justified because the principal is the one mandated to carry out leadership and decision within the institution and ensures that adequate competencies are acquired by the trainees. The Academic Registrars are in charge of ensuring that academic programmes are implemented which enhances the development of the required competencies. Table 3.1 below shows the target population category and respondents sampled:

Table 3.1: Target Population

| Category | Population (N) |
|---------------------|----------------|
| Principals | 384 |
| Academic Registrars | 384 |
| Total | 768 |

3.4 Sampling Frame

The sampling frame describes the list of all population units from which the sample was selected (Cooper & Schindler, 2011). The sampling frame is a physical representation of the target population and comprises all the units that are potential members of a sample (Brickmann, 2012). In order to meet the expectation of the sampling theory that all possible units in the target population be identified to enable probability for selecting a random combination to be calculated, a sample of respondents purposely drawn from the three hundred and eighty four (384) TVET institutions in Kenya registered with the Ministry of Education as at April 2018 was used.

3.5 Sample Size and Sampling Technique

According to Neumann (2013) and Zikmund et al. (2013), an optimum sample for small population of above 10,000 uses a sample size during research which ranges between 10% - 30%. This was further supported by Brickmann (2012) who stated that a sample size of 30% is statistically viable in any population. The sample of this study was determined by simple random sampling method when selecting the respondents. This was because each member of the subset had an equal probability of being chosen. This was good for generalization of the results to the target population.

The Slovin's formula is quite popularly used for determining the sample size for research, especially for thesis in Social Sciences, where the computation is based almost solely on the population size that is less than 1,000. To determine the sample size of this study using the unit of observation, the calculations using the Slovin's formula is given as:

$$\frac{n = N}{1 + N (e) 2}$$

Where: n =

Sample size, N = Total population and

e = Error tolerance (confidence level). Since the population N = 768,

Error tolerance = 0.05,

The sample size is determined as:

$$\underline{\mathbf{n}} = 768 = 262$$

1 + 768(0.05)2

The sample size therefore becomes 262. To determine the sample size of each category of respondents (Principals and Academic Registrars) of TVET institutions which were selected from all the 47 Counties in Kenya in both Public and Private institutions. However, Mombasa, Nairobi, Nakuru, Uasin Gishu and Kisumu Counties were given a larger proportion due to the high concentration of TVET institutions compared to other Counties in Kenya. These Counties have got a high number of private TVET institutions. Therefore, the respondents were selected to the sample using stratified and random sampling from each sampling unit. The sample distribution is given as shown in Table 3.2;

Table 3.2: Sample Size Distribution

| Category | Population (N) | Sample (n) | |
|---------------------|----------------|------------|--|
| Principals | 384 | 131 | |
| Academic Registrars | 384 | 131 | |
| Total | 768 | 262 | |

3.6 Data Collection Instruments

This study collected both primary and secondary data using a questionnaire. According to Rubin & Babbie (2016), a questionnaire is a research instrument which gathers data over a large sample. According to Yegidis, Weinbach and Myers (2017), a questionnaire comprises of carefully selected and ordered questions which enables a researcher to collect information within a very short time. According to Yin (2017), questionnaires are also able to give a detailed answer to complex problems.

The structured questionnaires were divided into two sections whereby the first section provided demographic information while the second section provided information on the content of the study. The information gathered represented individuals' opinions and attitudes towards some of the research study questions.

Likert scales are widely used in most studies in businesses and other related courses in social science literature, especially in instances where the reflection of the agreement of the respondent is required (Zikmund et al., 2013). Since this study is in social sciences, a five-point Likert scale was used to measure the responses to the various indicators of the variables under investigation.

3.7 Data Collection Procedure

The researcher sought and was granted permission and consent to collect data from the Principals of TVET institutions from the Jomo Kenyatta University and the National Council for Science, Technology, and Innovation (NACOSTI). After permission was granted, appointments were made with the respective respondents. The researcher administered the questionnaires through drop and pick later method. Personal administration of the questionnaire gave the researcher a chance to interpret and clarify questions in the questionnaire to the respondents. This ensured that the respondents fully understood the questions before answering, hence ensuring a high response rate. A deadline of two months was set by which the completed questionnaires were to be used for data analysis.

3.8 Pilot Study

Before a survey is carried out, all aspects of the data collection instrument should undergo a pilot test (Brickmann, 2012). Zikmund et al, (2013) explained that a pilot test is conducted to detect weakness in design, instrumentation and provide proxy data for selection of probability sample. Pilot test also enables the researcher to identify and eliminate any problems that may exist in a questionnaire design (Neumann, 2013) and examine the reliability and validity of measures used in the questionnaire (Glaser & Strauss, 2017). The number in the pilot study should be small, about 1% to 10% of the target population (Mugenda, 2012). This study followed the recommendations provided by the authors and thus used 10% of the target population during the pilot study. The study identified 262 TVET institutions as study respondents identified other 27 institutions which were not within the identified sampled institutions to be used during the pilot study.

3.8.1 Reliability of Data Collection Instruments

Reliability in qualitative research depends on the quality of recording, documenting

data, and the ability of the researcher to interpret it (Yin, 2017). Another approach to

examine reliability is to look for consistency within a single measurement. Two

methods often mentioned in this context are the split-half method and Cronbach's

alpha. The split-half method splits the questions of a dimension in two, for example

odd-numbered questions versus even-numbered questions or just randomly split.

Next, it correlates the scores across the two groups.

This study performed a split half analysis in SPSS on the original items from the pilot

survey questionnaire. The correlation between the two groups was compared.

However, splitting a group into two also reduces reliability, as reliability is increased

with the number of questions. The Spearman-Brown prophecy coefficient was used

to compensate for this. Since the result of the split-half method changes when you

split up the items differently it is suggested to try all possible combinations and

come up with some average. This is what Lee Cronbach might have thought when he

was developing his measure. When items have equal variance (for example after a z-

transformation) the Cronbach's alpha measure becomes:

$$\alpha = N \times r. /1 + (N-1) \times r$$

Source: Taber (2018).

Here N is the number of items and r-bar the average correlation between the items.

This study therefore used the Cronbach-alpha measure.

However, there arises a question as to what the acceptable magnitude of correlation

should be when using Cronbach-alpha. Criteria of acceptable levels of alpha qualify a

value of 0.8 and higher as good, and above 0.7 as satisfactory (McNeish, 2018). For

example, Yang (2015) suggests 0.70 (70% of variance reliable) and above while

some authors suggest that it is acceptable if it is 0.67 (Eisinga, Te Grotenhuis, &

Pelzer, 2013). Therefore, to check for reliability Cronbach's alpha coefficients were

calculated for each group of indicators to determine how the items correlate among

themselves. Cronbach's alpha is interpreted as the mean of all possible split-half

90

coefficients (Taber, 2018). This study adopted the Yang (2015) suggestion of 0.70 and above as the criteria of acceptable levels of alpha.

3.8.2 Validity of Data Collection Instruments

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda, 2012). A measuring instrument is valid if it measures what it perceives to measure (Yin, 2017; Lewis, 2015). Validity is therefore concerned with the meaningfulness of research components. There are four types of validity: internal validity, statistical conclusion validity, constructs validity and external validity (Drost, 2011). Construct validity refers to how well the results obtained from the use of the measures fit the theories around which the test is designed (Glaser & Strauss, 2017). Content validity relates to direct use in scientific generalization which is the extent to which one can generalize from a particular collection of items to all possible items that would be representative of a specified domain of items (Yin, 2017; Maxwell, 2012). This study used the two ways of assessing content validity by asking a number of questions on leadership styles and competency development and also sought opinion of Principals and Academic Registrars using a structured open-ended questionnaire.

3.9 Data Analysis and Presentation

Data analysis is the process in which raw data is ordered and organized so as to extract useful information (Taylor & Bonsall, 2017). As Oluwatayo (2013) points out after questionnaires are received back the raw data will be edited for any errors or omissions and corrections made where possible. This study collected both qualitative and quantitative data. Coding and classification of the collected data was done and entered into the relevant statistical software for ease of efficiency during the analysis of the data. This was done to ensure data accuracy and consistency. This study used both descriptive and inferential statistics to analyze the quantitative data. Descriptive statistics describe and summarize the data in a meaningful way using charts, tables, and bars while inferential statistics draw conclusions on the analyzed

data thus helping in generalization. Predictions based on the results of the analysis were made and the results generalized on the population of study given that the test sample is part of the population. The data collected was tested for the assumptions of various analytical models upon which the most appropriate was selected, for example the diagnostic for the use of correlation analysis and multiple linear regression was used to determine if the data is normally distributed.

3.9.1 Test for Assumptions

The study adopted ordinary least squares (OLS) estimation to fit the statistical models specified for drawing conclusions on the study objectives. OLS is a maximum likelihood estimation technique that is subject to the classical assumptions of statistical model estimation. The study therefore carried out diagnoses on fitted OLS models to ensure that they do not violate the assumptions and conditions. The assumptions diagnosed and tested were the assumption of normality of the residuals, non-autocorrelation of the residuals, non-multicollinearity of the independent variables and homoscedasticity of the residual terms. The study tested normality, autocorrelation, homoscedasticity, and multicollinearity.

i. Normality Test

Normality is important in knowing the shape of the distribution and helps to predict dependent variables scores (Betsch & Ebner, 2020). The study used Shapiro-Wilk test for normality. A p- value greater than 0.05 confirms that the residuals for the fitted multiple regression model is normally distributed.

ii. Autocorrelation Test

According to Kaya (2020), autocorrelation is the correlation between members of a series of observations ordered in time or space. Autocorrelation function was used to detect non-randomness in data and identifies an appropriate time series model if the data are not random. Autocorrelation is a correlation coefficient but instead of correlation being between two different variables, the correlation is

between two values of the same variable at times $X_i + X_{i+k}$.

The study therefore used Durbin Watson statistic to test for autocorrelation. A Durbin-Watson test was used to test autocorrelation between the variables. The Durbin-Watson statistic ranges in value between 0 and 4 and this was used in this study. A value near 2 indicates non-autocorrelation whereas a value closer to 0 indicates positive correlation while a value closer to 4 indicates negative correlation. An autocorrelation test was carried out on the variables of the study which were transformational leadership, transactional leadership, servant leadership and laissez faire leadership and the results obtained discussed in chapter four of the study.

iii. Homoscedasticity Test

Homoscedasticity is a situation where the residual terms have a constant variance. Adoption of OLS model requires the residual model to be homoscedastic (Cohen, West & Aiken, 2014). A Breuch-pagan test was done on the residual terms of the overall model to test the existence of either heteroscedasticity or homoscedasticity. Multicollinearity is exhibited if one or more independent variables can be expressed in terms of the other independent variables (Clayto n & Hill, 2013). Variance Inflation Factor (VIF) was used to test multicollinearity. Where no two independent variables are correlated, all the VIFs will be 1. If the VIF for one of the variables is around or greater than 5, then there is multicollinearity associated with that variable and in this case one of the variables must be removed from the regression model (Cohen, West & Aiken, 2013). This study used the Breuchpagan test to test the existence of either heteroscedasticity or homoscedasticity.

3.9.2 Correlation Analysis

This study conducted inferential statistics through correlation analysis. Correlation is a statistical tool used to determine relationships between two or more variables (Reddy, 2011). Correlation usually refers to the degree to which a linear predictive relationship exists between random variables, as measured by a correlation coefficient (Mihai, 2014). Pearson correlation coefficient was used for testing

associations between the independent and the dependent variables. A correlation coefficient (r) has two characteristics, direction, and strength. The direction of relationship is indicated by how r is to 1, the maximum value possible. r is interpreted as follows; When r=+1 it means there is perfect positive correlation between the variables. r=-1 means there is perfect negative correlation between the variables r=0 it means there is no correlation between the variables, that is the variables are uncorrelated. Correlation coefficients between independent variables (transactional leadership, transformational leadership, laissez-faire leadership, servant leadership and organizational culture) and dependent variable (Competency development) were computed to explore possible strengths and direction of relationships.

3.9.3 Statistical Modelling

To draw conclusions on the objectives of the study and test hypotheses, statistical models were fitted for the specification function showing the influence of leadership styles on competency development in the Technical and Vocational Training Institutions in Kenya.

Bivariate Model

Bivariate models consider the relationship between two variables at a time without considering the combined joint relationships. Bivariate regression models were fitted to determine the relationship between each independent variable and competency development in the TVET institutions in Kenya. This study used the following models to determine the influences of each independent variable on competency development in the Technical and Vocational Training Institutions in Kenya.

$$Y = \beta_{0} + \beta_{1}X_{1} + \epsilon$$

$$Y = \beta_{0} + \beta_{2}X_{2} + \epsilon$$

$$Y = \beta_{0} + \beta_{3}X_{3} + \epsilon$$

$$Y = \beta_{0} + \beta_{4}X_{4} + \epsilon$$
1.1

1.2

Multivariate Model

To test the combined effect of leadership styles (transactional leadership, transformational leadership, laissez-faire leadership, servant leadership and organizational culture) on the dependent variable, a multiple regression model was fitted. The model seeks to estimate the joint influence of the independent variable on competency development in the TVET institutions in Kenya. The multiple regression models were given by the equation below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_{.....1.6}$$

Where:

 $\beta_1, \beta_2, \beta_3$ and β_4 are the regression coefficients of the predictors in the model as shown below;

Y – Competency development in the Tertiary Institutions in Kenya; β_0 – The intercept of the equation (Constant term) X_1 – Transformational leadership; X_2 – Transactional leadership X_3 – Servant leadership X_4 – Laissez-faire leadership; M – Organization Culture and ε – The error term

Moderated Multiple Regression Models

Moderator is a variable that affects the direction and the strength of the relationship between an independent or predictor variable and a dependent criterion variable (Clayton & Hills,

2013). This variable may reduce or enhance the direction of the relationship between a predictor variable and a dependent variable, or it may change the direction of the relationship between the two variables from positive to negative (Andersen et al., 2020). This study used multiple regressions analysis (stepwise method) to establish the moderating effect of Organization Culture (Z) on relationship between leadership styles and competency development in TVET institutions in Kenya. For testing the moderating effect, the following model was used:

$$Y = \beta 0 + \beta_i X_i + \epsilon_i$$
 (i=1, 2, 3, 4)

$$Y = \beta 0 + \beta_i X_i + \beta m M + \epsilon \dots 1.7$$

$$Y = \beta 0 + \beta_i X_i + \beta m M \beta m_i M X_i + \epsilon \dots 1.8$$

Where:

Y is Competency Development (Dependent variable); X_1 = Transactional leadership; X_2 = Transformational leadership; X_3 =Servant leadership; Laissez-faire leadership = X_4 ; M is the hypothesized moderator (Organization Culture) The multiple regression model was: $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta_1 MX_1 M + \beta_2 MX_2 M + \beta_3 MX_3 M + \beta_4 MX_4 M + \epsilon$, (i= 1, 2, 3, 4)

3.9.4 Test of Significance

To draw conclusions on the objectives, the study tested the hypotheses based on statistics from the results and findings of statistical modelling. The study was fitted into the various OLS models and tested for significance at 0.05 level of significance. On correlation analyses, the correlation coefficients estimated were tested and concluded to be significant if the p-values were less than 0.05. Regression models were tested for goodness of fit by computing the R- square statistics that shows the explanatory power of the models. A large R-square was associated with high explanatory power implying good fitness. Every regression model fitted was tested for general significance by carrying out ANOVA and calculating the F-statistic with a regression model with p-values of less than 0.05 which was considered significant. Study hypotheses was tested from the t-test of the multiple regression coefficients of the variables. Variables with p-values of less than 0.05 of the t-statistics were concluded to have significant influence on competency development in the TVET institutions in Kenya.

3.9.5 Qualitative Analysis

Qualitative technique considers the respondents' feelings, suggestions, and opinions. Content analysis was adopted to analyze qualitative data. Qualitative data from indepth interviews and key informant interviews were analyzed using content analysis. The content analysis involved synthesizing the qualitative data by checking out key

concepts, emerging patterns and themes that seem to dominate the findings. Interpretation of the meanings and implications of the content was carried out by looking at the research problem from a new perspective, exploring new relationships and understanding basic motivations.

3.9.6 Data Presentation

Data is presented in various forms. A frequency distribution table was used to summarize categorical or numerical data. According to Orodho (2009) a frequency table is a table showing how often each value of the variable occurs in a data set. Frequencies and percentages were used to present the data. Frequency distribution tables were the devices that were used to present the data in a simple form. The tables have been numbered and a title given to every table.

3.9.7 Operationalization of Variables

To operationalize the research variables, the study first determined the indicators/parameters of each independent variable and then employed an ordinal/Likert scale to measure the independent variables. According to Chandler (2015). Likert scales are good because the show the strength of the person's feelings to whatever is in the questions, they are easy to analyze, they are easy for collection of data, are more expansive and they are quicker to use. Based on theories and models in the literature review, the independent variables of this study are transactional leadership, transformational leadership, servant leadership and laissez faire leadership all of which influence the competency development in the TVET institutions in Kenya. These independent variables were inbuilt in a 5-point Likert scale giving possible leadership attribute statements to assess if the respondents 1=SD (Strongly Disagree), 2=D (Disagree), 3=N (Neutral). 4=A (Agree), 5=SA (Strongly Agree) to various statements in regard to the leadership styles in their institutions. The questionnaires are structured into seven sections; Section A is on respondents demographic information, section В is on transformative leadership style, section C is on transactional leadership style, section D is on laissezfaire leadership style section E is on servant leadership style, section F is on

organizational culture and section G is on competency development. The leadership styles are moderated by the role of organizational culture in TVET Institutions in Kenya which is structured as section F in the questionnaire.

Table 3.3: Measurements of Variables

| Variable | Indicators | Measurement | Hypothesis Test/ Decision Rule |
|--------------------------------|---|--|---|
| Dependent Variable | | | |
| Competency Development | Critical thinking and Problem solving Creativity and innovation Digital Literacy Collaboration and Teamwork | Questionnaire (5-point Likert Scale) | T-test, P-value; Reject H _{a1} if P-value>.05 otherwise fail to reject H _{a1} if P-value<.05 |
| Independent Variables | | | |
| Transactional Leadership | Role definition Leader-stakeholder relations Contingent reward Management-by-exception | Questionnaire (5-point Likert Scale) | T-test, P-value; Reject H _{a1} if P-value>.05 otherwise fail to reject H _{a1} if P- value<.05 |
| Transformational Leadership | Idealized influence Inspirational motivation Intellectual Stimulation Individualized consideration | Questionnaire (5-point Likert Scale) | T-test, P-value; Reject H _{a1} if P-value>.05 otherwise fail to reject H _{a1} if P- value<.05 |
| Servant | Self-sacrifice | Questionnaire | T-test, P- |

| Leadership Laissez faire | Accommodative and inspirational Motivational Mutual consideration Hands-off management Participative decision making Delegation responsibility Continuance commitment | (5-point Likert Scale) Questionnaire (5-point Likert Scale) | value; Reject H _{a1} if P-value>.05 otherwise fail to reject H _{a1} if P- value<.05 T-test, P- value; Reject H _{a1} if P-value>.05 otherwise fail to reject H _{a1} if P- value>.05 |
|---------------------------|---|---|--|
| Moderator | | | |
| Organization Culture | Formal authority systems Values Norms and beliefs Patterns of communication | Questionnaire (5-point Likert Scale) | T-test, P-value; Reject H _{a1} if P-value>.05 otherwise fail to reject H _{a1} if P-value<.05 |

3.9.8 Chapter Summary

In summary, this chapter has discussed research design and methodology used in this study. Specifically, the chapter outlined the instrument and procedures used during data collection as well as the statistical techniques used during data analysis. The next chapter provides a detailed explanation of the results and findings of data analysis in relation to the study hypotheses.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the key findings of the study that sought to establish the influence of leadership styles on competency development in Technical and Vocational Training Institutions in Kenya. The findings with regard to the response rate and study sample characteristics are presented first. The chapter then provides a detailed analysis of descriptive and inferential statistics showing how each hypothesis was tested. The study linked the findings with reviewed literature to enable interpret the data, draw implications, and make recommendations.

4.2 Response Rate

Response rate is the percentage of people who responded to the survey. The study targeted a sample size of 262 respondents from which 203 filled in and returned the questionnaires, making a response rate of 77.48% as shown in Table 4.1. According to Mugenda and Mugenda (2012), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. Based on the assertion, the response rate was excellent and therefore, representative, and satisfactory to make conclusions for the study. This collaborates with the assertion by Bell, Bryman, and Harley (2018) that a response rate of 50% is adequate, while a response rate greater than 70% is very good. The analysis of the results was based on 203 questionnaires and according to Yin (2017), a minimum sample size of 30 to a maximum of 500 is sufficient and acceptable for a scientific investigation. Therefore, this response rate was considered adequate to draw conclusions from the study findings.

Table 4.1: Response Rate

| Response Rate | Frequency (n) | Percent |
|-------------------------|---------------|---------|
| Returned Questionnaires | 203 | 77.48 |
| Non-Response | 59 | 22.52 |
| Total | 262 | 100 |

4.3 Background Information

The study sought to find out the demographic characteristics of the respondents based on question 1 - 4 of section A in the questionnaire. The distribution of the respondents was as per gender, age categories, duration of service and level of education.

4.3.1 Gender of the Respondents

The study sought to find out the gender distribution of the respondents in order to establish if there was fair gender representation in the TVET institutions in Kenya. The results are presented in Table 4.2 below. Majority of the respondents (64.5%) were male while female accounted for 35.5%. This shows that both male and female were represented in the study though male gender was the most dominant. This implies that the views were not biased to one gender in regard to leadership styles and competency development in the TVET institutions in

Kenya.

Table 4.2: Gender of the Respondents

| Gender Categories | Frequency(n) | Percentage (%) | |
|-------------------|--------------|----------------|--|
| Male | 131 | 64.5 | |
| Female | 72 | 35.5 | |
| Total (N) | 203 | 100.0 | |

4.3.2 Age of the Respondents

The respondents were asked to indicate their age brackets. The results in Table 4.3 reveal that none of the respondents were below 30 years of age, 15.27% of the

respondents were aged between 30 and 40 years, 33.50% were aged between 41 and 50 years and 51.23% were aged above 50 years. The findings of this study implied that a majority (84.73%) of the respondents were 41 years and above. This result shows that TVET institutions in Kenya are being managed by a seasoned workforce who are not young because the majority have matured in age and thus can offer informed opinions the during study. This collaborates with the study of Kateb and Ramanathan (2019), who stated that leadership develops over a period of time and adequate leadership skills are gained with age and one can give informed opinion about the leadership styles and competency development in learning institutions.

Table 4.3: Age of the Respondents

| Age Category(years) | Frequency (n) | Percentage (%) | |
|-------------------------------|---------------|----------------|--|
| Less than 30 Between 30-40 | - 31 | - 15.27 | |
| Between 41-50 | 68 | 33.50 | |
| Above 50 | 104 | 51.23 | |

4.3.3 Respondents' Experience

The study sought to find out the work experience of the respondents with the aim of ascertaining the extent to which their responses could be relied upon to make conclusions. Table 4.4 below shows that 17% of the respondents indicated that they had worked in the TVET institutions in Kenya for less than 5 years, while 22% had worked between 5 to 10 years, 16% between 11 to 15 years and a majority (45%) had worked over 15 years. This shows that 61% of the respondents had the experience of working in the TVET institutions in Kenya for over ten years and therefore were knowledgeable with the information sought in the study. The was in tandem with observations made by Koech and Namusonge (2012) that respondents with high working experience assist in providing reliable data since they have technical experience on the problem being investigated by a study.

Table 4.4: Respondents Experience

| Categories | Frequency(n) | Percentage (%) |
|-------------------|--------------|----------------|
| Less than 5 years | 35 | 17 |
| 5-10 Years | 44 | 22 |
| 11-15 Years | 32 | 16 |
| Above 15 Years | 92 | 45 |
| Total (N) | 203 | 100 |

4.3.4. Respondents' Level of Education

The researcher sought to determine the respondents' highest level of education (academic qualifications). The results in Table 4.5 show that majority (85.71%) of the respondents' joined the TVET institutions at bachelor's level of Education while a minority (14.29%) had diploma certificates level of education. This shows that most respondents joined the TVET institutions in Kenya when they had degrees. This indicates that the respondents were well educated and quite informed and therefore furnished this study with better information which added value to the study.

Table 4.5: Respondents Level of Education

| Categories | Frequency(n) | Percentage (%) |
|--------------|--------------|----------------|
| Diploma | 29 | 14.29 |
| Degree | 138 | 67.98 |
| Postgraduate | 36 | 17.73 |
| Total (N) | 203 | 100 |
| | | |

4.4 Results of the Pilot Study

A pilot test was done before embarking on an actual data collection activity. Copper and Schindler (2011) describe a pilot test as a replica and rehearsal of the main survey and that it assists researchers to see if the questionnaire would obtain the required results. Creswell and Creswell (2017) further described a pilot study as a small-scale version done in preparation for a major study. This pilot study therefore was carried out to see if the questionnaire would provide the required results and determine the validity and reliability of research instruments as stated by Yin (2017).

The acceptable number for the pilot study should be ranging between 1% and 10% of the sample population according to Marshll & Rossmann (2014). This study identified other twenty-seven (27) TVET institutions not within the 262 identified institutions which were used during the main study. These 276 sampled institutions during the pilot represented 10% of the population.

4.4.1 Reliability Test

In evaluating the survey constructs, a reliability test was done. Reliability tests examine the degree to which individual items used in a construct are consistent with their measures (Al- Osail, et al., 2015). In this study, the reliability of the instrument (questionnaire) was tested using Cronbach alpha (α). Cronbach's alpha reliability coefficient ranges between 0 and 1 where 0 (zero) implies that there is no internal reliability while 1 indicated perfect internal reliability (Panayides, 2013). Cronbach's alpha reliability coefficient value of 0.7 or higher is considered sufficient (Tavakol & Dennick, 2011). Further, a Cronbach alpha of more than 0.7 indicates that the data collection instrument is reliable.

Reliability of all constructs representing the dependent variable (competency development in TVET institutions in Kenya) and the independent variables (transactional leadership style, transformational leadership style, servant leadership style and laissez-faire leadership style) and moderating variable (organizational culture) when they were tested in this study attracted a Cronbach alpha statistic of more than 0.7. Galvin, Gibbs, Sullivan & Williams (2014) tested for reliability which attracted a Cronbach alpha statistics of more than 0.7 in their study on the role of conflict management as an essential element of public participation in enhancing performance of devolved governance systems in Kenya. Therefore, based on the coefficient values, the items tested were deemed reliable for this study as per Cronbach alpha statistics. All the alpha coefficients ranged between 0.753 and 0.859 and therefore retained as shown in Table 4.6 below.

Table 4.6: Reliability Test Results

| Variable | No. of Items | Cronbach's Alpha | Conclusion |
|--------------------------|--------------|------------------|------------|
| Transactional Leadership | 5 | .753 | Reliable |
| Transactional Leadership | 5 | .765 | Reliable |
| Servant Leadership | 5 | .786 | Reliable |
| Laissez-faire Leadership | 5 | .768 | Reliable |
| Organization Culture | 5 | .759 | Reliable |
| Competency Development | 5 | .859 | Reliable |

4.4.2 Validity Test

Validity refers to whether a measurement tool (questionnaire) measures what it claims to measure. The study used content validity to test the questionnaire's ability to include or represent all the content of a particular construct. These elements are crucial if the aims and objectives of the entire study are to be achieved (Dikko, 2016). There is no easy way to determine content validity aside from expert opinion (Heale & Twycross, 2015). There is also no statistical test to determine whether a measure adequately covers a content area or adequately represents a construct and therefore content validity was tested based on the judgment of experts in the field. The questionnaire was pilot tested in TVET institutions which were randomly selected from the population which did not form part of the sample used during the study. The aim of the pilot was to establish if the respondents could answer the questions without difficulty and to get feedback to enhance the validity of the content. They were encouraged to provide recommendations and endorsements for the final version of the instrument. Their comments were reviewed and incorporated to enhance the validity of the questionnaire.

4.5 Diagnostic Tests

The study used classic linear regression model to carry out diagnostic tests due to its ability to show relationships between the independent and the dependent variables (Bollen et al., 2016). Classic linear regression model has important underlying assumptions that must be tested before it can be utilized as a model of data analysis

and hence the researcher embarked on the exercise. The key assumptions affecting the study are discussed herein.

4.5.1 Sampling Adequacy Tests

To examine whether the data collected was adequate and appropriate for descriptive and inferential statistical tests such as the factor analysis, regression analysis and other statistical tests. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy which is meant for data of over 200 and less than 1,000 samples was used since the sample size was 262 respondents. According to Sidiqqui (2013), such data set is regarded as adequate and appropriate for statistical analysis and the value of its KMO should be greater than 0.5.

Normally, 0 < KMO < 1: If KMO > 0.5, the sample is adequate.

In this study the KMO lies between 0.754 and 0.843 as shown in Table 4.7 below. This indicates that the sample is adequate and hence can proceed to the Factor Analysis stage.

Table 4.7: Kaiser-Meyer-Olkin (KMO) Test

| Leadership Styles | KMO Test | | | |
|---------------------------|----------------------|---------|----|--------------|
| Transactional Leadership | Kaiser-Meyer-Olkin | Measure | of | Sampling.754 |
| Transformational | Kaiser-Meyer-Olkin | Measure | of | Sampling.822 |
| Laissez- faire Leadership | Kaiser-Meyer-Olkin | Measure | of | Sampling.815 |
| Servant Leadership | Kaiser-Meyer-Olkin | Measure | of | Sampling.832 |
| Organization Culture | Kaiser-Meyer-Olkin | Measure | of | Sampling.789 |
| Competency Developmen | t Kaiser-Meyer-Olkin | Measure | of | Sampling.843 |

4.5.2 Factor Analysis

Factor analysis was used to summarize data to be more manageable without losing any important information and therefore, making it easier to test hypothesis (Brown, 2015). According to field (2009), there are three main reasons for using factor analysis which includes to develop a scale to measure variables and important information and making it easier to test hypothesis (Brown, 2015). According to Cooper & Schindler (2011), factor analysis is a technique used for specific computation with the aim of developing a scale to measure variables, reduce the variables to a manageable size and to have a better understanding of the variables. These factors, also called latent variables, aim to measure things that are usually hard to measure directly, such as attitudes and feelings (Siddiqui, 2013). Factor analysis is therefore a way of explaining the relationship among variables by combining them into smaller factors. The scales usually start with many questions and then by using factor analysis are reduced to smaller number (Yong & Pearce, 2013). The reduced results are then used for other analysis such as multiple regression analysis.

Factor loading assumes values between zero and one of which loadings of below 0.30 are considered weak and unacceptable (Yong & Pearce, 2013). Tavakol & Dennick (2011) provided for more stringent conditions and cut offs starting from 0.32 (Poor), 0.42 (fair), 0.55 (good), 0.63 (very good) and from 0.71 (excellent). Variables that have a factor loading of 0.4 or greater within a particular factor are considered to be its major components and have been used by other researchers such as Yong and Pearce (2013). The method has been widely accepted as reliable for factor analysis (Brown, 2015; Siddiqui, 2013; Yong & Pearce, 2013).

In their study, Muriithi, Louw and Radloff (2017) on influence of governance on public policy implementation in Kenya; Chelimo (2020) on transformational leadership and performance of public universities in Kenya; Gakenia, Katuse and Kiriri (2017) on devolved systems and performance of county governments in Kenya, described factor loading values that are greater than 0.4 as acceptable; values between 0.5 and 0.7 are commonplace; values between 0.7 and 0.8 are good; values between 0.8 and 0.9 as great, and values above 0.9 as superb. The current study adopted the factor loading values of 0.6 as acceptable benchmark as stated by Tavakol & Dennick (2011).

The findings presented in Table 4.8 show the overall factor analysis for all the variables that are measuring the independent and dependent variables. Transactional leadership had five items with factor loadings of 0.773. All the items were accepted based on the general rule of thumb for acceptable factor loading of 0.60 and above. No item was removed or expunged. The result of the factor analysis for Transformational leadership variable which had five items recorded a factor loading of 0.768. This implies that all items fall within the acceptable threshold and none of the items was dropped. The factor analysis for servant leadership, with five items showed factor loadings was 0.699 and no factor was eliminated because they met the acceptable threshold. Laissez-faire leadership had five items out of which none of them were dropped for consistency as the factor loading was 0.711. The factor analysis for organizational culture, with five items showed factor loadings of 0.795 and no factor was eliminated because they met the acceptable threshold. The dependent variable competency development in TVET institutions in Kenya was also subjected to factor analysis. All the factor loadings were 0.765 which implied that all items were within the acceptable threshold and no item was dropped. Therefore, all the factor loading of all the items were above 0.6 and thus all were considered for further statistical analysis.

Table 4.8: Summary of Factor Analysis

| Variable | Number of Items | Factor Loadings |
|-----------------------------|-----------------|-----------------|
| Transactional leadership | 5 | .773 |
| Transformational leadership | 5 | .768 |
| Servant leadership | 5 | .699 |
| Laissez- faire leadership | 5 | .711 |
| Organizational Culture | 5 | .795 |
| Competency Development | 5 | .765 |

4.5.3. Normality Test

Normality tests are done to determine whether the sample data had been drawn from a normally distributed population. Normality assessment can be done by using a graphical or numerical procedure. In this study, the response rate was 203 and therefore, the normality test was done using the Shapiro-Wilk test which also had power to detect departure from normality due to either skewness or kurtosis or both. If statistic ranges from zero (0) to one (1) and figures higher than 0.05 indicate the data is normal (Hanusz & Tarasinska, 2014). Shapiro-Wilk test assesses whether data is normally distributed using hypothesis:

H0: Sample follows a normal distribution.

The criterion is to reject the null hypothesis if the p-value of the Shapiro-Wilk statistic is less than 0.05. The results in Table 4.9 shows the distribution of data on Transactional leadership (p-value 0.834>0.05), Transformational leadership (p-value 0.921>0.05), Servant leadership (p-value 0.095>0.05), Laissez–faire leadership (p-value 0.092>0.05), Organizational Culture (p-value 0.850>0.05) and Competency Development (p-value 0.61>0.05). Therefore, according to Shapiro-Wilk test we fail to reject the null hypothesis and conclude that the sample data was normally distributed.

Table 4.9: Normality Tests

| Variable | Statistic | Shapiro-Wilk df | Sig. |
|-----------------------------|-----------|--------------------|-------|
| Transactional Leadership | 0.944 | 202 | 0.834 |
| Transformational Leadership | 0.918 | 202 | 0.921 |
| Servant Leadership | 0.956 | 202 | 0.095 |
| Laissez-faire Leadership | 0.892 | 202 | 0.092 |
| Organizational Culture | 0.942 | 202 | 0.850 |
| Competency Development | 0.913 | 202 | 0.610 |

Multicollinearity refers to the occurrence of high intercorrelations among two or more independent variables in a multiple regression model. Severe multicollinearity can cause problems because it increases the variance of coefficient estimates which makes the estimates very sensitive to minor changes in the model and thus makes the coefficient estimates unstable and difficult to interpret. In this study, multicollinearity was tested by computing the Variance Inflation Factors (VIF) and its reciprocal, the tolerance. The higher the value of VIF's, the more severe the problem since a VIF which is greater than 10 is a sign of multicollinearity. Results in Table 4.10 shows that all the variables had a variance inflation factors (VIF) of less than 10: transactional leadership (1.269), transformational leadership (2.725), laissez-faire leadership (2.590), servant leadership (1.851) and organizational culture (1.842). This implies that there was no severe collinearity with the variables thus all the variables were maintained in the regression model.

Table 4.10: Test for Multicollinearity

| Collinear | Collinearity Statistics | | | | | | | | | |
|-----------|-----------------------------|-----------|-------|--|--|--|--|--|--|--|
| Model | | Tolerance | VIF | | | | | | | |
| 1 | Transactional Leadership | 0.788 | 1.269 | | | | | | | |
| | Transformational Leadership | 0.367 | 2.725 | | | | | | | |
| | Laissez-Faire leadership | 0.386 | 2.590 | | | | | | | |
| | Servant Leadership | 0.540 | 1.851 | | | | | | | |
| | Organizational Culture | 0.543 | 1.842 | | | | | | | |
| | | | | | | | | | | |

a. Dependent Variable: Competency Development

4.5.4. Test for Heteroscedasticity

Heteroscedasticity refers to data with unequal variability (scatter) across a set of second, predictor variables (non-constant variance). A classical assumption in linear model estimation is that the residual term is homoscedastic (constant variance). A statistical test of heteroscedasticity was carried out to confirm homoscedasticity with statistical significance. The Breusch-Pagan test was used where the BP Lagrange Multiplier (LM) statistic was computed for the residuals to determine whether or not heteroscedasticity is present in the regression model. The test used the following null hypotheses:

H0: Residuals do not exhibit heteroscedasticity (residuals are homoscedastic).

The P-value of the BP-LM test as shown in Table 4.11 was greater than 0.05 implying that we fail to reject H0 and therefore conclude that the residuals do not exhibit heteroscedasticity thus meeting the homoscedasticity assumption.

Table 4.11: Test for Heteroscedasticity

| | LM | SIG | Conclusions |
|--------|-------|-------|-------------------|
| BP | 5.998 | 0.320 | Fail to reject H0 |
| Koenke | 1.986 | 0.654 | |

4.5.5. Test for Autocorrelation

Bui (2020) looked at autocorrelation as the relationship between members of a series of observations ordered in time or space suggests. He recommended the use of Durbin-Watson test to check for the presence of autocorrelation between variables. According to Zeng (2016), Durbin-Watson statistic ranges from 0 to 4. A value near 0 indicates presence of positive autocorrelation while a value close to 4 indicates presence of negative autocorrelation. A value ranging from 1.5 to 2.5 indicates that there is no presence of autocorrelation between the variables. According to Tsay (2020) rule of thumb, values of Durbin-Watson values close to 2 indicate rejection of the alternative hypothesis. This study used Durbin-Watson test to test whether the residuals from the multiple linear regression models are independent. The finding of this study shows that the Durbin-Watson is 1.765 which means that there was no autocorrelation between the variables. The results presented in Table 4.12 indicate the Durbin-Watson coefficient of this study.

Table 4.12: Autocorrelation Statistics

| Model | Durbin Watson |
|-------|---------------|
| 1 | 1.765 |

a. Predictors: (Constant), Transactional Leadership, Transformational Leadership, Laissez-faire Leadership, Servant Leadership b. Dependent Variable: Competency Development

4.5.6. Test for Linearity

Linearity Assumption of linear estimation is that the dependent variable has a linear relationship with the independent variables. Computation of ANOVA statistics was used to test for the linearity assumption in this study. The study hypothesized that: H0: the dependent variable, has no linear relationship with the independent variables. The study results as shown in Table 4.13 indicate that the F-statistic (4,198=24.564, p-value < 0.05). The ANOVA results indicate the model is significant and therefore we reject the null hypothesis and conclude that the dependent variable has a linear relationship with the independent variables.

Table 4.13: Test for Linearity ANOVA Statistics

| Model | | Sum of Squares | df | Mean Square | ${f F}$ | Sig. | |
|-------|---------------------------------|----------------------------------|-------------------|--------------------------------------|---------|-------------------|--|
| 1 | Regression Residual Total | 1234.120 2486.880 3721.000 | 4 198 202 a | 308.530 12.560 Dependent Varia | 24.564 | .000 ^b | |

b. Predictors: (Constant), X₁, X₂, X₃, X₄

4.6 Descriptive Analysis

Descriptive analysis helps to describe and show or summarize data in a meaningful way such that patterns might emerge from the data. Descriptive statistics simply describe the data and do not allow making conclusions beyond the analyzed data to reach conclusions regarding any hypotheses made. Descriptive statistics in this study enable data to be presented in a more meaningful way which allowed simpler interpretation of the data as stated by Lewis (2015).

4.6.1 Descriptive Analysis for Competency Development

The dependent variable (competency development in TVET) was measured using critical thinking and problem solving; creativity and innovation; digital literacy; collaboration and teamwork indicators in the opinion statements given. Respondents were asked to indicate the extent to which they measured competency development in their TVET institution. A five-point Likert Scale comprising of Strongly Disagree

(SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA) was used and the findings presented. Table 4.14 summarizes the results of the study.

The findings on the statement that students are able to display some level of critical thinking and problem solving upon completion of their studies shows that 30% of the respondents strongly agreed to this statement and 26% also agree. The study found out that there was a mean of 3.7622 which means that they agreed with the statement however the standard deviation was 1.1924. This shows that the sentiments were very much contested as shown by a standard deviation above 1.0. The study established that 56% of respondents agreed that students are able to display some level of critical thinking and problem solving upon completion of their studies. The study findings corroborate with the findings by Grover, Pea, and Cooper (2015) which revealed that the skills acquired and developed in technical training institutions did not match labour market demands and needs and that the physical facilities in these institutions were inadequate and inappropriate. Hence, this contributed to a great extent the production of low quality of graduates.

The findings on the statement that upon completion of their courses the students can demonstrate creativity and innovativeness in their respective field of study 20% of the respondents strongly agreed with the statement while 38% agreed. The study established that there was a mean of 3.6764 with a standard deviation of 1.5432. This shows that 58% of the respondents found that upon completion of their courses the students can demonstrate creativity innovativeness in their respective field of study. These sentiments were very much contested as shown by a standard deviation above 1.0. The study findings are consistent with the findings of Obiwuru, Okwu and Akpa (2011) concluded that transactional leadership style was more appropriate in inducing performance in small scale enterprises.

The findings on the statement that digital literacy is key in the institution and by the end of their course students are able to demonstrate acquisition of ICT skills; 10% of the respondents strongly agreed with the statement while 34% agreed. The study established that there was a mean of 3.5432 with a standard deviation of 1.2341. This shows that 44% of the respondents found that digital literacy is key in the institution and by the end of their course, students are able to demonstrate acquisition of ICT skills was very much contested as shown by a standard deviation above 1.0. The findings concur with those in Garza, Bain and Kupczynski, (2014) who asserted that lack of resourceful personnel recruited and retained in learning institutions affected performance of these institutions. The study concludes that the newly established schools have gaps that need to be filled if the quality agenda is to remain paramount.

The findings on the statement that there is effective collaboration between the staff and students during training and this has enhanced teamwork as key tenet in the institution; 20% of the respondents strongly agreed with the statement while 42% agreed. The study established that there was a mean of 3.5482 with a standard deviation of 1.2431. These sentiments were very much contested as shown by a standard deviation above 1.0. This shows that 62% of the respondents found that there is effective collaboration between the staff and students during training and this has enhanced teamwork as a key tenet in the institution.

The study results corroborate with the findings by Musyimi, Malechwanzi and Luo (2018) study which established that growth in technology, rural electrification, subsidized secondary school education as well as introduction of new TVET courses increased the demand for Technical and Vocational Education and Training when the institutions have adequate facilities. The study concluded that growth in technology as a result of rural electrification empowers people residing in rural areas to start up business thus influences demand for TVET education.

The study finding by McLachlan, Yeomans and Lim (2017) and Muriithi, Louw and Radloff, (2018) on competency development approach to learning for employment which focused on the theoretical and practical development, established that there was a positive relationship between the competencies acquired during

TVET training and leadership effectiveness since most TVET trainees are employable thus with adequate facilities the students can be able to adopt flexible approach to work and can be creative.

Table 4.14: Competency Development Descriptive Analysis

| Statement | SD % | D % | N % | A % | SA % | Mean | Std. Deviation |
|---|---------|--------|--------|--------|---------|--------|-------------------|
| Students are able to display some level of critical thinking and problem solving upon completion of their studies. | 4 | 14 | 26 | 26 | 30 | 3.7622 | 1.1924 |
| Upon completion of their courses the student can demonstrate creativity innovativeness in their | 2 | 24 | 16 | 38 | 20 | 3.6764 | 1.5432 |
| Digital literacy is key in the institution and by the end of their courses the students are able to demonstrate acquisition | 3 | 28 | 25 | 34 | 10 | 3.5432 | 1.2341 |
| There is effective collaboration between the staff and students during training and this has enhanced teamwork as key tenet in the institution. | 4 | 18 | 16 | 42 | 20 | 3.5482 | 1.2431 |

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA= Strongly Agree

4.6.2 Descriptive Analysis for Transactional Leadership

The first objective of the study sought to determine how transactional leadership influence competency development in TVET institutions in Kenya. To assess this, the respondents were presented with various statements and were asked to rate the extent to which they agreed or disagreed with the listed statements. A five point Likert Scale comprising of Strongly Disagree (SD), Disagree(D), Neutral (N), Agree (A) and Strongly Agree (SA) was used and the findings presented in Table 4.15.

The findings show that 66.5% of the respondents strongly agreed with the statement that the teaching staff and subordinates were being punished for being non-compliant with the set standards of student's competency and 29.1% agreed to this statement. 1.1% of the respondents strongly disagreed with this statement while 0.2% disagreed and 3.1% of the respondents were neutral. The study results show a mean of 3.5432 with a standard deviation of 0.9729. This shows that 95.6% of the respondents found that teaching staff and subordinates were being punished for being non-compliant with the set standards of student's competency to enhance competency development. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study results are in line with the findings by Kuria (2013) that transactional leadership style should be used interchangeably to suit issues on performance when he carried out a study on how school principals can increase efficiency and effectiveness in school management at the Kenya Management Institute (KEMI). The findings established that KEMI should organize seminars and workshops for head teachers which was aimed at making them understand leadership and management skills which is a prerequisite for better academic performance.

The findings on whether there is close monitoring for mistakes and errors and corrective action taken as quickly as needed through consultations, 0.4% of the respondents strongly disagreed, 2.0% disagreed, 5.7% were neutral, 51.1% agreed and 40.6% strongly agreed. The study results show a mean of 3.2122 with a standard deviation of 0.4321. These shows that 91.7% of the respondents agreed that there is close monitoring to identify mistakes and errors and corrective action taken as quickly as needed through consultations as shown by a standard deviation below 1.0. The study results are in line with the findings by Blose (2014) that transactional leadership can encourage consultations to improve accuracy of the tasks performed and thus could lead to increased interest in leadership preparation and development based on the fact that school leaders can make a difference in both the effectiveness and efficiency of schooling. The study further established that symptoms of weak management systems in schools experienced turbulence in Kenya due to mismanagement resulting in the destruction of property worth millions of shillings. This was attributed to lack of consultations.

On the statement stating that the teaching staff are recognized or rewarded based on the student capability to innovate and being creative, 2.2% of the respondents strongly disagreed,

2.9% disagreed, 16.3% were neutral, 52% agreed and 26.6% strongly agreed. The study results show a mean of 3.5432 with a standard deviation of 0.5455. These shows that 78.6% found that the teaching staff were recognized or rewarded based on the student capability to innovate and being creative. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings corroborate with the findings by Muthiani (2019) on the impact of leadership on learning outcomes which dwelt on effective leadership style for principals in vocational colleges. The findings asserted that transactional leadership style is theorized to comprise contingent reward and management by exemption to inspire and motivate employees. The study found that principals were using transactional leadership style to give followers certain tasks to perform and provide rewards to those who meet the goals set in the institution.

On whether the teaching staff had the student's expectations in terms of critical thinking, problem solving, innovation collaboration and creativity, 5.4% of the respondents strongly disagreed, 12.0% disagreed, 16.8% were neutral, 32.0% agreed and 33.8% strongly agreed. The study findings showed a mean of 3.1211 with a standard deviation of 0.8756. This shows that 65.8% of the respondents stated that the teaching staff had the student's expectations in terms of critical thinking, problem solving, innovation and creativity. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings agree with findings by Nazim (2017) whose study objective was to find out the relationship between leadership styles of principals and job satisfaction of college teachers. The findings of the study showed that there is a significant relationship between transactional leadership style and job satisfaction in that the teaching staff improves student's expectations in terms of critical thinking, problem solving, innovation and creativity.

Further, on establishing if the teaching staff and subordinates were punished for being non-compliant with the set standards of students' competency, 1.5% of the

respondents strongly disagreed, 1.5% disagreed, 1.8% were neutral, 22.1% agreed and 73.1% strongly agreed. The study results indicated a mean of 3.8987 with a standard deviation of 0.4322. These shows that 73.1% found that the teaching staff and subordinates were punished for being non-compliant to the set standards of student's competency. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are in tandem with the findings by Kateb and Ramanathan (2019) on the mediating role of communication competence on the relationship between transactional leadership and the job satisfaction of the employees in Syrian Private Universities. Findings of the study revealed that the indirect effect of transactional leadership on job satisfaction through communication competence enhanced job satisfaction of the employees.

Table 4.15: Transactional Leadership Descriptive Analysis

| Statement | SD % | D% | N% | A% | SA% | MEAN | STD DEV |
|---|---------|------|------|------|------|--------|------------|
| The teaching staff and subordinates are punished for being non-compliant with the set standards of student's competency | 1.1 | 0.2 | 3.1 | 29.1 | 66.5 | 3.5432 | .9729 |
| There is close monitoring for mistakes and errors and then taking corrective action as quickly as needed through consultations. | 0.4 | 2.0 | 5.7 | 51.3 | 40.6 | 3.2122 | .4321 |
| The teaching staff are recognized or rewarded based on the student capability to innovate and being creative | 2.2 | 2.9 | 16.3 | 52.0 | 26.6 | 3.5432 | .5455 |
| The teaching staff has the student's expectations in terms of critical thinking, problem solving, innovation and creativity | 5.4 | 12.0 | 16.8 | 32.0 | 33.8 | 3.1211 | .8756 |
| The teaching staff and subordinates are punished for being non-compliant with the set standards of student's competency | 1.5 | 1.5 | 1.8 | 22.1 | 73.1 | 3.8987 | .4322 |

4.6.3 Descriptive Analysis for Transformational Leadership

To assess whether transformational leadership influence competency development in TVET institutions in Kenya, the respondents were presented with various statements and were asked to rate the extent to which they agreed or disagreed with them. Five-point Likert scale comprising of strongly agree, agree, neutral, disagree, strongly disagree was used and the findings were as presented in Table 4.16.

On the statement which stated that the teaching staff motivates confidence and team spirit among the students for drawing sound conclusions, 70.4% of the respondents strongly agreed while 21.7% agreed to the statement. The study findings show a mean of 3.7862 with a standard deviation of 0.4562. This shows that 92.1% of the respondents found that the teaching staff motivates confidence and team spirit among the students for drawing sound conclusions. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings agree with the studies carried out by Muhsin, Ubud and Achmad (2017) which showed that transformational leadership style influence and was significant to transformational leadership style. Ayacko, K'Aol and Linge (2017) concluded that transformational leadership style positively influenced performance of judicial staff in Kenya through intellectual stimulation, idealized influence and inspiration motivation which agrees with the research statement stated above.

The findings that the teaching staff have articulated a clear vision for students to be able to solve problems on their own indicated that 45.5% of the respondents agreed with the statement while 23.5% strongly agreed. The study findings had a mean of 3.1230 with a standard deviation of 0.5427. This shows that 69.0% of the respondents found that the teaching staff has articulated a clear vision for students to be able to solve problems on their own. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study f i n d i n g s agree with the findings by Milelu (2019) on transformational leadership and school outcomes in Kenya which asserted that commitment and empowerment of staff

and students were inherently associated with transformational leadership. The study carried out in schools in Kenya concurred with the specific purpose of advancing and expanding research in competency development and transformational leadership as per this study.

On the statement which states that the teaching staff was responsive to student's ideas and thoughts regarding their views, 30.1% of the respondents strongly agreed to this statement while 41.4% agreed. The study findings show a mean of 2.8976 with a standard deviation of 0.5278. The study shows that 71.5% of the respondents found that the teaching staff was responsive to students' ideas and thoughts regarding their views. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings agreed with the findings by Muhsin, Ubud and Achmad (2017) whose study aimed at examining and empirically proving that transformational leadership style and competency influence work performance. The study established that transformational leadership positively influenced competency development and was significant to managers being responsive to their employees.

The findings on the statement which states that students were involved in decision making process and they were provided with incentive programs to inspire them for being innovative and creative; 43.8% of the respondents agreed with the statement while 29.3% strongly agreed with it. The study findings show a mean of 3.2161 with a standard deviation of 0.7235. This finding illustrates that 73.1% of the students were involved in decision making process and they were provided with incentive programs which inspired them to be innovative and creative. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings concurred with the findings by Mbithi, K'Obonyo and Awino (2016) who asserted that transformational leadership, employee outcomes and performance of universities in Kenya, had transformational leadership behaviour of the top leadership which led to improved institutional processes and services and organizational effectiveness which concurs with the statement that innovativeness and creativity among student's students is

encouraged through the provision of incentives.

On the statement which states that the teaching staff supported a flexible approach to work when it comes to committing extra effort in students work whenever necessary; 34.7% of the respondents strongly agreed to the statement while 18.5% agreed to it too. The study findings show a mean of 2.8765 with a standard deviation of 0.6789. This shows that 53.2% of the respondents found that the teaching staff supported a flexible approach to work when it comes to committing extra effort in students work whenever necessary. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are in tandem with the findings by Jyoti and Dev (2015) that transformational leadership is a model of leadership where the leaders inspire members to go beyond their task requirements to solve problems in time. Transformational leaders are individuals, who are change oriented, are inspiring; good communicators; people who walk the talk; they are people who let go-and let others do. They adopt a participatory form of leadership, regard teamwork as of high priority and entice teachers to maximize input, which can be expressed in teacher commitment to duty, teachers' involvement in monitoring of students' progress and student achievement. This concurs with the statement above which encourages the trainees from TVET institutions to be innovative and dynamic through support teaching by the trainers

Table 4.16: Transformational Leadership Descriptive Statistics

| Statement | SD % | D % | N % | A % | SA % | Mean | Std. Deviation |
|---|---------|--------|--------|--------|---------|--------|-------------------|
| Teaching staff motivate confidence and team spirit among the students for drawing sound conclusions | 1.5 | 1.4 | 5.0 | 21.7 | 70.4 | 3.7862 | .4562 |
| Teaching staff have articulated a clear vision for students to be able to solve problems on their own | 2.4 | 8.9 | 19.7 | 45.5 | 23.5 | 3.1230 | .5427 |
| Teaching staff is responsive to students' ideas and thoughts regarding their views | 3.3 | 7.3 | 17.9 | 41.4 | 30.1 | 2.8976 | .5278 |
| The students are involved in the decision-making process and incentive programs provided to inspire for being innovative and creative | 5.3 | 7.4 | 14.2 | 43.8 | 29.3 | 3.2161 | .7235 |
| Teaching staff support a flexible approach to work regarding committing extra effort regarding students whenever necessary | 9.7 | 17.4 | 19.6 | 34.7 | 18.5 | 2.8765 | .6789 |

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA= Strongly Agree

4.6.4. Descriptive Analysis for Laissez-Faire Leadership

To To assess whether laissez-faire leadership influence competency development in Technical and Vocational Training Institutions in Kenya this, the respondents were presented with various statements and were asked to rate the extent to which they agreed or disagree with the listed statements. Five-point Likert scale comprising of strongly agree, agree, neutral, disagree, strongly disagree was used and the findings presented in Table 4.17

From these findings, 44.5% of the respondents agreed on that students had freedom of action to make when solving problems without staff and management interference

while 25.7% of the respondents strongly agreed too. The study findings show a mean of 3.5623 with a standard deviation of 0.4321. This shows that 70.2% of the respondents found that students had freedom of action to make when solving problems without staff and management interference. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings agree with findings by Mbera (2015) study on the Relationship between leadership styles used by head teachers at public secondary schools and students' academic performance. The findings revealed that the head teachers' laissez-faire leadership styles had a strong relationship with the schools' K.C.S.E results. The study recommends that head teachers' training in school management should be strengthened and supervision of the teachers they should motivate staff and students by rewarding those who achieve the desired outcome. Head teachers should use a balance laissez-faire leadership style to achieve better K.C.S.E results. This research is vital in its contribution to understanding effective school management in the light of leadership styles and student academic performance.

The study results show that 51.7% agreed that student's words and decisions cannot be challenged by teaching staff and management while 23.1% of the respondents strongly agreed to this too. The study findings show a mean of 3.2316 with a standard deviation of 0.5429. This shows that 74.8% found that the student's words and decisions cannot be challenged by teaching staff and management. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are in line with Ovando and Ramirez (2017) that when leaders encouraged all the staff within the institution to seek approval and ensure individual work is appraised at all stages enhance improved academic performance. As per the study, it is expected that principals exercise good leadership skills and experience for quality results to be realized through a balanced laissez-faire leadership style. As part of recommendations, principals should use laissez-faire form of leadership as this type of leadership style involves all the other parties in the school and thus creates a better environment for teachers to work well and enhance higher academic performance. Principals who use laissez-faire leadership enact free reign where

teachers can be self-driven. The study findings are consistent with the findings by Ogalo (2013) sought to determine the influence of principals' leadership styles on students' academic achievement in K.C.S.E in Awendo district. The study established that principals' laissez faire leadership styles influence students' achievement in KCSE to a moderate extent.

As per the study findings 38.6% of the respondents agreed that there is a high amount of trust the students will be reaching decisions on key facts and practicality of solutions while 18.4% of the respondents strongly agreed to this statement. The study findings show a mean of 3.5431 with a standard deviation of 0.2312. This shows that 57.0% of the respondents agreed that there is a high amount of trust the students will be reaching decisions on key facts and practicality of solutions. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study results concur with the findings by Boke, Nyakundi and Nyamwaka (2017) which established that laissez—faire leadership style have not been practiced in the learning institutions. Based on the findings of this study, the study recommended the County Directors and Sub-County Directors of education should sensitize the principals to use all the laissez—faire leadership style with equal measure to reap the benefits. The principals should practice and use the laissez—faire leadership style to change the schools and all stakeholders since it gives freedom to solve problems on their own.

The study established that 27.9% of the respondents agreed that students were given little supervision or support in drawing sound conclusions while 17.1% strongly agreed to this too. The study findings show a mean of 3.5623 with a standard deviation of 0.6921. This shows that a minority of respondents (45.0) did agree that students were given little supervision or support in drawing sound conclusions. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are tandem with findings by Oyugi and Gogo (2019) that laissez-faire Leadership style by principals should be encouraged and is significant to stakeholders in education in assisting principals to practice leadership styles that would enhance students' academic performance in secondary schools.

The study established that 31.7% of the respondents agreed that the teaching staff and management have adopted a flexible approach and guide the students on what to do and how to do it whenever necessary while 13.5% of the respondents strongly disagreed. The study findings show a mean of 2.8753 with a standard deviation of 0.5237. This shows that a minority of the respondents (45.2) found that the teaching staff and management had adopted a flexible approach and guide the students on what to do and how to do it whenever necessary. These sentiments were very much a consensus as shown by a standard deviation below 1.0.

The study findings corroborate with the findings by Ojokuku, et al. (2012) conducted research on the Impact of leadership Style on Organizational Performance: A Case Study of Nigeria Bank in Nigeria. This study concluded that laissez faire leadership styles flexible approach have positive effect on both performance and followers and are highly recommended to banks especially in this global competitive environment. In addition, Barnett, Marsh and Craven (2005) study focused on the leadership behaviour, laissez-faire leadership, was demonstrated to have marked positive effects on a number of school learning environment constructs. Laissez-faire leadership behaviours especially on the flexibility of the managers demonstrated a differential impact on school learning environment, in some cases more influential than alternative types of leadership behaviour. Similarly, Kagwiria (2016) study established the influence of leadership on employee productivity at KCB Bank Kenya Ltd. The study found that a unit increase in Laissez-faire leadership style on adoption of followers and managers' flexibility leads to increase in employee productivity.

Table 4.17: Laissez-Faire Leadership Descriptive Analysis

| · | | | | | | | |
|----------------------------------|------|------|------|------|------|--------|-------|
| Statement | SD% | D% | N% | A | SA | MEAN | STD |
| | | | | | | | DEV |
| The students they make have | | | | | | | |
| freedom of action solving | 6.7 | 7.2 | 15.9 | 44.5 | 25.7 | 3.5623 | .4321 |
| problems without staff and | | | | | | | |
| management interference | | | | | | | |
| The students' words and | | | | | | | |
| decisions cannot be challenged | 3.8 | 7.8 | 13.7 | 51.7 | 23.1 | 3.2316 | .5429 |
| by teaching staff and | | | | | | | |
| management | | | | | | | |
| There is a high amount of trust | | | | | | | |
| the students will be reaching | 11.8 | 13.5 | 17.7 | 38.6 | 18.4 | 3.5431 | .2312 |
| decisions on key facts and | | | | | | | |
| practicality of solutions | | | | | | | |
| The students are given little | | | | | | | |
| supervision or support in | 14.9 | 18.0 | 22.1 | 27.9 | 17.1 | 3.5623 | .6921 |
| drawing sound | | | | | | | |
| Teaching staff and management | | | | | | | |
| have adopted a flexible approach | 14.9 | 20.6 | 19.3 | 31.7 | 13.5 | 2.8753 | .5237 |
| and guide the students on what | | | | | | | |
| to do and how to do it whenever | | | | | | | |
| necessary | | | | | | | |

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA= Strongly Agree

4.6.5. Descriptive Analysis for Servant Leadership

To To assess whether servant leadership affects competency development in Technical and Vocational Training Institutions in Kenya, the respondents were presented with various statements and were asked to rate the extent to which they agreed or disagree with the listed statements. Five-point Likert scale comprising of strongly agree, agree, neutral, disagree, strongly disagree was used and the findings presented in Table 4.18. The findings show that a majority (25.80%) of the respondents agreed that the teaching staff commit extra effort whenever necessary to improve student's skills and knowledge while 9.0% strongly agreed. The study findings show a mean of 3.5235 with a standard deviation of 0.3421 shows that a 37.0% which is a minority indicated that the teaching staff commit extra effort whenever necessary to improve student's skills and knowledge. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study

findings agree with the findings by Mulongo (2016) study evaluated the extent to which Central Kenya Conference (CKC) Region Principals Practice Servant Leadership style through service in their institutions. The study findings indicated they gave freedom in decision making by staff and students to improve academic performance of the institutions. In another study, Al-Mahdy, Al-Harthi and Salah El-Din (2016) found out that servant leaders are more concerned about group members' feelings and will tend to tolerate disruptive team member, which may in turn create harmony and teamwork among members of an organization.

The study findings further show that 44.4% of the respondents agreed that the teaching staff takes immediate actions to help students to gain and inspire confidence in own views while 31.3% strongly agreed to this statement. The study findings show a mean of 3.7865 with a standard deviation of 0.5327 shows that majority of respondents 75.70% indicated the teaching staff takes immediate actions to help students to gain and inspire confidence in own views. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are in line with the findings by Allen et al., (2016) whose study established that servant leaders encouraged listening and they acted on the staff and students' grievances and practice to improve competency development. The study captured the effects of self-identified faculty "servant" leaders and their potential to encourage deeper approaches to learning for students, with the hope of creating an environment more squarely within the learning community. The study's results indicated a link between servant leadership and deep approaches to learning with a strong correlation to student competency.

On the statement that the teaching staff behave politely and advise students for not doing mistakes again and should be careful to make appropriate decisions, 57.10% of the respondents strongly agreed with the statement while 37.0% agreed to it too. The study results show a mean of 3.7890 with a standard deviation of 0.6235. This shows that majority of respondents 94.1% of the respondents indicated that the teaching staff behave politely and advise students for not doing mistakes again and should be careful to make appropriate decisions. These sentiments were very much a consensus

as shown by a standard deviation below 1.0. The study findings are in line with the findings by Turkmen and Gul (2017) examined the effects of secondary school administrators' servant leadership behaviour on teachers' organizational commitment. It was established that they were considerate to staff and students' issues which touched on their wellness and growth. According to the research findings, school administrators have some modest and responsible managerial, empowerment and forgiveness behaviours. Teachers' level of adaptation of organizational commitment is moderate and is found to be at a high level in the sub-dimension of identification and internalization to enhance student competency development.

On whether the teaching staff involve students 'in decision making through constant consultation with them, 39.5% of the respondents agreed to this statement while 23.1% strongly agreed. The study results show a mean of 3.7631 with a standard deviation of 0.5238 shows that majority of respondents 62.6% of the respondents indicated that the teaching staff involved students' decision making through constant consultation. This makes them empathize and created hope to the students. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are in line with the findings by Lentoror (2016) who gave an introduction of the concept of servant-leadership to educational community which showed empathy and created hope and love by providing necessities and desires to improve competency development. The study suggested promoting awareness, integration, and development of the concept in the academy and other education forums.

The study results showed that the teaching staff gave room for students to learn from their mistakes, make appropriate decisions under the guidance of their tutors, 47.10% of the respondents agreed with the statement while 35.1% strongly agreed to this. The study results show a mean of 3.7863 with a standard deviation of 0.5625 shows that majority of respondents 82.2% of the respondents indicated that the teaching staff gave room for students to learn from their mistakes, make appropriate decisions under the guidance of their tutors. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings concurs with the

findings by Jamerson (2014) who established that servant leadership encouraged the leaders to put in place mechanisms of improving and enhancing satisfaction of staff and students by providing a framework for higher education institutions to use in course design to enhance student achievement levels and teacher empowerment for student competency development.

Table 4.18: Servant Leadership Descriptive Analysis

| Statement SD% | D% | N% | A% | SA | % Me | an Std. |
|--|------|------|------|------|------|--------------|
| | | | | | | Dev |
| Teaching staff commit extra effort | 21.5 | 23.1 | 20.6 | 25.8 | 9.0 | 3.5235 .3421 |
| whenever necessary to improve | | | | | | |
| students' skills and knowledge | | | | | | |
| Teaching staff takes immediate | 5.5 | 6.3 | 12.5 | 44.4 | 31.3 | 3.7865 .5327 |
| actions to help students to gain and | | | | | | |
| inspire confidence in own work. | | | | | | |
| Teaching staff behave politely and | 1.1 | 2.2 | 2.6 | 37.0 | 57.1 | 3.7890 .6235 |
| advise students for not doing | | | | | | |
| mistakes again and should be careful | | | | | | |
| to make appropriate decisions | | | | | | |
| Teaching staff involve students' | 3.5 | 10.4 | 23.5 | 39.5 | 23.1 | 3.7631 .5238 |
| decision making through constant | | | | | | |
| consultation with them | | | | | | |
| The teaching staff give room for | 1.8 | 1.5 | 14.5 | 47.1 | 35.1 | 3.7863 .5625 |
| students to learn from their mistakes, | | | | | | |
| make appropriate decisions under the | | | | | | |
| guidance of their tutors | | | | | | |

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA= Strongly

4.6.6. Descriptive Statistics for Organizational Culture

The fifth objective of the study sought to assess whether organizational culture moderates the relationship between leadership styles and competency development in the TVET institutions in Kenya. The respondents were presented with various statements and were asked to rate the extent to which they agreed or disagree using a five-point Likert scale comprising of Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA) as presented in Table 4.19.

The findings on the statement which states that formal authority systems emphasized student and organizational ethics which are defined, understood, and practiced shows that; 35.8% of the respondents strongly agreed while 40.4% agreed to the statement, 12.1% were neutral while 5.5% disagreed and 6.2% strongly disagreed. The study results show a mean of 2.5451 with a standard deviation of 0.7845. This shows that majority (76.2%) of the respondents indicated that formal authority systems emphasized student and organizational ethics which are defined, understood, and practiced. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are in line with the findings by Paus (2019) on the relationship between organizational culture and the competency of educators of Community Learning Centers (PKBM) in Minahasa District. The study established that there was a degree of relationship between Organizational Culture and PKBM Education Competence in Minahasa District.

On the statement that the organizations values and norms are based on encouraging student empowerment which encourage continuous learning and training; 16.1% of the respondents strongly agreed while 27.5% agreed to the statement, 10.6% were neutral while 20.3% disagreed and 25.6% strongly disagreed. The study results show a mean of 3.5234 with a standard deviation of 0.2468. This shows that 45.9% of the respondents do not agree that organizations values and norms are based on encouraging student empowerment which encourage continuous learning and training. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings are in agreement with literature review by Žukauskas, Veinhardt and Andriukaitienė (2018) which stated that the identification of individual learners' needs in the management culture is an integral element of organizational culture, which ensures a qualitative functionality of the processes within the organization. This enables the changes in the organizational culture and thus has a competitive advantage.

A total of 44.7% of the respondents indicated that formal rules and policies are geared towards students recognizing and solving individual and organizational problems. A further 36.8% strongly agreed to this statement. The study results show

a mean of 3.5632 with a standard deviation of 0.6532. This shows that majority (81.5%) of respondents indicated that formal rules and policies are geared towards students recognizing and solving individual and organizational problems and issues. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study results indicated that formal rules and policies are geared towards students recognizing and solving individual and organizational problems and issues through improved organizational culture in the institutions. The study findings are in agreement with findings by Jabłońska-Wołoszyn (2015) which stated that using competencies to manage business organizations allows improvement of workers' performance by informing them what behaviours are not required to achieve the organizational goals.

The study results established that 43.8% of the respondents agreed that formal authority systems encourage students to have good organizational, communication and problem-solving skills on their own while a further 29.3% of the respondents strongly agreed. The study results show a mean of 3.4231 with a standard deviation of 0.6423. This shows that the majority (73.1%) of respondents indicated that formal authority systems encourage students to have good organizational, communication and problem-solving skills on their own through improved organizational culture in their institutions. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings agree with Toha and Katoningsih (2018) study whose purpose was to know the effect of leadership, organizational culture, and competency on teachers' performance in Ibu Kartini Vocational High School. The result of the study showed that leadership, organizational culture, competency, and performance run well and had significant effect on teachers' performance. The study recommended that this can be improved through good organizational culture and the sourcing of well-maintained facilities to enhance competency development in the learning institutions.

As per the statement that political and cultural differences are the main factor interfering with leadership in the institution; 51.10% of the respondents strongly agreed while a further 26.0% agreed to the statement. The study results show a mean

of 3.8732 with a standard deviation of 0.5423. This shows that the majority (77.1%) of the respondents indicated that political and cultural differences are the main factors interfering with leadership in the institution. These sentiments were very much a consensus as shown by a standard deviation below 1.0. The study findings agree with Toha (2018) whose study revealed that there is a significant influence of the organizational climate and organizational culture in the managerial efficiency of the managers of private and public companies.

Table 4.19: Organizational Culture Descriptive Analysis

| Statement | SD | D% | N% | A% | SA% | Mean | Std. |
|--|------|------|------|------|-------|--------|-----------|
| | | | | | | | Deviation |
| Formal authority systems emphasize student and organizational ethics which are defined, understood, and | 6.2 | 5.5 | 12.1 | 40.4 | 35.8 | 3.6543 | .6742 |
| The organization values and norms are based on encouraging student | 25.6 | 20.3 | 10.6 | 27.5 | 16.1 | 3.5234 | .2468 |
| Formal rules and policies are geared towards student recognizing and solving individual and organizational | 4.8 | 4.4 | 9.2 | 44.7 | 36.8 | 3.5632 | .6523 |
| The formal authority systems encourage students to have good organizing, communication and problem | 8.1 | 5.3 | 17.4 | 43.8 | 29.3 | 3.4231 | .6423 |
| The values and norms of the student | 3.2 | 7.3 | 12.4 | 26.0 | 51.10 | 3.8732 | .5423 |

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA= Strongly Agree

4.7. Inferential Analysis

Inferential statistics allow you to make predictions (inferences) from samples and make generalizations about a population. Inferential statistics examine the relationships between variables within a sample and then generalize or predict how those variables relate to a larger population. Inferential statistics includes methods like point estimation, interval estimation and hypothesis testing (Barr, Levy, Scheepers & Tily, 2013). The study used correlation analysis and regression analysis to measure the strength of the association between dependent and independent

variable(s) and the direction of the relationship. Regression analysis was also used in this study as a form of predictive modelling technique.

4.7.1 Correlation Analysis

Correlation is a bivariate analysis that measures the strength of linear association between two variables and the direction of the relationship. According to Cohen, Cohen and Aiken (2013), Pearson(r) correlation is the most widely used correlation statistic to measure the degree of the relationship between linearly related variables and this was adopted in this study. To measure the strength of the relationship, the value of the correlation coefficient varies between +1 (positive one) and -1 (negative one). When the value of the correlation coefficient lies around ± 1 , then it is said to be a perfect degree of association between the two variables. As the correlation coefficient value goes towards 0, the relationship between the two variables will be considered to be weaker. The direction of the relationship is simply the +sign (indicating a positive relationship between the variables) or sign (indicating a negative relationship between the variables). Pearson Product moment correlation was used to determine the relationship between independent variables (transactional leadership, transformational leadership, laissez-faire leadership, organizational culture) and dependent variable competency development.

4.7.1.1 Correlation analysis for Transactional Leadership and Competency Development

The study sought to establish the relationship between transactional leadership and competency development in TVET institutions in Kenya. A Pearson correlation was performed and the result of the Pearson correlation test as presented in Table 4.20 shows a correlation (r (203) = 0.229; p < 0.05) between transactional leadership and competency development in TVET institutions in Kenya. This implies that the transactional leadership is positively correlated to the competency development in TVET institutions in Kenya. In addition, the correlation between these two variables was significant, that is p < 0.5 implying a linear relationship between transactional leadership and competency development in TVET institutions

in Kenya. This shows that transactional leadership significantly influenced competency development in TVET institutions in Kenya.

The study findings are in tandem with the findings by Hussain, Abbas, Lei, Jamal and Akram, (2017) whose study focused on the role of transactional leadership in creating the organizational creativity through knowledge sharing behavior between employees and leaders. The results showed that transactional leadership and knowledge sharing had a positive relationship with creativity and knowledge sharing mediating the role between transactional leader and organizational creativity.

4.7.1.2 Correlation analysis for Transformational Leadership and Competency Development

The study sought to establish the relationship between transformational leadership and competency development in TVET institutions in Kenya. A Pearson Correlation was performed and the result of the pearson correlation test as presented in Table 4.20 shows a correlation (r (203) = 0.301; p < 0.05) between transformational leadership and competency development in TVET institutions in Kenya. This implies that the transformational leadership positively correlates with competency development in TVET institutions in Kenya. In addition, the correlation between these two variables was significant, that is p < 0.5 implying a linear relationship between transformational leadership and competency development in TVET institutions in Kenya. This shows that transformational leadership significantly influenced competency development in TVET institutions in Kenya.

The study results agree with the findings by Zakaria, Jizat and Zakaria (2015) study which focused on the purpose of leadership skills among technical and vocational educators in their preparation towards effective organization in Malaysia. The study findings showed that transformational leadership style in an organization could increase leadership skill among educators in the areas of critical thinking, insight, intuition, and interpersonal communication. Adams (2018) study established that to develop a leadership development curriculum framework specifically for leaders, present and future for public TVET colleges in South Africa, transformational

leadership style ought to be adopted. Moreover, Omar, Zulazmi and Ladin (2019) findings indicated that lecturer's transformational leadership style significantly and positively correlated with students' competence and employability.

4.7.1.3 Correlation analysis for Laissez-faire Leadership and Competency Development

The study sought to establish the relationship between laissez-faire leadership and competency development in TVET institutions in Kenya. A Pearson Correlation was performed, and the result presented in Table 4.20 showed a correlation (r (203) = 0.287; p < 0.05) between laissez-faire leadership and competency development in TVET institutions in Kenya. This implies that the laissez-faire leadership positively correlated to the competency development in TVET institutions in Kenya. In addition, the correlation between these two variables was significant, that is p < 0.5 implying a linear relationship between laissez-faire leadership and competency development in TVET institutions in Kenya. This shows that laissez-faire leadership significantly influenced competency development in TVET institutions in Kenya.

The study findings are in line with the findings by Boateng (2012) who assessed the leadership styles and effectiveness of principals of Vocational Technical Institutions in Ghana in order to identify their strengths and leadership development needs. The study established that laissez- faire leadership style practiced by the leaders enhances effective training and development of programs for the Vocational Technical Institutions. In addition, the study results are in line with findings by Razak, Jaafar, Hamidon and Zakaria, (2015) whose study focused on the style of lecturer's leadership styles used during the process of teaching and learning in UTHM Technical and Vocational Institution. The findings of this study showed that the leadership style chosen by the lecturers was laissez-faire leadership style of teaching and learning since it produces excellent quality students.

4.7.1.4 Correlation analysis for Servant Leadership and Competency Development

The study sought to establish the relationship between servant leadership and competency development in TVET institutions in Kenya. A Pearson Correlation was performed and the result of the presented in Table 4.20 shows a correlation (r (203) = 0.241; p < 0.05) between servant leadership and competency development in TVET institutions in Kenya. This implies that the servant leadership style positively correlated to the competency development in TVET institutions in Kenya. In addition, the correlation between these two variables was significant, that is p < 0.5 implying a linear relationship between servant leadership and competency development in TVET institutions in Kenya. This shows that servant leadership significantly influenced competency development in TVET institutions in Kenya.

The study findings concur with the findings by Wang, Yu, Xi and Zhang (2019) who examined the effect of servant leadership on followers' subjective career success. The study established that servant leadership had a positive effect on career satisfaction. The findings suggest that organizations should select and train leaders to practice servant leadership to enhance employee subjective career success based on their competences. Further, Allen et al, (2016) established that servant leadership had attributes that provided guidance and inspiration and supports the development of individuals within an institution to work towards a common goal. Moreover, Chen (2018) established a positive association between good medical servant leadership being key in building high-quality healthcare.

4.7.1.5 Correlation analysis for Organizational Culture and Competency Development

The study sought to establish the relationship between organizational culture and competency development in TVET institutions in Kenya. A Pearson correlation was performed and the result presented in Table 4.20 shows a correlation (r (203) = 0.311; p < 0.05) between organizational culture and competency development in TVET institutions in Kenya. This implies that organizational culture positively

correlated to the competency development in TVET institutions in Kenya. In addition, the correlation between these two variables was significant, that is p < 0.5 implying a linear relationship between organizational culture and competency development in TVET institutions in Kenya. This shows that organizational culture significantly influenced competency development in TVET institutions in Kenya.

The study results are in line with findings by Polishchuk (2015) study on organizational culture of Vocational and Technical Educational (VTE) institution in Ukraine. The study established that VTE becomes market-based due to contemporary socio-cultural and economic situation in the country because of good organizational culture. Further, Offorma (2016) explained that institutional culture can enhance curriculum planning in TVET institutions when it is integrated and thus enhances competency development.

Table 4.20: Correlation Matrix for Independent and Dependent Variables

| | | CD | TL | TrL. | LL | SL | OC |
|--------------------------------------|-----------------------------|------|------|------|------|------|----|
| Competency | Pearson Sig.(2-tailed) | 1 | | | | | |
| Transactional Leadership | N Pearson Correlation | .229 | | | | | |
| | Sig.(2-tailed) | .000 | 1 | | | | |
| | N | 203 | | | | | |
| Transformational Leadership | Pearson Correlation | .301 | .324 | | | | |
| | Sig.(2-tailed) | .000 | .003 | 1 | | | |
| | N | 203 | 203 | | | | |
| Laissez-faire Leadership | Pearson Correlation | .287 | .216 | | | | |
| | Sig.(2-tailed) | .000 | .004 | .006 | 1 | | |
| | N | 203 | 203 | 203 | | | |
| Servant Leadership | Pearson Correlation | .241 | .008 | .003 | .008 | 1 | |
| | Sig.(2-tailed) | .000 | .004 | .005 | .003 | | |
| | N | 203 | 203 | 203 | 203 | | |
| Organizational Culture Engagement | Pearson Correlation | .311 | .324 | .312 | .432 | | 1 |
| | Sig.(2-tailed) | .000 | .000 | .004 | .008 | .006 | |
| | N | 203 | 203 | 203 | 203 | 203 | |

^{*.} Correlation is only significant at the 0.05 level (2-tailed)

4.7.2 Regression Analysis

Regression analysis is a form of predictive modelling technique which investigates the relationship between a dependent and independent variable(s). This technique is used for forecasting, time series modelling and finding the causal effect relationship between the variables (Chatterjee & Hadi, 2015). With this analysis, one is able to

CD = Competency Development; TL = Transactional Leadership; TrL = Transformational Leadership; LL = Laissez-faire Leadership; SL = Servant Leadership; OC = Organizational Culture

understand how the typical values of the dependent variable change when one of the independent variables is varied, while the other variables are held constant/fixed. This study applied a multiple regression model to identify the influence of transactional leadership, transformational leadership, laissez-faire leadership, servant leadership, organizational culture, and their impact on competency development in TVET institutions in Kenya.

All the four independent variables were measured using the responses on each of the variables obtained from the respondents. The collected data satisfied the assumptions for multiple linear regressions as established in the diagnostics tests. The initial effort to examine the relationships proposed by the research model involved conducting a bivariate analysis between each independent variable and the dependent variable. The second step is conducting a multiple regression analysis by examining the relationship between all independent variables and the dependent variable. The study used moderated multiple regression analysis to estimate the interaction effect and test the moderating influence of organizational culture on the relationship between leadership styles and competency development in the TVET institutions in Kenya.

Bivariate regression analysis is used to analyze the relationship between a single dependent variable and single predictor variable (Hair, Black, Babin, & Anderson, 2012). It is one of the simplest forms of statistical analysis, used to find out if there is a relationship between two variables X and Y (X = independent variable) and (Y = dependent variable). This study used bivariate analysis to test the first four alternative hypotheses. The F-test was used further to determine the validity of the model while R squared was used as a measure of the model goodness of fit. The regression coefficient summary was then used to explain the nature of the relationship between the dependent and independent variables.

4.7.2.1 Regression analysis for Transactional Leadership and Competency Development

The first study objective sought to establish whether transactional leadership significantly influenced competency development in the TVET institutions in Kenya.

The results of the regression are presented in Table 4.21 which displays R as 0.229. This is a moderate relationship between the observed and predicted values of the dependent variable. It shows that there was a positive correlation between transactional leadership and competency development in TVET institutions in Kenya. Table 4.21 also displays R squared as 0.052. This means that transactional leadership can explain 5.2% of the competency development in the TVET institutions in Kenya. The remaining 94.80% can be explained by other factors excluded from the model. The adjusted R-square is 0.047. This indicates that transactional leadership in exclusion of the constant variable explained the change in competency development in TVET institutions in Kenya by 4.7%. The value of the standard error of the estimate is shown in the output as 0.453. It shows the average deviation of the dependent variable (competency development in Technical and Vocational Education and Training Institutions) from the line of best fit.

Table 4.21 summarizes the results of an analysis of variance, with the sum of squares, degrees of freedom, and mean square being displayed for two sources of variation, regression, and residual. For the accounted for values, the mean square is 193.492, the F statistic is 11.025 and the degree of freedom (df) is 1. The output for residual which displays information about the variation that is not accounted for by the model has the following values: sum of squares as 5527.508 d.f as 201 and a mean square of 17.550. The overall relationship was statistically significant (F1,201 = 11.025, p < 0.05). It has a significance level of 0.000 this means that the chances are zero that the result of regression model are due to random events instead of a true relationship, which implies that the linear regression model is a good fit for the data and hence can be used to predict the influence of transactional leadership on the competency development in TVET institutions in Kenya.

Hypothesis Testing

The study hypothesized Ha1: There is a positive and significant relationship between transactional leadership style and competency development in TVET institutions in Kenya.

The study results of the survey in Table 4.21 revealed that there was positive relationship between transactional leadership style and competency development in TVET institutions in Kenya (β 1=0.225, t cal = 8.654 > t critical = 1.96, p-value < 0.05). To test the relationship the Regression Model fitted was Y= β 0 + β 1X1 + ϵ , that is Y= 2.876 + 0.225X1. The alternative

hypothesis (Ha₁): transactional leadership has a positive and significant influence on the competency development in TVET institutions in Kenya or (Ha1: \Box j \neq 0) is therefore accepted (β 1=0.225, t cal= 8.654> t critical =1.96, p-value < 0.05) and conclude that transactional leadership (X1) positively and significantly influences competency development in TVET institutions in Kenya (Y).

Table 4.21: Regression Statistics (Transactional Leadership and Competency and leadership

| | Model | | |
|-------|----------------|-------------------------|-----------------------------|
| | summary | | |
| R | \mathbb{R}^2 | Adjusted R ² | Std. Error of thee estimate |
| .229a | .052 | .047 | .453 |

a. Predictor: (constant), transformational leadership

ANOVA Statistics

| Model | | Sum | Df | Mean | F | Sig |
|-------|------------|----------|-----|---------|--------|------|
| | | squares | | Square | | |
| 1 | Regression | 193.492 | 1 | 193.492 | 11.025 | .000 |
| | Residual | 3527 | 201 | 17.550 | | |
| | Total | 3721.000 | 202 | | | |

Regression Coefficient

| | Unstandardized coefficient | | Standardized coefficient | | |
|--------------------------------|----------------------------|-------------|--------------------------|-------|------|
| Model | Beta | St error | Beta | T | Sig. |
| 1 (constant) | 2.876 | .742 | | | .000 |
| Transformational Leadership | .225 | .026 | .229 | 8.654 | .000 |

a. Dependent variable: Competency Development

The study results are consistent with findings by Khan (2017) that higher education institutions operate in a complex environment which includes the influences from external factors, new technologies for teaching and learning, globalization and changing student demographics among others. The study recommended that such complexities and change require transactional leadership strategy to support and helps enhance effective competency development.

4.7.2.2 Regression analysis for Transformational Leadership and Competency Development

The second study objective was to establish whether transformational leadership significantly influenced competency development in the TVET institutions in Kenya. The results of the regression are presented in Table 4.22 which displays R as 0.301. This is a moderate relationship between the observed and predicted values of the dependent variable. It also shows that there is positive correlation between transformational leadership and competency development in TVET institutions in Kenya. Table 4.22 also displays R squared to be 0.091. This means that transformational leadership can explain 9.1% of the competency development in the TVET institutions in Kenya. The remaining 90.90% can be explained by other factors excluded from the model. The adjusted R-square of 0.087 indicates that transformational leadership in exclusion of the constant variable explained the change in competency development in TVET institutions in Kenya by 8.7%. The value of the standard error of the estimate is shown in the output as 0.654. It shows the average deviation of the dependent variable (competency development in TVET institutions) from the line of best fit.

Table 4.22 summarizes the results of an analysis of variance, with the sum of squares, degrees of freedom and mean square being displayed for two sources of variation, regression, and residual. For the accounted for values, the mean square is 338.611, the F statistic is 20.122 and the degree of freedom (df) is 1. The output for residual has the values of 3382.389 d.f as 201 and a mean square of 16.828. The overall relationship was statistically significant (F1,201 = 20.122, p < 0.05). It has a significance level of 0.000 this means that the chances are zero that the result of

regression model are due to random events instead of a true relationship, which implies that the linear regression model is a good fit for the data and hence can be used to predict the influence of transformational leadership on the competency development in TVET institutions in Kenya.

Hypothesis Testing

The study hypothesized Ha2: There is a positive and significant relationship between transformational leadership style and competency development in TVET institutions in Kenya.

The study results of the study in Table 4.22 revealed that there was positive relationship between transformational leadership style and competency development in TVET institutions in Kenya ($\beta_1 = 0.299$, t cal = 9.087 > t critical = 1.96, p-value < 0.05). To test the relationship the Regression Model fitted was $Y = \beta_0 + \beta_1 X_2 + \xi$, that is $Y = 4.780 + 0.299X_2$.

The alternative hypothesis (Ha₂): transformational leadership has a positive and significant influence on the competency development in TVET institutions in Kenya or (Ha₂: \Box j \neq 0) is therefore accepted (β 1=0.299, t=9.087, p-value < 0.05) and conclude that transformational leadership (X₂) positively and significantly influences competency development in TVET institutions in Kenya (Y).

Table 4.22: Regression Statistics (Transformational Leadership and Competency Development)

| | Model summary | | |
|-------|------------------|-------------------------|-----------------------------|
| R | \mathbb{R}^2 | Adjusted R ² | Std. Error of thee estimate |
| .301a | .091 | 087 | .654 |

b. Predictor: (constant), transformational leadership

ANOVA Statistics

| Model | | Sum | Df | Mean | F | Sig |
|-------|------------|----------|-----|----------|--------|------|
| | | squares | | Square | | |
| 1 | Regression | 338.611 | 1 | 1338.611 | 20.122 | .000 |
| | Residual | 3382.389 | 201 | 16.828 | | |
| | Total | 3721.000 | 202 | | | |

a. Dependent Variable: Competency Development

Regression Coefficient

| | Unstandardized coefficient | | Standardized coefficient | | |
|--------------------------------|----------------------------|-------|--------------------------|------|------|
| Model | Beta | St | Beta | T | Sig. |
| | | error | | | |
| 1 (constant) | 4.780 | .813 | 5.876 | | .000 |
| Transformational Leadership | .299 | .033 | .033 | .301 | .000 |

The study results concur with the findings by Al-Mansoori and Koc (2019) who examined innovation capacity building through the impact of transformational leadership on followers' satisfaction and output in two Engineering Colleges in the United States and the other in Qatar. The results of the study showed that transformational leadership highly correlated with followers' satisfaction with the leader and the system in the institutions of higher learning. Li, Sajjad, Wang, Muhammad Khaqan and Amina (2019) study findings also demonstrated the

b. Predictors: (Consultant, Transformational Leadership

significant impact of transformational leadership on trust in a leader, and its subsequent positive impact on the work engagement of the employees.

4.7.2.3 Regression analysis for Servant Leadership and Competency Development

The third study objective was to examine whether servant leadership significantly influenced competency development in the TVET institutions in Kenya. The results of the regression are presented in Table 4.23 which displays R as 0.241. This is a moderate relationship between the observed and predicted values of the dependent variable. It also shows that there is positive correlation between servant leadership and competency development in TVET institutions in Kenya. Table 4.23 also displays R squared as 0.058. This means that servant leadership can explain 5.8% of the competency development in the TVET institutions in Kenya. The remaining 94.20% can be explained by other factors excluded from the model. The adjusted R-square of 0.052 indicates that servant leadership in exclusion of the constant variable explained the change in competency development in TVET institutions in Kenya by 5.2%. The value of the standard error of the estimate is shown in the output as 0.037. It shows the average deviation of the dependent variable (competency development in TVET institutions) from the line of best fit.

Table 4.23 summarizes the results of an analysis of variance, with the sum of squares, degrees of freedom, and mean square being displayed for two sources of variation, regression, and residual. For the accounted for values, the mean square is 215.818, the F statistic is 12.375 and the degree of freedom (df) is 1. The output for residual which displays information about the variation that is not accounted for by the model has the following values: sum of squares as 3505.182 d.f as 201 and a mean square of 12.375. The overall relationship was statistically significant (F1,201 = 12.375, p < 0.05). It has a significance level of 0.000 this means that the chances are zero that the result of regression model are due to random events instead of a true relationship, which implies that the linear regression model is a good fit for the data

and hence can be used to predict the influence of servant leadership on the competency development in TVET institutions in Kenya.

Hypothesis Testing

The study hypothesized H_{a3} : There is a positive and significant relationship between servant leadership style and competency development in TVET institutions in Kenya. The study results of the survey in Table 4.24 revealed that there was positive relationship between servant leadership style and competency development in TVET institutions in Kenya (β_3 =0.237, t cal= 6.778> t critical =1.96, p-value < 0.05). To test the relationship the Regression Model fitted was Y= β_0 + β_1 X₃ + ξ , that is Y= 3.654 + 0.237X₃

The alternative hypothesis (Ha₃): servant leadership has a positive and significant influence on the competency development in TVET institutions in Kenya or (Ha₃: \Box $j \neq 0$) is therefore accepted (β_3 =0.237, t cal = 6.778 > t critical =1.96, p - value < 0.05) and conclude that servant leadership (X₃) positively and significantly influences competency development in Technical and Vocational Education and Training Institutions in Kenya (Y).

Table 4.23: Regression Statistics (Servant Leadership and Competency Development) Model Summary

| | Model summary | | |
|-------|------------------|-------------------------|-----------------------------|
| R | \mathbb{R}^2 | Adjusted R ² | Std. Error of thee estimate |
| .241a | .058 | 052 | 037 |

| Predictor: (constant), | Servant leadership |
|------------------------|--------------------|
| ANOVA Statistics | |

| Model | | Sum | Df | Mean | F | Sig |
|-------|------------|----------|-----|---------|--------|------|
| | | squares | | Square | | |
| 1 | Regression | 215.818 | 1 | 215.818 | 12.375 | .000 |
| | Residual | 3505.182 | 201 | 17.439 | | |
| | Total | 3721.000 | 202 | | | |

a. Dependent variable. Competency Development

b. Predictors: (constant), Servant Leadership

The study findings concur with the findings by Wang, Yu, Xi and Zhang (2019) who examined the effect of servant leadership on followers' subjective career success and the mediating role of career skills in an IT company. The study established that servant leadership had a positive effect on career satisfaction and perceived employability through career skills. The findings suggested that organizations should select and train leaders to practice servant leadership since it enhances employee subjective career success as per the expected competences.

4.7.2.4 Regression analysis for Laissez-faire Leadership and Competency Development

The fourth study objective was to establish whether Laissez-faire leadership significantly influenced competency development in the TVET institutions in Kenya. The results of the regression are presented in Table 4.24 displays R as 0.287. This is a moderate relationship between the observed and predicted values of the dependent variable. It also shows that there is positive correlation between Laissez-faire leadership and competency development in TVET institutions in Kenya. Table 4.24 also displays R squared as 0.082. This means that Laissez-faire leadership can explain 8.2% of the competency development in the TVET institutions in Kenya. The remaining percentage (91.80%) can be explained by other factors excluded from the model. The adjusted R-square of 0.079 indicates that Laissez-faire leadership in exclusion of the constant variable explained the change in competency development in TVET institutions in Kenya by 7.9%. The value of the standard error of the estimate is shown in the output as 0.853. It shows the average deviation of the dependent variable (competency development in TVET institutions) from the line of best fit.

Table 4.24 summarizes the results of an analysis of variance, with the sum of squares, degrees of freedom, and mean square being displayed for two sources of variation, regression, and residual. For the accounted for values, the mean square is 305.122, the F statistic is 17.955 and the degree of freedom (df) is 1. The output for residual sum has the values of 3415.878 d.f as 201 and a mean square of 16.994. The

overall relationship was statistically significant (F1,201 = 17.955, p < 0.05). It has a significance level of 0.000 this means that the chances are zero that the result of regression model are due to random events instead of a true relationship, which implies that the linear regression model is a good fit for the data and hence can be used to predict the influence of Laissez-faire leadership on the competency development in TVET institutions in Kenya.

Hypothesis Testing

The study hypothesized Ha4: There is a positive and significant relationship between Laissez- faire leadership style and competency development in Technical and Vocational Education and Training Institutions in Kenya.

The study results of the survey in Table 4.24 revealed that there was positive relationship between Laissez-faire leadership style and competency development in TVET institutions in Kenya (β_4 =0.290, t cal = 8.542 > t critical = 1.96, p-value < 0.05). To test the relationship the Regression Model fitted was Y= β_0 + β_1 X₄ + ξ , that is Y=4.322 + 0.290X₄

The alternative hypothesis (Ha₄): Laissez-faire leadership has a positive and significant influence on the competency development in TVET institutions in Kenya or (Ha₄: \Box j \neq 0) is therefore accepted (β_4 = 0.290, t cal = 8.542 > t critical = 1.96, p-value < 0.5) and conclude that Laissez-faire leadership (X₄) positively and significantly influences competency development in Technical and Vocational Education and Training Institutions in Kenya (Y).

Table 4.24: Regression Statistics (Laissez-faire Leadership and Competency Development)

| | Model summary | 7 | |
|-------|------------------|----------------------------|-----------------------------|
| R | \mathbb{R}^2 | Adjusted R ² | Std. Error of thee estimate |
| .287a | .082 | 079 | 853 |

Predictor: (constant), Laissez-faire leadership

ANOVA Statistics

| Model | | Sum | Df | Mean | F | Sig |
|-------|------------|----------|-----|---------|--------|------|
| | | squares | | Square | | |
| 1 | Regression | 305.122 | 1 | 305.122 | 17.955 | .000 |
| | Residual | 3415.878 | 201 | 16.994 | | |
| | Total | 3721.000 | 202 | | | |

a. Dependent variable. Competency Development

Kosgei, Tanui and Rono (2018) study examined the influence of selected principal's leadership styles on the performance of students during K.C.S.E. in public secondary schools in Narok South Sub-County in Kenya. The findings of the research revealed that autocratic, democratic, and laissez-faire leadership styles were commonly used with preference given to democratic style of leadership. From the findings, the research further revealed that laissez- faire leadership style was the least adopted leadership style.

4.7.3 Multiple Regression Analysis

Multiple regression analysis was used to determine whether independent variables, Transactional Leadership (X_1) , Transformational Leadership (X_2) , Servant leadership (X_3) and Laissez-faire leadership (X_4) simultaneously influence the dependent variable which is competency development in TVET institutions in Kenya (Y). To test the combined influence of leadership styles on competency development in TVET institutions in Kenya, the study hypothesized that simultaneously, transactional leadership, transformational leadership servant leadership and laissez-faire leadership influence competency development in Technical and Vocational Education and Training Institutions in Kenya.

The results of the regression are presented in Table 4.25 displays R (the correlation between the observed and predicted values of the dependent variable), which is 0.849. This is a strong relationship between the observed and predicted values of the dependent variable. It also shows that there is positive correlation between combined influence of leadership styles and competency development in TVET institutions in Kenya. Table 4.25 also displays R squared which is the proportion of variation in the dependent variable explained by the regression model, in this case, it is 0.721. This means that combined leadership styles can explain 72.10% of the competency development in the TVET institutions in Kenya. The remaining percentage (27.90%) can be explained by other factors excluded from the model. The adjusted R-square of 0.698 indicates that leadership styles (transformational leadership, transactional leadership, laissez-faire leadership, and servant leadership) in exclusion of the constant variable explained the change in competency development in TVET institutions in Kenya by 69.80%. The value of the standard error of the estimate is shown in the output as 0.087. It shows the average deviation of the dependent variable (competency development in Technical and Vocational Education and Training Institutions) from the line of best fit.

Table 4.25 summarizes the results of an analysis of variance, with the sum of squares, degrees of freedom, and mean square being displayed for two sources of variation, regression, and residual. For the accounted for values, the mean square (the sum of squares divided by the degrees of freedom), is 2682.841, the F statistic (the regression mean square divided by the residual mean square) is 127.924 and the degree of freedom (df) is 4 whereas the output for residual which displays information about the variation that is not accounted for by the model has the following values: sum of squares as 1038.159 d.f as 198 and a mean square of 5.243. The overall relationship was statistically significant (F4,198 = 127.924, p < 0.05). It has a significance level of 0.000 which means that the chances are zero that the result of regression model are due to random events instead of a true relationship, which implies that the linear regression model is a good fit for the data and hence can be used to predict the influence of leadership styles on the competency development in

TVET institutions in Kenya. This implies that leadership styles [Transactional leadership (X_1) , Transformational leadership (X_2) , Servant leadership (X_3) and Laissez-faire leadership (X_4)] are significant predictors at explaining the competency development in TVET institutions in Kenya and that the model is significantly fit at 5% level of significance.

Further, the study ran the procedure of obtaining the regression coefficients, and the results are shown on Table 4.25. The coefficients or beta weights for each variable allows the researcher to compare the relative importance of each independent variable. In this study the unstandardized coefficients and standardized coefficients are given for the multiple regression equations. However, discussions are based on unstandardized coefficients. The significance of each independent variable (leadership style) in the model, the beta value, t- values and p-values were used to answer the question; which of the independent variables (leadership styles) play a more important role in competency development in TVET institutions TVET institutions in Kenya?

According to Table 4.25, the multiple regression model equation would be $(Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon)$ becomes: $Y = 0.432 + 0.424 X_1 + 0.448 X_2 + 0.414 X_3 + 0.407 X_4$. This indicates that competency development in Technical and Vocational Education and Training Institutions in Kenya = 0.432 + 0.424 (Transactional Leadership) + 0.448 (Transformational Leadership) + 0.407 + 0.414 (Servant Leadership) + (Laissez – Faire Leadership). According to the regression equation established, taking all factors into account (Transactional Leadership, Transformational Leadership, Laissez, Servant Leadership and Faire Leadership) constant at zero, competency development in TVET institutions in Kenya was 0.432.

Findings in Table 4.25 showed that transactional leadership had coefficients of estimate which was significant basing on (β 1=0.424, t cal = 2.667 > t critical = 1.96, p - value < 0.05). Also, the influence of transactional leadership is more than the effect attributed to the error, this is indicated by the t-test value = 2.667, thus we

conclude that there is a significant relationship between transactional leadership and competency development in TVET institutions in Kenya.

The alternative hypothesis that there is a positive and significant relationship between transactional leadership and competency development in TVET institutions in Kenya is therefore failed to be rejected (P < 0.05). Thus, transactional leadership is used as a response to competency development in TVET institutions in Kenya. In addition, study results in Table 4.25 indicated that transformational leadership had coefficients of estimate which was significant basing on (β 1=0.448, t cal= 3.156 > t critical = 1.96, p - value < 0.05). Also, the influence of transformational leadership is more than the effect attributed to the error, this is indicated by the t-test value = 2.667, thus we conclude that there is a significant relationship between transformational leadership and competency development in TVET institutions in Kenya. The alternative hypothesis that there is a positive and significant relationship between transformational leadership and competency development in TVET institutions in Kenya is therefore failed to be rejected (P < 0.05). Thus, transformational leadership is used as a response to competency development in TVET institutions in Kenya.

Moreover, study results in Table 4.25 indicated that servant leadership had coefficients of estimate which was significant basing on ($\beta_1 = 0.414$, t cal = 2.290 > t critical = 1.96, p - value < 0.05). Also, the influence of servant leadership is more than the effect attributed to the error, this is indicated by the t-test value = 2.045, thus we conclude that there is a significant relationship between servant leadership and competency development in TVET institutions in Kenya. The alternative hypothesis that there is a positive and significant relationship between servant leadership and competency development in TVET institutions in Kenya is therefore failed to be rejected since P < 0.05. Thus, servant leadership is used as a response to competency development in TVET institutions in Kenya.

Further, study results in Table 4.25 indicated that laissez-faire leadership had coefficients of estimate which was significant basing on (β_1 =0.407, t cal= 2.045> t critical =1.96, p-value < 0.05). Also, the influence of laissez-faire leadership is more

than the effect attributed to the error, this is indicated by the t-test value = 2.045, thus we conclude that there is a significant relationship between laissez-faire leadership and competency development in TVET institutions in Kenya.

The alternative hypothesis that there is a positive and significant relationship between laissez-faire leadership and competency development in TVET institutions in Kenya is therefore failed to be rejected (P < 0.05). Thus, laissez-faire leadership is used as a response to competency development in TVET institutions in Kenya. Therefore, based on the results in Table 4.25, it can be deduced that the most significant factor is transformational leadership, followed by transactional leadership, then servant leadership and laissez-faire leadership. The beta values for these variables; 0.448, 0.424, 0.414 and 0.407 respectively indicate that the dependent variable (competency development in TVET institutions in Kenya) would change by a corresponding number of standard deviations when the respective independent variables change by one standard deviation. The order of importance of the factors is similar to that suggested by the bivariate correlation analysis using the zero order correlation coefficients as shown in table 4.20 above.

Table 4.25: Multiple Regression Analysis Statistics: Independent Variables and Competency Development

| | | odel mmary | | | | |
|--------------------|---------------------------------|----------------|----------------|-----------------|---------------|------|
| R | R2 | | Adjusted R2 | Std. Error of t | thee estimate | |
| .849 | .72 | .1 . | 658 | 087 | | |
| Predictor: ANOVA S | (constant), Serva Statistics | ant leadershi | p | | | |
| Model | | Sum squares | Df | Mean Square | F | Sig |
| 1 | Regression | 268.841 | 4 | 670.710 | 127.924 | .000 |
| | Residual | 1038.159 | 198 | 5.243 | | |
| | Total | 3721.000 | 202 | | | |

Dependent Variable: Competency Development

a. Predictors: (constant), Transformational leadership, Transactional leadership, Laisses-faire leadership Servant Leadership

| | Unstand | | | Standardized coefficient | | |
|--------------------------------|---------|---------|--------------|--------------------------|-------|-------|
| Model | Beta | | Std error | Beta | T | Sig. |
| 1 (constant) | 3.654 | | .143 | | 3.025 | . 027 |
| Transformational Leadership | .432 | | .159 | .365 | 2.667 | 034 |
| Transactional leadership | .424 | | 142 | .433 | 3.156 | .026 |
| Laisses-faire leadership | .448 | | 200 | .339 | 2.045 | .048 |
| Servant Leadership | .409 | | 181 | .344 | 2.290 | .037 |
| • | В | Std. Er | ror | В | | |
| Constant) | .432 | .143 | | | 3.025 | .02 |
| Γransactional Leadership | .424 | .159 | | .365 | 2.667 | .034 |
| Γransformational | .448 | .142 | | .433 | 3.156 | .02 |
| Servant Leadership | .414 | .181 | | .344 | 2.290 | .03 |
| Laissez-faire Leadership | .409 | .200 | | .339 | 2.045 | .04 |

4.7.4 Moderated Regression analysis

The fifth study objective sought to establish whether organizational culture moderates the relationship between leadership styles (transactional, transformational, servant leadership, laissez-faire) and TVET institutions in Kenya. The study hypothesized as follows:

Hypothesis five (Ha₅): Organizational culture significantly moderates the relationship between leadership styles and competency development in TVET institutions in Kenya.

4.7.4.1 Moderated regression analysis for Organization Culture on the relationship between Transactional Leadership and Competency Development

Moderated regression analysis was carried to estimate the interaction effect and test the moderating influence of organization culture on the relationship between transactional leadership and competency development in TVET institutions in Kenya. The hypothesis to test for this specific objective was:

Ha₁ — Organization culture does moderate the relationship between transactional leadership and competency development in TVET institutions in Kenya.

To determine if organization culture moderates the relationship between transactional leadership and competency development in TVET institutions in Kenya, three models have been fitted hierarchically with;

Model 1: $Y = \beta 0 + \beta_1 X_1 + \epsilon$; Model 2: $Y = \beta 0 + \beta_1 X_1 + \beta m$ M + ϵ ; Model 3: $Y = \beta 0 + \beta_1 X_1 + \beta_2 M + \beta_3 X_1 * M + \epsilon$; Where Y is Competency development in Technical and Vocational Education and Training Institutions in Kenya, X_1 Transactional leadership, M is Organization Culture and $X_1 * M$ is the interaction term between transactional leadership and Organization Culture

In Table 4.26 and in Model 1, the F change for X1 was significant (F change = 11.025, P < 0.05), implying that X1 did significantly influence Y as discussed earlier in Table 4.21. In Model 2, when M (organization culture) was added as a predictor to the model containing X_1 the model was still significant (F change = 5.596, P < 0.05). In Model 3, when the interaction term was introduced, the model remained the same (significant) (F change = 4.159, P < 0.05). This means that M (organization culture) is a significant moderator of the relationship between transactional leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.

- 1) Model 1 having X_1 as the predictor (see Table 4.26). Therefore, the model equation for transactional leadership is $Y = 2.876 + 0.225X_1$
- 2) Model 2 having X_1 and the moderation variable as a predictor (see Table 4.26). Thus, the model equation for transactional leadership and organization culture as a predictor is $Y = 1.987 + 0.231X_1 + 0.145M$.

3) Model 3 is model 2 with interaction term between X_1 and the moderating variable (see Table 4.26). Thus, the model equation for transactional leadership and organization culture as a predictor is $Y = 1.432 + 0.324 X_1 + 0.132 M + 0.235 X_1 * M$

Table 4.26: Moderated Multiple Regression Statistics: (Organization Culture, Transactional Leadership and Competency Development)

| | | Change Statistics | | | | | | | | | |
|-------|-------|-------------------|----------|----------|----------------|--------|-----|-----|--------|--|--|
| Model | R | \mathbb{R}^2 | Adjusted | Std | \mathbb{R}^2 | F | Df1 | Df2 | Sig F | | |
| | | | R | Error of | change | Change | | | change | | |
| | | | | the | | | | | | | |
| | | | | estimate | | | | | | | |
| 1 | .229a | .0.052 | 0.047 | 0.453 | 0.051 | 11.025 | 1 | 201 | .000 | | |
| 2 | .232 | 0.053 | 0.053 | 0.051 | 0.052 | 5.596 | 1 | 200 | .000 | | |
| 3 | .243c | 0.059 | 0.059 | 0.054 | 0.054 | 4.159 | 1 | 199 | .000 | | |

a) Predictors: (Constant), Transactional leadership

ANOVA Statistics

| | Model | Sum of | Df | Mean | F | | Sig. |
|---|-------------------|---------------------|----------|---------|--------|-------|-------|
| 1 | Regressi | 193.492 | 1 | 193.492 | 11.02: | 5 | .000a |
| | Residual | 3527.508 | 201 | 17.550 | | | |
| 2 | Total Regressi | 3721.000 197.213 | 202 2 | 98.606 | 5.596 | | .000b |
| | Residual | 3523.787 | 200 | 17.619 | | | |
| 3 | Total Regressi | 3721.000 219.539 | 202 3 | 73.180 | 4.159 | .000c | |
| | Residual | 3501.461 | 199 | 17.595 | | | |
| | Total | 3721.000 | 202 | | | | |

Predictors: (Constant), Transactional leadership

Predictors: (Constant), Transactional leadership, Organization Culture, Predictors: (Constant), Transactional leadership, Transactional leadership *

Dependent Variable: Competency Development

b) Predictors: (Constant), Transactional leadership, Organization Culture

c)Predictors: (Constant), Transactional leadership, Organization Culture, Transactional leadership * Organization Culture

Regression Coefficients

| Model | Unstandar Coefficien | | Standard Coefficie | | Sig | |
|---------------|-------------------------|------|-----------------------|-------|------|--|
| | В | | or Beta | | | |
| Constant) | 2.876 | .742 | | 3.876 | .000 | |
| 1 | | | | | | |
| Transactional | .225 | .026 | .229 | 8.654 | .000 | |
| Leadership | | | | | | |
| 2(Constant) | 1.987 | .687 | | 2.890 | .000 | |
| Transactional | .231 | .030 | .231 | 7.654 | .000 | |
| Leadership | | | | | | |
| Organization | .145 | .036 | .041 | 3.927 | .000 | |
| Culture | | | | | | |
| 3(Constant) | 1.432 | .215 | | 6.654 | .000 | |
| Transactional | .324 | .041 | .216 | 7.876 | .000 | |
| Leadership | | | | | | |
| Organization | .132 | .034 | .038 | 3.847 | .000 | |
| Culture | | | | | | |
| Transactional | | | | | | |
| leadership* | .235 | .029 | .060 | 7.989 | .000 | |
| Organization | | | | | | |
| Culture | | | | | | |

a) Dependent Variable: Competency Development

The study findings are in tandem with the study results by Ahmad and Gelaidan (2011) on the organizational culture, leadership styles and employee's affective commitment to change in Yemen Public Sector which showed that transactional leadership positively related to the employee's affective commitment to change. The results showed that organizational culture had positively moderated the relationship between the transactional leadership style and employee affective commitment to change.

4.7.4.2 Moderated Regression analysis for Organization Culture on relationship between Transformational Leadership and Competency Development

Moderated regression analysis was used to estimate the interaction effect and test the moderating effect of organization culture on the relationship between transformational leadership and competency development in TVET institutions in Kenya. The hypothesis to test for this specific objective was:

Ha₂ – Organization culture does moderate the relationship between transformational leadership and competency development in TVET institutions in KenyaTo determine if organization culture moderates the relationship between transformational leadership and competency development in TVET institutions in Kenya, in Table 4.27, three models have been fitted hierarchically with;

Model 1: $Y = \beta 0 + \beta_1 X_2 + \epsilon$; Model 2: $Y = \beta 0 + \beta_1 X_2 + \beta m$ M + ϵ ; Model 3: $Y = \beta 0 + \beta_1 X_2 + \beta_2 M + \beta_3 X_2 * M + \epsilon$; Where Y is Competency development in Technical and Vocational Education and Training Institutions in Kenya, X_2 Transformational leadership, M is Organization Culture and $X_2 * M$ is the interaction term between Transformational leadership and Organization Culture.

In Model 1, the F change for X_2 was significant (F change = 20.122, P < 0.05), implying that X_2 did significantly influence Y as discussed earlier in Table 4.22. In model 2, when M (organization culture) was added as a predictor to the model containing X_2 the model was still significant (F change = 10.253, < 0.05) In Model 3, when the interaction term was introduced, the model remained the same (significant) (F change = 5.890, P < 0.05). This means that M (organization culture) is a significant moderator of the relationship between transformational leadership and competency development in TVET institutions in Kenya.

- 1) Model 1 having X_2 as the predictor (see Table 4.27). Therefore, the model equation for transformational leadership is $Y = 4.780 + 0.299X_2$
- 2) Model 2 having X_2 and the moderation variable as a predictor (see Table 4.27). Thus, the model equation for transformational leadership and organization culture as a predictor is $Y = 3.247 + 0.306X_2 + 0.306M$
- Model 3 is model 2 with interaction term between X_2 and the moderating variable (see Table 4.27). Thus, the model equation for transformational leadership and organization culture as a predictor is $Y = 3.218 + 0.310X_2 + 0.265M + 0.309X_2*M$

Table 4.27: Moderating Effect of Organization Culture on Transformational

| Mode | el R | R ² | Adjust | tedEstimate | Change | F Chang | e df | 1 df2 | Change |
|------|-------|----------------|----------------|-------------|--------|---------|------|-------|--------|
| | | | \mathbb{R}^2 | | | | | | |
| 1 | .301a | .091 | .087 | .453 | .322 | 20.122 | 1 | 201 | .000 |
| 2 | .305b | .093 | .091 | .467 | .022 | 10.253 | 1 | 200 | .000 |
| 3 | .308c | .094 | .092 | .837 | .061 | 5.890 | 1 | 199 | .000 |

- a) Predictors: (Constant), Transformational Leadership
- b) Predictors: (Constant), Transformational Leadership, Organization Culture
- c) Predictors: (Constant), Transformational leadership, Organization Culture,

Transformational

Leadership*Organization Culture

ANOVA Statistics

| | Model | Sum of squares | Df | Man | F | Sif |
|---|------------|----------------|-----|---------|--------|-------|
| | Regression | 338.611 | 1 | 38.611 | 20.122 | .000a |
| | Residual | 3382.389 | 201 | 16.828 | | |
| | Total | 3721.000 | 202 | | | |
| 2 | Regression | 346.053 | 2 | 173.026 | 10.253 | .000b |
| | Residual | 3374.947 | 200 | 16.875 | | |
| | Total | 3721.000 | 202 | | | |
| 3 | Regression | 349.774 | 3 | 116.591 | 5.890 | .000c |
| | Residual | 3371.226 | 199 | 16.941 | | |
| | Total | 3721.000 | 202 | | | |

The study findings agree with the findings by Alneyadi, Al-Shibami, Ameen and Bhaumik (2019) on the moderating effect of organizational culture on relationship between transformational leadership and human capital in the public sector of UAE. The study aimed at evaluating the role of organizational culture between transformational leadership and human capital in the public sector in the UAE. The study improved the insight into the importance of transformational leadership and organizational culture in that the results indicated that transformational leadership significantly predicted human capital, in addition to collectivism having a significant moderating role between transformational leadership and human capital. This

implied that organizational culture moderated the relationship between transformational leadership and human capital in the public sector of UAE.

4.7.4.3 Moderated regression analysis for Organization Culture on relationship between Servant Leadership and Competency Development

Moderated regression analysis was used to estimate the interaction effect and test the moderating influence of organization culture on the relationship between servant leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya. The hypothesis to test for this specific objective was:

Ha₃ – Organization culture does moderate the relationship between servant leadership and competency development in TVET institutions in Kenya

To determine if organization culture moderates the relationship between servant leadership and competency development in TVET institutions in Kenya, Table 4.28, the three models have been fitted hierarchically with. To test the hypothesis, the following models were fitted. Model 1: $Y = \beta 0 + \beta_1 X_4 + \epsilon$; Model 2: $Y = \beta 0 + \beta_1 X_4 + \beta_2 M + \beta_3 X_3 * M + \epsilon$; Where Y is Competency development in TVET institutions in Kenya, X_3 is Servant Leadership, M is Organization Culture and $X_3 * M$ is the interaction term between Servant Leadership and Organization Culture

In Model 1, the F change for X_3 was significant (F change = 12.375, P < 0.05), implying that X_3 did significantly influence Y as discussed earlier in Table 4.24. In Model 2, when M (organization culture) was added as a predictor to the model containing X_3 the model was still significant (F change = 7.066, P < 0.05). In Model 3, when the interaction term was introduced, the model remained the same (significant) (F change = 5.456, P < 0.05). This means that M (organization culture) is a significant moderator of the relationship between servant leadership and competency development in TVET institutions in Kenya.

1) Model 1 having X_3 as the predictor (see Table 4.28). Therefore, the model equation for servant leadership is $Y = 3.654 + 0.237X_3$

- 2) Model 2 having X_4 and the moderation variable as a predictor (see Table 4.28). Thus, the model equation for servant leadership and organization culture as a predictor is Y =
- 3) $2.678 + 0.243 X_3 + 0.145M$
- 4) Model 3 is model 2 with interaction term between X_3 and the moderating variable (see Table 4.28). Thus, the model equation for servant leadership and organization culture as a predictor is $Y=2.879\pm0.268X_3\pm0.187M\pm0.187X_3*M$

Table 4.28: Moderating Effect (organization culture, competency development)

| | | | | | Change | statistics | | | |
|------------|-------|-------------------------|-------------|----------------|-------------|-------------|-----|-----|---------------|
| Model 1 | R | Adjusted R ² | R Square | | R square | F change | Df1 | Df2 | Sig change |
| | | | | of estimate | | | | | |
| 1 | .241 | .058 | .055 | .098 | .580 | 12.375 | 1 | 201 | .000 |
| 2 | .258b | .066 | .062 | .467 | .325 | 7.066 | 1 | 200 | .000 |
| 3 | .276c | .076 | .074 | .837 | .432 | 5.456 | 1 | 199 | .000 |

Regression Coefficients

| Model | Sum of Squares | df | Mean | F | Sig. |
|------------|--|--|--|---|---|
| Residual | 3505.182 | 201 | 17.994 | | |
| Total | 3721.000 | 202 | | | |
| Regression | 245.586 | 2 | 122.793 | 7.066 | .000b |
| Residual | 3475.414 | 200 | 17.377 | | |
| Total | | | | | |
| Regression | | | | | |
| Residual | 3438.204 | 199 | 17.277 | | |
| Total | 3721.000 | 202 | | | |
| | Residual Total Regression Residual Total Regression Residual | Residual 3505.182 Total 3721.000 Regression 245.586 Residual 3475.414 Total Regression Residual 3438.204 | Residual 3505.182 201 Total 3721.000 202 Regression 245.586 2 Residual 3475.414 200 Total Regression Residual 3438.204 199 | Residual 3505.182 201 17.994 Total 3721.000 202 Regression 245.586 2 122.793 Residual 3475.414 200 17.377 Total Regression Residual 3438.204 199 17.277 | Residual 3505.182 201 17.994 Total 3721.000 202 Regression 245.586 2 122.793 7.066 Residual 3475.414 200 17.377 Total Regression Residual 3438.204 199 17.277 |

a) Predictors: (Constant), Servant Leadership b) Predictors: (Constant), Servant leadership, Organization culture c)Predictors: (Constant), Servant leadership, organization culture, Servant leadership*organization culture

d) Dependent Variable: Competency Development

| Unstandardized | t |
|----------------|---|
| | |

| | coefficients | | Standardiz coefficient | |
|----------------------|--------------|------------|------------------------|------------|
| | В | Std. Error | Beta | T |
| | | | | Sig |
| 1(Constant) | 3.654 | .935 | | 3.908 .000 |
| Servant Leadership | .237 | .035 | .241 | 6.778 .000 |
| 2(Constant) | 2.678 | .546 | | 4.898 .000 |
| Servant Leadership | .243 | .027 | .267 | 8.872 .000 |
| Organization culture | .145 | .043 | .041 | 3.325 .000 |
| 3(Constant) | 2.879 | .564 | | 5.098 .000 |
| Servant Leadership | .268 | .035 | .267 | 7.549 .000 |
| Organization culture | .187 | .076 | .038 | 2.456 .000 |
| Servant leadership* | 245 | .039 | .060 | 6.218 .000 |
| Organization Culture | | | | |

The study findings are in tandem with findings by Wowor (2014) on the moderating influence of organizational culture on the impact of servant leadership and job satisfaction on community policing officers' job performance in Indonesia. The study established that Organization culture had a moderating effect on the relationship between servant leadership and job satisfaction on community policing officers' job performance in Indonesia.

4.7.4.3 Moderated regression analysis for Organization Culture on relationship between Laissez-faire Leadership and Competency Development

Moderated regression was carried out to estimate the interaction influence and test the moderating influence of organization culture on the relationship between laissezfaire leadership and competency development in TVET institutions in Kenya. The hypothesis to test for this specific objective was:

Ha₄ – Organization culture does moderate the relationship between Laissez-faire leadership and competency development in TVET institutions in Kenya.

To determine if organization culture moderates the relationship between Laissez-faire leadership and competency development in TVET institutions in Kenya, in Table 4.28, three models have been fitted hierarchically with; Model 1: $Y = \beta 0 + \beta_1 X_4 + \epsilon$;

Model 2: $Y = \beta 0 + \beta_1 X_4 + \beta m$ M + ϵ ; Model 3: $Y = \beta 0 + \beta_1 X_4 + \beta_2 M + \beta_3 X_4 * M + \epsilon$; Where Y is Competency development in TVET institutions in Kenya, X_4 laissez-faire leadership, M is Organization Culture and $X_4 * M$ is the interaction term between laissez-faire leadership and organization culture. In Model 1, the F change for X_4 was significant (F change = 17.955, P<0.05), implying that X_4 did significantly influence Y as discussed earlier in Table 4.23. In Model 2, when M (organization culture) was added as a predictor to the model containing X_4 the model was still significant (F change = 9.051, P < 0.05). In Model 3, when the interaction term was introduced, the model remained the same (significant) (F change = 6.083, P < 0.05). This means that M (organization culture) is a significant moderator of the relationship between Laissez-faire leadership and competency development in TVET institutions in Kenya.

- 1) Model 1 having X_4 as the predictor (see Table 4.29). Therefore, the model equation for Laissez-faire leadership is $Y = 4.322 + 0.290X_4$
- 2) Model 2 having X_4 and the moderation variable as a predictor (see Table 4.29). Thus, the model equation for Laissez-faire leadership and organization culture as a predictor is $Y = 3.456 + 0.289X_4 + 0.169M$
- 3) Model 3 is model 2 with interaction term between X3 and the moderating variable (see Table 4.29). Thus, the model equation for Laissez-faire leadership and organization culture as a predictor is $Y = 3.218 + 0.291X_4 + 0.242M + 0.298X_4*M$

Table 4.29: Moderating Effect (Organization Culture, Laissez-faire leadership and Competency Development)

| | | | | | C | hange st | tatist | ics | | |
|-------|-------|--------|----------|--------------|----------|----------|--------|-----|-------|----|
| ' | | R | Adjusted | Std. Error o | fR Squar | еF | | | Sig. | F |
| Model | R | Square | R Square | the Estimate | Change | Change | df1 | df2 | Chang | ;e |
| 1 | .287a | .082 | .079 | .853 | .543 | 17.955 | 1 | 201 | .000 | |
| 2 | .289b | .083 | .081 | .467 | .325 | 9.051 | 1 | 200 | .000 | |
| 3 | .291c | .084 | .082 | .837 | .432 | 6.083 | 1 | 199 | .000 | |

- a) Predictors: (Constant), Laissez-faire Leadership
- b) Predictors: (Constant), Laissez-faire leadership, Organization culture
- c) Predictors: (Constant), Laissez-faire leadership, Organization culture, Laissez-faire leadership * Organization culture

ANOVA Statistics

| Model | Sum of Squares | Df | Mean F Sig. |
|--|--|----------------------|--|
| 1 Regression | 305.122 | 1 | 305.12217.955.000ba |
| Residual | 3415.878 | 201 | 16.994 |
| Total | 3721.000 | 202 | |
| 2 Regression Residual Total 3 Regression | 308.843 3412.157 3721.000 312.564 | 2 200 202 3 | 154.4229.051 .000b 17.061 104.1886.083 .000c |
| Residual Total | 3408.436 3721.000 | 199 202 | 17.128 |

Regression Coefficients

| Model | Unstandardized | | Standardized | | |
|-------------------------------|----------------|--------------|------------------|----------------|------|
| | | В | Std. | Beta | sig |
| 1 (Constant) | | 4.322 | .882 | 4.898 | .000 |
| Laissez-faire 2 (Constant) | e Leadershin | 290 3.456 | 034 .912 | 8 542 3.786 | 000. |
| Laissez-faire Organization | | .289 .169 | .033 . .056 . | 8.546 2.989 | .000 |
| 3 (Constant) | | 3.218 | .627 | 5.125 | .000 |
| Laissez-faire | e Leadership | .291 | .034 . | 8.578 | .000 |
| Organization | n Culture | .242 | .062 . | 3.847 | .000 |
| Laissez-faire | e Leadersh | nip* .298 | .032 .060 | 9.075 | |

a: Dependent Variable: Competency Development

4.8 Moderated Optimal Model

The optimal model presents the overall model summary of moderating effect of organization culture on the relationship between leadership styles and competency development in TVET institutions in Kenya. The fifth specific objective of the study was to determine the moderating effect of organization culture on relationship between leadership styles (transactional leadership, transformational leadership, laissez-faire leadership, servant leadership) and competency development in TVET institutions in Kenya. The hypothesis to test for this specific objective was:

Ha5: Organizational culture moderates the relationship between leadership styles and competency development in TVET institutions in Kenya.

$$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_1 M X_1 M + \beta_2 M X_2 * M + \beta_3 M X_3 * M + \beta_4 M X_4 * M + \epsilon, (i = 1, 2, 3, 4)$$

Where Y is Competency development (Dependent variable); X_1 = Transactional leadership; X_2 = Transformational leadership; X_3 = Servant leadership; X_4 = Laissez-faire leadership; M is the hypothesized moderator (Organization culture). Model 1 represents the independent variables (transactional leadership, transformational leadership, servant leadership, laissez-faire leadership,) and the dependent variables (competency development in TVET institutions in Kenya). Model 2 represents the regression model with the independent variables (transactional leadership, transformational leadership, servant leadership, laissez-faire leadership) and the moderator (Organization culture) as the predictor. As shown in Table 4.30, the moderator as a predictor was significant in the model. Beta coefficient for organization culture as a predictor was significant ($\beta_1 = 0.823$, t cal = 5.015 > t critical = 1.96, p - value < 0.05). Meaning that for one unit improvement in organization culture, index performance improves by 0.823.

The model equation is: $Y=0.366+0.405X_1+0.395X_2+0.378X_3+0.421X_4+0.516M$. Where X_1 = Transactional leadership; X_2 = Transformational leadership; X_3 = Servant Leadership; X_3 = Laissez-faire leadership X_4 ; M= Organizational Culture. Model 3 represents the regression model with the independent variable, the moderating variable, and the interaction term. Using the results in Table 4.30, the

study failed to reject the alternative hypothesis Ha₅: Organizational culture moderates the relationship between leadership styles and competency development in TVET institutions in Kenya. The study found out that organization culture does significantly moderate the relationship between leadership styles and competency development in TVET institutions in Kenya.

Further, the regression coefficients remained unchanged at the levels presented in the same table for each independent variable, and as such, in concurrence with the hypothesis that each individually positively influences competency development in TVET institutions in Kenya. The interpretation of these results was that the contributions of all variables collectively were positive. That is, there was a positive relationship between leadership styles and competency development in TVET institutions in Kenya. The model can be represented as follows: $Y = 0.328 + 0.264X1 + 0.256X2 + 0.253X3 + 0.278X4 + 0.215X1*M+0.322 X2*M+0.243X3*M +0.253X4*M. Where; <math>X_1 = \text{Transactional leadership}$; $X_2 = \text{Transformational leadership}$; $X_3 = \text{Servant Leadership}$; $X_4 = \text{Laissez-faire leadership}$; M = Organizational Culture

Table 4.30: Overall Joint Moderating Effect

| Change Statistics | | | | | | | | | |
|-------------------|--------|----------|-------|-------|--------|--------------|-----|-----|----------|
| Model | R | | Std. | Error | R | \mathbf{F} | df1 | df2 | 2 Change |
| | Square | Adjusted | of | the | Square | Change | | | |
| | | R square | Estin | nate | Change | | | | |
| 1 | .607 | .595 | .654 | .623 | 76.4 | 154 4 | 1 | 98 | .000 |
| 2 | .669 | .658 | .467 | .625 | 46.8 | 397 5 | 1 | 97 | .000 |
| 3 | .677 | .669 | .837 | .632 | 44.9 | 950 | 1 | 93 | .000 |

ANOVA Statistics

| | Model | Sum of Squares | Df | Mean | F | Sig. |
|---|------------|----------------|-----|---------|--------|-------|
| 1 | Regression | 2258.647 | 4 | 564.662 | 76.454 | .000a |
| | Residual | 1462.353 | 198 | 7.385 | | |
| | Total | 3721.000 | 202 | | | |
| 2 | Regression | 2489.349 | 5 | 497.869 | 79.633 | .000b |
| | Residual | 1231.651 | 197 | 6.252 | | |
| | Total | 3721.000 | 202 | | | |
| 3 | Regression | 2519.117 | 9 | 279.902 | 44.950 | .000c |
| | Residual | 1201.883 | 193 | 6.227 | | |

The findings are consistent with studies by Rehman, Bhatti, and Chaudhry (2019)

| | Unstandardize coefficient | d | Unstandardized coefficient | T | Sig |
|--|---------------------------|-------|----------------------------|-------|------|
| Model 1 | В | Std | Beta | | |
| | | Error | | | |
| 1. (Constant) | .432 | .143 | | 3.023 | .027 |
| Transactional Leadership | .424 | .159 | .365 | 2.667 | .034 |
| Transformational Leadership | .448 | .142 | 433 | 3.156 | .026 |
| Laissez-faire Leadership | .409 | .200 | .339 | 2.045 | .048 |
| Servant Leadership | .414 | .181 | .344 | 2.290 | .037 |
| 2. (Constant) | .366 | .149 | • | 2.456 | .034 |
| Transactional Leadership | .405 | .151 | .389 | 2.680 | .013 |
| Transformational Leadership | .395 | .184 | .326 | 2.248 | .022 |
| Laissez-faire Leadership | .378 | .187 | .292 | 2.024 | .032 |
| Servant Leadership | .421 | .139 | .391 | 3.032 | .011 |
| Organization Culture | .516 | .103 | .455 | 5.015 | 006 |
| 3. (constant) | .328 | .150 | | 2.175 | .025 |
| Transactional Leadership | .264 | .121 | .256 | 2.189 | .021 |
| Transformational Leadership | .256 | .122 | .235 | 2.099 | .032 |
| Laissez-faire Leadership | .253 | .126 | .235 | 2.243 | .022 |
| Servant Leadership | .278 | 124 | .243 | 2013 | .041 |
| Organization Culture Transactional | .314 | .109 | .284 | 2.878 | .014 |
| leadership*Organization culture Transformational | .215 | 066 | .223 | 3.234 | .033 |
| leadership*Organization culture | .322 | .058 | .287 | 5.543 | .010 |
| Laissez-faire leadership*Organization culture | .243 | .077 | .030 | 3.145 | .023 |
| Servant leadership*Organization culture | .253 | .060 | .250 | 4.234 | .014 |

findings revealed that leadership styles had a significant influence on organizational learning, innovative culture and organizational performance in Malaysian SMEs. Hamzah, Othman, Hashim, Rashid and Besir (2013) study which established that organizational culture had moderating influence on the relationship between the leadership competencies and employees' job performance in Malaysian Public Universities. They recommended adoption of the right leadership competencies which will lead the organizations to excel in the highly competitive business environment.

4.9 Summary of Hypotheses Testing

The results of hypotheses testing as indicated in Table 4.31 shows that out of the five, hypothesized relationships, all the hypothesized relationships are significant. The study results indicated that transactional leadership, transformational leadership, laissez-faire leadership, and servant leadership had positive and significant relationship with competency development in the TVET institutions in Kenya. Further, the moderating effect of organizational culture on relationships between all explanatory variables (transactional leadership, transformational leadership, laissez-faire leadership, and servant leadership) and competency development in the Technical and Vocational Education and Training Institutions in Kenya were positive and significant.

Table 4.31: Summary of Hypotheses Testing

| Hypotheses | P-Value | Empirical Results |
|--|--------------------|---|
| Ha1: There is a positive and significant relationship between transformational leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya | Karl- Pearson's | Coefficient of correlation -F-test (ANOVA) -T-test $H0_1: \beta 1 = 0$ (Accepted Ha1) |
| Ha2: There is a positive and significant relationship between transactional leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya | < 0<0.05 | Positive and significant (Accepted Ha ₂ |
| Ha3: There is a positive and significant relationship between laissez-faire leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya | < 0<0.05 | Positive and significant (Accepted Ha ₃) |
| Ha4: There is a positive and significant relationship between servant leadership style and competency development in Technical and Vocational Education and Training Institutions in Kenya | < 0<0.05 | Positive and significant (Accepted Ha ₄ |
| Ha5: Organizational culture moderates the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya | < 0<0.05 | Positive and significant (Accepted Ha ₅) |

From the foregoing study findings, the conceptual model was revised by the order of the influence organizational culture had on the relationship between leadership styles and competency development. The modified conceptual framework of the study is illustrated showing that leadership styles dimensions namely transactional leadership, transformational leadership, laissez-faire leadership and servant leadership had a significant relationship with competency development in the Technical and Vocational Education and Training Institutions in Kenya as shown in Figure 4.1

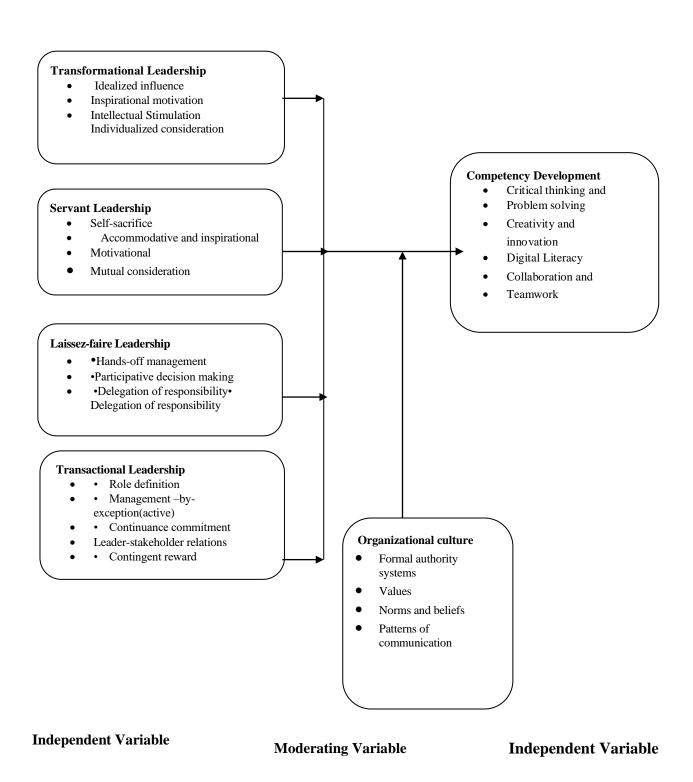


Figure 4.1: Revised Conceptual Framework

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents; a summary of the major findings of the study, conclusions, recommendations and discusses the implications of the findings of the study, offers a summary on data collection and analysis, discussion of the findings on each research objective and the logical interpretation emanating from the findings and conclusions. Finally, the chapter makes recommendations on possible areas for further research.

5.2 Summary of the Major Findings of the study

The purpose of this study was to examine the influence of leadership styles on competency development in Technical and Vocational Education and Training Institutions in Kenya. The study was guided by the following specific objectives which included to; establish the influence of transformational leadership styles on competency development in Technical and Vocational Education and Training Institutions in Kenya; Examine the influence of transactional leadership styles on competency development in Technical and Vocational Education and Training Institutions in Kenya; Examine the influence of laissez-faire leadership styles on competency development in Technical and Vocational Education and Training Institutions in Kenya; Assess the influence of servant leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya; Examine moderating influence of organizational culture on the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya. The specific findings relating to the study objectives are summarized in the following section.

5.2.1 Transactional Leadership

The first objective of the study sought to examine the influence of transactional leadership on competency development in Technical and Vocational Education and

Training Institutions in Kenya. The indicators of transactional leadership considered were role definition, leader-stakeholder relations, contingent reward, and management —by-exception (active). Descriptive and inferential statistics methods were used to arrive at the results. Most of the respondents agreed that transactional leadership influenced competency development in Technical and Vocational Education and Training Institutions in Kenya as depicted in the results. The findings shown in the correlation matrix indicated that there was a significant positive relationship between transactional leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.

Inferential statistics were also used to give findings and deductions. The dimensions of transactional leadership were found to be statistically significant in explaining competency development in Technical and Vocational Education and Training Institutions in Kenya. The regression results indicated that a change in transactional leadership caused a significant change in competency development in Technical and Vocational Education and Training Institutions in Kenya. The first alternative hypothesis (H₀₁) was accepted, and this indicated that there was a significant relationship between transactional leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.

The results showed that competency development in Technical and Vocational Education and Training Institutions in Kenya highly depended on objectivity in role definition, leader-stakeholder relations, contingent reward, and management –by-exception (active) could improve competency development. The responses to the opinion statements showed that most respondents agreed that transactional leadership affected competency development in Technical and Vocational Education and Training Institutions in Kenya. Therefore, the study findings indicated that transactional leadership improved competency development in Technical and Vocational Education and Training Institutions measured based on critical thinking and problem solving; creativity and innovation; digital literacy; collaboration and teamwork indicators.

5.2.2 Transformational Leadership

The second objective of the study sought to determine the influence of transformational leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya. The indicators of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The descriptive results showed that majority of the respondents agreed that significantly transformational leadership aspects influenced competency development in Technical and Vocational Education and Training Institutions in Kenya. The statistical results also showed that there was a strong positive correlation between idealized influence, inspirational motivation, intellectual stimulation and individualized consideration and competency development in Technical and Vocational Education and Training Institutions in Kenya. The regression results indicated that an increase in transformational leadership led to an increase in competency development in Technical and Vocational Education and Training Institutions in Kenya. The inferential statistics provided enough evidence to justify the rejection of the second null hypothesis (H₀₂) and therefore indicating that there was a relationship between transformational leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.

The responses to the opinion statements on transformational leadership showed that idealized influence, inspirational motivation, intellectual stimulation. individualized consideration significantly influenced competency development in Technical and Vocational Education and Training Institutions in Kenya. Most of the respondents explained that their management had not gone any extra mile to establish idealized influence, inspirational motivation, intellectual stimulation and individualized consideration to enhance competency development in Technical and Vocational Education and Training Institutions in Kenya.

5.2.3 Laissez-faire Leadership

The third objective of the study sought to determine the influence of laissez-faire leadership on competency development in Technical and Vocational Education and

Training Institutions in Kenya. The indicators that were considered for laissez-faire leadership were the elements of hands-off management, participative decision making, and delegation of responsibility and continuance commitment with most of the indicators having high mean scores from the respondents. The responses to the different opinion statements showed that through laissez-faire leadership, they motivated staff and students by rewarding those who achieved the desired outcome. The study findings show that they motivated staff and students by rewarding those who achieved the desired outcome and encouraged all within the institution to seek approval and ensure individual work was appraised at all stages. The respondents agreed that they gave all staff and students the freedom to solve their problems on their own and did not interfere until problems became serious.

The correlation analysis results showed that the relationship between laissez-faire leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya was positive and insignificant. A unit increase in laissez faire leadership led to an increase in competency development in Technical and Vocational Education and Training Institutions as indicated by the regression results. From the inferential statistics, there was enough evidence to justify the acceptance of the third alternative hypothesis (H₀₃) indicating that laissez-faire leadership does significantly influence competency development in Technical and Vocational Education and Training Institutions in Kenya.

5.2.4 Servant Leadership

The fourth objective of the study sought to examine the influence of servant leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya. The indicators of transactional leadership considered were self-sacrifice, accommodative and inspirational, motivational, and mutual consideration. Descriptive and inferential statistics methods were used to arrive at the results. Most of the respondents agreed that servant leadership influenced competency development in Technical and Vocational Education and Training Institutions in Kenya as depicted in the results. The findings show that most of the respondents agreed on the statement that they gave freedom in decision making to

staff and students. They listened and acted to the staff and students' grievances and practice and were considerate to staff and students' issues which touched on their wellness and growth, showed empathy and created hope and love by providing basic necessities and desires. It was also established that majority of respondents put in place mechanisms of improving and enhancing satisfaction of staff and students.

Inferential statistics were also used to give findings and deductions. The findings shown in the correlation matrix indicated that there was a significant positive relationship between servant leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya. The dimensions of servant leadership were found to be statistically significant in explaining competency development in Technical and Vocational Education and Training Institutions in Kenya. The regression results indicated that a change in servant leadership caused a significant change in competency development in Technical and Vocational Education and Training Institutions in Kenya. The fourth alternative hypothesis (H₀₄) was accepted and this indicated that there was a significant relationship between servant leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya.

The study findings concur with the findings by Wang, Yu, Xi and Zhang (2019) who examined the effect of servant leadership on followers' subjective career success and the mediating role of career skills. The moderating effect of followers' proactive personality was also investigated from employees of an IT company. It was established that servant leadership has a positive effect on career satisfaction and perceived employability through career skills. In addition, proactive personality moderates the association between servant leadership and career skills; such that the relationship is stronger when proactive personality is high. Proactive personality also moderates the indirect effect of servant leadership on career satisfaction and perceived employability. The findings suggest that organizations should select and train leaders to practice servant leadership to enhance employee subjective career success based on their competence.

5.2.5 Organization Culture

This study objective is founded on the hypothesized statement that 'Organizational culture significantly and positively moderates the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya." Based on the regression method, organization culture construct was interacted with each independent variable and the finding showed that it significantly moderated the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya. Therefore, the study alternate hypothesis that 'Organizational culture significantly and positively moderates the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya" was accepted. This implies that all independent variables when moderated by organization culture do positively influence the competency development in Technical and Vocational Education and Training Institutions in Kenya. The study results are in line with findings by Polishchuk (2015) on organizational culture of vocational and technical educational institution: concept, content, functions and features in Ukraine. It was established that VTE becomes market-based, and therefore the successful functioning of educational services should be in accordance with needs of contemporary socio-cultural and economic situation in the country due to good organizational culture. One of the major trends of its modernization is the creation and translation of organizational culture both inside an educational institution as an organization and outside it that push forward the necessity for studying organizational culture of vocational and technical education (VTE).

5.2.6 Competency Development

From both the descriptive and inferential statistics it was concluded that leadership styles significantly and positively influenced competency development in Technical and Vocational Education and Training Institutions in Kenya. The research hypotheses were tested, and it was established that the four study variables

(transactional leadership, transformational leadership, laissez-faire leadership and servant leadership) significantly competency development in Technical and Vocational Education and Training Institutions in Kenya. The study results indicated that respondents agreed that policies have been established to enhance development of competencies; efforts being made to identify individual learners' needs, competent and resourceful personnel were recruited and retained in the institution. The respondents disagreed that concerning facilities to enhance competencies have not been properly sourced and maintained. The study results corroborate with the findings by Anane (2013) study found that competency development in terms of proactiveness and proficiency in the TVET institutions when the institutions have appropriate leadership styles.

5.3 Conclusion of the Study

The study findings confirm that there is a statistically significant influence of transactional leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya. A positive increase in transactional leadership leads to an increase in competency development in Technical and Vocational Education and Training Institutions in Kenya. It can be concluded from this study that transactional leadership was statistically significant in explaining competency development in Technical and Vocational Education and Training Institutions in Kenya. The findings also support the previous research that transactional style is one of the predominant leadership styles in improving competency. Academics and administrators are adopting and adapting their transactional leadership styles that respond to the new organizational, social and cultural challenges and realities of today's society in institutions of higher learning (Afsar, Badir, Saeed & Hafeez, 2017).

Based on the study findings it was revealed that there exists a positive significant relationship between transformational leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya. The results reveal that transformational leadership is statistically significant in explaining

competency development in Technical and Vocational Education and Training Institutions in Kenya. This confirms the findings by Li, Sajjad, Wang, Muhammad Khaqan and Amina (2019) that transformational leadership traits, in addition to contingent rewards from transactional leadership, are highly correlated with students with the leader and the system in the institutions of learning to enhance competency development in the institutions.

It can be concluded that there was a statistically significant influence of servant leadership on competency development in Technical and Vocational Education and Training Institutions in Kenya. It was possible to infer that the relationship between servant leadership and competency development in Technical and Vocational Education and Training Institutions is positive and significant. The study concluded that servant leadership was statistically significant in competency development in Technical and Vocational Education and Training Institutions in Kenya. The findings support the previous researchers' findings that adopting effective servant leadership makes the learners more responsive to the needs and preferences of the learning institutions aimed to enhance their competency (Al-Hilla &U Al-Shobak, 2017; Malingkas *et al.*, 2018; Mukonoweshuro *et al.*, 2016).

It was established that there was a statistically positive and significant influence of Laissez-faire leadership competency development in Technical and Vocational Education and Training Institutions in Kenya. The study thus concluded that there is a positive and significant relationship between Laissez-faire leadership and competency development in Technical and Vocational Education and Training Institutions in Kenya. The study supported Ogola (2013) findings on laissez faire leadership styles have positive effect on both students' competency and principals and are highly recommended to institutions especially in this global competitive environment to improve learners' competency.

5.4 Recommendations of the Study

According to the study optimal study results, the study established that transactional leadership influence competency development in the Technical and Vocational

Education and Training Institutions in Kenya. The study recommends that managers or leaders need to involve an exchange process that results in follower compliance with leader request to generate enthusiasm and commitment to task objective. The leaders should focus on having internal actors perform the tasks required for the institutions to reach the desired goal of competency development, ensure that the path to goal attainment is clearly understood by the internal actors, to remove potential barrier within the system, and to motivate the actors to achieve the competency development in the institutions.

From the conclusion drawn from the findings is that the most preferred and dominant leadership style to enhance competency development in the Technical and Vocational Education and Training Institutions in Kenya is transformational leadership style. A transformational leadership will help the institutions to make positive changes in the way they do things to enhance competency development. This leadership style combines charisma, inspirational leadership, and intellectual stimulation in leading organizational members. This will cause a dramatic change in the way the institutions operate and achieve significant results regarding competency development

From the study findings it was established that laissez-faire leadership influence competency development in the Technical and Vocational Education and Training Institutions in Kenya. The principals' laissez-faire leadership style will decrease competency development in the institutions. So, they should try to avoid this type of leadership style. Contrarily, leaders should clarify expectations and provide goals and standards to be achieved for the followers. They should not wait until the problems become more serious and then act/ take action they should monitor competency development on timely basis. Whenever a problem arises, leaders should try to intervene into the issues as soon as possible. Leaders should respond to urgent questions and make decisions promptly and precisely. They should not be afraid of getting involved in problem solving to enhance competency development in the institutions.

The study results revealed that there existed a positive relationship between servant leadership attributes and competency development in the Technical and Vocational Education and Training Institutions in Kenya and the based on the vision, empowerment, humility and service and integrity attributes of the managers. The leaders should be forming relationships with subordinates, empowering subordinates, helping subordinates grow and succeed, behaving ethically, having conceptual skills, putting subordinates first and creating value for those outside the institutions to enhance competency development in the institutions.

5.4.1 Study's Contribution to Theory

Contribution of the current study would include the addition to knowledge of leadership and governance in the education sector in Kenya. The exploration of the linkage between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya particularly in developing countries provides not only significant contribution to the education leadership and governance literature but also enables managers to employ the right leadership styles for their institutions to compete in the fast-changing environment. In the context of leadership on the Trait theory of leadership and Path-goal theory widely used theoretical frameworks in the leadership and management literature, remains outstanding because of how it focuses on the leadership styles of the institutions and internal strengths and weaknesses to enhance competency development by employing the right leadership styles.

Another major contribution is the introduction of critical element of organization culture in the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya. This thesis contributed to the knowledge by investigating the moderating effect of organization culture as an environmental variable to analyse the reactions of Technical and Vocational Education and Training Institutions in Kenya in their choice of leadership styles in the institutions. Despite the known fact that external environment impacts on leadership styles choice and the need to have a fit between the leadership style and the competency development in the Technical and Vocational Education and

Training Institutions in Kenya environment, there had been a gap in the empirical knowledge in literature. Therefore, the findings of this study have contributed to filling this knowledge gap.

Further, a thorough analysis of literature on leadership styles and competency development in the Technical and Vocational Education and Training Institutions in Kenya revealed that the previous studies had not adequately covered all the aspects of leadership styles and how they affected competency development in the Technical and Vocational Education and Training Institutions in Kenya. This therefore is a clear indication of the research gap that existed before this study and that the study made significant contribution to the body of knowledge in addressing the research gap. This study has explained how leadership styles can be used in improving competency development specifically in the Technical and Vocational Education and Training Institutions in Kenya. A new dimension of knowledge to leadership styles and competency development has been adequately provided by the study. The findings provide the managers of the Technical and Vocational Education and Training Institutions with a framework for ensuring that there is effective and efficient management and that all decisions are made to improve their competency development in the technical and vocational education training institutions. The study will therefore be of great help to both intellectuals and practitioners as a basis for further studies and effective decision making. The findings of the study will add to the literature and therefore narrow the knowledge and practice gap in adoption of transactional leadership, transformational leadership, laissez-faire leadership and servant leadership and competency development in the technical and vocational education training institutions.

The study made various contributions to theory building. First, the study developed a conceptual framework for underpinning future research work on the relationship between leadership styles on competency development in the Technical and Vocational Education and Training Institutions in Kenya. The study successfully tested hypothesis related to the original conceptual framework developed in chapter

two. Based on research findings, it was found that future conceptual frameworks and theories should focus on particular aspects of leadership styles

5.4.2 Recommendations for Policy

The underlying assumption of Trait theory of leadership and Path-goal theory as used in this study is that leadership styles of transactional leadership, transformational leadership, laissez-faire leadership, and servant leadership influence competency development in Technical and Vocational Education and Training Institutions in Kenya when used exclusively and for institutions to achieve competency development they must choose either of these leadership styles. The findings of this study equally revealed that transactional leadership, transformational leadership, laissez-faire leadership, and servant leadership influenced competency development in Technical and Vocational Education and Training Institutions in Kenya. The findings further revealed that transformational leadership and servant leadership as the most preferred leadership styles by the Technical and Vocational Education and Training Institutions in Kenya and that generally they employed dual leadership styles unlike the assumption of the Trait theory of leadership and Path-goal theory used in this study.

The study also found out that organization culture had significant moderating influence on the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya. Organization culture also had a negative effect on the competency development in Technical and Vocational Education and Training Institutions in Kenya. The study recommends that policy makers of these Technical and Vocational Education and Training Institutions in Kenya pay careful consideration to aligning their leadership styles and in consideration with the organization culture as one of the environmental variables so as to enhance competency development in Technical and Vocational Education and Training Institutions in Kenya.

5.5 Recommendations for Further Research

In this study, the research focused on the influence of leadership styles on competency development in Technical and Vocational Education and Training Institutions in Kenya. A replica of this study can be carried out with a further scope to include other learning institutions and see whether the findings hold true. Future studies should apply different research instruments like interview guide, focus group discussions to involve respondents in discussions to generate detailed information which will help in bringing out better leadership styles to enhance competency development in Technical and Vocational Education and Training Institutions in Kenya.

Conceptual model of this study can also be extended by considering other aspects of internal and external environmental factors since the current study limited itself to organization culture as the moderating variable. The finding of this study on the moderating influence of organization culture on the relationship between leadership styles and competency development in Technical and Vocational Education and Training Institutions in Kenya showed significant moderating influence. Future research may replicate this variable in similar study in other learning institutions to find out whether the finding is different from the current results.

With the growth in technical and vocational education training education in Kenya, internal brain drain is becoming common and a challenge across all the institutions. While technical and vocational education training have adopted retention strategies through leadership for teaching staff, mobility of staff has grown over the last few years. A relationship between staff development and leadership requires further consideration.

The study focused only on how certain sets of leadership styles impact on competency development in technical and vocational education training education in Kenya. While the characteristics covered were important, there are other diverse leadership styles such charismatic, autocratic, bureaucratic, dynamic, and democratic leadership styles that could not be included hence should be considered in future studies.

Further studies should be undertaken with a view of understanding the history of leadership and governance of technical and vocational education training education in Kenya and the implication of these leadership styles for the design of technical and vocational education training education institutions in Kenya governance regulations so as to foster competency development in the technical and vocational education training education institutions in Kenya.

Further, the study recommended that future scholars could assess if the same findings can apply in other sectors such as hospitability, manufacturing, and public sector. Since the study concentrated on only technical and vocational education training education institutions, the study recommended future scholars to corroborate the findings by undertaking a similar study across Africa and the world. Finally, the study used organization culture as a moderating variable. Therefore, future scholars can assess the relationship between leadership styles and competency development using other mediating or moderating variables such as information technology and institution size.

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APPENDICES

Appendix I: Introduction Letter to Respondents

Date:

Dear Respondent,

This questionnaire is aimed at collecting data for academic research purposes on "Influence of Leadership Styles on Competency Development in Technical and Vocational Training Institutions in Kenya". The study is in partial fulfilment of the requirements for the award of a PhD degree in Leadership and Governance of Jomo Kenyatta University of Agriculture and Technology (JKUAT).

Please be assured that any information collected through this questionnaire will be treated with utmost confidence and will be used for research purposes only. High level ethical standards will strictly be observed to ensure that the study outcomes and reports will not include reference names of any respondents. Thank you in advance for your time and cooperation. Yours faithfully,

Wilson K.C.Chelimo

Student, PhD, Governance and Leadership

Reg. No. HD419-2559/2015

Appendix II: Letter of Authorization to Conduct Study



JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

NAIROBI CBD CAMPUS

Department of Entrepreneurship and Procurement

P.O. Box 62000 NATROBI — 80200 KENNA TEL: 020-221306 Pmzil: sp<u>úrodel/Si</u>kuat.zs.<u>ks</u>

Date: 17th May, 2019

Ref:JKU/6/3/17a

To Whom It May Concern;

SUBJECT: WILSON CHELIMO HD419-C004-2559/15

This is to introduce to you Mr. Wilson Chelimo who is a student pursuing Doctor of Philosophy in Governance and Leadership at Jomo Kenyalta University of Agriculture and Technology, Nairobi CBD Campus. The student is currently undertaking research project entitled: "Influence of Leadership Styles on Competency Development in Technical and Vocational Training Institutions in Kenya" in partial fulfillment of the requirement for the degree program.

The purpose of this letter is to request you to give the student the necessary support and assistance to enable him obtain necessary data for the project. Please note that the information given is purely for academic purpose and will be reaxed with strict confidence.

Yours faithfully,

Associate Chairmen

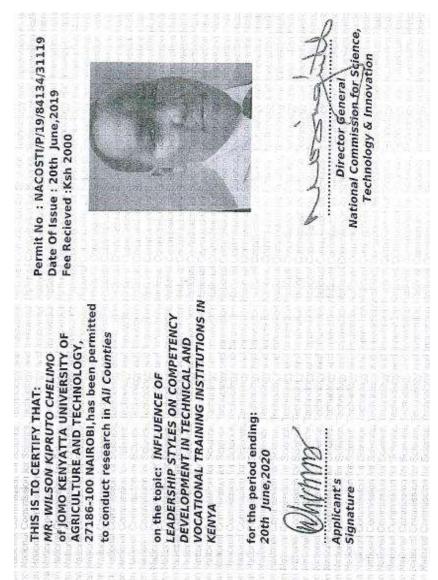
Dr. M. Kamaara (Ph.D)

ASSOCIATE CHAIRPERSON, EPD

Setting Trends in Higher Education, Research and Innovation

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Appendix III: NACOSTI Permit



Appendix IV: Research Questionnaire

Section A: Demographic Information

Please tick (check) the answer that applies in your case.

What is the name of your institution (optional) ------

- 1. What is your gender? Male { } female { }
- 2. What is your age? < 30 years $\{\} 30-40$ years $\{\} 41-50$ years $\{\} 51+$ years $\{\}$
- 3. How many years have you been a Principal/Registrar? < 5 { }, 6-10 { }, 5-10 { }, 11-15 years { } over 15 years { }
- 4. What is your highest academic qualification? Diploma { }, Degree { }, Postgraduate { }; any other, specify

Section B: Transactional Leadership Style

Please indicate to what extent you agree or disagree with the following statements on transactional leadership style to improve competency development in your institution by putting a tick against the options provided as follows: 1=Strongly Disagree (SD) 2=Disagree (D) 3=Neural (N) 4=Agree (A) 5= Strongly Agree (SA)

| Statements | SA | A | N | D | SD |
|---|----|---|---|---|----|
| The teaching staff and subordinates are punished for being non-compliant with the set standards of student's competency | | | | | |
| There is close monitoring for mistakes and errors and then taking corrective action as quickly as needed through consultations imparted to the students | | | | | |
| The teaching staff are recognized or rewarded based on the student capability to innovate and being creative capability to innovate and creative | | | | | |
| The teaching staff has the students' expectations in terms of critical thinking, problem solving, innovation and creativity | | | | | |
| The teaching staff and subordinates are punished for being non-compliant with the set standards of student's | | | | | |
| There is close monitoring to identify m and errors and then taking corrective action as quickly as needed | | | | | |

Section C: Transformational Leadership Style

Please indicate to what extent you agree or disagree with the following statements on transformational leadership style to improve competency development in your institution by putting a tick against the options provided as follows: 1=Strongly disagree (SD) 2=Disagree (D) 3=Neural (N) 4=Agree (A) 5= Strongly Agree (SA)

| Statements | SA | A | N | D | SD |
|---|----|---|---|---|----|
| Teaching staff motivate confidence and team spirit among the students for drawing sound conclusions | | | | | |
| Teaching staff have articulated a clear vision for students to be able to solve problems on their own | | | | | |
| Teaching staff is responsive to students' ideas and thoughts regarding their views | | | | | |
| The students are involved in the decision-making process and incentive programs provided to inspire for being innovative and creative | | | | | |
| Teaching staff support a flexible approach to work regarding committing extra effort regarding students whenever necessary | | | | | |

Section D: Servant Leadership Style

Please indicate to what extent you agree or disagree with the following statements on servant leadership style to improve competency development in your institution by putting a tick against the options provided as follows: 1=Strongly Disagree (SD) 2=Disagree (D) 3=Neural (N) 4=Agree (A) 5= Strongly Agree (SA)

| Statement | SA | A | N | D | SD |
|---|----|---|---|---|----|
| Teaching staff commit extra effort whenever necessary to improve students' skills and knowledge | | | | | |
| Teaching staff takes immediate actions to help students to gain and inspire confidence in own views | | | | | |
| Teaching staff are politely and advise students for not doing mistakes again and should be careful to make appropriate decisions | | | | | |
| Teaching staff involve students' decision making through constant consultation with them | | | | | |
| The teaching staff give room for students to learn from their mistakes, make appropriate decisions under the guidance of their tutors | | | | | |

Section E: Laissez-faire Leadership Style

Please indicate to what extent you agree or disagree with the following statements on laissez- faire leadership style in your institution by putting a tick against the options provided as follows: 1= Strongly Disagree (SD) 2=Disagree (D) 3=Neural (N) 4=Agree (A) 5= Strongly Agree (SA)

| Statements | SA | A | N | D | SD |
|---|----|---|---|---|----|
| The students have freedom of action they make on solving problems without staff and management interference | | | | | |
| The students' words and decisions cannot be challenged by teaching staff and management | | | | | |
| There is a high amount of trust the students will be reaching decisions on key facts and practicality of solutions | | | | | |
| The students are given little supervision or support in drawing sound conclusions | | | | | |
| Teaching staff and management have adopted a flexible approach and guide the students on what to do and how to do it whenever necessary | | | | | |

Section F: Organization Culture

Please indicate to what extent you agree or disagree with the following statements on organization culture in your institution by putting a tick against the options provided as follows: 1= Strongly Disagree (SD) 2=Disagree (D) 3=Neural (N) 4=Agree (A) 5= Strongly Agree (SA)

| Statements | SA | A | N | D | SD |
|---|----|---|---|---|----|
| Formal authority systems emphasizes student and organizational ethics which are defined, understood and practiced | | | | | |
| The organization values and norms are based on encouraging student empowerment | | | | | |
| The established patterns of communication encourage continuous learning and training | | | | | |
| Formal rules and policies are geared towards student recognizing and solving individual and organizational | | | | | |
| The formal authority systems encourage students to have good organizing, communication and problem solving on their own | | | | | |

| The values and norms of the student are anchored to | | | |
|--|--|--|--|
| communication ability to their fellow students, teachers, leaders, and to a broaden society. | | | |
| | | | |

Section G: Competency Development in TVET

To what extent do you agree with the following statements in regard to competency development in your institution? Tick the appropriate response on the Likert scale against the options provided as follows; of Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA) in each indicator.

| Statements | SA | A | N | D | SD |
|---|----|---|---|---|----|
| Students are able to display some level of critical thinking and problem solving upon completion of their studies. | | | | | |
| Upon completion of their courses the student can demonstrate creativity innovativeness in their respective field of study | | | | | |
| Digital literacy is key in the institution and by the end of their courses the students are able to demonstrate acquisition of ICT skills. | | | | | |
| There is effective collaboration between the staff and students during training and this has enhanced teamwork as key tenet in the institution. | | | | | |

Appendix V: List of Technical and Vocational Training Institutions in Kenya

| S/No | NAME OF INSTISTUTION |
|------|--|
| 1 | KILIFI COLLEGE OF ACCOUNTANCY |
| 2 | TANA RIVER TECHNICAL AND VOCATIONAL COLLEGE |
| 3 | STAR INSTITUTE OF PROFESSIONALS |
| 4 | INSTITUTE OF ADVANCED TECHNOLOGY -MOMBASA |
| 5 | KENYA COAST NATIONAL POLYTECHNIC |
| 8 | KENYA COAST NATIONAL POLYTECHNIC |
| 9 | BANDARI COLLEGE |
| 10 | MOMBASA AVIATION TRAINING INSTITUTE |
| 11 | EAST AFRICA INSTITUTE OF CERTIFIED STUDIES-MOMBASA |
| 12 | JUSNET BUSINESS INSTITUTE |
| 13 | WERU TECHNICAL AND VOCATIONAL COLLEGE |
| 14 | MUYEYE VOCATIONAL TRAINING CENTRE |
| 15 | LENA SECRETARIAL COLLEGE |
| 16 | WERU TECHNICAL AND VOCATIONAL COLLEGE |
| 17 | MSAMBWENI TECHNICAL AND VOCATIONAL COLLEGE |
| 18 | TAVETA TECHNICAL AND VOCATIONAL COLLEGE |
| 19 | COAST INSTITUTE OF TECHNOLOGY |
| 20 | GODOMA TECHNICAL TRAINING INSTITUTE |
| 21 | AHMED SHAHAME MWIDANI TECH AND VOCATIONAL COLLEGE |
| 25 | KINANGO TECHNICAL AND VOCATIONAL COLLEGE |
| 26 | S.M.I ST. THERESA'S TECHNOLOGY TRAINING INSTITUTE |
| 27 | CONSOLATA CATHEDRAL INSTITUTE |
| 28 | NYERI NATIONAL POLYTECHNIC |
| 29 | ST ANDREWS COLLEGE (KABARE) |
| 30 | NDIA TECHNICAL AND VOCATIONAL COLLEGE |
| 31 | LAKE INSTITUTE OF TROPICAL MEDICINE-KERUGOYA |
| 32 | SAGANA TECHNICAL TRAINING INSTITUTE |
| 33 | KIHARU TECHNICAL COLLEGE -MURANG'A |
| 34 | KIAMBU INSTITUTE OF SCIENCE & TECHNOLOGY |
| 35 | NAIROBI INSTITUTE OF BUSINESS STUDIES |
| 36 | THIKA INSTITUTE OF BUSINESS STUDIES - (HIGHWAY CAMPUS) |
| 37 | HAVARD INSTITUTE OF DEVELOPMENT STUDIES |
| 38 | THIKA COLLEGE OF EXELLENCE |
| 39 | THIKA TECHNICAL TRAINING INSTITUTE |
| 40 | JODAN COLLEGE OF TECHNOLOGY-THIKA CAMPUS |
| 41 | CASCADE INSTITUTE OF HOSPITALITY |

| 42 | HEMLAND COMPUTER COLLEGE |
|----|--|
| 44 | CHRISTIAN INDUSTRIAL TRAINING COLLEGE-THIKA |
| 45 | GAKEO COLLEGE OF BUSINESS STUDIES |
| 46 | THIKA SCHOOL OF MEDICAL & HEALTH SCIENCE |
| 48 | CHRISTIAN INDUSTRIAL TRAINING CENTRE, THIKA |
| 50 | HEMLAND COLLEGE OF PROFESSIONALS TECHNICAL STUDIES |
| 51 | MURANG'A TECHNICAL TRAINING INSTITUTE |
| 52 | KIENI TECHNICAL AND VOCATIONAL COLLEGE |
| 53 | LIMURU TECHNICAL AND VOCATIONAL COLLEGE |
| 55 | GATUNDU SOUTH TECHNICAL AND VOCATIONAL COLLEGE |
| 56 | NYANDARUA NATIONAL POLYTECHNIC |
| 57 | KIPIPIRI TECHNICAL AND VOCATIONAL COLLEGE |
| 58 | KINANGOP TECHNICAL AND VOCATIONAL COLLEGE |
| 60 | MATHIRA TECHNICAL AND VOCATIONAL COLLEGE |
| 61 | MUKURWEINI TECHNICAL TRAINING INSTITUTE |
| 62 | TETU TECHNICAL AND VOCATIONAL COLLEGE |
| 63 | MWEA TECHNICAL AND VOCATIONAL COLLEGE |
| 64 | KANDARA TECHNICAL AND VOCATIONAL COLLEGE |
| 66 | MATHIOYA TECHNICAL AND VOCATIONAL COLLEGE |
| 67 | MICHUKI TECHNICAL TRAINING INSTITUTE |
| 68 | NACHU TECHNICAL AND VOCATIONAL COLLEGE |
| 69 | GATANGA TECHNICAL AND VOCATIONAL COLLEGE |
| 71 | MATHENGE TECHNICAL INSTITUTE |
| 72 | UWEZO COLLEGE |
| 73 | MACHAKOS TECHNICAL INSTITUTE FOR THE BLIND |
| 74 | MACHAKOS INSTITUTE OF TECHNOLOGY |
| 75 | MACHAKOS MEDICAL AND TECHNICAL TRAINING CENTRE |
| 79 | UWEZO COLLEGE |
| 80 | KITUI INSTITUTE OF DEVELOPMENT STUDIES |
| 81 | ST. JOHN PAUL II INSTITUTE |
| 82 | INTELLECTS COLLEGE |
| 83 | KITUI TEACHERS TECHNICAL SCHOOL |
| 84 | EMBU COLLEGE OF PROFESSIONAL STUDIES |
| 85 | ACHIEVERS COLLEGE OF PROFESSIONALS LIMITED |
| 86 | MOLO VOCATIONAL TRAINING CENTRE |
| 87 | EMBU SECRETARIAL & COMPUTER SERVICES |
| 88 | MERU INSTITUTE OF BUSINESS STUDIES |
| 89 | MERU NATIONAL POLYTECHNIC |
| 90 | NKABUNE TECHNICAL INSTITUTE |
| 91 | MERU NATIONAL POLYTECHNIC |

| 92 | ST MARYS' SECRETARIAL COLLEGE |
|-----|---|
| 93 | WOTE TECHNICAL TRAINING INSTITUTE |
| 94 | RICCATTI BUSINESS COLLEGE -WOTE CAMPUS |
| 95 | WOTE TECHNICAL TRAINING INSTITUTE |
| 96 | CHUKA TECHNICAL AND VOCATIONAL COLLEGE |
| 97 | THARAKA TECHNICAL AND VOCATIONAL COLLEGE |
| 98 | MWALA TECHNICAL AND VOCATIONAL COLLEGE |
| 99 | NYS YATTA SCHOOL OF AGRICULTURE |
| 100 | MUKIRIA TECHNICAL TRAINING INSTITUTE |
| 102 | MITUNGUU TECHNICAL TRAINING INSTITUTE |
| 103 | LAISAMIS TECHNICAL AND VOCATIONAL COLLEGE |
| 104 | MACALDER YOUTH POLYTECHNIC |
| 105 | LUKENYA TRAINING INSTITUTE-EMALI |
| 106 | MURAGA TECHNICAL AND VOCATIONAL COLLEGE |
| 107 | KARUMO TECHNICAL TRAINING INSTITUTE |
| 110 | RURAL AID KENYA TRAINING INSTITUTE |
| 111 | RUNYENJES TECHNICAL AND VOCATIONAL COLLEGE |
| 112 | KAELO TECHNICAL AND VOCATIONAL CENTRE |
| 113 | NUU TECHNICAL AND VOCATIONAL COLLEGE |
| 114 | MERCY COMMERCIAL VOCATIONAL TRAINING CENTRE |
| 115 | JEREMIAH NYAGA TECHNICAL TRAINING COLLEGE |
| 116 | MASINGA TECHNICAL AND VOCATIONAL COLLEGE |
| 117 | KATINE TECHNICAL TRAINING INSTITUTE |
| 118 | MAKINDU INSTITUTE OF PROFESSIONAL STUDIES |
| 119 | KIBWEZI WEST TECHNICAL AND VOCATIONAL COLLEGE |
| 120 | TSEIKURU TECHNICAL TRAINING INSTITUTE |
| 122 | KITUI INSTITUTE OF PROFESSIONALS - MULANGO |
| 123 | MERTI TECHNICAL AND VOCATIONAL COLLEGE |
| 124 | TIGANIA EAST TECHNICAL AND VOCATIONAL COLLEGE |
| 125 | KIIRUA TECHNICAL TRAINING INSTITUTE |
| 126 | CARLILE COLLEGE |
| 127 | RAILWAY TRAINING INSTITUTE |
| 131 | KENYA INSTITUTE OF HIGHWAYS & BUILDING TECHNOLOGY |
| 132 | RAILWAY TRAINING INSTITUTE I |
| 133 | EAST LANDS COLLEGE OF TECHNOLOGY |
| 134 | S O S TECHNICAL SCHOOL |
| 135 | KENYA INSTITUTE OF MASS COMMUNICATION |
| 136 | CARLILE COLLEGE |
| 139 | NAIROBI AVIATION COLLEGE |
| 140 | ZETECH COLLEGE |

| 141 | AFRICA COLLEGE OF AVIATION AND MANAGEMENT |
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| 142 | ATLAS COLLEGE |
| 143 | REGIONAL CENTRE OF MANAGEMENT |
| 144 | AIMS COLLEGE OF BUSINESS & TECHNOLOGY |
| 145 | KEY CENTER OF EXCELLENCE INSTITUTE |
| 146 | KAMUKUNJI TECHNICAL AND VOCATIONAL COLLEGE |
| 147 | KENYA INSTITUTE OF PROFESSIONAL STUDIES |
| 152 | VISION EMPOWERMENT TRAINING INSTITUTE |
| 154 | SUMMIT INSTITUTE OF PROFESSIONALS |
| 155 | ELWAK TECHNICAL AND VOCATIONAL COLLEGE |
| 156 | THE NEW DIMENSION COLLEGE |
| 157 | TEMPLE SECRETARIAL COLLEGE |
| 158 | EAST AFRICA INSTITUTE OF CERTIFIED STUDIES |
| 159 | ROYAL BUSINESS SCHOOL |
| 160 | BRIDGE COLLEGE |
| 161 | VISION INSTITUTE OF PROFESSIONALS |
| 162 | MILELE INSTITUTE OF DEVELOPMENT AND TECHNOLOGY |
| 163 | VISION STARS TRAINING INSTITUTE |
| 164 | COLLEGE OF HUMAN RESOURCE MANAGEMENT |
| 165 | NAIROBI TECHNICAL TRAINING INSTITUTE |
| 166 | TULIPS COMMERCIAL COLLEGE |
| 167 | TEMPLE COLLEGE |
| 168 | PLATINUM TECHNICAL COLLEGE |
| 169 | EAST AFRICA INSTITUTE OF CERTIFIED STUDIES |
| 170 | CHRISTIAN INDUSTRIAL TRAINING CENTRE |
| 171 | NAIROBI TECHNICAL TRAINING INSTITUTE |
| 172 | MILELE INSTITUTE OF DEVELOPMENT AND TECHNOLOGY |
| 173 | BRIDGE COLLEGE |
| 174 | KAREN TECHNICAL TRAINING INSTITUTE |
| 175 | KAREN T. T. I. FOR THE DEAF |
| 176 | KENYA AERONAUTICAL COLLEGE |
| 177 | KINYANJUI TECHNICAL INSTITUTE |
| 178 | P.C. KINYANJUI TECHNICAL TRAINING INSTITUTE |
| 179 | KABETE NATIONAL POLYTECHNIC |
| 181 | KCA TECHNICAL COLLEGE |
| 184 | NYS ENGINEERING CRAFT TRAINING SCHOOL |
| 188 | NATIONAL YOUTH SERVICE ENGINEERING INSTITUTE |
| 189 | KENYA INSTITUTE OF SURVEY & MAPPING |
| 195 | DEFENSE FORCES TECHNICAL COLLEGE (DEFTEC) |
| 196 | TOPMAX TRAINING COLLEGE |

| 197 | EAST AFRICAN SCHOOL OF AVIATION |
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| 198 | KASARANI TECHNICAL AND VOCATIONAL COLLEGE |
| 199 | ELDORET TECHNICAL TRAINING INSTITUTE-LODWAR BRANCH |
| 200 | TURKANA COLLEGE OF TECHNICAL AND BUSINESS STUDIES |
| 201 | LODWAR TECHNICAL AND VOCATIONAL COLLEGE |
| 204 | KITALE NATIONAL POLYTECHNIC |
| 205 | ST KIZITO SECRETARIAL COLLEGE |
| 206 | KITALE NATIONAL POLYTECHNIC |
| 207 | EQUIP AFRICA COLLEGE OF MEDICAL AND HEALTH SCIENCE |
| 209 | KITELAKAPEL TECHNICAL TRAINING INSTITUTE |
| 214 | ELDORET TECHNICAL TRAINING INSTITUTE |
| 223 | RIFT VALLEY INSTITUTE OF BUSINESS STUDIES |
| 224 | MWANGAZA COLLEGE - NAKURU |
| 225 | ADEPT COLLEGE OF PROFESSIONAL STUDIES |
| 226 | SEREIN EDUCATION CENTRE |
| 227 | NAKURU TRAINING INSTITUTE |
| 228 | KENYA INDUSTRIAL TRAINING INSTITUTE |
| 229 | RIFT VALLEY INSTITUTE OF BUSINESS STUDIES |
| 232 | KERICHO TOWNSHIP TECHNICAL AND VOCATIONAL COLLEGE |
| 233 | NISHKAM SAINT PURAN SINGH |
| 234 | BETHEL INSTITUTE OF TECHNOLOGY |
| 235 | MOSPEN INSTITUTE OF DEVELOPMENT STUDIES |
| 236 | KERICHO TOWNSHIP TECHNICAL AND VOCATIONAL COLLEGE |
| 237 | NISHKAM SAINT PURAN INSTITUTE |
| 239 | MAASAI TECHNICAL TRAINING INSTITUTE |
| 240 | BARTEK INSTITUTE - BARINGO |
| 241 | BARINGO TECHNICAL COLLEGE |
| 242 | KIPSOEN TECHNICAL AND VOCATIONAL COLLEGE |
| 243 | KAPCHEROP TECHNICAL AND VOCATIONAL COLLEGE |
| 245 | ELDAMA RAVINE TECHNICAL AND VOCATIONAL COLLEGE |
| 246 | BURETI TECHNICAL TRAINING INSTITUTE |
| 247 | ALDAI TECHNICAL TRAINING INSTITUTE |
| 248 | SAMBURU TECHNICAL AND VOCATIONAL COLLEGE |
| 249 | SOTIK TECHNICAL TRAINING INSTITUTE |
| 254 | KIPKABUS TECHNICAL AND VOCATIONAL COLLEGE |
| 255 | ITEN VOCATIONAL TRAINING CENTRE |
| 256 | ELDORET AVIATION TRAINING INSTITUTE |
| 257 | COGRI VOCATIONAL TRAINING CENTRE |
| 258 | A.I.C NAIVASHA TECHNICAL TRAINING INSTITUTE |
| 259 | NAIVASHA TECHNICAL AND VOCATIONAL COLLEGE |

| 260 | NYS TECHNICAL TRAINING INSTITUTE - NAIVASHA |
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| 261 | NAIVASHA TECHNICAL TRAINING INSTITUTE |
| 262 | MOLO TECHNICAL AND VOCATIONAL COLLEGE |
| 263 | KIPSINENDE TECHNICAL TRAINING INSTITUTE |
| 264 | THE GOLDEN GATE COLLEGE |
| 265 | KAIBOI TECHNICAL TRAINING INSTITUTE |
| 266 | EMSOS TECHNICAL AND VOCATIONAL COLLEGE |
| 267 | OL'LESSOS TECHNICAL INSTITUTE |
| 269 | TINDIRET TECHNICAL AND VOCATIONAL COLLEGE |
| 270 | LAIKIPIA NORTH TECHNICAL AND VOCATIONAL COLLEGE |
| 271 | TURKANA EAST TECHNICAL AND VOCATIONAL COLLEGE |
| 272 | RIFT VALLEY INSTITUTE OF SCIENCE AND TECHNOLOGY |
| 273 | NAKURU TEACHERS TRAINING COLLEGE |
| 275 | BELGUT TECHNICAL AND VOCATIONAL COLLEGE |
| 276 | LAIKIPIA EAST TECHNICAL AND VOCATIONAL COLLEGE |
| 277 | ST. ANNE'S CATHOLIC INSTITUTE |
| 278 | NGONG TECHNICAL AND VOCATIONAL COLLEGE |
| 279 | CHEPSIREI TECHNICAL AND VOCATIONAL COLLEGE |
| 280 | EMURUA DIKIRR TECHNICAL TRAINING INSTITUTE |
| 281 | KERIO VALLEY TECHNICAL AND VOCATIONAL COLLEGE |
| 282 | EMINING TECHNICAL TRAINING INSTITUTE |
| 283 | KONOIN TECHNICAL AND VOCATIONAL COLLEGE - BOMET |
| 286 | KIPTARAGON TECHNICAL AND VOCATIONAL COLLEGE |
| 288 | INTERNATIONAL TEACHING TRAINING CENTRE |
| 290 | BEAM INTERNATIONAL TRAINING CENTRE |
| 291 | NYS SCHOOL OF CATERING - GILGIL |
| 292 | KIMASIAN TECHNICAL AND VOCATIONAL COLLEGE |
| 293 | ENDEBESS TECHNICAL AND VOCATIONAL COLLEGE |
| 294 | KAJIADO WEST TECHNICAL AND VOCATIONAL COLLEGE |
| 295 | KIMININI TECHNICAL AND VOCATIONAL COLLEGE |
| 296 | ZIWA TECHNICAL TRAINING INSTITUTE |
| 297 | MOIBEN TECHNICAL AND VOCATIONAL COLLEGE |
| 298 | KOSHIN TECHNICAL TRAINING INSTITUTE |
| 299 | ELDORET NATIONAL POLYTECHNIC |
| 301 | TOTAL TECHNICAL AND VOCATIONAL COLLEGE |
| 302 | NAROK WEST TECHNICAL TRAINING INSTITUTE |
| 303 | MAASAI MARA TECHNICAL AND VOCATIONAL COLLEGE |
| 304 | SOT TECHNICAL TRAINING INSTITUTE |
| 305 | KARAI YOUTH POLYTECHNIC |
| 306 | BUNGOMA COLLEGE OF TECHNOLOGY |

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| 307 | WESTEND INSTITUTE OF SCIENCE AND TECHNOLOGY |
| 308 | SANG'ALO INSTITUTE OF SCIENCE AND TECHNOLOGY |
| 309 | DOMINION TRAINING INSTITUTE |
| 310 | BUNGOMA INSTITUTE OF BUSINESS AND TECHNOLOGY |
| 311 | CHANZEYWE TECHNICAL AND VOCATIONAL COLLEGE |
| 312 | CHAMASIRI TECHNICAL AND VOCATIONAL COLLEGE |
| 313 | BUTERE TECHNICAL AND VOCATIONAL COLLEGE |
| 314 | BUMBE TECHNICAL TRAINING INSTITUTE |
| 315 | BUNYALA TECHNICAL AND VOCATIONAL COLLEGE |
| 317 | BUNGOMA NORTH TECHNICAL AND VOCATIONAL COLLEGE |
| 318 | KISIWA TECHNICAL TRAINING INSTITUTE |
| 319 | SHAMBERERE TECHNICAL TRANING INSTITUTE |
| 320 | BUSHIANGALA TECHNICAL TRAINING INSTITUTE |
| 321 | SIGALAGALA NATIONAL POLYTECHNIC |
| 322 | ST JUDE TECHNICAL COLLEGE - MUMIAS |
| 323 | MUMIAS WEST TECHNICAL TRAINING INSTITUTE |
| 324 | EBUKANGA TECHNICAL AND VOCATIONAL COLLEGE |
| 325 | FRIENDS COLLEGE KAIMOSI |
| 326 | GIMOMOI S.A VOCATIONAL TRAINING CENTRE |
| 327 | OKAME TECHNICAL VOCATIONAL COLLEGE |
| 328 | MATILI TECHNICAL TRAINING INSTITUTE |
| 329 | SABATIA TECHNICAL AND VOCATIONAL COLLEGE |
| 330 | SIRISIA TECHNICAL AND VOCATIONAL COLLEGE |
| 331 | MUSAKASA TECHNICAL TRAINING INSTITUTE |
| 332 | MUNGATSI TECHNICAL AND VOCATIONAL COLLEGE |
| 333 | KONGONI TECHNICAL AND VOCATIONAL COLLEGE |
| 334 | NAVAKHOLO TECHNICAL AND VOCATIONAL COLLEGE |
| 335 | WANGA TECHNICAL AND VOCATIONAL COLLEGE |
| 336 | WEBUYE WEST TECHNICAL AND VOCATIONAL COLLEGE |
| 337 | KISII NATIONAL POLYTECHNIC |
| 338 | PHILLIPS BUSINESS TRAINING COLLEGE |
| 339 | ST ANN'S COLLEGE |
| 340 | SIAYA INSTITUTE OF TECHNOLOGY |
| 341 | KAKRAO TECHNICAL AND VOCATIONAL COLLEGE |
| 343 | SIKRI TECHNICAL TRAINING INSTITUTE FOR THE BLIND &DEAF |
| 344 | RACHUONYO TECHNICAL AND VOCATIONAL COLLEGE |
| 345 | VITECH TRAINING INSTITUTE - BONDO |
| 346 | BONDO TECHNICAL TRAINING INSTITUTE |
| 347 | ST. JOSEPHS TECHNICAL INSTITUTE FOR THE DEAF- NYANGOMA |
| 348 | VITECH TRAINING INSTITUTE - BONDO |

| 349 | ST JOSEPH'S TECHNICAL INST. FOR THE DEAF |
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| 350 | SEME TECHNICAL AND VOCATIONAL COLLEGE |
| 351 | KITUTU MASABA TECHNICAL AND VOCATIONAL COLLEGE |
| 352 | SIALA TECHNICAL TRAINING INSTITUTE |
| 353 | KENDEGE TECHNICAL AND VOCATIONAL COLLEGE |
| 354 | RIRAGIA TECHNICAL AND VOCATIONAL COLLEGE |
| 355 | UGENYA TECHNICAL AND VOCATIONAL COLLEGE |
| 356 | EKERUBO GIETAI TECHNICAL TRAINING INSTITUTE |
| 357 | BORABU TECHNICAL TRAINING INSTITUTE |
| 358 | GITWEBE TECHNICAL TRAINING INSTITUTE |
| 359 | MAWEGO TECHNICAL TRAINING INST. |
| 360 | OROGARE TECHNICAL AND VOCATIONAL COLLEGE |
| 361 | NYAKACH TECHNICAL AND VOCATIONAL COLLEGE |
| 362 | KEROKA TECHNICAL TRAINING INSTITUTE |
| 363 | RAMOGI INSTITUTE OF ADVANCED TECHNOLOGY |
| 364 | UGUNJA TECHNICAL AND VOCATIONAL COLLEGE |
| 365 | SIRUTI TECHNICAL AND VOCATIONAL COLLEGE |
| 366 | KISUMU NATIONAL POLYTECHNIC |
| 368 | EAST AFRICA INSTITUTE OF CERTIFIED STUDIES-KISUMU |
| 369 | ST. FRANCIS TECHNICAL TRAINING INSTITUTE |
| 370 | RANGWE TECHNICAL TRAINING INSTITUTE |
| 372 | OMUGA TECHNICAL AND VOCATIONAL COLLEGE |
| 373 | MIGORI INSTITUTE OF BEAUTY AND PROFESSIONAL STUDIES |
| 374 | MABERA TECHNICAL AND VOCATIONAL COLLEGE |
| 375 | GARISSA COMMERCIAL COLLEGE |
| 376 | FRONTIER INST. OF PROFESSIONAL & MANAGMENT STUDIES |
| 377 | GREENWICH COLLEGE |
| 378 | GANANA INSTITUTE OF MEDICAL SCIENCE AND TECHNOLOGY |
| 379 | NORTHEASTERN NATIONAL POLYTECHNIC |
| 380 | FRONTIER INSTITUTE OF PROFESSIONAL AND MANAGEMENT STUDIES LTD |
| 381 | NORTHLANDS PROFESSIONAL INSTITUTE |
| 383 | MANDERA TECHNICAL AND VOCATIONAL COLLEGE |
| 384 | ELWAK TECHNICAL AND VOCATIONAL COLLEGE |