Innovations

The Effect of College Environment on Implementing Transformational Leadership in Government Technical and Vocational Education and Training Colleges of Sidama Regional State

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Abstract

The objective of this study was to identify the effect of College Environment on Implementing Transformational Leadership in Government Technical and Vocational Education and Training Colleges of Sidama Regional State. To this end, the researchers employed quantitative research approach with explanatory research design. The primary data were collected through questionnaire in the form of five point Likert scale. The sample size of this research was 133 of which 110 respondents returned back the questionnaire with response rate of 82%. Both descriptive and inferential statistics analysis have been done using STATA 17. The multiple regression model result analysis showed that independent variables incorporated in the model all variables means academic staff competence, availability of resources, monitoring, conflict, and information technology utilization have positive effect on transformational leadership implementation. Recommendations for the Technical and Vocational Education and Training Colleges should give attention to implication of these variables in order to improve transformational leadership implementation.

Keywords: academic staff competence, availability of resources, monitoring, conflict, and information technology utilization, transformational leadership implementation, technical and vocational education and training colleges

1. Introduction

The college environment plays a crucial role in shaping the overall educational experience and outcomes of students. Each of the independent variables, including academic staff competence, availability of resources, monitoring, conflict, and information technology utilization, contributes to the multifaceted nature of the college environment. Academic staff competence ensures that students receive quality instruction and guidance, fostering a conducive learning environment (Wang &Degol, 2016). The availability of resources, such as libraries, laboratories, and study spaces, directly impacts students' ability to access necessary materials and engage in hands-on learning experiences. Monitoring mechanisms, such as assessments and feedback, help identify areas of improvement and enable timely interventions. Conflict resolution strategies, whether interpersonal or organizational, are essential to maintaining a harmonious environment conducive to learning and growth. Lastly, information technology utilization allows for innovative teaching methodologies, enhanced communication, and exposure to cutting-edge resources. The college environment, determined by these independent variables, significantly influences students' academic achievements, personal development, and overall satisfaction with their educational experience (Akens ET al.2019).

Academic staff competence is a crucial factor that can significantly influence the implementation of transformational leadership in TVET colleges. A study by Belay and Uzunboylu (2015) found that highly competent academic staff is more likely to exhibit the necessary skills and knowledge required to implement transformational leadership practices effectively. When academic staff members possess excellent subject matter expertise and pedagogical skills, they can provide innovative and inspirational teaching, which fosters an environment conducive to transformational leadership.

The availability of resources also plays a significant role in the successful implementation of transformational leadership in TVET colleges. According to Chawla and Saini (2017), the presence of adequate resources such as modern teaching tools, equipment, and facilities enhances the capabilities of academic staff to implement transformational leadership practices. Availability of resources also contributes to the provision of quality education, as it facilitates the creation of an environment that encourages creativity, problem-solving, and critical thinking among students.

A robust monitoring system is essential for ensuring the effective implementation of transformational leadership in TVET colleges. Research by Tsigab and Naicker (2016) suggests that regular monitoring of teaching practices and performance enables leaders to provide necessary feedback and support to academic staff, thereby promoting the implementation of transformational leadership. Effective monitoring ensures that leaders can identify areas of improvement, recognize exceptional performance, and address any issues or concerns that may hinder the successful implementation of transformational leadership in TVET colleges.

Conflict management strategies are critical in the implementation of transformational leadership in TVET colleges. Studies by Mobley and Payne (2015) highlight that conflicts can arise among academic staff members or between staff and leadership, impeding the successful implementation of transformational leadership practices. Effective conflict management strategies that encourage open communication, mutual respect, and collaboration are necessary to reduce conflicts and ensure a harmonious working environment conducive to implementing transformational leadership in TVET colleges.

Information technology (IT) utilization is an emerging factor that influences the implementation of transformational leadership in TVET colleges. As noted by Khan, Usman, and Shahzad (2016), effective use of IT tools and technologies can enhance communication, collaboration, and knowledge sharing among academic staff and students. IT utilization can also facilitate access to relevant information and resources, enabling leaders and academic staff to stay current with the latest pedagogical practices and trends. Therefore, incorporating IT into the teaching and learning processes can significantly contribute to the successful implementation of transformational leadership in TVET colleges.

Despite the importance of transformational leadership in the context of Technical and Vocational Education and Training (TVET) colleges in the Sidama region, there appears to be a significant research gap regarding the factors that influence its implementation. While several studies have focused on various aspects of leadership in educational environments, few have specifically examined the relationship between academic staff competence, availability of resources, monitoring, conflict, and Information Technology (IT) utilization, and the successful implementation of transformational leadership in TVET colleges. Therefore, this research aims to address this gap by investigating the influence of these independent variables on the implementation of transformational leadership, providing valuable insights and contributing to the existing literature in the field.

1.1 Research objectives

General objective: To examine the factors influencing the implementation of transformational leadership in TVET colleges of the Sidama region.

Specific objectives:

a) To assess the level of academic staff competence in TVET colleges of the Sidama region.

b) To determine the availability of resources in TVET colleges of the Sidama region.
c) To examine the extent of monitoring practices in TVET colleges of the Sidama region.
d) To identify the level of conflict in TVET colleges of the Sidama region.
e) To evaluate the utilization of information technology in TVET colleges of the Sidama region.

1.2 Research hypotheses:
H1. There is a significant relationship between academic staff competence and the implementation of transformational leadership in TVET colleges of the Sidama region.
H2. The availability of resources significantly influences the implementation of transformational leadership in TVET colleges of the Sidama region.
H3. Monitoring practices have a significant impact on the implementation of transformational leadership in TVET colleges of the Sidama region.
H4. Conflict has a significant negative effect on the implementation of transformational leadership in TVET colleges of the Sidama region.
H5. The utilization of information technology positively contributes to the implementation of transformational leadership in TVET colleges of the Sidama region.

2. Literature Review

2.1 Concept of College Environment
The concept of a college environment encapsulates a unique blend of academia, social interactions, and personal growth. It is a space where students are exposed to various intellectual pursuits, diverse perspectives, and opportunities for self-discovery. In this environment, students engage in rigorous academic coursework, engage in critical thinking, and develop their knowledge and skills in their chosen disciplines. Additionally, the college environment fosters social interactions, allowing students to form friendships, join clubs and organizations, and participate in extracurricular activities. This social aspect of college life encourages collaboration, teamwork, and the exploration of different cultures and perspectives. Overall, the college environment serves as a catalyst for personal growth and development, providing students with the foundation for their future careers and lifelong success (Fink, 2014).

2.2 Components of College Environment
The college environment typically consists of various components that together contribute to the overall experience and success of students. These components can include physical facilities, academic programs, faculty and staff, student support services, extracurricular activities, and campus culture (Grimes et al. 2020; Bean, 2016).

Academic environment:
This includes classrooms, libraries, laboratories, and other academic facilities that promote learning and research. It also includes the curriculum, teaching methods, and academic support services provided by the college.

Academic staff competence & Implementing Transformational Leadership
The relationship between academic staff competence and implementing transformational leadership in TVET (Technical and Vocational Education and Training) colleges is crucial for the overall success and development of these institutions. Academic staff competence refers to the knowledge, skills, and expertise possessed by the teaching staff in their respective fields. When academic staff members are competent in their subject matter, they are better equipped to effectively implement transformational leadership practices. Transformational leadership inspires and motivates staff and students by providing a clear vision, fostering a positive and collaborative environment, and encouraging innovation and personal growth. By possessing the necessary competence, academic staff can effectively communicate and implement transformational

leadership strategies, leading to improved teaching and learning outcomes, increased student engagement, and the overall growth and development of the TVET institution (Chelimo, 2022).

H1: Academic Staff competence has positively contributed to implementing transformational leadership in TVET

Safety and security environment:
This pertains to measures and policies in place to ensure the safety and security of students, faculty, and staff. This includes campus security personnel, emergency response systems, and policies promoting a safe and secure learning environment.

Conflict & implementing transformational leadership
The relationship between conflict and implementing transformational leadership in TVET (Technical and Vocational Education and Training) colleges is complex yet crucial. Conflict is inevitable in any organizational setting, and TVET colleges are no exception. However, the effective implementation of transformational leadership can significantly influence how conflicts are managed and resolved within these institutions. Transformational leaders, through their inspirational vision and ability to engage and empower their followers, can create a positive and supportive work environment that fosters trust, open communication, and collaboration. By promoting a shared sense of purpose and encouraging the development of individual skills and abilities, transformational leaders can effectively address conflicts by encouraging open dialogue, understanding different perspectives, and seeking win-win solutions. This not only enhances the organizational culture and climate within TVET colleges, but also enables the successful implementation of necessary changes and improvements, ultimately benefiting the overall effectiveness and success of the institution. Conflict happen in the college has negative relationship with implementing transformational leadership (Mukhtar, Risnita, &Prasetyo, 2020).
H2: Conflict has negative contribution to implementing transformational leadership in TVET

Physical environment
This refers to the campus layout, buildings, and infrastructure. It includes facilities such as dormitories, dining halls, sports facilities, and recreational spaces. The physical environment contributes to the overall atmosphere and well-being of the college community.

Availability of resources & implementing transformational leadership
The availability of resources is essential for implementing transformational leadership effectively. Transformational leaders are known for their ability to inspire and motivate their followers to achieve outstanding results. To do so, they often need access to various resources financial resources, human resources, information and technology resource, and time resources. In conclusion, the availability of resources is crucial for implementing transformational leadership successfully. Financial, human, information and technology, and time resources are needed to support the practices and strategies of transformational leaders. By utilizing these resources effectively, leaders can inspire and motivate their followers to achieve exceptional results (Seljemo, Viksveen, &Ree, 2020).
H3: Availability of resources has positively contributed to implementing transformational leadership in TVET

Supportive environment:
This includes the support services and resources provided by the college to help students succeed academically, emotionally, and socially. This can include academic advising, monitoring and evaluation, counseling services, health services, career counseling, and financial aid assistance.

Monitoring and evaluation & implementing transformational leadership

Monitoring and evaluation are crucial components of any successful project or program. It involves systematically tracking progress, measuring performance, and assessing the impact of interventions. Monitoring provides real-time information, allowing for timely adjustments and addressing any issues or challenges that may arise. Evaluation, on the other hand, provides a comprehensive analysis of the overall effectiveness of the project, identifying strengths, weaknesses, and areas for improvement. Both monitoring and evaluation are essential for evidence-based decision making and ensuring accountability. Implementing transformational leadership involves adopting a leadership style that inspires and motivates individuals to achieve their full potential. It involves setting clear goals, providing continuous support, and empowering employees to take ownership of their work. Transformational leaders foster a positive organizational culture through open communication, trust, and collaboration. They encourage innovation and creativity, challenging the status quo to drive meaningful change. By creating a shared vision and setting high expectations, transformational leaders inspire their team members to go above and beyond, resulting in enhanced performance and long-term organizational success (Abrahams & Burke, 2012).

H4: Monitoring and evaluation has positively contributed to implementing transformational leadership in TVET

Technology environment:

This refers to the technological resources and infrastructure available on campus. This includes access to computers, internet connectivity, online learning platforms, and other digital tools and resources that support teaching, learning, and research. These components collectively contribute to the college environment and play a vital role in shaping the overall college experience for students.

Information technology utilization & implementing transformational leadership

The relationship between Information Technology (IT) utilization and the implementation of transformational leadership can be described as mutually beneficial. On one hand, IT utilization can enhance the effectiveness of transformational leadership by providing leaders with access to real-time information and data. This allows leaders to make informed decisions, delegate tasks efficiently, and monitor progress effectively. IT tools such as project management software, communication platforms, and data analytics can aid leaders in communicating their vision, inspiring and motivating employees, and fostering a culture of innovation. Additionally, IT utilization can enable leaders to lead across geographical boundaries and facilitate virtual collaboration. Transformational leaders can leverage technologies such as video conferencing, instant messaging, and virtual team collaboration tools to connect with employees and stakeholders across different locations, creating a shared vision and sense of purpose.
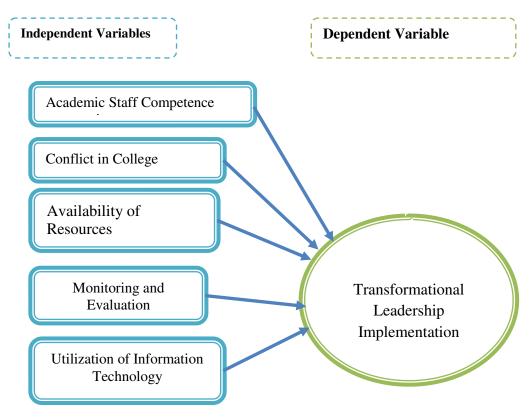
On the other hand, transformational leadership can drive the effective utilization of IT in organizations. Transformational leaders tend to be visionary, innovative, and open to change. They encourage their employees to embrace new technologies and seek ways to improve organizational processes using IT solutions. Transformational leaders can inspire employees to adapt to new technologies, promote a learning culture, and create a supportive environment for experimentation and exploration of IT tools. Furthermore, transformational leaders can advocate for IT investments, secure necessary resources, and align IT initiatives with the strategic objectives of the organization. They can champion the implementation of IT systems and facilitate the training and development of employees to ensure smooth adoption and utilization of technology. In summary, the relationship between IT utilization and the implementation of transformational leadership is synergistic. IT utilization enhances the effectiveness of transformational leadership by providing access to information and facilitating communication and collaboration. At the same time, transformational leadership fosters the effective utilization of IT by promoting a culture of innovation, change, and continuous learning.

H5: Information technology utilization has positively contributed to implementing transformational leadership in TVET

2.3 Conceptual Framework

The conceptual framework for this study on implementing transformational leadership in Technical and Vocational Education and Training (TVET) centers around the relationship between academic staff competence, availability of resources, monitoring, conflict, and information technology utilization as independent variables, and their impact on the dependent variable of successful implementation of transformational leadership. Academic staff competence refers to the knowledge, skills, and abilities of staff members to effectively lead and inspire others within the TVET center. Availability of resources encompasses the presence of adequate facilities, equipment, and funding required for effective leadership practices. Monitoring refers to the process of supervision, evaluation, and feedback provided to leaders to ensure accountability and performance improvement. Conflict addresses the presence of conflicts and disagreements within the center that can affect the implementation of transformational leadership. Information technology utilization focuses on the extent to which technology tools and platforms are utilized to facilitate communication, collaboration, and leadership practices. By examining these factors, this study seeks to understand the role they play in fostering successful implementation of transformational leadership within TVET centers.

Figure 1: Conceptual Framework of the Study

Source: Researchers Own construction, 2023

2.4 Knowledge gap

The existing literature on the influence of college environment on implementing transformational leadership in government technical and vocational education and training colleges of Sidama Regional State reveals a critical knowledge gap. While some studies have explored the impact of college environment on leadership in general or specifically in educational settings, there is limited research focusing on the unique context of government technical and vocational education and training colleges in Sidama Regional State. Furthermore, there is a lack of comprehensive investigation into the specific factors within the college environment that facilitate or hinder the implementation of transformational leadership approaches in these institutions. Thus, this knowledge gap highlights the need for further research to address this critical area and provide insights for effective leadership practices in government technical and vocational education and training colleges in the region.

3. Materials & Methods

3.1 Research design:

The research design for this study can be a quantitative research design. This design will allow for the measurement and analysis of numerical data, which can help in exploring the relationship between the independent variables (academic staff competence, availability of resources, monitoring, conflict, and information technology utilization) and the dependent variable (implementation of transformational leadership).

3.2 Research approach:

The research approach can be a deductive approach, where existing theories and literature on transformational leadership and college environments are used to formulate hypotheses and test them empirically.

3.3 Data sources:

The primary data source for this study can be surveys/questionnaires administered to academic staff members in the government technical and vocational education and training colleges of the Sidama Regional State. Secondary data, such as reports and documents related to the colleges' environment and leadership practices, can also be utilized.

3.4 Sampling design:

The target population of this study is 200 academic staff of TVET colleges in Sidama region. A stratified random sampling technique can be used to select the participants for the survey/questionnaire. The academic staff members can be divided into different strata based on their years of experience or job titles, and a proportional number of respondents can be selected from each stratum. Yamane (1967) sample size determinations were employed to have 133 sample sizes.

3.5 Data collection tools:

A structured questionnaire can be developed to collect data from the participants. The questionnaire can consist of items related to the independent variables (academic staff competence, availability of resources, monitoring, conflict, and information technology utilization) and the dependent variable (implementation of transformational leadership). Likert scale or multiple-choice questions can be used to measure the variables.

3.6 Model specification:
The model specification can include a regression model, where the dependent variable (implementation of transformational leadership) is regressed on the independent variables (academic staff competence, availability of resources, monitoring, conflict, and information technology utilization). The model can be specified as:

Implementation of transformational leadership = β_0 + β_1(academic staff competence) + β_2(availability of resources) + β_3(monitoring) + β_4(conflict) + β_5(information technology utilization) + ε

3.7 Methods of data analysis:
The collected data can be analyzed using statistical software such as SPSS or STATA. Descriptive statistics can be computed to examine the distribution of variables. Multiple regression analysis can be conducted to test the relationship between the independent variables and the dependent variable. Additionally, hypothesis tests and inferential statistics can be used to determine the significance of the relationships.

4. Results

4.1 Response rate
This study aimed to examine the influence of college environment on implementing transformational leadership in Government Technical and Vocational Education and Training Colleges of Sidama Regional State. This section is devoted for the analysis of data collected in the questionnaire. The questionnaire is distributed to targeted 133 respondents out of which 11c0 of them were properly filled and returned questionnaire on the specified time period. Hence, response rate is 82.70% which implies the majority of the respondents have participated in the process of data collection. Then, the analysis of the data was based on the questionnaires collected using STATA version 13.0.

4.2 Demographic profile of the Respondents
In the following table, the demographic information of respondents is presented. These include the gender, age, educational status, and experience of respondents. Theses have showed as follow:

Table 1: General background of the respondents

1. Gender		Frequency	Percentage
	Male	85	77.3
	Female	25	22.7
	Total	110	100.0
2	Age	Frequency	Percentage
	Below 25 years	30	27.3
	25-34 years	66	60.0
	35-46 years	11	10.0
	Above 46 years old	3	2.7
	Total	110	100.0
3	Education level	Frequency	Percentage
	Diploma	3	2.7
	BA degree	64	58.2
	Master's degree	43	39.1

	Total	110	100.0
4	Experience	Frequency	Percentage
	Below 2 years	28	25.5
	between 2 and 5	47	42.7
	Between 6 up to 10 years	28	25.5
	Above 10 years	7	6.4
	Total	110	100.0

Source: Survey result, 2023

In the table 1 above, there were 110 respondents. Of these, 85 (77.3%) were male and 25 (22.7%) were female. This implies the ratio of male academic staff respondents to female is relatively high in the public sector TVET colleges of Sidama region. Hence, there is no gender bias since both gender groups participated in the study. This suggests that the participation of male auditors relatively high than female participation as it is true for all developing countries in the world.

Regarding the age of the respondents, 30 (27.3%) lies in age groups of below 25 years, 66 (60.0%) respondents were found in age group of 25 up to 34, followed by 11 (10.0 %) are in the range of (35-46), 3 (2.7%) percent respondents who are in the age group above 46 years. This implies that most academic staff of TVET colleges in Sidama region fall in productive age group, which is relatively higher than other age category. As it can be easily seen from (table 1), majority of the respondents fall in the age group of 31 to 40 and there are very few respondents with age group of more than 46 and above. Thus, the questionnaires collected data on the intention and perception of that productive age group of employees on their attitude about the Influence of College Environment on Implementing Transformational Leadership in Government Technical and Vocational Education and Training Colleges of Sidama Regional State.

Moreover, respondents were also asked about their level of education, as indicated in the above table (1) majority of survey respondents were bachelor's degree holders 64 (58.4%) , diploma holders 3 (2.7%) and 43 (39.1%) were master's degree respectively. This indicates that there were no respondents who had other level of educations that shows all participants are professional and can contribute more for the effectiveness of their internal audit activity since they are academically enough to know the status of Implementing Transformational Leadership.

Furthermore, table 1 displayed background information about the respondents' years of work experience. As a result, 28 (25.5%), 47(42.7%), 28 (25.5), and 7 (6.4 %) of the respondents have work experience of below 2 years, 2-5 years, 6-10 years and above 10 years in public procurement performance. of sectors, respectively. This implies that most respondents are having moderate work experience and with their qualified education level they are expected to make quality of Implementing Transformational Leadership in accordance with the standards.

4.3 Test of the questionnaires

Before making the correlation and regression analysis, questionnaires are required to be tested for their validity and reliability. This enhances the quality of the study and increases its reliability. Test of reliability is one important test of sound measurement. A measuring instrument is reliable if it provides consistent results. Reliable measuring instrument does contribute to validity, but a reliable instrument need not be a valid instrument. If the quality of reliability is satisfied by an instrument, then while using it we can be confident that the transient and situational factors are not interfering the data and the data collected before making

regression analysis is reliable. In this study, the student researcher employed Cronbach's Alpha (α) which is the most common measure of scale reliability and a value greater than 0.7 is very acceptable.

Table 4.2 Reliability Test of the variables

Variables	Cronbach's Alpha	No of Items
Implementing Transformational Leadership	0.836	5
Academic Staff competence	0.853	5
Conflict in colleges	0.850	5
Availability of resources	0.999	5
Monitoring and evaluation	0.849	5
Information technology Utilization	0.898	5

Source: Survey result, 2023

This indicates that all the variables under consideration accounts above the scientifically accepted threshold, therefore the study are believed to be reliable under a given circumstance. compared with the minimum value of alpha 0.70 advocated by Cronbach's (1951), then the responses generated for all of the variables 'used in this research were reliable enough for data analysis. This implies that the data incorporated in SPSS is reliable.

4.3.2 Validity

The validity of the questionnaire was determined through face, content and constructs validity. First, the question was framed in such a manner that it was easily understood and exactly conveyed its sense and purpose to the respondents. Moreover, the draft questionnaire was given to 5 academic staff to view it in the light of the research objectives, its relevance, the adequacy of the questionnaire items, and question coverage. According to Creswell (2014), validity measures the degree to which the study achieves what it sets out to do. To test the validity of the research instruments, content validity index (CVI) formula was used to ascertain the validity. If CVI is Greater than 0.70 then the questionnaire is valid. Research experts and advisors helped as they ascertain the validity of the instruments. i.e.

Content Validity Indenx (CVI)= (Total number of relevant items in the questionnaire)/(Total number of items in the questionnaire)

Source: (Creswell, 2014).

Accordingly, the researcher used the content validity index in order to check the validity of the questionnaire in current study and calculated as follow:

Content Validity Indenx (CVI) = 30/35=0.91

The CVI of this study is greater than 0.70. Then, the researcher forced to conclude that the questionnaire of this study is valid.

4.4 Summary of Descriptive Statistics

Descriptive statistics refers to the process of summarizing and analyzing the data in a dataset. It involves calculating various measures such as measures of central tendency (mean, median, and mode) and measures of dispersion (range, variance, standard deviation). Descriptive statistics can provide an overview of the dataset and help identify patterns, trends, and outliers. In this study, mean, SD, min and Maximum values are considered.

Table 4.3 Summary of Descriptive Statistics for all Variables incorporated in the model

Variables	Obs	Mean Std.	dev.	Min	Max
Implementing Transformational Leadership	110	2.590909	1.2138	1	5
Academic Staff competence	110	2.827273	1.255148	1	5
Conflict in colleges	110	2.836364	0.962863	1	5
Availability of resources	110	3.090909	1.31711	1	5
Monitoring and evaluation	110	2.554545	1.113605	1	5
Information technology Utilization	110	3.01454	0.762488	1	5

Source: Survey result, 2023

As indicated table 4.3, a maximum of 5 and a minimum of 1 likert scale values for all variables incorporated in the model. The Implementing Transformational Leadership has mean value of 2.59 and standard deviation value is 1.214 which indicates there was variation of actual responses from the mean. With regard to the independent variables, academic staff competence the overall mean was 2.83 with SD of 1.255, quality of internal control mean value 2.84 with SD value 0.963, conflict with mean value of 2.9916 with SD result of 0.92961 availability of resources has mean value of 3.09 with SD of value of 1.317, monitoring and evaluation has mean value of 2.6000 and standard deviation of 1.11042, IT utilization has mean value of 3.01 with SD value of .76249. In summary, all variables incorporated in the model have low contribution to public procurement performance in the study area.

4.5 Correlation Matrix for Dependent and Independent Variables

Correlation analysis measures the relationship between two items. The resulting value (called the correlation coefficient) shows if changes in one item will result in changes in the other item. Correlation is a way to index the degree to which two or more variables are associated with or related to each other (Brooks, 2008). The correlation matrix for this study was computed as follow:

Table 4.4 Correlation Matrix of Variables

Variables	1	2	3	4	5	6
Implementing Transformational Leadership (TLI)	1					
Academic Staff competence (ASC)	0.3567	1				
Conflict in colleges (CC)	-0.4053	0.393	1			
Availability of resources (AR)	0.1497	0.4621	0.055	1		
Monitoring and evaluation (ME)	0.366	0.167	0.2312	0.271	1	
Information technology Utilization (ITU)	0.1497	0.4621	0.055	0.561	0.1497	1

Source: Survey result, 2023

Table 4.4 shows the relationship between dependent variable which is implementing transformational leadership and independent variables with coefficient of correlation 1 indicates that each variable is perfectly positively correlated with each other. The result shows that, academic staff competence, monitoring and evaluation, availability of resources, and information technology utilization were positively correlated with implementing transformational leadership. In opposite direction, conflict has negative correlation with implementation of transformational leadership.

4.7 The Regression Results (Inferential Statistics)

Ordinary Least Squares (OLS) is the most common estimation method for linear models and that's true for a good reason. As long as your model satisfies the OLS assumptions for linear regression, we can rest easy knowing that we're getting the best possible estimates. The most common assumptions to be tested before running final regression result are normality, Multicollinearity, autocorrelation, and Heteroscedasticity. Before, processing the regression analysis, the researcher assessed all OLS assumptions. In this section, the researcher interoperated the model and discussed the finding in comparison with empirical studies reviewed.

Table 4.4. Regression Results

Source	SS	df	MS	Number of obs =110		
				F(8, 101) = 15.98		
Model	89.702608	8	11.212826	Prob> F = 0.0000		
Residual	70.8883011	101	.701864368	R-squared = 0.5586		
				Adj R-squared = 0.5236		
Total	160.590909	109	1.47331109	Root MSE = .83777		
TLI	Coefficient	Std. err.	t	P>t	[95% conf.	
ASC	.3503179	.0859301	4.08	0.000	.1798556	.5207802
CC	-.484532	.100885	4.80	0.000	.2844034	.6846606
AR	.2030622	.078683	2.58	0.011	.0469764	.359148
ME	.6184809	.0935157	6.61	0.000	.432971	.8039908
ITU	.2185881	.1154077	1.89	0.041	-.0103498	.447526
Cons	-2.636383	.6413431	-4.11	0.000	-3.908636	-1.364131

Source: Survey result, 2023

Implementing Transformational Leadership (TLI) = -2.636+0.350*Academic staff competence (ASC) -0.485* Conflict in colleges (AIC) +0.203*Availability of Resources (AFR) +0.618*Monitoring and evaluation (ME)+0.218* Information technology   (ICT)

The multiple regression result is presented in Table 4.8 above; R-squared measured the goodness of fit of the explanatory variables in explaining the variations in implementing transformational leadership. R-squared and the Adjusted-R- squared statistics of the model were 55.9 percent and 52.4 percent respectively. In this study, we used R-squared measured the goodness of fit of the explanatory variables in explaining the variations in implementing transformational leadership. This implies that 55.9 percent variation in the dependent variable was explained by the explanatory variables in the model. That means the explanatory variables (such as academic Staff competence, conflict in colleges, availability of resources, monitoring and evaluation, and information technology utilization jointly explain about 55.9 percent of the variation in the implementing transformational leadership. The remaining 49.1 percent of the variation in the implementing transformational leadership (as measured by Likert scale) explained by other variables which are not included in the model. In addition, the, F- statistics (15.98) the model summary and ANOVA with (p-value of 0.000) which is used to test the overall significance of the model was presented and indicates the reliability and validity of the model at 1 percent level of significance. This tells us that the model as a whole is statistically significant. The coefficients of 0.350* academic staff competence +0.203 availability of resources +0.618*monitoring and evaluation+0.219*expenditure management 0.216 availability of resources+0.088 *information technology utilization percent increase in public Procurement performance respectively. Whereas, the coefficient of explanatory variable which is -0.485*conflict lead to a negative direction changes on implementing transformational leadership.

Discussion of Regression Results

The result of this study shows that academic staff competence with coefficient of regression [⬚= 0.350] has positive and statistically significant value at 1% level of significance since p-value indicates 0.000 < 0.01. Hence, hypothesis one is accepted. This finding is consistent with the findings of other studies results of Ghasemi&Kordi (2018) who found out that there is positive and significant relationship between staff competence and implementing transformational leadership. This implies that more competent staff is positively contributes to the effectiveness of public organization which indirectly contributes to the implementing transformational leadership.

The conflicts in TVET college coefficient of regression [⬚= - 0. 485] has negative and statistically significant value at 1% level of significance since p-value of 0.005 < 0.01. Hence, the student researcher forced to accept hypothesis two. This finding is consistent with the findings of other studies such as Dahlan et al. (2023) who found out that there is a positive and significant relationship between conflicts in college and implementing transformational leadership. The regression result of the model was also clearly evidenced that there is statistically significant and positive relationship between conflict and implementing transformational leadership as far as the significance of coefficient of regression is negative. This implies that conflict has negative contribution to the implementing transformational leadership.

The result of this study also shows that availability of resources with coefficient of regression [⬚=0.203] has positive and statistically significant since (p-value of 0.011 < 5%). Hence, hypothesis H05 stated as "management support has positive and significant impact on Public Procurement performance "is accepted. This finding is consistent with finding of other studies results Geibel& Otto (2023) found out the positive and significant relationship between availability of resources and implementing transformational leadership.

The regression result of the model indicates availability of resources and implementing transformational leadership. Regarding the monitoring and evaluation with coefficient of regression of monitoring and evaluation, [⬚=0.618] there is positive and more statistically significant relationship with p-value 0.000< 1%, level of significance. Therefore, hypothesis H04 stated as "monttoring and evaluation has positive and significant impact on implementing transformational leadership" is accepted by the researcher. This finding is consistent with that of Ponsford et al. (2022) who found out that monitoring and evaluation has positive and significant relationship with implementing transformational leadership. This indicated that an increase in monitoring and evaluation in the organization has a positive influence on implementing transformational leadership.

The result of this study shows that information technology (IT) with unstandardized coefficient of regression [⬚=0.218] has positive and statistically significant with p-value of 0.041 ≥ 5%, level of significances. Hence, hypothesis H08 was not accepted by student researcher. This finding is consistent with research finding of Afshari et al. (2012) who suggested that information technology utilization has positive and statistically significant effect on implementing transformational leadership. The finding implies that increase in information technology facility utilization has positive and statistically significant impact on implementing transformational leadership. Hence, hypothesis is accepted.

Conclusion

This means that the competence of academic staff, effective monitoring and evaluation, sufficient availability of resources, and utilization of information technology all have a positive impact on the implementation of transformational leadership within an organization. These factors enhance the ability of leaders to inspire, motivate, and empower their followers. On the other hand, conflicts within the organization have a negative influence on the implementation of transformational leadership. Conflict can create a hostile environment,

hinder effective communication, and impede the leader's ability to build trust and rapport with their followers. Based on these findings, it is important for organizations to prioritize the development and support of their academic staff, establish effective monitoring and evaluation systems, ensure sufficient availability of resources, and promote the utilization of information technology to foster a transformational leadership culture. Additionally, efforts should be made to minimize and resolve conflicts within the organization to create a favorable environment for the implementation of transformational leadership practices.

Recommendations

Based on the study results, several recommendations can be made to enhance the implementation of transformational leadership in academic settings. Firstly, focus should be placed on enhancing the competence of academic staff through continuous training and development programs. By equipping them with the necessary knowledge and skills, they will be better prepared to embrace and effectively implement transformational leadership practices. Secondly, regular monitoring and evaluation should be conducted to assess the progress and effectiveness of transformational leadership initiatives. This will help identify areas for improvement and ensure that the intended outcomes are being achieved. Additionally, it is important to ensure the availability of adequate resources such as funding, technology, and materials, as these factors greatly influence the successful implementation of transformational leadership. Lastly, the integration of information technology should be encouraged and supported in academic settings, as it has the potential to greatly enhance communication, collaboration, and overall organizational effectiveness. On the other hand, it is crucial to address conflicts promptly and effectively, as they can hinder the implementation of transformational leadership. Conflict resolution strategies should be implemented to foster a positive and harmonious work environment that supports the ideals of transformational leadership. By implementing these recommendations, academic institutions can create a conducive environment for transformational leadership to flourish, leading to improved organizational performance and outcomes.

Direction for the Future Research

While the five explanatory variables included in the model have contributed to explaining 55.9% of the variation in the model, it is clear that a significant portion of the variance remains unexplained. This presents an opportunity for future research to delve deeper into understanding the factors that influence the remaining variance. One possible avenue for further investigation could involve incorporating additional variables that were not considered in the current model, such as demographic or socioeconomic factors, to capture a more comprehensive picture of the phenomenon under study. Moreover, qualitative approaches, such as interviews or surveys, may provide valuable insights into other potential explanatory factors that were not captured by the quantitative variables used in the current model. Additionally, exploring more sophisticated statistical techniques, such as non-linear or interaction models, could help uncover more complex relationships between the explanatory variables and the model outcome. By addressing these directions for future research, a more accurate and comprehensive understanding of the factors impacting the model outcome can be achieved.

Declarations
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