

General Information

The journal is produced by the Faculty of Business Management at The Open University of Tanzania. It accepts theoretical, conceptual and research-based papers in a wide range of topics on business management in Africa and the world at large. It also accepts cases, book reviews and summaries of dissertations.

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EDITORIAL NOTE

Dear readers

On behalf of the Board of the Pan-African Journal of Business Management (PAJBM) and my co-editor, I am pleased to present Volume 8, Issue 2 of our journal. This biannual publication is produced by the Faculty of Business Management at The Open University of Tanzania (OUT). PAJBM is a peer-reviewed, open-access journal dedicated to promoting research and disseminating findings from African and international scholars in the fields of business and management.

We are committed to publishing impactful scholarly articles that contribute to the advancement of knowledge in multiple disciplines. This issue encourages fresh ideas and new perspectives on existing research. Featured topics in this issue include: Effects of Self-Efficacy on Facilitating Prevention Intention of Fire Outbreaks in Public Markets in Tanzania: A Case of Dar es Salaam Region, Effects of Perceived Vulnerability on Enhancing Prevention Intention of Fire Outbreaks in Public Markets in Dar Es Salam Tanzania, Role of Entrepreneurship Education on Self-Employment in Tanzania: Case of Vocational Institutions Graduates, Examining the Effect of Financial Management Practices on Financial Sustainability of Selected Local Government Authorities in Tanzania: The Moderating Effect of Good Governance, the Effect of Credit to the Agriculture Sector on Coffee Export Growth in Tanzania, Examining the Implementation of Public-Private Partnership Model in Primary Education Provision in Kigamboni Municipality, Tanzania, Exploring Determinants of Low Tax Collection in Informal Businesses: Evidence from Mbeya city, Tanzania, Impact of Training on Police Officers' Performance in Tanzania: A Case of Ruvuma Regional Police Commander's Office, Challenges facing Micro and Small Business Growth in Tanzania: A case of Mbalizi Town Council, Effect of Personal Resources on Turnover Intentions in Food and Beverage Manufacturing Micro and Small Enterprises in Dar es salaam Tanzania, The Influence of Participative Leadership Style on Organizational Performance: A Case Study of the Central Corridor Transit Transport Facilitation Agency in Tanzania, Effects of Fiscal and Monetary Policies on Agricultural Industry Growth in Tanzania from 1970 to 2022, Impact of Human Resource Planning on Construction Project Completion in Zanzibar, The Impact of Covid-19 on the Performance of SMEs in Mwanza Tanzania and Social Media Marketing and Performance of Gas Energy Companies: A systematic Literature Review.

We hope that you find the articles in this issue insightful and that they contribute significantly to academic discussions in their respective areas.

Dr. Bukaza Chachage



Dr. Bukaza Chachage
Chief Editor

Effects of Self-Efficacy on Facilitating Prevention Intention of Fire Outbreaks in Public Markets in Tanzania: A Case of Dar es Salaam Region

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Abstract

This research investigated the effects of self-efficacy on facilitating prevention intention of fire outbreaks in public markets in Tanzania. The study utilized quantitative research approaches, surveying 384 participants comprising traders in public markets and the management of these markets in the Dar es Salaam Region. A simple random sampling method was employed to select respondents from 10 markets and data analysis was conducted using a structural equation model. A positive path coefficient ($\gamma = 0.685$) using standardized estimate results indicates that Self-Efficacy has positive and significant relationship with Prevention Intention of Fire Outbreaks in Public Markets. Findings justified by critical ratio of 2.619 and p value of 0.009. These results indicated that self-efficacy positively contributes to the intention to prevent fire outbreaks in public markets. The study suggests that all measurement variables associated with self-efficacy be considered when facilitating the intention to prevent fire outbreaks in Tanzania.

Keywords: *Self-Efficacy, Prevention Intention of Fire Outbreaks, Public Markets*

INTRODUCTION

Prevention intention, as defined by Boehmer *et al.* (2015), denotes a personal commitment involving safety engagement and coping efficacy. Prevention intention refers to the actions individuals take to implement preventive measures, aiming to mitigate the potential adverse impacts arising from hazards related to market fires. Market fire incidents have become a widespread concern in both developed and developing nations which need to be prevented (Hatmoko and Larassati, 2021; Oneugubu *et al.*, 2021). Notable examples include the Sentul market fires in Malaysia in 2017 and 2019 (Pressreader, 2020; New Straits Times, 2020), the Daegu market fire in Korea in 2016 (The Korea Herald, 2016), the Kolibo public market fire in the Philippines in 2019 (Rappler, 2019), as well as the Camden Lock market fire in England in 2017, Sunrise Oriental market fire in the USA in 2017, La Merced market fire in Mexico in 2019, and Gariahat market fire in India in

2019 (Hatmoko and Larassati, 2021). This trend indicates a rising occurrence of fire outbreaks (Bushesha and Ndibalema, 2017; William, 2022).

For instance, Nigeria witnessed 39 market fires from 2012 to 2013, resulting in significant losses for traders (Popoola *et al.*, 2016), and four market fire incidents from 2015 to 2018 (Hatmoko and Larassati, 2021). Similarly, Burundi experienced 13 market fire outbreaks from 2006 to 2021 (The Christian Science Monitor, 2013; IWACU English News, 2017; Anglican Church of Burundi, 2019; Burundi Times, 2020; Emmanuel, 2021). Uganda endured nine market fire cases from 2010 to 2022 (VOA, 2011; The Monitor, 2021; URN, 2022; The Independent, 2022; Wadembere and Apaco 2020; Faria *et al.*, 2021; Kimuli *et al.*, 2022), and Kenya faced 12 market fire incidents from 2015 to 2022 (Citizen Digital, 2022; BBC News, 2018; Hilary *et al.*, 2020; NTV, 2016; Daily Nation, 2023; Lule *et al.*, 2020). In Tanzania alone, there were 28 market fire incidents from 2010 to 2022 (URT, 2022; Mwidege and Rogath, 2014; Hilary *et al.*, 2020; The Citizen, 2020). The frequency of fire outbreaks in Tanzania is on the rise (William, 2022; Bushesha and Ndibalema, 2017; Kihila, 2017; Jongo *et al.*, 2018). Despite the significant losses incurred by traders due to these fires, no studies have investigated the effects of self-efficacy on the prevention intention of fire outbreaks in Tanzanian public markets. Therefore, this study explored the effect of self-efficacy on facilitating the prevention intention of fire outbreaks in public markets.

LITERATURE REVIEW

Theoretical Review: Protection Motivation Theory (PMT)

The Protection Motivation Theory (PMT) was introduced by Rogers in 1975 and has been extensively employed to predict mitigation behaviors (Rogers, 1975; Sommestad *et al.*, 2015). PMT posits that engaging in protective behavior is contingent on an individual's motivation for self-defense (Ezati *et al.*, 2021). PMT comprises two appraisals of behavior change: Threat appraisal, which involves an individual's belief in the severity of the threat (perceived severity) and their estimation of the likelihood of being affected by the problem (perceived vulnerability); and coping appraisal, which includes Response Efficacy (RE), an individual's expectations that the recommended behavior will effectively reduce the danger and Self-Efficacy (SE), one's belief in their capacity to carry out the recommended action. The founder expected PMT to be applied diversely and this expectation has been proven correct, as it is currently used across various disciplines for safety prevention (Rogers, 1975; Westcott *et al.*, 2017). Furthermore, it is argued that PMT studies have tripled since 2014, demonstrating its usefulness and development in the research arena (Mou *et al.*, 2022). PMT has been

extensively applied in studies on natural hazards such as drought (Kenshavas and Karami, 2016), earthquakes (Mulilis and Lippa, 1990), safety driving campaigns (Glendon and Walker, 2013), flooding (Gothmann and Reusswing, 2006; Paussin et al., 2014; Oakley et al., 2020), wildfires (Hall and Slothower, 2009; Martin et al., 2007a; Martin et al., 2007b; McFarlane et al., 2011; Dupey and Smith, 2019), bush fires (Westcott et al., 2017), and fire mitigation behavior (Liu and Jiao, 2017). However, in the present context, self-efficacy is borrowed to investigate its impact on enhancing the prevention intention of fire outbreaks in public markets since under it one's belief in carrying out action towards prevention of fire.

EMPIRICAL LITERATURE REVIEW

Self Efficacy and Prevention Intention of Fire

Self-efficacy (SE) is one's ability to perform the necessary prevention action (Martin *et al.*, 2007). Karamaker *et al.* (2021) found that SE is effective towards taking prevention measures to residential fires. Majority of the respondents showed to have ability and confidence to use installed equipment in case of fire to extinguish fire (Karamaker *et al.*, 2021; McCaffrey *et al.*, 2020). Surprisingly the study found that elderly see not being vulnerable to fire risk but yet possess high SE on ceasing fire (Karamaker *et al.*, 2021). However, there were contradictory results among few of the respondents showing low SE for not being able to use available fire equipment to extinguish fire (Karamaker *et al.*, 2021). The study was done in Netherlands and was qualitatively analysed by transcribing interviews and importing to ATLAS. Moreover, Marceron and Rohrbeck (2019) discovered that Self-Efficacy (SE) and perceived threat mutually influence individuals to adopt preventive measures. However, the moderating effects of SE were found to have the least impact on the relationship between perceived threat and preventive measures for those with low SE (Marceron and Rohrbeck, 2019). Threat and SE were identified as crucial factors motivating individuals to engage in risk prevention behavior (Glauberma, 2018; Marceron and Rohrbeck, 2019). It was also suggested that when disaster awareness is sufficiently raised, it leads to an adequate sense of SE (Marceron and Rohrbeck, 2019). This study, conducted in the USA, employed a general linear model using the Statistical Analysis System (SAS) but was not focused on the domain of market fires. Conversely, Jansen *et al.* (2020) observed that lower SE had no effect on prevention behavior. In situations where the severity was high, SE was negatively influenced (Jansen *et al.*, 2020). In such cases, people lacked the confidence to respond effectively to grease fires. However, severity and SE were found not to be significantly related to prevention behavior, although other studies demonstrated a positive relationship between the same constructs (Jansen *et al.*, 2020; McLennan *et*

al., 2015). This study, conducted in the Netherlands, employed Structural Equation Modeling (SEM) and Confirmatory Factor Analysis (CFA). Fitria *et al.* (2020) discovered a significant correlation between self-efficacy and optimism with anxiety among market fire victims. This study, conducted in Indonesia, utilized independent T-square, Chi-square, and logistic regression prediction models. Therefore, this study puts forth the hypothesis that: **Alternative Ha:** *There is a positive relationship between perceived self-efficacy and prevention intention on outbreaks of fire in public markets.* **Null Ho:** *There is no positive relationship between perceived self-efficacy and prevention intention on outbreaks of fire in public markets.*

METHODOLOGY

This research was carried out in the Dar es Salaam region, focusing on traders in public markets as the target population. The selection of this Region was motivated by the elevated occurrence of fire incidents in public markets, with Dar es Salaam having witnessed 16 such incidents. The study embraced the positivist research philosophy, and a deductive research approach was adopted due to the quantitative nature of the investigation. Following Saunders *et al.* (2012) suggestion that a survey strategy is pivotal in deductive approaches, this study employed a survey methodology. The determination of the sample size was based on Cochran's formula (1977), advocating for a large sample size to minimize sampling errors in social research, where a 5% margin of error is considered acceptable (Taherdoost, 2020). Hence, the sample size for this study was 384. The author utilized a probability sampling technique, incorporating multistage and random sampling methods, to secure a representative sample suitable for generalising the findings (Acharya *et al.*, 2013). The sampling frame was derived from the population of traders in the 77 available public markets in Dar es Salaam, with a total population of 64,753 traders. Multistage cluster sampling was applied to obtain a representative sample for the study, covering Ilala, Kinondoni, Temeke, Ubungo, and Kigamboni. Primary data for this study were collected through the self-administered questionnaire method, a cost-effective approach. Structural Equation Modelling (SEM) was employed for data analysis. SEM, taking a confirmatory approach that specifies inter-variable relationships, is uniquely capable of handling such relationships, unlike other multivariate techniques. The author ensured the observance of all ethical considerations from the initial stage to the conclusion of the study.

RESULT AND DISCUSSION

Confirmatory Analysis Results

The measurement model employed to assess self-efficacy incorporated the observed variables SE4, SE2, SE3, and SE6 for confirmatory factor analysis.

The analysis was conducted using IBM Amos 20 with maximum likelihood estimation, yielding the following results for model fit indices: CMIN/df = 0.131, GFI= 1.00, AGIF = 0.998, CFI = 1.00, and RMSEA= 0.000. According to Byrne (2013), a good model fit should have CMIN/df less than or equal to 3, CFI greater than 0.90, indicating a well-fitting model, RMSEA less than 0.05, indicating acceptable fit, and GFI should be at least 0.9, indicating acceptable fit. Similarly, the measurement model for prevention intention involved observed variables PI4, PI3, PI2, and PI1. Confirmatory factor analysis, also conducted using IBM Amos 20 with maximum likelihood estimation, produced the following results: CMIN/df = 2.430, GFI= 0.993, AGIF = 0.967, CFI = 0.965, and RMSEA= 0.065. These findings demonstrate a well-fitted model based on the established criteria for model fitness, as outlined in Table 4.

Table 1: Summary of Measurement Model on CFA

Items	Initial Stage of CFA Indicating Unsatisfactory Measurement Model Fit					Remarks
	CMID/Df	GFI	AGFI	CFI	RMSEA	
	SE	0.131	1.00	0.998	1.00	
PI	2.430	0.993	0.967	0.965	0.065	Accepted in 1st run

Source: Researcher (2023)

Significant Relationship between Self-Efficacy on Prevention Intention

The fourth hypothesis suggested in this study was based on significant relationship between perceived self-efficacy and prevention intention on outbreaks of fire in public markets. To come up with findings, the developed hypothesis was tested. For testing the stated hypothesis, descriptive statistical analysis was run first to profile the influence of the four attributes of self-efficacy and prevention intention on outbreaks of fire in public markets. The self-efficacy attributes are SE2: Confidence; SE3: Resources; SE4: Fire hydrant; SE6: Accessibility; as illustrated in Table 2.

Table 2: Self-Efficacy on Facilitating Prevention Intention of Fire

Variable	SE2	SE3	SE4	SE6
N	384	384	384	384
Mean	5.1979	5.1562	5.1536	5.2682
Std. Error of Mean	.03678	.03619	.03705	.03229
Median	5.0000	5.0000	5.0000	5.0000
Mode	5.00	5.00	5.00	5.00
Std. Deviation	.72075	.70918	.72612	.63281

Source: Researcher (2023)

Among the four self-efficacy measurements outlined in Table 5, SE6 demonstrated a substantial influence by yielding a high mean value of 5.2682, accompanied by a median of 5.00. SE2 produced a mean value of 5.1979 with a median of 5.00, SE3 had a mean value of 5.1562 and a median of 5.00, and finally, SE4 had a mean value of 5.1536 with a median of 5.00. The higher mean values suggest a more pronounced impact on the prevention intention concerning fire outbreaks in public markets. Additional analysis was conducted using Structural Equation Modelling (SEM) to explore the relationship between self-efficacy and prevention intention regarding fire outbreaks in public markets, as illustrated in Table 3.

Table 3: Regression Weights and Standardized Regression Weight

Path	Estimate	S.E.	C.R.	P	SRW	Remarks
PI <--- SE	1.631	.623	2.619	.009	.685	Supported
SE3 <--- SE	1.000				.245	Supported
SE2 <--- SE	1.968	.666	2.954	.003	.473	Supported
SE4 <--- SE	.968	.409	2.368	.018	.231	Supported
SE6 <--- SE	1.119	.403	2.778	.005	.306	Supported

Source: Researcher, (2023)

The path leading from SE to PI in Table 6 is used to examine the relationship between Self-Efficacy on Facilitating Prevention Intention of Fire Outbreaks in Public Markets. A positive path coefficient ($\gamma = 0.685$) using standardized estimate results in Table 3 above indicates that Self-Efficacy has positive and significant relationship with Prevention Intention of Fire Outbreaks in Public Markets. The result is similar with (Acharya *et al.*, 2013). who argued that a standardized path coefficient (γ) should be at least 0.2 in order to be considered significant and meaningful in the model. The results in the current study confirm a strong positive relationship between Self-Efficacy on Facilitating Prevention Intention of Fire Outbreaks in Public Markets because of having positive path coefficient ($\gamma = 0.685$). Apart from standardized coefficient, further analysis was done using critical ratio and p-value to determining the significant relationship with Prevention Intention of Fire Outbreaks in Public Markets. In this study findings yielded a critical ratio of 2.619 which is greater than 1.96 and significance level of p value of 0.009. According to Hox and Bechger (2014) the relationship which has yield a critical ration greater than 1.96 and p value less than 0.05 is considered significant. This means that **Alternative Ha:** which state that *there is a positive relationship between perceived self-efficacy and prevention intention on outbreaks of fire in public markets was rejected while Null Ho* which states that *there is no positive relationship between perceived self-efficacy and prevention intention on outbreaks of fire in public markets accepted.*

Attributes of self-efficacy under resources play a vital role in enhancing fire management, as resources contribute to boosting the prevention intention of fire outbreaks in public markets (Larsen *et al.*, 2021). Furthermore, fire hydrants, connected to a reliable source of fire protection water supply, are equipped with water spray nozzles for targeted water distribution over the surface or area requiring protection. In simpler terms, fire hydrants function as above-ground pumps connected to pipelines for safety in urban or residential areas. Firefighters can attach their hoses to these hydrants to access water for extinguishing fires, strategically located to aid the fire department. They play a crucial role in firefighting, providing a steady flow of water during operations. Governments and entities worldwide are actively educating the public on the significance of fire hydrants and safeguarding this valuable equipment. Therefore, the presence of fire hydrants in marketplaces is essential to enhance the prevention intention of fire outbreaks in public markets. The findings are related with arguments made by Yu *et al.*, (2022) who contended that SE were identified as crucial factors motivating individuals to engage in risk prevention behavior.

Additionally, the study revealed that fire safety equipment plays a crucial role in protecting individuals during fire incidents. While having these individual pieces of equipment installed is a positive step, maintaining the safety of the building is an ongoing responsibility that should not be neglected. Servicing and maintaining fire safety equipment are essential for ensuring their efficacy.

Findings are similar to Jansen, *et al.* (2020) study who analyzed the effects of experiencing a fire on psychological determinants of behavior knowledge self-efficacy and locus of control based mainly on arguments from Protection Motivation Theory and the Health Belief Model. Crucial in our setup is that we also relate these determinants to actual prevention behavior. Results show that IVE has the hypothesized effects on vulnerability self-efficacy and an unexpected negative effect on knowledge. Only knowledge and vulnerability showed subsequent indirect effects on actual prevention behavior. The results contradict the implicit assumption that an induced change in these psychological determinants is necessarily fire prevention.

The findings relate with Makara-Studzińska, *et al.*, (2019) who analyzed the importance of individual resources in firefighting, one of the highest risk professions. Firefighters from 12 different Polish provinces ($N = 580$; men; M (mean age) = 35.26 year, $SD = 6.74$) self-efficacy, and a broad range of sociodemographic variables. The Perceived Stress Scale (PSS), the Link

Burnout Questionnaire (LBQ), and the General Self-Efficacy Scale (GSES) were used in the study. To explore the relationships between work-related stress, burnout, and self-efficacy, separate regression models for each burnout dimension were analyzed. The results revealed that self-efficacy is a significant moderator that changes the direction and strength of the relationships between perceived stress and psychophysical exhaustion, sense of professional inefficacy, and disillusion. However, self-efficacy did not moderate the relationship between stress and lack of engagement in relationships (relationship deterioration).

Thus, personal self-efficacy, reflecting one's belief in the ability to effect change in the prevention intention of fire outbreaks in public markets, emerges as a key factor. Organizations with a strong sense of personal self-efficacy tend to adopt preventive measures more rapidly in the face of fire outbreaks in public markets. From this finding also it relates with protection motivation theory which has been extensively applied in studies on natural hazards such as drought and assumption show that self-efficacy is important on prevention of fire (Egbelakin *et al.*, 2015). Therefore, a critical point to note is that, in marketplaces, personal self-efficacy plays a significant role in shaping the prevention intention for fire outbreaks in public markets.

CONCLUSION

The results revealed a positive path coefficient ($\gamma = 0.685$), indicating a significant and positive correlation between Self-Efficacy and Prevention Intention of Fire Outbreaks in Public Markets. This finding aligns with Hoe's (2008) assertion that a standardized path coefficient (γ) should be at least 0.2 to be deemed meaningful and significant in the model. Further scrutiny involved the use of critical ratio and p-value to ascertain the significance of the relationship with Prevention Intention of Fire Outbreaks in Public Markets. In this study, the findings showed a critical ratio of 2.619, surpassing the threshold of 1.96, and a significance level of the p-value was 0.009. According to Hox and Bechger (2014), a relationship with a critical ratio exceeding 1.96 and a p-value below 0.05 is considered significant. Consequently, the study concludes that there is a positive relationship between perceived self-efficacy and the prevention intention regarding outbreaks of fire in public markets in Tanzania.

RECOMMENDATIONS FOR FUTURE RESEARCH

The research established a positive correlation between perceived self-efficacy and the intention to prevent fire outbreaks in public markets. Consequently, perceived self-efficacy should be strategically employed to enhance the prevention intention of fire outbreaks in public markets.

However, as this study was limited to the Dar es Salaam Region in Tanzania, it remains uncertain whether the findings and validated model can be generalised to other regions. Including additional regions in future studies is essential to obtain a comprehensive understanding of the situation.

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Role of Entrepreneurship Education on Self-Employment in Tanzania: Case of Vocational Institutions Graduates

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Abstract

This study examined the impact of entrepreneurship education curriculum on self-employment in Tanzania, specifically examining whether skills development for trainees in vocational training institutions contributes significantly to economic growth. Data for this study was collected from a sample of 118 trainees from the fitter mechanics, electrical installation, and motor vehicle mechanics trades at the Chang'ombe Regional Vocational Training Institution in the Dar es Salaam region, using a questionnaire and employing a descriptive design. The chi-square model, implemented through SPSS version 25, was used to determine the relationship between entrepreneurship education taught in vocational institutions and students' perception of their future careers. The findings indicated that vocational entrepreneurship education is knowledge and skills-based, thereby enhancing learners' competencies for self-employability. Additionally, student's exhibited positive attitudes towards entrepreneurship education, and a significant relationship exists between students' perception of entrepreneurship and their future careers. This study recommends that future researchers conduct in-depth case studies of successful self-employment ventures initiated by graduates of vocational training institutions who have undergone entrepreneurship education. Such studies can help identify key factors contributing to success and inform future reforms of entrepreneurship education curriculum

Keywords: *Vocational education, entrepreneurship, vocational institutions graduates, self-employment*

INTRODUCTION

Entrepreneurial program in vocational education (VE) in Tanzania was established with the responsibility of provision of employability skills in all sectors of the economy. With reforms in education specifically in vocational education in Tanzania, the instruction system changed from traditional method of teaching to an approach known as competency-based education and training (CBET). The approach, competency-based education and training has been claimed that it has increased learners' work experiences

hence chances of employment, personal and social development (VETA, 2018). To ensure smooth provision of skills, entrepreneurship program was designed in such a way it provides and plasters all technological dimensions in terms of knowledge and skills needed for development of skills for industrial economy.

According to VETA (2018), curriculum is designed to cover attitudinal aspects in relation to cross cutting issues, such as entrepreneurship skills, environmental issues and issues related to HIV/AIDS. This has been integrated in the entrepreneurship curriculum in order to produce graduates who can face the challenges of the world of work (VETA, 2018).

In Tanzania, entrepreneurship education is currently taught as a subject in all vocational institutions on a nationwide basis to support efforts by the Government to promote entrepreneurship capacities to trainees completing studies at these vocational institutions. This is in line with ongoing efforts by Tanzania government view to vocationalise the secondary education where students are expected to learn vocational subjects, this in turn will help the learners to develop life and work-related skills to increase efficiency in everyday life (URT, 2023).

Vocational educational and entrepreneurship plays an important function in creating an avenue for economic growth for all nations (VETA, 2018). In Tanzania, Vocational Educational and Training Authority (VETA) play a pivotal role of training of middle cadre manpower for industrial production, a study by Luhala and Yuting (2021) pointed out that VET prepares students to be familiar with detailed careers and be professionals and experts in different career paths, for example, agriculture, food and nutrition programmes in the school. The advancement of science and technology, practical activities such as computer sciences need to be introduced and integrated in public secondary schools to develop students' careers. Amongst many functions, VETA promotes provision of short tailor-made course programs and in-serving training in order to improve performance, quality and productivity of the national economy (VETA, 2018).

Transformation in VE encompassed technology advancements and market rivalry, as well as shifts in the requirement for highly qualified and adaptable workforce. To meet these demands, it is necessary to reduce the gap between academic and vocational education and strengthen the co-operation between the education authorities and employment organizations as well as industries (Tabbron and Yang, 1998). In Malaysia, the studies have highlighted the importance of entrepreneurial initiatives in improving the country's economic

conditions. For instance, Hoang et al. (2020) investigated the role of entrepreneurial education in enhancing self-efficacy, learning orientation and entrepreneurial intention among young people. Furthermore, (Ip et al., 2021) investigated the important effects of different determinants of entrepreneurial intention, providing fruitful findings to help educators nurture students' abilities to solve social problems and EE is important for developing their favourable entrepreneurial attitudes and mindsets (Wardana et al., 2020).

Vocational Education and Training (VET) system is a vital element of economic development approach in Tanzania as it maintains economic competitiveness among the workforce and improves skills and knowledge. The statement is supported by Moshi et al. (2024) who adds that Technical and vocational educational and training (TVET) remain the appropriate tool for implementing and promoting sustainable development in Tanzania, it produces the workforce who will be in the forefront in dealing directly with sustainable development issues. In this regard, TVET programmes must aim to enable and expand the acquisition of life skills needed to meet the changing needs of industry and the economy.

VET curriculum should be designed to provide a pathway to development of knowledge and skills for improving entrepreneurial practices and facilitate flow of theory and practice. According to Ellis (2003), the obvious advantages of a vocational curriculum are: to provide instruction for many different fields that require technical skills rather than academic knowledge, to allow students to focus solely on training for a career development and to provide flexible programs for skill development. At some extent, skills provided by VET may be influenced by quality of instructors in VET.

Both the vocational training and skills development are the most impact factors of human capital development of a country. In Tanzania vocational education institutions, the concept of entrepreneurship is not new; it encompasses the theoretical understanding and practical application of principles and skills related to entrepreneurial endeavors (Audu, 2022). This has been included in vocational curricular for training middle carders and to help out those who wish to establish small businesses. Vocational institutions like Morogoro Teachers Training College (MVTTC), Dar, es Salaam National Vocational Training Centre (NVTC) provide several short courses, targeting all those who aspire to set up and run their own businesses and those engaged in small business enterprises development.

The World Bank points out that the fundamental solution for the manpower problem facing Tanzania's small-scale enterprises (SSEs) was the establishment of vocational schools and training centres since they are important for formation of industrial manpower (World Bank, 1991). It is therefore advanced that effective use of the vocational skills acquired from vocational education and training could serve as a basis for technological innovation within the SSEs in Tanzania (Ishumi, 1998). Technical and vocational education (TVET) is of key important for Tanzania today as countries vision is to implement industrialization policy and more recently the government has set the goal to introduce vocational subjects in secondary schools (Ishumi, 1998). The purpose is to ensure that all students completing basic education also obtain employability skills. Ofori (2018) backs up this argument by acknowledging that any developing country's education system must be linked to TVETs colleges which are a driver to human capital development that bases on the provision of skills and competences for its sustainable development.

Characteristics and competencies of an entrepreneur trainee from vocational education as highlighted in syllabus stipulates that: the syllabus intends to provide a crucial link between the trainee's occupation and a practical life of self-employment. The trainees will therefore have developed a positive attitude towards self-employment and the motivation to become job creators and not mere job seekers (Ofori, 2018). This is supported by literature on entrepreneurship by Van der (1998) who adds that a number of competencies listing on entrepreneurial qualities are like motivation, a need for autonomy and independence, creativity and originality, taking initiative, risk taking. Other competencies include looking for possibilities, posing challenging objectives, self-confidence, internal locus of control and endurance, these qualities could be called enterprising key skills. These skills are more important in promoting self-employable individuals. In some cases, skills analysis focuses on managing a business rather than managing your own enterprise. The last, and most interesting, theme focuses more explicitly on the role of the entrepreneur as entrepreneur. 'Proper' entrepreneurial competencies are needed successfully to start an enterprise, to run it in the market and to let it survive or grow. Competencies, range from recognizing business opportunities, interpretation of market information and the development of customer orientation to the development and effective operation of relation networks and the building of an innovative organisation (Tolentino, 1998). The entrepreneur has to develop personal entrepreneurial behavior and characteristics, learning effectively from and in business interactions and the personalization (knowledge circulation in personal and

Internet/email supported networks) of global information. Bonet *et al.*, (2011) individuals with entrepreneurial characteristics can significantly be driven to self-employment since they are: self-confident, creative, dynamic and energetic, leaders, flexible, able to calculate risk, able to get on well with people, independent, and initiative oriented. These people also, need to achieve, are optimistic, are directed towards profit, can persevere and are determined, and are receptive to suggestions and criticisms. However, Bonet *et al.*, (2011) have shown that education, specifically the provision of entrepreneurship education to all students may not lead to innovation.

The aim of the reform is to better use the VET system to qualify people and prepare them for the labour market and to improve vocational training. More specifically, the reform sets out to improve the effectiveness and efficiency throughout the system by improving the quality of training and making it more relevant to the needs of business, individuals and society.

It has been claimed that a number of researches conducted worldwide illustrate that formal education has failed in achieving the target of providing entrepreneurship education in various levels. Vocational education contribution in this matter called into question by many sides, because many graduates who do not meet the qualifications required by the sector at the same time were not ready to be entrepreneurs. Winarno (2012, 2013), Peterman, and Kennedy (2003) suggest that formal education has no significant influence on the formation of character and an -entrepreneurial attitude to the learners. His research on the effectiveness of entrepreneurial learning in vocational show that the material and entrepreneurial learning strategy is not sufficiently effective in developing entrepreneurial values of students, the diversity knowledge of entrepreneurship teachers affects the failure of achieving the entrepreneurial class. Timmons (2004) indicates that formal education is not able to encourage entrepreneurship in its graduates; schools prepare graduates to only know limited knowledge about the company, and be mentally prepared to seek for work, and actually suppress creativity and students' entrepreneurial skills. Similarly, entrepreneurial education cannot be used as a strategy to solve unemployment but can equip students with job skills.

Theoretical Framework

The study employed Human Capital Theory, positing that the success of entrepreneurs hinges on their knowledge, skills, and experiences (Becker, 1964). Developed primarily by economist Gary Becker in the 1960s, this theory suggests that investments in education, training, and health can elevate

economic productivity and spur higher levels of development within societies (Becker, 1964). According to Becker, individuals accumulate human capital through these investments, thus enhancing their productivity and earning potential in the labor market (Becker, 1964). This concept encompasses not only formal education but also practical skills, knowledge, and experiential learning gained through on-the-job training and informal education (Schultz, 1961). In the realm of entrepreneurship studies, Human Capital Theory offers valuable insights into the pivotal role of education and training in nurturing entrepreneurial success (Audretsch & Thurik, 2001). Researchers leverage this framework to explore how individuals' human capital—comprising their educational attainment, relevant skills, and prior work experience—affects their propensity to embark on entrepreneurial ventures, their adeptness in identifying and capitalizing on entrepreneurial opportunities, and their overall performance as entrepreneurs (Shane & Venkataraman, 2000). Furthermore, the theory aids in assessing the efficacy of entrepreneurial education and training initiatives in enhancing individuals' entrepreneurial capabilities and outcomes, thereby informing policymakers and educators in crafting efficacious entrepreneurship development strategies (Wyrwich, Stuetzer, & Sternberg, 2016). Within vocational training programs, entrepreneurship initiatives aim to bolster individuals' human capital by providing education tailored to specific industries, thereby enhancing their capacity to succeed as entrepreneurs (Wyrwich et al., 2016). This study aligns with Human Capital Theory by prioritizing the acquisition and enhancement of skills and experiences directly applicable to particular vocational or industry settings (Wyrwich et al., 2016). Within the framework of vocational education, Human Capital Theory underscores the importance of experiential learning, enriching individuals' human capital by bridging the gap between theoretical knowledge and practical application (Wyrwich et al., 2016). By staying abreast of industry advancements, learners in entrepreneurship programs gain a competitive edge, ensuring they are well-equipped to tackle the evolving challenges of entrepreneurship within their specific industries (Wyrwich et al., 2016). This study underscores the significance of cultivating human capital tailored to the requirements of particular vocational fields, with vocational education programs building human capital and preparing individuals for successful entrepreneurship through practical experiences and continual learning (Wyrwich et al., 2016). Guided by three research questions, this study aims to evaluate the adequacy of current vocational entrepreneurship education in developing the entrepreneurial skills necessary for enhancing self-employability, assess vocational institution students' attitudes towards entrepreneurship education, and explore the relationship

between students' perception of entrepreneurship and their choice of entrepreneurship as a future career.

METHODOLOGY

The study was comprised of 118 vocational education trainees that were enrolled in second-level entrepreneurship courses at the Regional Vocational Training Centre (RVTC) in the Dar es Salaam region. Data was gathered from multiple trades within the RVTC, including electrical installation, fitter mechanics, and motor vehicle mechanics, with a random selection of 30 trainees per trade, totaling 120 participants. Unfortunately, two questionnaires were not returned, resulting in the utilization of 118 questionnaires for data collection. The study adopted a pragmatic paradigm, employing a mixed approach and descriptive survey design, with the chi-square model utilized for analysis. Descriptive research aimed to depict the characteristics of the study participants, enabling the capture of diverse perspectives on the role of vocational entrepreneurship curriculum in developing employability skills for the current economy. Non-participant observation was conducted during teaching and learning workshops to assess the availability of facilities, including ICT gadgets. Likert scales, ranging from strongly agree (SA) to strongly disagree (SD), were employed for data collection, analyzed quantitatively using SPSS version 23. The study instruments were modified based on the human capital model, emphasizing the significance of knowledge, skills, and experience in entrepreneurial success. The scale exhibited good consistency in responses, demonstrating moderate to good internal reliability and suitability for the vocational education context.

RESULTS

The results and discussion section presents an analysis of the study's findings regarding the influence of entrepreneurship curriculum on self-employment among vocational students in Tanzania. Descriptive statistics were used to summarize data, while inferential analysis employed the Chi-square test to assess the association between entrepreneurship and future careers. Results are presented in accordance with the study objectives. Firstly, regarding the appropriateness of the vocational entrepreneurship curriculum for developing entrepreneurial skills, 54 (45.8%) respondents agreed that vocational training centers are adequately resourced for teaching entrepreneurial skills, with 46 (39%) strongly agreeing and 8 (6.8%) disagreeing. Additionally, 51 (43.2%) trainees agreed that the curriculum's teaching contents are knowledge-based, enhancing skills and competencies for self-employability. Observation revealed predominant use of a traditional classroom-based teaching approach,

with limited integration of ICT gadgets. Secondly, regarding student attitudes towards entrepreneurship education, 75 (63.9%) learners showed strong positive attitudes towards entrepreneurship education, while 71 (60.2%) strongly agreed that entrepreneurship programs can produce graduates with high knowledge and skills. Moreover, 77 (65.5%) students agreed that entrepreneurship education enhances their potential for future entrepreneurial success. Notably, 81 (68.6%) students expressed confidence in their business ideas, indicating a predisposition towards entrepreneurship even before completing the curriculum. Finally, concerning the relationship between students' perception of entrepreneurship and future careers, the Chi-square test revealed a statistically significant association ($\chi^2 = 0.000$, $p < 0.05$) between students' views on entrepreneurship and their aspirations for future entrepreneurship careers. The strong association (Cramer's $V = 0.516$) underscores the link between students' perceptions of entrepreneurship and their future career choices as entrepreneurs.

Table 1: The Summary of Association Between the Entrepreneurship and Future Career

Chi-Square Tests			
	Value	Degree of freedom	Asymp. Sig. (2-sided)
Pearson Chi-Square	156.852 ^a	25	.000
Likelihood Ratio	41.996	25	.018
Cramer's V	.516	-	.000
N of Valid Cases	118		

Discussion and Implications of the Study

The findings of this study shed light on the perceptions and attitudes of vocational students towards entrepreneurship education and its impact on their future self-employment prospects in Tanzania. Firstly, concerning the adequacy of the vocational entrepreneurship curriculum, a substantial proportion of respondents agreed that vocational training centers possess the necessary resources for teaching entrepreneurial skills, with a notable percentage strongly endorsing this view. Moreover, a considerable number of trainees acknowledged the knowledge-based nature of the curriculum, indicating its effectiveness in enhancing skills and competencies relevant to self-employability. However, the observation of predominantly traditional teaching methods and limited integration of ICT gadgets suggests potential areas for improvement in curriculum delivery to align more closely with modern entrepreneurial practices and technological advancements.

Secondly, the study revealed encouraging attitudes among vocational students towards entrepreneurship education, with a majority expressing strong positive sentiments towards its potential to cultivate high knowledge

and skills. The positive correlation between entrepreneurship education and future entrepreneurial success, as perceived by the majority of students, underscores the value they place on such educational initiatives in preparing them for self-employment opportunities. Furthermore, the significant level of confidence exhibited by a large proportion of students in their business ideas highlights their proactive inclination towards entrepreneurship, signalling a promising foundation for future entrepreneurial endeavours.

Lastly, the examination of the relationship between students' perceptions of entrepreneurship and their aspirations for future careers yields noteworthy insights. The Chi-square test results demonstrate a statistically significant association between students' views on entrepreneurship and their intentions to pursue entrepreneurship as a future career path. This strong association underscores the influential role of students' perceptions in shaping their career aspirations, emphasizing the pivotal importance of fostering positive attitudes towards entrepreneurship education within vocational training institutions. The high Cramer's V value further reinforces the robustness of this association, indicating a strong link between students' perceptions of entrepreneurship and their inclination towards entrepreneurial careers.

Overall, these findings underscore the critical role of entrepreneurship education in equipping vocational students with the requisite knowledge, skills, and attitudes necessary for successful self-employment ventures. The study highlights the importance of continuously enhancing entrepreneurship curricula and teaching methodologies to better align with the evolving demands of the entrepreneurial landscape and to foster a conducive environment for cultivating entrepreneurial aspirations among vocational students in Tanzania.

RECOMMENDATIONS AND CONCLUSIONS

Based on the findings of this study, several recommendations can be made to enhance entrepreneurship education and support self-employment among vocational students in Tanzania. Firstly, there is a need for vocational training centers to modernize their curriculum delivery methods by incorporating more interactive and experiential learning approaches. This includes greater integration of ICT gadgets including; computers, printers, projectors, lecture boards internet facilities, adequate stable power supply, as well as technology-driven teaching tools to better prepare students for the dynamic entrepreneurial landscape. Additionally, vocational institutions should collaborate with industry partners to provide students with real-world

exposure and practical experience in entrepreneurship, enabling them to apply theoretical knowledge in practical settings.

Furthermore, efforts should be made to foster a culture of entrepreneurship among vocational students by promoting positive attitudes towards entrepreneurship education. This can be achieved through targeted initiatives such as guest lectures, workshops, and mentorship programs conducted by successful entrepreneurs and industry experts. Moreover, vocational training centers should strive to install confidence in students' business ideas and aspirations, providing them with the support and encouragement needed to pursue entrepreneurial ventures. By nurturing students' entrepreneurial mindset and skills, vocational institutions can empower them to seize opportunities for self-employment and contribute to economic growth and innovation in Tanzania.

In conclusion, this study underscores the critical role of entrepreneurship education in equipping vocational students with the knowledge, skills, and attitudes necessary for successful self-employment ventures. By addressing the identified areas for improvement and implementing the recommended strategies, vocational training centers can play a pivotal role in fostering a conducive environment for cultivating entrepreneurial aspirations among students. Ultimately, investing in entrepreneurship education not only benefits individual students but also contributes to the socio-economic development of Tanzania by fostering innovation, job creation, and economic empowerment.

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Examining the Effect of Financial Management Practices on Financial Sustainability of Selected Local Government Authorities in Tanzania: The Moderating Effect of Good Governance

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Abstract

The study examined how financial management practices affects the financial sustainability of Local Government Authorities (LGAs) in Tanzania, considering good governance as a moderating factor. Using an explanatory design and data from 330 respondents selected via simple random sampling, the research employed structural equation modeling to analyze the data collected through a structured questionnaire. The results revealed that financial planning; financial monitoring and financial control have positive and significant relationships with financial sustainability. Also, good governance fully moderating relationship between financial monitoring and financial sustainability. The study found out that effective financial planning, financial monitoring and robust financial control mechanisms are essential for sustaining financial health. The findings underscore the necessity for LGAs to adopt rigorous financial management practices and strengthen governance frameworks to enhance financial sustainability.

Keywords: *Financial Sustainability, Financial Monitoring, Good Governance, Local Government Authorities.*

INTRODUCTION

One of the most significant factors for Local government authorities (LGAs) to consider while fulfilling their functions is financial sustainability (Fellowset al.,2022) The use of agency and institutional theories in understanding the effect of financial monitoring (FM) on attaining financial sustainability (FS) was recognized in previous studies (Mbilla2020; Adegboyegun, et al., 2020), The relevance of these theories, especially the agency theory, can be attributed to the fact that FS has become widespread in FM studies (Makamache & Chikwature 2020)). This is because, as sustainability practices become predominant in institutions, stakeholders from the external environments ensure conformance (Baah et al., 2020).

The need to analyze the effect of FM on FS particularly for the selected local government authorities in Tanzania under moderating role of good governance (GG) was triggered by the fact that LGAs had numerous internal financial sources, however they were unable to collect the intended TZS 76.59 billion (URT, 2022). Seventy six (76) LGAs out of the 184 LGAs failed to allocate and contribute the necessary proportion of TZS 22.37 billion to development initiatives (URT, 2022) furthermore, there was a theft of funds in the LGAs, where TZS 435.02 billion was spent to buy more building materials than were necessary, TZS 898.85 was wasted, and TZS 3.5 was borrowed but not paid back on time (URT 2022) these are challenges facing selected LGAs regardless the number of efforts established by the government of Tanzania on improving performance of LGA such as, the government of Tanzania embarked from the 1990s on major decentralization reforms under the motto of “decentralization by devolution” (popularly referred to as D by D). D-by-D refers to the transfer of power, authority, and resources from the central government to LGAs (Harris, Domingo, Sianga, Chengullah & Kavishe 2011; Hoffman & Gibson 2006; Kessy & McCourt 2010; Mdee & Thorley 2016; Ndlovu & Ngenya 2006; Pallotti 2008). This was initiated through the umbrella of reforms to make the LGAs more accountable for resource delivery in their areas of jurisdiction. The reforms were carried out in LGAs through the Local Government Reform Programme (LGRP) which was part of a broader programme among the four key public sector reform programmes in Tanzania. The other three reform programmes included the Public Service Reform Programme (PSRP), Legal Sector Reform (LSR) and Public Financial and Management Reform (PFMR). All four programmes were part of a broader policy and strategic framework aimed at enhancing accountability, citizen participation, transparency, and integrity in the use of public resources and to improve service delivery (Mdee & Thorley 2016).

Furthermore several studies have been carried out in LGAs to identify the best methods for enhancing LGAs' financial sustainability (Ameer et al., 2019; Masenga, 2021; Mbogo, 2022; Ocholla, *et al.*, 2022; McQuestin, 2021; Kessy, 2020) crucial managerial components of analysis are either entirely absent or dispersed and understudied, specifically the determinants of financial sustainability such as, financial monitoring and its effects on financial sustainability of LGAs in Tanzania (McQuestin, 2021). However, to the best of the researcher's knowledge, little research has been conducted globally or specifically in Tanzania to look at the effect of financial monitoring on the financial sustainability of LGAs as variables of agency

theory using good governance (Institutional theory) as a moderating variable in predicting financial sustainability.

LITERATURE REVIEW

Theoretical literature review

The effect of financial monitoring on financial sustainability of selected LGA in Tanzania under moderating role of Good Governance has been theorized by Agency and Institutional theories.

Agency theory

Jensen and Meckling expanded on this idea in 1976 after it was first put forth by Alchian & Demsetz in 1972. The relationship between the principals—such as shareholders and agents like company executives and managers—is explained by the theory. Principal Agency Theory postulates that the agent and principal are both expectation-focused, that the agent's actions have an external impact on the principal's welfare, and that the agent has discretionary freedom due to asymmetric information (Eisenhardt, 1989). A potential goal conflict arises from pursuing self-interests (Magasi et al., 2020). Accordingly, suitable precautions must be taken to keep an eye out for any opportunistic actions by the agent (Jensen & Meckling, 1976; Magasi, et al., 2020; Panda & Leepsa, 2017). The agency theory also contends that in order to make sure that their agents behave in accordance with predetermined goals and expectations, principals must adopt a variety of policies, practices, systems, and strategies, most notably implementing internal control practices such as, financial monitoring (Abiodun. (2020). Monitoring, according to Mbilla et al. (2020), is the process of evaluating the effectiveness of internal control framework's performance over time, like self-evaluations, peer reviews, internal audits, financial reporting and monitoring of fund. In a similar vein, Adegboyegun (2020) studying this variable in the context of agency theory, researchers can gain insights into how financial monitoring affects the financial sustainability of selected LGAs in Tanzania. Agency theory focuses more on internal mechanisms to align interests and reduce agency costs (Jensen & Meckling, 1976). In contrast, institutional theory provides insights into how external institutional pressures shape governance practices (DiMaggio & Powell, 1983). In practice, researchers and practitioners often integrate elements from both theories to understand the complexities of governance. They examine how institutional pressures (institutional theory) interact with internal governance mechanisms (agency theory) to affect organizational outcomes such as financial performance, sustainability, and stakeholder trust (Scott, 2001; Tihanyi et al., 2003).

Institutional Theory

This study used neo-institutional theory (e.g., DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1995) it is further argued that the set of good governance practices that the OECD (2019) considered as being universally accepted is the result of a rationalized norm. Along with increased globalization and digitalization, other factors also played a role in the institutionalization of the global good governance norm.

First, the introduction of good corporate governance codes and other regulatory changes subject firms to work under a great deal of legitimacy pressure (Galaskiewicz & Wasserman, 1989) to embrace a set of globally approved board practices presuming good governance (Zattoni & Cuomo, 2008) as a result of the presence of various forces pressuring them to comply to the globally legitimate good governance norm. Efficiency and legitimacy, which are not necessarily mutually exclusive but may coexist and complement one another (Ntim & Soobaroyen, 2013; Tolbe, are the two main reasons why neo-institutional theory contends that coercive, normative pressures can compel firms to adhere to the good governance norm.

According to academics, companies that adhere to the good governance norm can increase efficiency by lowering agency costs through improved monitoring and facilitating access to valuable resources (Aguilera & CuervoCazurra, 2004). The Local Government system is a recognized organization with laws and bye-laws. When the theory is applied effectively, performance will increase, and local governments will be better able to deliver services in an efficient and effective manner. Because of this, institutional theory is important to inform effective governance in LGAs in Tanzania, working in conjunction with agency theory.

Empirical Evidence

The study by Chelangat, *et al.*, (2018) on the effect of financial monitoring on financial sustainability of NGOs, carried out in Kenya, using a multiple regression model showed a strong and positive relationship. A sample size of 550 people was chosen using an easy sampling procedure. Although the study's conclusions are restricted to NGOs, future research should take other sectors.

Mbilla *et al* (2020) did a further study in Ghana looking at the effect of financial monitoring on financial sustainability of listed bank. The study employed a purposive sampling strategy to obtain a sample size of 300 bank employees. The outcomes of multiple regressions revealed a positive but

insignificant relationship. Unfortunately, the use of the purposive sample technique limits the generalizability of results due to bias. Similar to this, Odek, & Okoth (2019) from Kenya did a study in distribution enterprises to examine, the effect of financial monitoring on financial sustainability. The author collected a sample of 38 employees from the companies using a census survey technique. Multiple regression analysis was used and results indicated positive and significant correlations. This study is restricted to distribution corporations in Kenya, other businesses, particularly those in the public sector (local government authorities), are not considered.

Another study, conducted by Sri Lankan researchers Kumari *et al.* (2019), looked at the effect of financial monitoring on the financial sustainability of banking organizations. A sample of 70 bank employees using a stratified sampling technique was used and multiple regression was used to analyze the data. The results showed a substantial positive association. The results are restricted to banking institutions, and the sample size is modest, which is the study's main drawback. On other hand Adegboyegun, *et al.*, (2020) conducted study from Nigeria examining the effect of financial monitoring on financial sustainability in the SMEs. The study used purposive sampling technique to attain a sample size of 120 employees of SMEs. The analysis of data done logistic regression estimate revealed positive and insignificant relationship However, this study was limited to only one state which limit the generalization of findings.

The research by Abdulkadir (2021) investigates how financial sustainability of regional NGOs based in Addis Ababa is affected by financial planning. The 936 regional NGOs present in Addis Ababa were the study's intended audience. 215 neighborhood NGOs were chosen at random to participate in the study and multiple regression was used to analyze the data. The findings indicate positive and significant relationships. Nevertheless, because only local NGOs working in Ethiopia were included in the study, findings are only applicable to specific organizations, making it unable to generalize the findings.

Another study by Mahmood, *et al.*, (2021) from Pakistan on the effect of strategic planning on the financial sustainability of small and medium-sized firms (SMEs) with sample size of 384 SMEs using the stratified probability sampling and the SEM for data analysis. discovered positive and significant relationships. Future studies may recommend this paradigm for use in other organizational contexts. The study by Abiodun *et al.* (2020), which examined the effect of financial planning on financial sustainability using a purposive

sample of 50 employees from firms listed on Nigeria's capital market, presents several gaps. The primary limitation is the use of purposive sampling, which may introduce bias by selectively targeting a specific group of employees rather than a representative sample, potentially affecting the generalizability of the findings. Additionally, the study's focus on capital market firms does not account for the unique financial and governance challenges faced by public sector entities such as Local Government Authorities (LGAs), limiting the applicability of its results to other contexts. Furthermore, the small sample size may not provide a comprehensive view of the broader organizational impact of financial planning on sustainability.

The study from Kenya by Dagane, & Kihara, (2021), assessed the effect of financial controls on the financial sustainability of NGOs. Multiple regression was utilized and results show positive and significant relationship. However, it was limited to NGOs, the other research should consider other areas including local government Authorities. The study by Kenyan researchers Ochola, *et al.*, (2022) looked at the effect of financial controls on financial sustainability of the public sector. The outcomes of the multiple regressions a positive and significant relationship. Unfortunately, the public sector analysis did not consider the municipal governments. Hamed (2023) Saudi Arabian studied the effect of financial control on the financial sustainability of banks. There is a strong and positive correlation, according to the results of the multiple regression analysis that was done. However, it was limited to banks, and further study should consider local government agencies and other industries.

Mpora (2023) looked into how the internal control framework of financial institutions in Uganda affected their performance. There exists a significant positive correlation between the efficacy of the internal control system and the performance of the firm. However, the financial sustainability of the local government authority was not considered by the study

This study integrates Agency Theory and Institutional Theory to analyze how governance practices influence the relationship between financial monitoring and financial sustainability. The theoretical framework posits that effective governance reduces agency costs by optimizing resource allocation and enhancing access to valuable resources (Aguilera & Cuervo-Cazurra, 2004). Motubatse, Ngwakwe, and Sebola (2017) argue that robust public sector governance supports sound decision-making and efficient resource utilization while ensuring accountability. Similarly, Lamdany and Martinez-Diaz (2009) underscore the role of multinational organizations, like the IMF,

in promoting governance solutions and transparency. Ojok and Basheka (2016) identify key governance components: accountability, transparency, participation, and predictability. While the reviewed literature provides a solid foundation, it largely reflects existing viewpoints without delving into critical analysis. To enhance the discourse, it is essential to evaluate the limitations and contextual variations in these theories and their application. For instance, the theoretical emphasis on resource allocation may overlook the complexities of implementing governance reforms in diverse institutional settings. Furthermore, while accountability and transparency are critical, their practical effectiveness can be hindered by political and cultural factors that are not always addressed in the literature. The study addressed these gaps by offering a more nuanced understanding of how governance practices interact with financial planning and sustainability, incorporating both theoretical insights and empirical observations to challenge and expand upon the existing discourse. Therefore, it was hypothesized that:

H₁: Financial monitoring has positive effect on financial sustainability of selected LGAs in Tanzania

H₂: Good governance positively moderates the effect of the financial monitoring on financial sustainability of selected LGAs in Tanzania

H₃: Financial planning has positive effect on financial sustainability of LGAs in Tanzania

H₄: Financial controls have positive effect on financial sustainability of LGAs in Tanzania

Conceptual framework

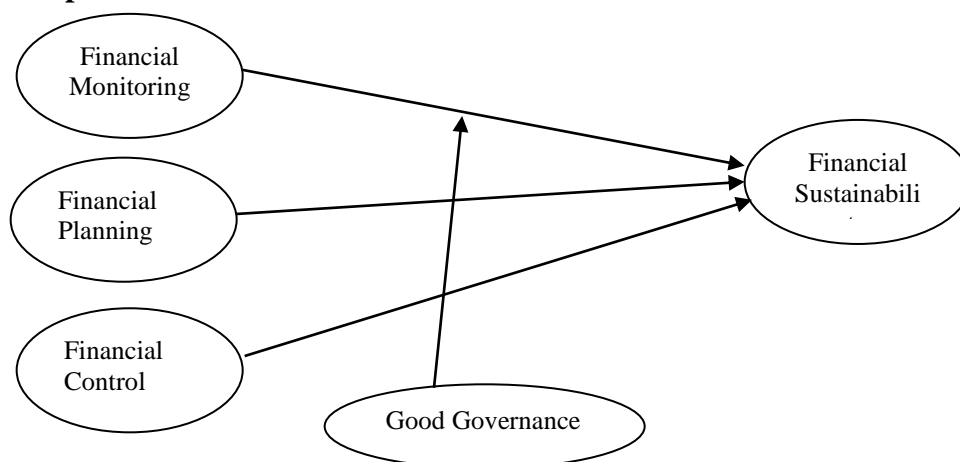


Figure 1: Conceptual framework

1.0 METHODOLOGY

This study utilized a deductive approach and a positivist philosophy, relying on empirical data as outlined by Scotland (2012). An explanatory design and survey strategy were employed (Saunders et al., 2009), focusing on a population of 800 accountants and auditors from selected Local Government Authorities (LGAs) in Tanzanian city councils and municipalities across six regions: Dar es Salaam, Tanga, Arusha, Mwanza, Mbeya, and Dodoma. These regions were purposefully chosen to represent various zones of Tanzania—urban, coastal, central, northern, and southern highlands—ensuring a comprehensive coverage of the country’s administrative and socio-economic landscape (Thapa, 2020; Shah & Shah, 2006). The sample size was determined based on guidelines from Field (2009), recommending at least 10-15 participants per variable for the 30 indicator variables used in the research instrument. Following Kass & Tinsley (1979) and Tabachnick & Fidell (2007), a sample size of 300 was considered adequate for factor analysis. To account for potential issues such as responses and non-cooperation, 10% was added to the base sample size, resulting in a final sample of 330 respondents. This sample size meets the 10:1 ratio suggested by Jackson (2003) for Structural Equation Modeling (SEM), ensuring robustness in the analysis and maintaining proportionality to the research area (Kothari & Gard, 2014).

Therefore, 330 individuals sampled from the target population was the sample size for the study as shown in Table 1.

Table 1: Sample Distribution by Stratum and Systematic Sampling Interval

SN	Region	Stratum	Sampling unit	Percentage	Sample size (330X Ratio)	Sampling interval K/n
1	Dar es salaam	Kinondoni Municipal council	60	7.5	25	60/25=2nd
		Temeke Municipal council	70	8.75	29	70/29 =2nd
		Ihala city council	100	12.5	41	100/41 =2nd
		Kigamboni Municipal council	30	3.75	13	30/13 = 2nd
		Ubungo Municipal council	40	5	17	40/17 =2 nd
2	Mwanza	Ilemela Municipal Council	50	6.25	21	50/21 =2nd
		Mwanza City Council	110	13.75	45.375	110/45 =2nd
3	Dodoma	Dodoma city council	160	20	66	160/66= 2nd
4	Arusha	Arusha City Council	60	7.5	24	60/24 = 2nd
5	Mbeya	Mbeya City council	70	8.75	27	70/27= 2nd
6	Tanga	Tanga City Council	50	6.25	18	50/18=2nd
Total			800	100	330	

Table 2: Variables

Variable	No of items	Code	Measurement items	Measurement	Sources
Financial planning	6	FP	FP 1=Annual budget FP2=Expenditure outside budget FP3=Compare actual expenditure FP4= Maximum expenditure FP5=Accurate financial report FP6=Discussion for financial proposal	Five-point Laker scale =Strongly disagree = Disagree = Neutral =Agree = Strongly agree	Masiega et al., (2021) Chelingat <i>et al.</i> , (2018)
Financial monitoring	6	FM	FM1 =Strict supervision FM2=Audit of internal control FM3= External audit FM4= Discuss audit report FM5=Understanding of internal control FM6= Coordination of activities	Five-point Likert scale. 1 =Strongly disagree 2 = Disagree 3 = Neutral 4 =Agree 5 = Strongly agree	Chelingat <i>et al.</i> , (2018), Mujannah et al., (2019)
Financial control	6	FC	FC1=Segregation of duties FC2 =Review transactions FC3 =Supervision FC 4=Training FC5= Adhere to provision FC6 = Follow up actions	Five-point Likert scale. 1 =Strongly disagree 2 = Disagree 3 = Neutral 4 =Agree 5= Strongly agree	Mbilla, <i>et al</i> (2020), Hussein Umar et al (2018)
Financial sustainability	6	FS	FS1=Surplus FS2=Positive operating margin FS3=Funding diversified FS4=Less fixed cost FS5=adequate resources allocation FS6= money for contingencies	Five-point Likert scale. 1 =Strongly disagree 2 = Disagree 3 = Neutral 4 =Agree 5=Strongly agree	Ejohb et al., (2014) Ejoh,N & Ejom P (2014)
Good	6	GG	GG1=available website	Five-point Likert scale.	Amalia et al (2018)

Variable	No of items	Code	Measurement items	Measurement	Sources
governance			GG2= ethical compliance	1 =Strongly disagree	Eckersley et., al (2018)
			GG3= regular audit	2 = Disagree	
			GG4= independent decision making	3 = Neutral	Sudaryati, et.,al., (2018)
			GG5= compliance with laws and regulations	4 =Agree	
			GG6= participation	5 =Strongly agree	

Data Analysis

Statistical Package for Social Sciences (SPSS) software version 25 was used in performing descriptive analysis and evaluating exploratory factor analysis (EFA) so as to determine the validity and reliability of constructs as well as evaluating the assumptions of a structural equation model. IBM AMOS software version 23 was used during the construction of measurement and structural models through Confirmatory Factor Analysis (CFA). The relationship between independent and dependent variables was determined to be significant at the 5% level of significance whereby moderation effect was determined using ???? test. Goodness of fit indices with their acceptable threshold level was adapted from Hooper et al. (2008), Gupta (2015), Hair et al. (2006) and Malhotra et al. (2017) as follows: $CMIN/DF (X^2/df) \leq 3$, $RMR \leq 0.08$, $GFI \geq 0.90$, $CFI \geq 0.90$, $NFI \geq 0.90$, $TLI \geq 0.90$, $RFI \geq 0.90$, $PCFI \geq 0.50$, and $RMSEA \leq 0.08$. The study employed a variety of indicators statements to quantify good governance, making it a latent construct. In light of this, the study by Awang (2011) issues a warning that the moderation analysis for a model with a latent component is extremely challenging. Additionally, because it may result in issues with model convergence and standard error, the conventional modeling technique employing interaction terms is not applicable to latent constructs. Instead, Multi-Group CFA was used in the study to examine the influence of the moderator variable's latent nature. There two groups including the group that comply with good governance and another one which do not comply with good governance practices as a result, this study examined H2 obtained from the using a step-by-step Multi-Group CFA approach.

FINDINGS AND DISCUSSION

Demographic profile of respondents

The study used 318 respondents to determine the influence of financial monitoring on financial sustainability via good governance. To answer this objective, results for both descriptive and inferential analysis were reported. Descriptively, we revealed that of 318 participants, the majority were; 210 (66%) males, 161 (51%) having bachelor education level, and 124 (39%) aged between 31 – 40 years. Table 3.

Table 3: Description of participant demographic characteristics

Variable	Frequency	Percent
Age Group		
50 +	32	10.1
41 – 50	99	31.1
31 – 40	124	39
20 – 30	63	19.8
Gender		
Male	210	66
Female	108	34
Level of education		
Diploma	59	18.6
Bachelor	161	50.6
Masters	77	24.2
Post graduate diploma	21	6.6
Region of residence		
Dar es Salaam	121	38
Dodoma	41	12.9
Tanga	25	7.9
Arusha	42	13.2
Mbeya	33	10.4
Mwanza	56	17.6

Source: Field Data, (2023).

Factor Correlation Analysis

Comparing the square root of AVE (table 5) and the bivariate correlation between constructs (Table 6); we revealed that all constructs attained the divergent validity. For instance, the minimum value for the square root of AVE was 0.64 while the minimum value for Pearson correlation was 0.527. Hence implies the attainment of divergent validity as the square root of AVE was as greater as compared to the Pearson correlation coefficient between constructs.

Table 4: Bivariate correlation between studies constructs.

	FS	FC	FM	FP
FS_score Pearson Correlation	1			
FC_score Pearson Correlation	.622**	1		
FM_score Pearson Correlation	.659**	.527**	1	
FP_score Pearson Correlation	.634**	.607**	.591**	1

Key: ** correlation was statistically significant at $p < 0.001$

Source: Field Data, (2023).

Model Formulation and Validation

Results from exploratory factor analysis

Based on the exploratory factor analysis (EFA), we revealed the determinant and KMO values at 2.569E-10 and 0.940 respectively. Additionally, the Bartlett's Test was statistically significant at $p < 0.001$ hence implies that sampling adequacy was attained and the study observable variables were correlated enough to form different constructs. Table 5.

Table 5: KMO and Bartlett's Test results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.940
Bartlett's Test of Sphericity	Approx. Chi-Square	6760.876
	df	435
	Sig.	.000

Source: Field Data, (2023).

Then, using principal component analysis we revealed that the 30 observed variables formulated 5 constructs. The first and fifth constructs had Eigenvalue of 12.2 (financial sustainability) and 1.13 (FC) respectively. The cumulative percentage due to the rotation sum of squared loadings was 68.5. Table 6.

Table 6: Description on the extracted constructs under PCA

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.238	40.793	40.793	12.238	40.793	40.793	4.548	15.161	15.161
2	3.696	12.320	53.113	3.696	12.320	53.113	4.353	14.509	29.670
3	1.905	6.350	59.462	1.905	6.350	59.462	4.017	13.390	43.060
4	1.591	5.304	64.767	1.591	5.304	64.767	3.913	13.043	56.103
5	1.130	3.766	68.533	1.130	3.766	68.533	3.729	12.430	68.533

Extraction Method: Principal Component Analysis.

Source: Field Data, (2023)

The formulated principal components were rotated to determine the items underlined to each construct. As expected, we revealed that each construct had 6 observable items and no overlapping was observed. Each of the items had factor loading above 0.5 which is the best cut-off for SEM (Hair et al., 2014; Yong & Pearce, 2013) as shown in Table 7.

Table 7: Rotation component matrix

	Component				
	1	2	3	4	5
FP2	.835				
FP1	.823				
FP3	.800				
FP4	.787				
FP6	.692				
FP5	.633				
GG2		.852			
GG3		.847			
GG1		.794			
GG4		.725			
GG5		.617			
GG6		.554			
FM1			.800		
FM4			.799		
FM3			.791		
FM2			.756		
FM5			.522		
FM6			.514		
FS3				0.689	
FS2				0.675	
FS4				0.663	
FS1				0.629	
FS6				0.654	
FS5				0.545	
FC4					.733
FC2					.721
FC3					.719
FC1					.650
FC5					.641
FC6					.625

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Source: Field Data, (2023).

Confirmatory factor analysis

The confirmatory factor analysis (CFA) involved the use of both measurement and structural models to assess the data fit-ability into the model as well as the effect of independent variables on the dependent variable. Based on the measurement model for each study construct, we revealed that the data fitted well the model as evidenced by the model fit indices which were revealed to be within the prescribed cut-off points. In each of the figures 1 to 5, we revealed that the CFI, TLI, RFI and NFI were above the recommended cut-off of 0.9 while the RMSEA was below 0.08.

similarly, the overall measurement model as presented in figure 6 was revealed to meet the prescribed criteria for SEM as determined by the model fit indices.

Measurement models for study constructs

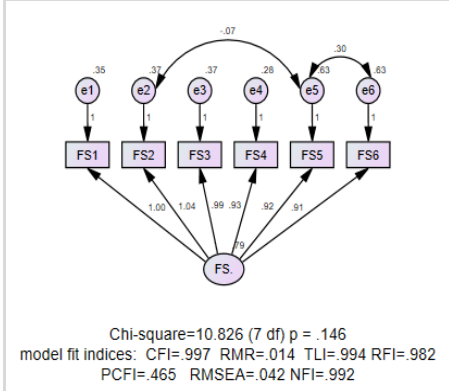


Figure 2: FS model

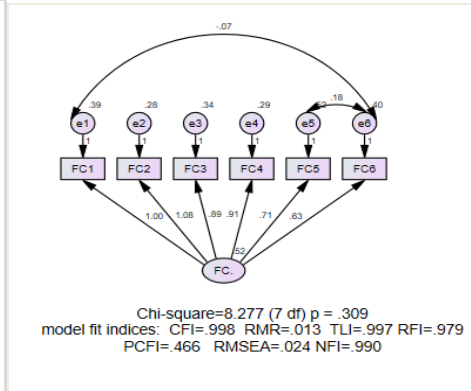


Figure 2: FC model

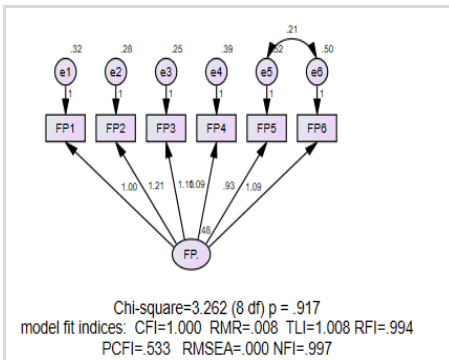


Figure 4: FP model

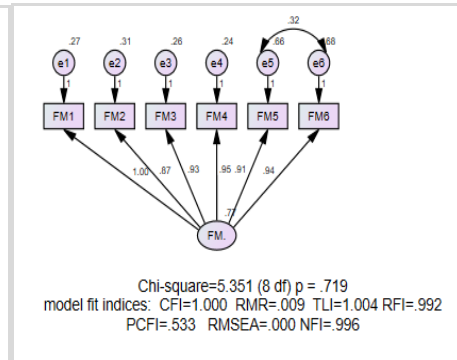


Figure 5: FM model

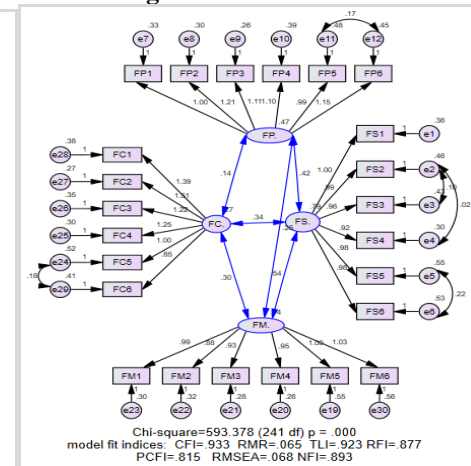
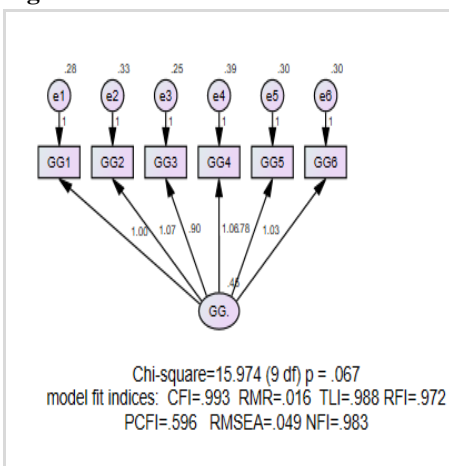


Figure 6: GG model

Figure 7: Overall model

Evaluation of structural model

The structural model showing the relationship between independent and dependent variable was presented in figure 9. W revealed that the model fit indices met the required cut-offs hence implies that the data fitted well the model. For instance, the CFI, TLI and CFI were above 0.9 while the RMSEA was below 0.08.

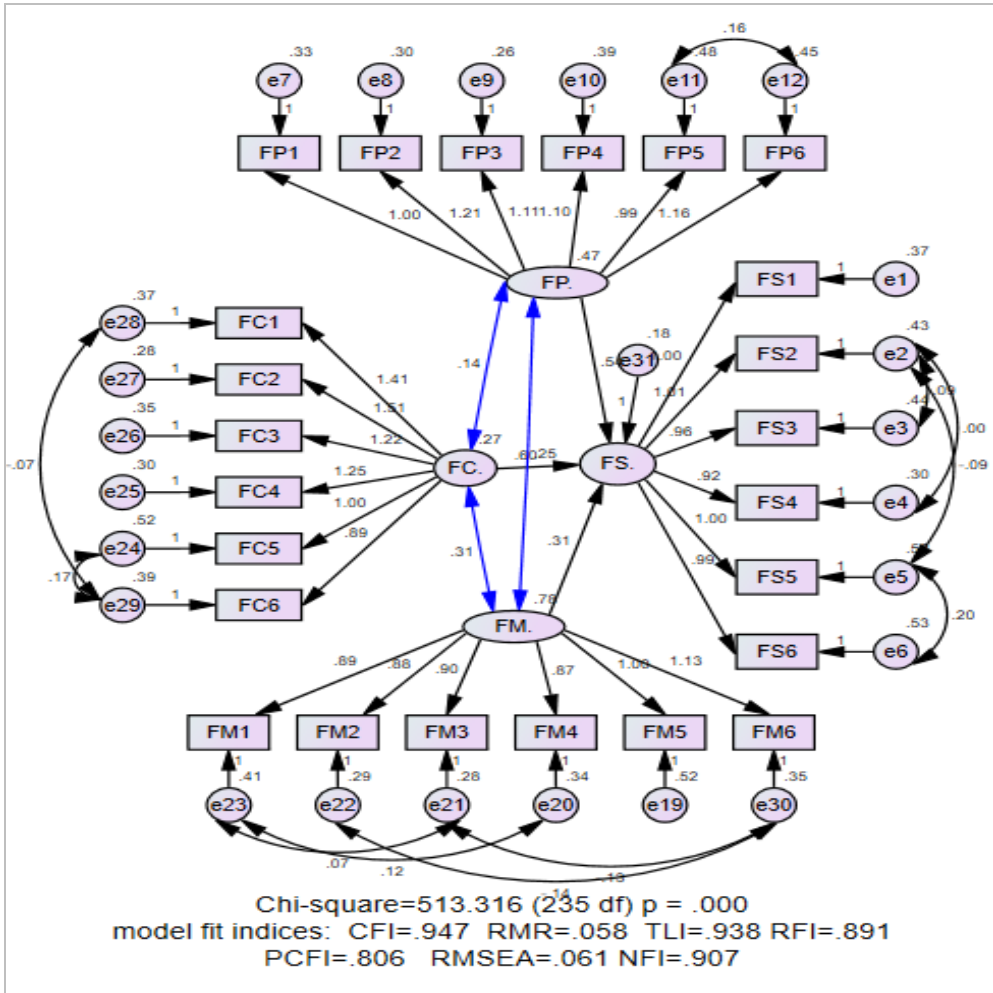


Figure 8: Structural model

After revealing that the structural model fitted well the data, other SEM assumptions were assessed. We revealed that the linearity, multicollinearity, homoscedasticity, and normality of residuals were met. On top of these assumptions, the multivariate normality was attained as the levels of

skewness and kurtosis were revealed to be within the stipulated cut-offs of ± 2 and ± 3 respectively. Table 8.

Table 8: Assessment of the multivariate normality assumption

Variable	min	max	skew	c.r.	kurtosis	c.r.
FM6	1.000	5.000	-.476	-3.466	-.750	-2.731
FC6	1.000	5.000	-.648	-4.716	.267	.971
FC1	1.000	5.000	-.604	-4.401	.193	.704
FC2	1.000	5.000	-.411	-2.990	-.281	-1.021
FC3	1.000	5.000	-.347	-2.528	-.228	-.831
FC4	1.000	5.000	-.141	-1.029	-.293	-1.068
FC5	1.000	5.000	-.597	-4.343	.436	1.586
FM1	1.000	5.000	-.626	-4.556	-.095	-.346
FM2	1.000	5.000	-.665	-4.845	.093	.338
FM3	1.000	5.000	-.740	-5.391	.216	.787
FM4	1.000	5.000	-.653	-4.753	.033	.119
FM5	1.000	5.000	-.440	-3.202	-.746	-2.717
FP6	1.000	5.000	-.342	-2.489	-.435	-1.583
FP5	1.000	5.000	-.444	-3.235	-.287	-1.044
FP4	1.000	5.000	-.444	-3.230	-.237	-.864
FP3	1.000	5.000	-.455	-3.310	-.216	-.785
FP2	1.000	5.000	-.665	-4.844	.215	.783
FP1	1.000	5.000	-.589	-4.288	.301	1.094
FS6	1.000	5.000	-.687	-4.998	-.375	-1.366
FS5	1.000	5.000	-.661	-4.815	-.432	-1.572
FS4	1.000	5.000	-.620	-4.517	-.166	-.605
FS3	1.000	5.000	-.847	-6.164	.170	.620
FS2	1.000	5.000	-.852	-6.204	.125	.456
FS1	1.000	5.000	-.654	-4.758	-.170	-.620
Multivariate					26.977	6.809

Source: Field Data, (2023).

Validity and Reliability Testing

Furthermore, the study revealed that each study construct's Cronbach's alpha (CA) was at least 0.7 as stipulated by Palos-Sanchez & Saura (2018 and Vaske et al. (2017). hence implying that all constructs were reliable. Similarly, all constructs were revealed to attain the convergent validity as the Average Variance Extracted (AVE) was at least 0.5 as the measurement models as proposed by (Fornell & Larker, 1981). The researcher was confident with internal reliability as its composite reliability (CR) was above the recommended cut-off point of 0.6 (Lam, 2012). Table 9

Table 9: Assessment of validity and reliability of study constructs

Construct	No. items	CA	CR	AVE	\sqrt{AVE}
FS	6	0.914	0.809	0.415	0.64
FP	6	0.902	0.894	0.586	0.77
FC	6	0.863	0.839	0.467	0.68
FM	6	0.915	0.854	0.502	0.71
GG	6	0.870	0.877	0.548	0.74

Source: Field Data (2023)

Hypothesis Testing

After revealing that the SEM assumptions were met, then the relationship between independent and dependent variables were assessed and results are presented in table 8. We revealed that controlling for FP and FC, for each unit increase in FM the FS increased by 0.31. This association was strongly statistically significant at $p < 0.001$.

Table 10: Effect of financial monitoring financial planning and financial control on LGA's financial sustainability

	Unstandardized Estimate	Standardized estimate	S.E.	C.R.	P	Label
FS. <--- FM.	.312	.312	.055	5.689	***	par_30
FS. <--- FP.	.537	.415	.064	8.402	***	par_28
FS. <--- FC.	.604	.354	.109	5.562	***	par_29

Source: Field Data, (2023).

Moderation Analysis

The final stage was to assess the moderating effect of good governance on the relationship between FM and FS. To concur to the requirements of multigroup analysis, we constructed three groups of GG. These groups are; the non-compliance (average point score was below 3), moderate compliance (the average score was 3) and the compliance group (average score was above 3). Based on these three groups, the majority were 193 (60.7%) in compliance groups and minority were 17 (5.3%) in moderate compliance group while 108 (34%) were in the noncompliance group. Kline (2011) asserts that each group should have at least 100 cases in order to be considered for multi-group analysis. Thus, the moderate group with 17 (5.3%) of cases was eliminated for further analysis and hence two group moderation analysis was considered Table 9.

Table 9: Descriptive Analysis of the GG

	Frequency	Percent	Valid Percent	Cumulative Percent
Non compliance	108	34.0	34.0	34.0
Moderate	17	5.3	5.3	39.3
Compliance	193	60.7	60.7	100.0
Total	318	100.0	100.0	

Source: Field Data, (2023)

However, according to Kline (2011), the multigroup analysis requires at least 100 respondents in each group for attaining accurate and reliable conclusion. Thus, the moderate compliant group was discarded for further analysis hence the two-group analysis was considered.

Measurement invariance Testing

The main objective of the measurement invariance test, according to Hair et al. (2010), is to verify that measure models run under different conditions yield a comparable representation of the same construct. In accordance with Xu et al. (2017), both the configural metric and scalar invariance were used to determine whether the measurement of a latent construct varied across groups.

Configural invariance Testing

This involved the test for the configural invariance in each measurement model of FS and FM to confirm that each group achieved the same overall factor structure and same number of constructs (Byrne, 2010).

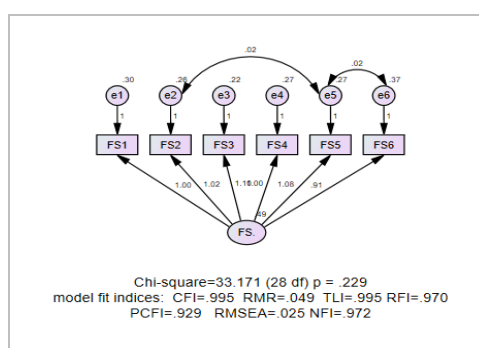


Figure 9: FS model

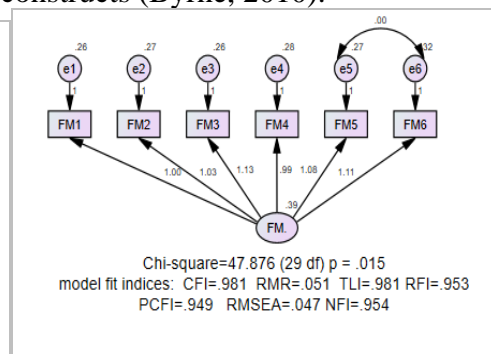


Figure 10: FM model

From the Figure 10 and 11 above, the study revealed that the two models attained the configural non-invariance as evidenced by the model fit indices were within the recommended threshold. For instance, the TLI, CFI and RFI were above 0.9 while the RMSEA was below 0.08. Similar observation was observed for the overall measurement model as presented in figure 12 below.

Furthermore, using the Chi-square test for configural model, we revealed that the unconstrained model was not statistically significant ($p = 0.094$) hence implying that there were no differences in the structural models for the noncompliance and compliance groups. Table 11.

Table 11: Composite Chi-square Test for the configural model

Model	NPAR	CMIN	DF	P	CMIN/DF
Unconstrained	106	437.692	400	.094	1.094
Measurement weights	88	476.814	418	.024	1.141
Structural weights	85	478.223	421	.028	1.136
Structural covariances	82	489.637	424	.015	1.155
Structural residuals	81	491.313	425	.014	1.156
Measurement residuals	59	524.285	447	.007	1.173

Source: Field Data, (2023)

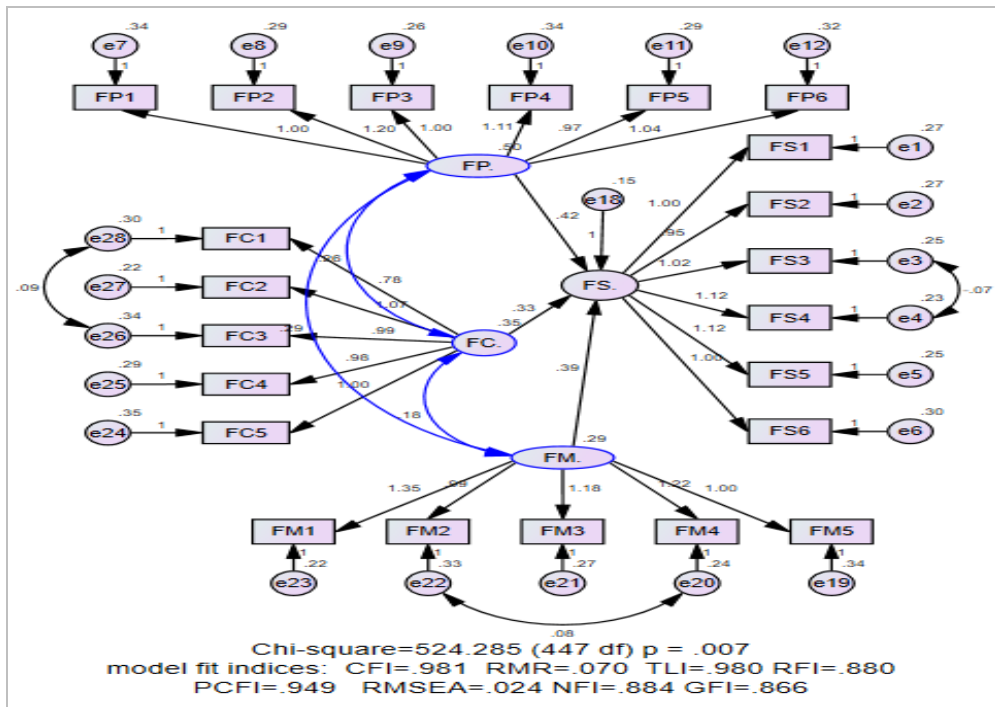


Figure 11: Configural model

Chi-square Difference Tests

Furthermore, the Chi-square difference for moderation test was undertaken to evaluate the presence of non-invariance between groups. The rule of thumb is that the Chi-square test statistic should be statistically significance so as to conclude the presence of non-invariance between the restricted and the

unrestricted models. The study revealed a strongly statistically significant Chi-square value at a 5% level ($p = 0.003$) hence implying the presence of non-invariance between the two models. Table 12.

Table 12: Chi-square difference test for configural model

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Measurement weights	18	39.122	.003	.009	.009	.005	.005
Structural weights	21	40.531	.006	.009	.010	.004	.005
Structural covariances	24	51.945	.001	.011	.013	.006	.007
Structural residuals	25	53.621	.001	.012	.013	.006	.007
Measurement residuals	47	86.593	.000	.019	.021	.008	.009

Source: Field Data, (2023)

Furthermore, the invariant test was evaluated using the Chi-square differences between the unconstrained and constrained models. The study revealed the Chi-square difference of 58.27 which was statistically significant at $p < 0.001$.

Table 4.1: Stats Tool Package for Chi-square Outputs

	Chi-square	df	p-value	Invariant?
<u>Overall model</u>				
Unconstrained	478.223	421		
Fully constrained	536.495	446		
Number of groups		2		
Difference	58.272	23	< 0.001	No
<u>Constrained path</u>				
FS <--- FM	701.174	513	0.000	
<u>Chi-square critical values</u>				
90% confidence	553.41	513	0.1	
95% confidence	565.74	513	0.05	
99% confidence	589.37	513	0.01	

Source: Field Data (2023)

Path by path Moderation Analysis

The presence of non-invariance further suggests that the effect of independent variables on the dependent variable might be different hence necessitating for the further moderation analysis called path by path analysis. The path analysis was conducted by constraining the FS <--- FM path and we revealed that the Computed Chi-squared values were larger (701.174) as compared to the critical values (589.37) at 99% level, then the presence of statistically significant moderation effect of GG on the relationship between FM and FS.

Moderation Hypothesis Testing

The last step was to assess the GG group with higher effect of FM on FS. We revealed that, in the group of not complying with governance, each unit increase in FM the FS increased by 0.476. The observed increase was statistically significant at $p < 0.001$. Table 13.

Table 13: Effect of FM on FS for the Group complying with GG

Variables	Unstandardized Estimate	Standardized estimates	S.E.	C.R.	P	Label
<i>For the group not complying with GG</i>						
FS. <--- FM.	.476	.311	.110	4.327	***	b2_2
<i>For the group complying with GG</i>						
FS. <--- FM.	-.106	-.099	.101	-1.046	.296	b2_1

Source: Field Data, (2023).

Furthermore, based on the group complying with GG, we revealed that for each unit increase in FM, FS decreased by 0.106. However, the observed decline was not statistically significant at a 5% level ($P = 0.296$). The observed declining effect of FM on GG was evidenced by both standardized and unstandardized estimates. Table 13 In such instances, we had enough statistical evidence of rejecting the null hypothesis hence concluding that the GG significantly moderates the association between FM and FS.

Discussion of the Findings

The results maintained H1 of the study, in which FM was assumed to have positive and statistically significant effect on FS as proved by the effect of 0.31 ($p < 0.001$) of FM on FS. This study result is consistent with previous studies such as Odek, & Okoth (2019) from Kenya did a study in distribution enterprises to examine, the effect of financial monitoring on financial sustainability which reported positive and significant correlations. Another study, conducted by Sri Lankan researchers Kumari, *et al.*, (2019), looked at the effect of financial monitoring on the financial sustainability of banking organizations the results showed a substantial positive association. However, the results of this study contradict to the findings reported in financial sustainability most notably that of Mbilla, *et al.*, (2020) did a study in Ghana looking at the effect of financial monitoring on financial sustainability of listed bank which revealed a positive but insignificant relationship. On other hand Adegboyegun *et al* (2020) conducted study from Nigeria examining the effect of financial monitoring on financial sustainability in the SMEs the study revealed positive and insignificant relationship. These contradictory findings could be caused either by the studies being conducted in a different

country with diversity in social, political, and economic factors as well as sectorial differences. Therefore, financial monitoring is important to the selected LGAs in Tanzania since it improves financial sustainability and enables the LGAs being able to provide services to the citizens effectively and efficiently.

The findings indicated that, as shown in table 13, there was a stronger correlation between financial sustainability and financial monitoring in the group that do not adheres to good governance ($y = 0.47$ and $p < 0.001$), which was statistically significant while group that adhere to good governance ($y = -.106$), which was statistically insignificant at $p < 0.05$ ($p = 0.296$). This showed that the group that practices good governance experiences a decrease in FS of $-.106$, compared to a 0.47 increase in the group that does not practice good governance for every unit increase in FM. The results verified that the relationship between FM and FS was fully moderated by good governance. The results indicated that the two groups' approaches to financial monitoring are comparable. This demonstrated that the groups that influence FM on FS and those that do not comply with GG do differ significantly. Research revealed that groups adhering to GG face compliance costs, which in turn raise expenses and weaken the organization's financial viability (Boivie. et al., 2016; Dalton & Dalton, 2011; Johnson et al., 2013). Regarding the theoretical contribution, the group that does not adhere to GG in terms of financial sustainability and monitoring has had an impact because the two groups' significance levels are not the same.

The findings upheld the study's hypothesis H3, according to which FP had a positive and statistically significant impact on FS, as evidenced by the effect of FP on FS of 0.54 ($p < 0.001$). The results of this study support those of Abdulkaddir, 2021; Mahmood et al., 2021; AlQersh, 2021; Abiodun et al., 2020; however, they contradict those of Abiodam et al., 2020, Odek, & Okoth 2019). Financial sustainability and financial planning have a negative relationship, as demonstrated by Mujannah et al.'s 2019 study. It was limited to manufacturing SMEs, though, so more research should look into other sectors, like local government authorities.

The results maintained H4 of the study, in which FC was assumed to have positive and statistically significant effect on FS as proved by the effect of 0.60 ($p < 0.001$) of FC on FS. This result is consistent with previous studies such as Dagane & Kihara (2021) that assessed the effect of financial controls on the financial sustainability of NGOs and the results show positive and significant relationship. The study by Kenyan researchers Ochola, et al.

(2022) looked at the effect of financial controls on financial sustainability of the public sector which revealed a positive and significant relationship. On the other hand, Ahmed & Ng'anga, (2019) conducted research in Kenya to examine the effect of financial controls on financial sustainability; the results demonstrated a positive and significant relationship. The effect of financial controls on the financial sustainability of the North Gorontalo Regency Government was examined in the study carried out in Indonesia by Aneta et al. (2021) which revealed a positive and significant relationship between financial control and financial sustainability. Bashaija, et al. (2020) conducted a study to examine the effects of MFI financial control in Rwanda and the study's findings show a positive and significant relationship. However, other previous studies show contradictory findings such as Abiodun (2020) from Nigeria conducted a study on the enterprises listed in the capital market to assess the effect of financial controls on financial sustainability whose findings show a negative and substantial association. Kumari et al. (2019) did another study from Sri Lanka to investigate the effect of financial controls on the financial sustainability which revealed insignificant but favorable correlation between financial control and financial sustainability. These contradictory findings could be caused either by the studies being conducted in a different country with diversity in social, political, and economic factors as well as sectorial differences.

CONCLUSIONS AND RECOMMENDATIONS

The study analyzed the effect of FP, FC and FM on Financial sustainability and also the FM on FS of selected LGAs in Tanzania with the moderation role of GG. The findings revealed that FM has positive and significant effect on FS. Thus, it is concluded that FM is predictor of FS of selected LGAs in Tanzania. The findings demonstrated that there was effect of good governance in moderating the relationship between financial monitoring and financial sustainability. With respect to moderation effect on the relationship between financial monitoring and financial sustainability, the results provide evidence that Good Governance moderated fully their relationship. This is due to the fact that it displayed strong, positive and significant effect on the relationship between financial monitoring and financial sustainability of LGAs in Tanzania in the group that did not comply with Good Governance but weak, positive and insignificant relationship in the group that comply with Good Governance. In this view the study has drawn up the conclusion that financial monitoring towards financial sustainability plays more significant effect in the group that did not comply with Good Governance compared to another group that complies with Good Governance.

The study recommends that, in order to track outcomes, boost credibility, and foster accountability, the LGAs should create appropriate and trustworthy accountability mechanisms in monitoring of its financial resources like internal and external audits. The study also suggests that LGAs should be accountable by putting in place efficient financial monitoring, financial planning and financial control mechanisms collaborating with already-existing private investors, or securing funding from reputable development partners in order to maintain financial sustainability. After learning that financial planning is a prerequisite for the financial sustainability of the chosen LGAs, LGAs should give priority to the components of financial planning, such as having a documented mission statement, a future vision for the LGAs, and the establishment of core values, or the organization's rules of conduct. They should also set realistic goals, establish long-term objectives—which must be measurable and specific—and develop action (strategic) plans, as well as implement and appropriately monitor them. Following their discovery that the financial sustainability of the chosen LGAs depends on financial control, LGAs should prioritize the elements of financial control by making sure that their institutions have financial control policies and procedures in place, including authorization limits, job separation, and physical and financial resource custodianship.

AREA FOR FUTURE RESEARCH

The purpose of this study was to examine the effects of internal determinants on the financial sustainability of the chosen LGAs, specifically all major cities in Tanzania, without considering LGAs in rural areas. As a result, the study's findings are only applicable to LGAs operating in Tanzania's major cities, and the researcher recommends that more research be done on the relationship between financial accountability and financial sustainability for LGAs in Tanzania's rural areas.

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Examining the Implementation of Public-Private Partnership Model in Primary Education Provision in Kigamboni Municipality, Tanzania

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Abstract

Public-Private Partnerships (PPPs) involve a contractual collaboration between the government and the private sector in delivering public services, including primary education. This paper examined the implementation of the PPP model in the provision of primary education within Kigamboni Municipality, Tanzania. The study investigated the types of partnerships utilized and their impacts on primary education. Grounded in an interpretive paradigm, the research employs a qualitative methodology using a multiple case study design. The target population included schools, educational officers, teachers, and pupils. The sample comprised of 26 participants: 15 head teachers, 2 ward education officers, 1 district education officer, and 8 classroom teachers, selected through purposive and snowball sampling techniques. Data were collected through semi-structured interviews and document analysis, and analyzed using thematic analysis. Results indicated that the forms of partnership included government agencies, community engagement, international organizations, non-governmental organizations, faith-based organizations, and private organizations. Regarding the impacts of PPP implementation, participants disclosed that several positive outcomes, including: increased enrollment of pupils in schools; improved attendance rates; enhanced infrastructure; better teaching and learning conditions; increased motivation among pupils and teachers. On the negative side, participants highlighted several challenges associated with PPP implementation, which included: lack of competent personnel; political influence; economic factors; legal factors and lack of awareness. The study concludes that while PPPs have significantly contributed to the provision of primary education in Kigamboni Municipality. Implications of these results suggest that strengthening the capacity of local stakeholders and promoting awareness of PPP roles can further enhance educational outcomes. Policymakers, educational leaders, and community organizations are the primary beneficiaries of these findings, as they can utilize the insights to refine partnership strategies and address existing challenges, ultimately leading to improved primary education delivery in the region. There is a

need for strategies to address the identified challenges to enhance the effectiveness of the PPP model in Tanzania's education sector.

Keywords: *Public-Private Partnership, Primary Education, Contract, Engagement Model*

INTRODUCTION

Education is a cornerstone for socio-economic and technological transformation in any society (Mgaiwa & Poncian, 2016). In Tanzania, primary education is a vital component of the national education system, designed to provide foundational skills in literacy, numeracy, and critical thinking to children aged 7 to 14 (UNESCO, 2020). It plays a crucial role in fostering social development, economic growth, and health awareness among the population (World Bank, 2018). However, the sector faces significant challenges, including limited access in rural areas, inadequate infrastructure, a shortage of qualified teachers, and cultural barriers that particularly affect girls' enrollment (UNICEF, 2021). Improving primary education in Tanzania is essential for breaking the cycle of poverty and promoting sustainable development, ensuring that every child has the opportunity to learn and thrive (World Bank, 2019). To address these challenges, public-private partnerships (PPPs) have emerged as a critical strategy for enhancing primary education in Tanzania. By leveraging resources, expertise, and innovation from both the government and the private sector, PPPs aim to tackle issues such as limited access, inadequate infrastructure, and the shortage of qualified teachers (Afonso & Ghanem, 2020). These collaborations pool resources and create more efficient management models, allowing educational initiatives to benefit from improved facilities, teacher training programs, and increased community engagement. As a result, PPPs can lead to higher enrollment and better learning outcomes (Kweka, 2016). By fostering collaboration among government agencies, private organizations, and community stakeholders, PPPs can significantly advance primary education in Tanzania, contributing to a more equitable and effective educational landscape for all children (Mwanalushi, 2019).

Globally, PPPs have been adopted to bridge funding gaps and meet increasing public infrastructure needs, but they are not without risks (Bagenda & Ndevu, 2024). While initially confined to sectors like transportation and utilities, PPPs have increasingly expanded into education (Tilak, 2016). The range of PPPs includes contractual agreements, alliances, and cooperative activities for policy development and service delivery (Kumari, 2016). Through these partnerships, public and private entities share

or reallocate risks, costs, and responsibilities in planning, constructing, or managing infrastructure projects (Liu, Clegg, & Pollack, 2024). PPPs have the potential to expand access to quality education more rapidly than fully public or fully private models, though they come with challenges and risks (Latham, 2009). Public-Private Partnerships (PPPs) in education involve a model where the public and private sectors collaborate to share the costs and risks of education provision, typically through a contracting mechanism (Mgaiwa & Poncian, 2016). Bridge International Academies (BIA) is a key example of a public-private partnership in Tanzania's education sector, aiming to provide quality education to underserved communities through low-cost private schools that utilize a technology-driven curriculum to improve learning outcomes (Bridge International Academies, 2020). By leveraging their respective strengths, capabilities, and competencies, governments and private organizations establish systematic partnerships to enhance service delivery (Rao et al., 2024).

Public-private partnerships (PPPs) can encompass nearly all aspects of education, including policy development, planning, evaluation, management, funding, and even the operation of institutions and special education programs (Tilak, 2016). However, a significant challenge lies in selecting suitable private partners for long-term, mutually beneficial relationships (Samoilov et al., 2024). Many societies cannot afford to provide education solely through public funds due to the high associated costs, which makes public-private partnerships (PPPs) crucial for ensuring equitable access and quality (Mgaiwa & Poncian, 2016). Public-Private Partnerships (PPPs) are not a new phenomenon, but their prominence has grown significantly in the neo-liberal era. They have expanded into sectors that were once public monopolies, taking on new forms previously unknown (Tilak, 2016). The PPPs model reduces the financial burden on national budgets by attracting private investment and expertise (Samoilov et al., 2024). Through PPPs, emerging economies can develop and maintain social and economic infrastructure projects in education (Samoilov et al., 2024). International experiences with PPPs in education demonstrate various options for improving education quality (Kumari, 2016). For example, the case of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in India partnered the government with private organizations to enhance educational infrastructure in rural areas (Government of India, 2005). Consequently, PPPs prioritize service delivery over asset creation, addressing public service needs more effectively (Rao et al., 2024). Governments alone cannot meet the educational needs of growing

populations without collaborating with the private sector and this is where PPPs become crucial.

Public-Private Partnerships (PPPs) bring financial and infrastructure benefits to education (Alqahtani, Alagha, & Mohamed, 2024). They are increasingly adopted worldwide as a strategy for addressing challenges in infrastructure development within the education sector (Sharma & Bindal, 2014). Countries, both developed and developing, have embraced PPPs as an innovative model for delivering education services (Cheng et al., 2021). However, PPPs face challenges related to development direction and value orientation, as many implementations are primarily driven by economic concerns (Cheng et al., 2019). These challenges highlight the need for private sector investment and expertise in education (Takmazyan et al., 2019). Given the high costs of education infrastructure, modern states cannot offer primary education without private sector involvement that is why PPPs have gained interest (Andronova et al., 2021). In education, PPPs leverage the strengths of both the public and private sectors to achieve common goals such as infrastructural development, technology integration, pedagogical innovation, and teacher capacity building (Okeke & Ofojebe, 2018). PPPs are particularly encouraged in developing countries where governments face financial constraints in providing quality education (Mgaiwa & Poncian, 2016). By engaging the private sector, PPPs can help to address gaps in service delivery that the government may be unable to fill.

The implementation of PPPs has become a central element in educational strategies globally, particularly in the last few decades (Tilak, 2016). Various contractual arrangements are employed to implement public-private partnerships (PPPs) in education across different countries, as seen in the United Kingdom's Academies Programme which allows private organizations to establish and run schools while receiving government funding (Kumari, 2016). However, global crises have underscored the importance of government-private sector partnerships in maintaining and enhancing education systems (Castelblanco, Guevara & De Marco, 2024). While PPPs have yielded mixed results, sometimes negatively affecting education quality and equity, governments continue to rely on them to address infrastructure and service gaps (Tilak, 2016). One of the primary advantages of public-private partnerships (PPPs) is their ability to leverage private sector efficiency and innovation, which can lead to improved service delivery and cost-effectiveness (Hodge & Greve, 2007). Additionally, PPPs facilitate shared financial risks, enabling governments to undertake projects that might otherwise be unaffordable (World Bank, 2015). However, notable

drawbacks exist, such as the risk of profit motives overshadowing public interests, potentially resulting in inequitable access to services (Kumar & Prasad, 2017). Furthermore, complex contractual arrangements can create challenges related to accountability and transparency, making it difficult to prioritize educational outcomes over financial gains (Bain, 2014). Overall, while PPPs can provide significant benefits, careful management and oversight are essential to mitigate these potential downsides.

In Tanzania, the concept of PPPs emerged over the past two decades, following the shift from socialist policies in the mid-1980s (Mgaiwa & Poncian, 2016) to neo-liberalism policies. This shift was accompanied by neo-liberal reforms aimed at involving the private sector in education. Although Tanzania has made strides in improving access and equity in education through PPPs, challenges still remain, including shortages of teachers and infrastructure such as classrooms and toilets, exacerbated by increased student enrollment following the introduction of fee-free education (Lucumay & Matete, 2024). Many schools are in poor condition, lacking basic facilities like clean water, sanitation, and adequate classrooms. This affects not only enrollment but also retention and the overall learning environment (Human Rights Watch, 2024). Although PPPs had been in practice since the 1980s, it was not until 2009 that the Tanzanian government developed a national PPP Policy, formally guide the implementation of these projects (Natai, 2018). This policy aims to attract private investment and improve public services, including education (United Nations, 2024). Contrarily, many children still lack access to primary education, particularly in rural areas. Barriers include long distances to schools, insufficient infrastructure, and cultural factors that discourage enrollment, especially for girls (UNESCO Institute for Statistics, 2024). There is a significant gap in the quality of education, characterized by large class sizes, inadequate teaching materials, and poorly trained teachers (World Bank, 2024). Many teachers lack sufficient qualifications, which impacts student learning outcomes. Reading skills continue to be a significant issue, as only 5.4% of students in early grades are reading with comprehension (USAID, 2024).

Additionally, in Tanzania, the shortage of materials for teaching fundamental skills like reading, writing, and arithmetic further complicates the situation (USAID, 2024). These challenges raise the questions about whether the implementation of PPPs has met the objectives outlined in Tanzania's 2009 PPP policy, prompting a need for further evaluation. PPPs are fundamentally cooperative ventures that allocate resources, risks, and rewards based on the expertise of each partner to address public needs (Kumari, 2016). Such

partnerships in education often involve public institutions collaborating with private entities, including businesses, foundations, or non-governmental organizations (Okeke & Ofojebe, 2018). Even countries that once opposed private sector involvement in public services are now embracing PPPs, recognizing the role of private organizations in driving development (Tilak, 2016). Public partners in PPPs are typically government agencies, while private partners can be domestic or international companies or investors with financial or technical expertise (Rao et al., 2024). Despite the government's efforts to promote PPPs, including the creation of a policy framework, there are still significant legal and institutional challenges that hinder their effective implementation. These challenges include a lack of skilled personnel within government institutions, political interference, and limited public awareness of PPPs (Natai, 2018). Moreover, balancing transparency in PPPs with the need for private partners to maintain competitive advantages can complicate the partnerships (Rao et al., 2024). Given these challenges, the specific objectives of this study were to explore the various forms of public-private partnerships (PPP) employed in public primary schools and to examine the impacts of their implementation in Kigamboni Municipality.

METHODOLOGY

This study was guided by the interpretive paradigm, which emphasizes understanding social phenomena from the perspectives of those involved. A qualitative research methodology was employed, as it allows for an in-depth exploration of participants' experiences and perceptions. The research design adopted was a multiple case study design, enabling the examination of different cases within Kigamboni Municipality to provide a comprehensive understanding of the implementation of Public-Private Partnerships (PPP) in primary education. The study was conducted in Kigamboni Municipality, targeting a population that included head teachers, classroom teachers, and education officers at ward and municipality level involved in the provision of primary education. The sample size consisted of 26 participants, selected through purposive and snowball sampling techniques. Purposive sampling was used to intentionally select individuals with relevant experience and knowledge, while snowball sampling helped identify additional participants through referrals. Data collection methods included semi-structured interviews and documentary reviews. Semi-structured interviews provided flexibility in exploring participants' insights, while documentary reviews offered additional context and supporting information. Data analysis was conducted using content analysis, which involved identifying patterns, themes, and insights within the data collected. This method allowed for a systematic interpretation of qualitative data to address the research

objectives. In terms of ethical considerations, the researcher obtained a research clearance letter from the Directorate of Research, Publication, and Innovation at the Open University of Tanzania. This letter was then submitted to the Kigamboni Municipality Director, who granted permission to conduct the research within the municipality. Participants were also informed about the study's purpose and assured of confidentiality and voluntary participation.

RESULTS

This study assessed the implementation of the Public-Private Partnership (PPP) model in Kigamboni Municipality, Tanzania, involving 26 teachers and education administrators from school, ward and Municipality levels. The research was guided by two specific objectives: to explore the various forms of PPPs employed in public primary schools and to examine the impacts of their implementation within the Kigamboni District.

The Forms of PPPs employed in the provision of primary education.

The researcher inquired about the forms of Public-Private Partnerships (PPPs) employed in Kigamboni Municipality. Results indicated that 20(76.9%) out of 26(100%) participants identified various forms of partnerships involved in the implementation of PPPs in Kigamboni Municipality. These partnerships included government agencies, community engagement, international organizations, non-governmental organizations, faith-based organizations, and private organizations. In contrast, 6(23.1%) out of 26(100%) participants reported being unaware of these partnerships. One participant noted: “When we want to involve the community, we call the parents and share our ideas with them. Once approved, we proceed with the implementation, focusing on both infrastructure and academic matters.” (Ward Educational Officer 1, July 2024). Another participant elaborated on community empowerment and collaboration:

“The community is being empowered, but the quality of life affects full participation in education. The private sector has posed challenges. For instance, classroom construction often begins with parents, and if they cannot finish, the government steps in. NGOs like SCABA SCUBA help us with desks and chairs. The community is striving to improve enrollment and reduce absenteeism. We have also received support from banks like NMB and DCB for desks.” (Head of School C, July 2024).

It was further argued by another participant as follows:

“We involve parents for support; for example, they previously built a classroom to the roofing stage, after which we sought district assistance to complete it.

NMB helped us with nearly 50 desks, and TASAF contributed to the school's construction. We've also received solar lights for security. A local group provided mattresses, T-shirts, toothbrushes, and a first aid kit." (Ward Educational Officer 1, July 2024).

Another participant emphasized the importance of community participation:

"We have a system called a force account, where citizens contribute their efforts. For tasks like digging foundations or bringing water, they need to understand the project's requirements. Programs like BOOST from the World Bank are essential, as they provide substantial funding and require community involvement." (Municipality Educational Officer, July 2024).

On the role of private institutions, a participant mentioned:

"The provision of education is largely participatory, requiring community involvement. Donors often contribute to infrastructure, such as building toilets and renovating classrooms. However, awareness about special education remains a significant challenge." (Head of School D, July 2024).

Another participant noted:

"Participation means the community is engaged in what they can do. For instance, when I called parents for support to renovate my office, they completed 70% of the work. The government provides guidelines for food support, but the actual implementation relies heavily on parents and the community." (Head Teacher School F, July 2024).

Support for infrastructure also came from the community:

"Although the community helps with food and security, they also contribute to infrastructure. For example, parents renovated my office, and we are digging water well for students. While I haven't received banking assistance, we request help through the director or local political leaders." (Head Teacher School E, July 2024).

Regarding collaboration with NGOs, one participant stated:

"We've received help from SAWA for constructing safe toilets and from OPEN RWANDA to repair our school roof. Although we've made efforts to engage with the private sector, such as sending proposals to banks, we haven't had much success. Raising awareness about special education is a critical challenge." (Head Teacher School E, July 2024).

Another participant highlighted the engagement process:

"We involve the community through meetings. Our challenges include securing support from the local private sector. We primarily approach businesses in

Kigamboni for assistance with desks and chairs, often sending letters to outline our challenges.” (Head Teacher, School B, July 2024).

Further, another participant added:

“Community involvement is evident; they support food initiatives and even provide assistance for infrastructure, such as renovating the head teacher's office. While we've reached out to banks, assistance has been scarce, but community support for food services has been robust.” (Head Teacher School F, July 2024).

Another response pointed out the challenges of engagement:

“Often, community members donate materials rather than money, which can be limiting. For example, we request desks, and they may provide metal sheets instead. There are few stakeholders in Kigamboni, and the competition for assistance can be overwhelming.” (Head Teacher School C, July 2024).

Lastly, one participant summarized the contributions of NGOs:

“The government cannot fully provide education due to its various obligations. NGOs play a vital role, providing additional educational support and materials. During graduation events, we often invite stakeholders to beautify the school, reflecting our community's collaborative spirit.” (Head Teacher School A, July 2024).

These extracts revealed that the forms of PPPs in the municipality include government, community involvement, international organizations, NGOs, faith-based organizations, and private organizations. This indicates that the implementation of PPPs is a cooperative activity involving both public and private sectors.

The Impacts of PPPs in the Provision of Primary Education

The researcher sought to understand how the implementation of the PPP model impacted primary education provision in Kigamboni Municipality. Results disclosed that 23(88.5%) out of 26(100%) participants noted several positive outcomes, including: increased enrollment of pupils in schools; improved attendance rates; enhanced infrastructure; better teaching and learning conditions; increased motivation among pupils and teachers. Conversely, 3(11.5%) participants indicated they were not aware of these positive impacts. On the negative side, 19(73.1%) out of 26(100%) participants highlighted negative impacts associated with PPP implementation, which included: lack of competent personnel; political influence; economic factors; legal factors; lack of awareness whereas 7(26.9%) out of 26 (100%) participants reported being unaware of these negative impacts. One participant noted:

“We involve parents in addressing academic issues, such as absenteeism; they help ensure students return to school. Regarding infrastructure, if we face a shortage of classrooms, we consult community members for consent to seek solutions, including donor assistance. The involvement of the private sector has led to successes such as the availability of safe, clean water, reduced overcrowding, and increased student attendance. However, a challenge remains: a lack of sufficient education.” (Ward Educational Officer 1, July 2024).

Another participant emphasized the improvements resulting from community and private sector involvement:

“The desks provided by NMB came about because the school committee wrote a letter after involving parents. Once we built additional classrooms, we could redistribute overcrowded students. The availability of desks has allowed children to write more comfortably, which has positively impacted their academic % not performance. Enrollment has surged from 700 to 2000 students as parents seek schools with better performance.” (Head Teacher 1, School A, July 2024).

Another participant highlighted the role of private sectors in supporting students with special needs:

“Private sector involvement has been crucial in providing food, bicycles, and wheelchairs, often facilitated by international organizations. While the government handles infrastructure, the community contributes ideas and materials, such as bricks for building a fence. We have received over 200 desks from the private sector, and performance has notably increased.” (Head Teacher 3, School C, July 2024).

Despite these benefits, participants also identified negative impacts associated with PPP implementation in the municipality. Common issues included a lack of competent personnel, low engagement from the private sector, and poor awareness of the PPP model. One participant stated: “The biggest challenge with PPPs is the lack of availability of individuals from the private sector.” (Ward Educational Officer 2, July 2024). Another participant echoed this sentiment: “We often do not receive the assistance we need in a timely manner.” (Head of School D, July 2024).

A particularly concerning issue raised was the negative impact of PPPs on schools with students who have mental health issues. One participant explained:

“There are various types of disabilities, including deafness and intellectual disabilities, but those with mental health issues are often overlooked.”

Engagement with this group is inconsistent, leading to significant gaps in support. For instance, there is a lack of follow-up on what happens to children after they leave special education units.” (Head of School G, July 2024).

One participant expressed dissatisfaction with the lack of support from the private sector:

“In the three years I have been here, I have not received any contributions from the private sector, such as desks or classroom construction. Despite writing letters, the response has been minimal. We approached CRDB for a photocopier and printer, but they have not responded. Engagement with the private sector is very challenging; they rarely inquire about our challenges to offer assistance.” (Head of School C, July 2024).

Another participant critiqued the overall engagement with private institutions:

“The partnership between the government and the private sector is limited. The contributions from private institutions to public schools are minimal, and awareness remains low. Although many public resources exist, the government has not sufficiently opened the doors for private institutions to contribute to improving infrastructure for learning.” (Head Teacher School D, July 2024).

Additionally, one participant highlighted about the participation:

“The government's reliance on private institutions for effective functioning is evident, yet their participation is minimal. This lack of collaboration results in delays and inefficiencies in improvements. The government primarily relies on tax revenues, and any disruption can lead to significant setbacks.” (Head Teacher School B, July 2024).

Participants indicated that despite efforts to engage the community through workshops and fundraising activities during the implementation of PPPs, the response was disappointing. One head teacher shared:

“We have invited various stakeholders to participate in school development, but many only make promises without delivering. The buildings are worn out, constructed in the 1970s, and although we have plans to renovate, the response to our fundraising efforts has been minimal.” (Head Teacher, School A, July 2024).

Another participant lamented the poor response from private sector organizations: “In the past, we received some assistance from an organization that drilled a well for us in the 1970s, but since then, support has dwindled. This has led to discouragement and reduced involvement with stakeholders, as most promises go unfulfilled.” (Head Teacher School F, July 2024).

The lack of awareness among parents and the private sector was also noted:

“Many parents and private sector representatives lack understanding regarding their roles in school service provision. They often assume that all services are provided by the government, which hampers participation in development initiatives.” (Head Teacher School C, July 2024).

These extracts indicate that while the implementation of the PPP model offers potential benefits, it also faces numerous challenges that hinder the provision of primary education. The identified drawbacks include incompetent personnel, lack of awareness, low private sector engagement, political hurdles, and legal challenges, particularly those concerning the fee-free education policy.

Discussion

This discussion based on the major findings of the study obtained from the two specific objectives which were identify the forms of Public-Private Partnerships (PPPs) and their impacts on primary education.

The Forms of PPPs Employed in the Provision of Primary Education.

The study disclosed that forms of partnerships in primary education, included collaboration between the government, community involvement, international organizations, non-governmental organizations (NGOs), faith-based organizations, and private entities. This multifaceted collaboration highlights the commitment to enhancing the quality of education in the Kigamboni Municipality. This finding aligns with the concept of PPPs in Tanzania, defined as arrangements where public and private entities collaborate in renovating, constructing, operating, maintaining, or managing facilities according to specified outputs (URT, 2009). Participants highlighted the active involvement of parents in addressing academic issues, such as minimizing dropouts. Community engagement extended to infrastructure development, where local members contributed to building classrooms and renovating school facilities. Additionally, international organizations like the World Bank and IMF provided significant funding under initiatives like the BOOST program. Faith-based organizations, such as OPEN Rwanda, played a role in repairing school infrastructure. This finding resonates with Latham (2009), who noted that various countries subsidize private, often faith-based, schools through direct funding or resource support like textbooks and teacher salaries.

The Impacts of PPPs on Primary Education Provision

The study revealed both positive and negative impacts of PPPs on primary education in Kigamboni Municipality. On the positive side, the

implementation of PPPs has led to increased enrollment, improved attendance rate, enhanced academic performance, and improved infrastructure. Conversely, challenges identified included a lack of competent personnel, insufficient awareness, low participation from the private sector, and poor engagement with educational initiatives. These findings suggest that PPPs can alleviate some of the government's burdens in education delivery, promoting accountability among stakeholders. This aligns with the views of Rao et al. (2024), who argued that recognizing each other's strengths enables effective collaboration in PPPs. Respondents noted that private sector involvement facilitated the provision of food, particularly for children with special needs, indicating that such partnerships help schools address physical resource shortages. However, the study has also diverged from conventional PPP principles, as many partnerships lacked formal contractual agreements. The informal nature of these collaborations allowed individuals and organizations to assist schools without prior agreements, evidenced by community contributions of bricks and over 200 desks.

Despite these positive outcomes, negative consequences were also observed. The findings indicated that educational initiatives do not always yield solely positive results; complexities often arise within unpredictable environments. This perspective resonates with Tilak (2016), who cautioned that private sector involvement in education can produce mixed outcomes, potentially undermining established goals of human development. The negative impacts noted stemmed from insufficient awareness, inadequate personnel, and misconceptions surrounding free education, which complicated the engagement of private sectors and community stakeholders. Many believed that the government's provision of free education negated the need for additional support, aligning with Natai's (2018) assertion that legal challenges, political influence, and lack of public understanding hinder effective PPP implementation in the country. This scenario creates barriers to transparency and prevents partners from leveraging privileged information for competitive advantage (Rao et al., 2024). Such challenges impede the successful implementation of the PPP model within the municipality.

CONCLUSION

This study concludes that the implementation of Public-Private Partnerships (PPPs) in Kigamboni Municipality has yielded both positive and negative impacts on the provision of primary education. While there have been notable improvements, such as increased enrollment and enhanced infrastructure, challenges remain, including a lack of awareness and engagement among stakeholders. The practical implication of this study is that it highlights the

dual nature of Public-Private Partnerships (PPPs) in Kigamboni Municipality, revealing that while there are notable advancements in primary education; such as increased enrollment and improved infrastructure; there are also significant challenges that hinder full engagement and effectiveness. This underscores the importance of a well-informed and involved community, as stakeholder awareness and participation are critical to the success of PPP initiatives.

RECOMMENDATIONS

To address these issues, the study recommends that schools actively encourage parental involvement by providing education on the principles and benefits of PPPs. Furthermore, media outlets should play a pivotal role in raising community awareness about their responsibilities in contributing to education. Local leaders at the ward, district, and regional levels must effectively incorporate education into their community engagements, emphasizing the importance of continued support for the education sector. Additionally, it is crucial to enhance existing PPP frameworks to foster improved primary education provision across Tanzania. Collaborative efforts among government, private sectors, and communities will be essential in overcoming the current challenges and maximizing the potential of PPPs in education. Implementing these recommendations can help create a more supportive and effective educational environment in Kigamboni Municipality, ultimately leading to improved outcomes for students. Lastly the study recommends that another study should be carried out to investigate the implementation of PPPs in the provision of secondary education in the country.

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Exploring Determinants of Low Tax Collection in Informal Businesses: Evidence From Mbeya City, Tanzania

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Abstract

This study explored the determinants of low tax collection among informal businesses in Mbeya City, Tanzania. Informal businesses, which make up a significant portion of Tanzania's economy, face challenges in complying with tax regulations, despite the government's efforts to create tax awareness and improve collection systems. The study is anchored in the Informal Economy Tax Compliance Theory, which suggests that tax compliance is influenced by economic survival, regulatory complexity, and trust in government institutions. The research employs both qualitative and quantitative methods to assess the efficiency of tax collection processes, the clarity of regulations, and the willingness of informal businesses to comply. Findings indicated mixed perceptions of tax collection efficiency, significant dissatisfaction with the clarity of tax regulations, and varying levels of tax awareness among informal business owners. The study concludes that simplifying tax processes, providing education programs, and enhancing the perceived fairness of the tax system could improve compliance and boost revenue collection. This research contributes valuable insights for policymakers and stakeholders aiming to strengthen tax collection strategies in Tanzania's informal sector.

Keywords: *Informal Businesses, Tax Collection, Compliance, Mbeya City*

INTRODUCTION

Two billion people work in informal jobs around the world, which come with risks and vulnerabilities. This equates to 90% of all small and medium-sized businesses and 60% of the world's labour force (Odusanya et al., 2018; Benjamin & Mbaye, 2012). Governments in the Global South suggest that most people either directly or indirectly rely on the informal sector for survival (Singh & Ehlers, 2020; Mtengeti, 2013; Etim & Daramola, 2020). Many wealthy nations have focused on the development of SMEs, particularly informal businesses, recognizing their potential for driving economic growth. Countries like the USA and the UK have provided considerable financial and non-financial resources to support the growth of

SMEs. One such initiative is the creation of advantageous tax structures for these businesses, which has stimulated their development (McCluskey & Huang, 2019; Mwila et al 2011; IMF, 2007). Furthermore, tax revenue from previously unregistered businesses has contributed significantly to socioeconomic advancement.

In a similar vein, nations such as; South Africa, Nigeria, Kenya, and Rwanda are implementing tax policies designed to foster the growth and profitability of small and medium-sized enterprises, particularly those in the informal sector (Dom & Miller, 2018). Tanzania shares this perspective on the importance of SMEs, especially informal ones, due to their substantial contribution to the nation's economic growth and development strategy. According to data from the Tanzania Chamber of Commerce, Industry, and Agriculture, over 95% of businesses in Tanzania are small and medium-sized enterprises. These businesses contribute 35% to the country's GDP and provide employment to roughly 40% of the workforce (Kashalaba, 2017). Additionally, Tanzania relies heavily on tax revenue collection to support its socioeconomic development, making the role of SMEs even more crucial in sustaining national growth (Masanja, 2019).

To collect the essential taxes and fund the country's development, the government has worked hard to construct an effective tax administration system. Small- and medium-sized taxpayers are one group that has a lot of potential to boost domestic revenue mobilization and so help close enormous budget deficits. The industry provides a sizeable quantity of taxable income and employs a sizable portion of the nation's active labor force (Mlay et al., 2013; Dube, 2014). Nevertheless, small, and medium-sized firms in Tanzania contributes to the expansion of the economy, these companies face significant taxation issues that jeopardize their long-term viability and expansion (Masanja, 2019). One of the biggest problems affecting small and medium-sized businesses is tax compliance, specifically with multiple and costly taxes (Eragbhe & Modugu, 2014). Due to this intricacy, fewer taxes are being collected from taxpayers, including unregistered enterprises. Despite of the government efforts of providing awareness and other efforts still low tax collection among informal businesses remain questionable in Tanzania. Furthermore, different studies (McCluskey & Huang, 2019; Dube & Casale, 2016) have been conducted but little is known on low tax collection among informal businesses. Therefore, this study intended to fill the gap through investigating factors leading to low tax collection among informal businesses Mbeya City Council.

The willingness of informal sector businesses to pay taxes is influenced by factors such as tax morale, transaction costs, the effectiveness of tax administration, and the capacity for auditing and monitoring tax payments (Sebele-Mpofu, 2021; Loeprick, 2009). Despite government efforts, a significant number of businesspeople in informal firms, managed by both men and women, are reported to evade taxes, negatively impacting overall tax collection. Notably, initiatives like providing identity cards for an annual fee of 20,000 Tsh have been introduced to facilitate business operations for entrepreneurs in the informal sector (Masanja, 2019). However, the sustainability of tax payments among informal businesses remains uncertain, prompting the need for a closer examination (Kashalaba, 2017; ILO, 2018). Given the intricate tax and fiscal environment influencing tax collection in Tanzania, there is a critical research gap in understanding the specific factors contributing to low tax collection among informal businesses in the Mbeya City Council.

Guiding Theory of the Study

This study is guided by the theory named Informal Economy Tax Compliance. The theory was firstly proposed by David P. Weber (2006). It stated that low tax collection in informal businesses is influenced by a complex interplay of economic, structural, and behavioral factors. The theory stated further that informal businesses often operate outside formal regulatory frameworks due to perceived high costs of compliance, lack of formal record-keeping, and a general mistrust of government institutions. The assumption of this theory is that informal businesses prioritize immediate their economic survival over tax compliance, they perceive the tax system as unfair or ineffective, and weak enforcement and complex regulations impair non-compliance (Leoprick, 2009). The theory fits in this study by straightly addressing the sole challenges and factors affecting tax collection in the informal businesses (OECD, 2019). Furthermore, the theory is applied in order to improve tax collection strategies employed to informal businesses. Researchers such as (Ordonez, 2014; Zogli et al, 2021; Phiri & Nakamba-Kabaso, 2012; Benjamin & Mbaye, 2012) have used this theory in their studies to explore tax compliance behaviors in various informal businesses and proposed the targeted policy interventions.

To address the study, gap this study investigates the factors leading to low tax collection among informal businesses in the Mbeya City specifically assessing the current tax collection processes among informal businesses in the area and identifying the key factors that contribute to the observed low tax collection. Additionally, the following questions will be answered to

fulfill the objectives of the study, how are taxes currently collected among informal businesses in the Mbeya City? What are the specific factors that lead to low tax collection among informal businesses in the Mbeya City? Addressing these questions is essential for developing targeted interventions that enhance tax compliance within the unique context of informal businesses in Mbeya City. Also, this study contributes to adding knowledge to the existing literatures, policy makers and various stakeholders on enhancing tax collection and compliance.

METHODOLOGY

This study employs a quantitative and qualitative research approaches to explore factors influencing low tax collection from informal businesses in Mbeya City (Creswell & Clark, 2011; Mlay et al, 2013). The chosen approach aims to provide an in-depth understanding of perceptions and experiences, also a convergent parallel design is utilized for the concurrent collection and analysis of qualitative data (Klassen et al., 2012; Ary et al, 2010). The study focuses on Mbeya City which is selected for its significant informal business presence. Participants include tax collectors, business administrators, and informal business owners, chosen purposively for their insights into the research problem. Data is gathered through semi-structured interviews and questioners. Semi-structured interviews were conducted with tax collectors and business administrators to explore their perspectives on low tax collection (Creswell, 2009; Mugenda & Mugenda. 1999). Open-ended questions allowed participants to express nuanced views beyond predefined categories. In data analysis, the study used the descriptive analysis to analyze the findings.

RESULTS AND DISCUSSION

Descriptive Results

The study findings were analyzed by the descriptive analysis and compared with references from various researchers and came up with different observations; -

Efficiency of tax collection

From the survey questionnaires used, the respondents were asked on the efficiency of tax collection on informal business practices in Mbeya City and the results were as follows; -

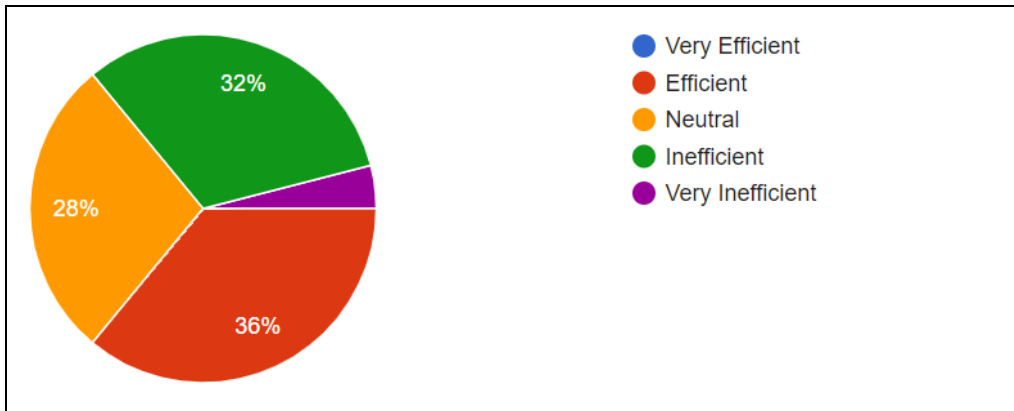


Figure 1: Tax collection efficiency for informal businesses.

Figure 1 shows the efficiency of tax collection mechanisms employed by Mbeya City Council for informal businesses reveals a diverse range of opinions among participants. While 36% perceive the current methods as efficient, 32% find them inefficient, and 2% label them as very inefficient. Additionally, 28% provided a neutral rating. These results are in line with Assfaw & Sebhat, (2019) and OECD (2019). Also, the results are in line with the study theory in that there is a minor deviation in respondent's percentage as between efficient and inefficient of tax collection efficiency for informal businesses. To address these findings, a policy brief may recommend a comprehensive review of the existing tax collection processes, incorporating feedback from both satisfied and dissatisfied stakeholders. This could involve soliciting input from informal business owners to identify specific challenges and areas for improvement.

On the other hand, through interview, respondents elaborated that *“Tax collection efficiency in informal businesses is a serious concern, as compliance behavior and attitudes towards the tax system are often influenced by an individual, relatives, neighbours, and friends. If a taxpayer is aware that many people in their important social areas are evading taxes, their own commitment to comply is likely to be weak, and further its impairing challenges in effectively collecting taxes from the informal sector.”* (Business Administrator, February, 2024)

Clarity of tax regulations and procedures applicable to informal businesses

Respondents were asked on clarity of tax regulations and procedures applicable to informal businesses in Mbeya City and the findings were as follows: -

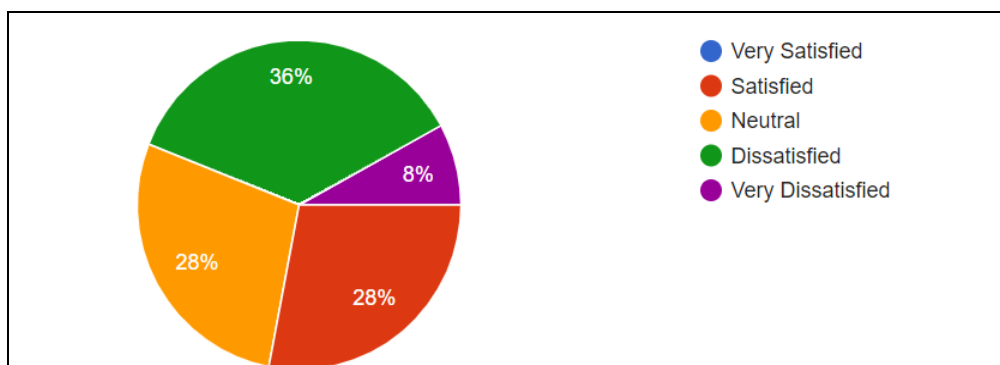


Figure 2: Clarity of tax regulations and procedures applicable to informal businesses

Figure 2 depicts the analysis of satisfaction with the clarity of tax regulations and procedures for informal businesses which shows a substantial level of dissatisfaction with 36% expressing discontent and an additional 8% being very dissatisfied. Meanwhile, 28% of respondents reported being satisfied, and the same percentage indicated a neutral stance. This indicates a significant gap in understanding and acceptance of tax regulations among respondent. These findings are in line with Dube & Casale (2016) which recommended that there should be conducted a comprehensive review and simplification of tax regulations applicable to informal businesses.

On explaining clarity of tax regulations and procedures through interview, respondents were recorded and saying that *“Clarity of tax regulations and procedures applicable to informal businesses is important. How well taxes are collected from informal businesses is a big issue because people’s attitudes towards taxes can be shaped by their family, friends, and neighbors. If a taxpayer sees that many people around them are avoiding taxes, they may not be very committed to paying their own taxes. This makes it harder to collect taxes from the informal sector.”* (Business Administrator, February, 2024).

Compliance on the willingness of informal businesses to pay taxes

Regarding compliance on the willingness of informal businesses to pay tax in Mbeya City, the respondents revealed as follows: -

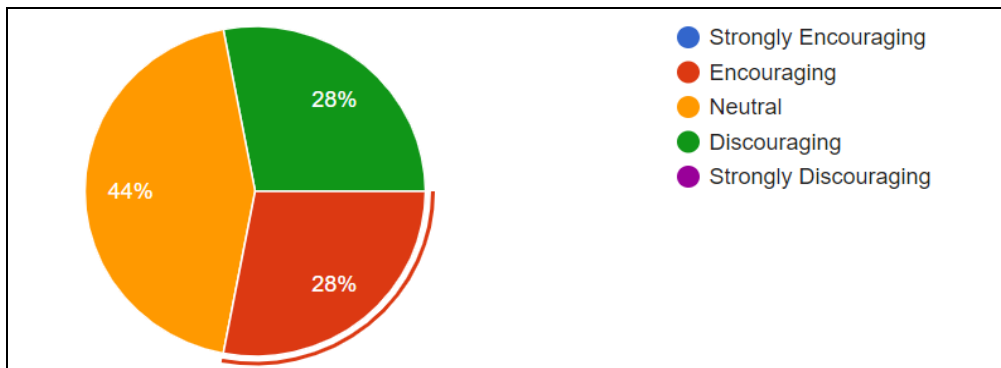


Figure 3: Compliance on paying tax.

Figure 3 shows the analysis of the study on the influence of compliance on the willingness of the informal businesses to pay taxes and reveals a balanced result, with 28% of responses categorized as encouraging and an equal 28% as discouraging. This divided sentiment suggests the need for further investigation into the specific factors driving these perspectives. These results resemble with the study theory in that informal businesses are mostly relying on their own economic survival over tax compliance also the results are in line with the findings of Sebele-Mpofu (2021) who recommended that the policymakers could tailor interventions to address the concerns and motivations of informal businesses to pay tax effectively.

On an interview, the respondents said that *“the willingness of informal businesses to pay taxes often depends on whether they feel it’s fair and if they see any benefits from paying. Many are unsure because the tax rules can be complicated, they don’t see what they get in return, or they worry about being closely watched. To get more informal businesses to pay taxes, we need to make the process easier to understand, clearly explain how tax money helps improve things like roads and services, and build trust”*. (The informal businessman, February, 2024)

Awareness among informal businesses owners regarding their tax obligations

The results on awareness among informal business owners regarding their tax obligation on informal businesses in Mbeya City were as follows: -

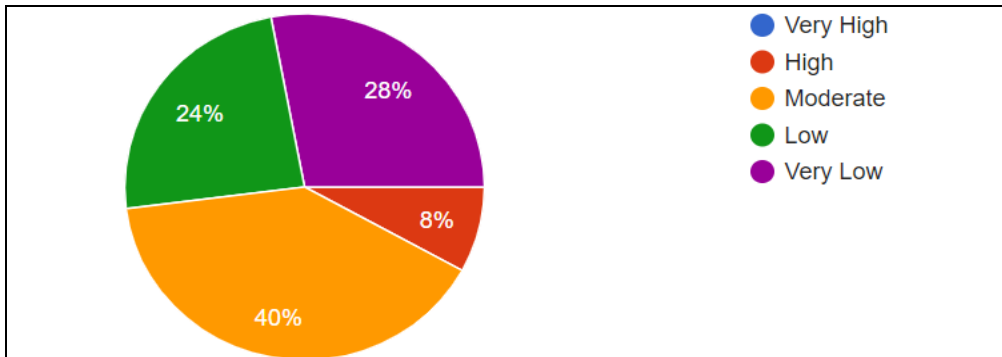


Figure 4: Awareness to pay tax.

The analysis of the awareness level among informal business owners regarding their tax obligations reveals a range of perceptions. Notably, 40% of respondents rated the awareness as moderate, indicating a substantial portion with a satisfactory understanding of their tax responsibilities. In contrast, 28% perceived the awareness level to be very high, suggesting a significant group well-informed about tax obligations. On the other hand, 24% considered the awareness to be low, indicating a notable portion with insufficient knowledge. Lastly, 8% rated it as high, signifying a smaller yet considerable group acknowledging a commendable level of awareness. These results are in line with Tegegn & Kebede (2016), who propounded that awareness is one of the strategies that the regulator may use to improve tax compliance.

On an interview, pertaining with awareness to pay tax, the respondents said that many *informal business owners don't know much about their tax obligations. They often aren't aware of what taxes they need to pay or how to handle them. This lack of knowledge means they might miss important deadlines or even face fines. Educating these business owners about their tax responsibilities could help them stay compliant and avoid problems.*" (*The informal businessman, February, 2024*)

Tax Education Programs for Improving Tax Collection in Informal Businesses

The results on tax education programmes for improving tax collection in informal businesses in Mbeya City were as follows: -

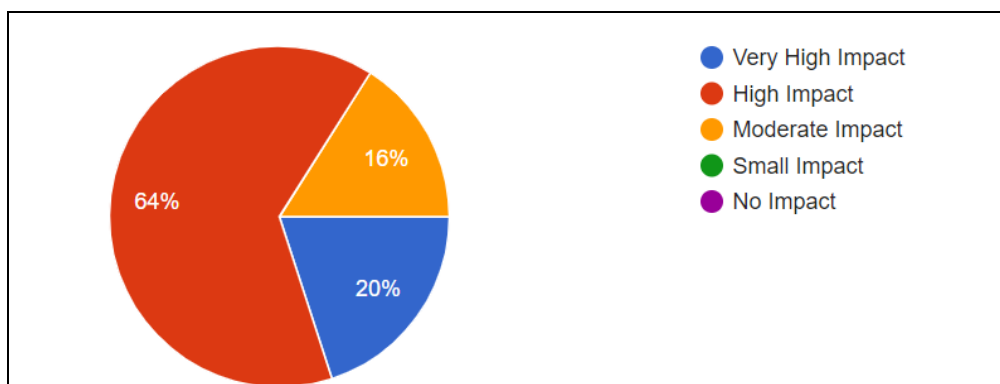


Figure 5: Tax Education Programs for Informal Businesses.

The analysis of the results for the impact of providing tax education for improving tax collection in informal businesses indicates a significant positive perception among respondents. A majority of 64% believe that such education programs would have a high impact, while 20% anticipate a very high impact. Additionally, 16% perceive a moderate impact. These results are in line with Fjeldstad (2014) and Gaspar et al (2016), who recommended that the overall positive sentiment towards the potential effectiveness of tax education programs suggests a strong endorsement for implementing initiatives aimed at enhancing tax awareness and understanding among informal businesses, with an emphasis on the expected high and very high impacts as highlighted by the respondents.

In an interview question on tax education programmes, the respondents presented that “the presence of tax education programs will help informal businesses understand and manage their taxes better. These programs teach business owners about tax regulations, how to keep proper records, and the benefits of paying taxes, such as access to government services and avoiding penalties. By improving their knowledge and skills, informal businesses can comply with tax laws more easily, leading to better tax collection and a more organized financial system overall.” (The informal businessman, February, 2024).

CONCLUSION

The study on exploring determinants of low tax collection in informal businesses in Mbeya City revealed the key areas for improvement in informal business tax compliance. The mixed perceptions of tax collection efficiency indicated 36% found as effective and 32% ineffective. This indicates a need for a thorough review and stakeholder feedback to refine processes. Dissatisfaction with tax regulation clarity, affecting 44% of respondents,

underscores the need for simplification to enhance understanding and compliance. The balanced views on tax payment willingness 28% encouraging and 28% discouraging suggest the necessity for targeted interventions to address specific concerns and improve perceptions of fairness. Awareness levels among business owners vary, with a significant portion needing better education to avoid penalties. The high regard for tax education programs 84% anticipating a positive impact point to their potential in boosting compliance. Addressing these gaps through clearer regulations, educational efforts, and stakeholder engagement will help create a more efficient tax system, benefiting both the economy and the community.

RECOMMENDATIONS

To improve tax collection efficiency and compliance among informal businesses in Mbeya City, it is recommended to conduct a comprehensive review of current tax collection processes and gather stakeholder feedback to refine strategies. Simplifying tax regulations and procedures will enhance clarity and understanding. Tailored interventions should address specific compliance concerns and ensure tax policies are perceived as fair. Increasing educational efforts to raise awareness about tax obligations is crucial, along with implementing and promoting tax education programs to improve understanding and compliance. These measures will contribute to a more effective and equitable tax system.

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Impact of Training on Police Officers' Performance in Tanzania: A Case of Ruvuma Regional Police Commander's Office

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Abstract

The study was carried to determine the impact of training on police officers' performance in Tanzania specifically at Ruvuma Regional Police Commander's Office. The study specifically focused on determining the impact of on-the-job training and off-the-job training on police officers' performance. The study employed a cross-sectional study design and collected data from 285 police officers who were selected via stratified sampling. Self-structured questionnaire was used to collect data from the respondents. Data was analyzed through descriptive statistics and multiple regression analysis. The study found a positive relationship between on-the-job training and police officers' performance. It also found that off-the-job training positively associate with police officers' performance. The study generally revealed that, training positively and significantly associates with police officers' performance. The study concludes that, both on-the-job and off-the-job training programs positively correlate with police officers' performance. The study recommends that, there should be allocation of resources to enhance on-the-job and off-the-job training programs for police officers. This could involve developing specialized training modules, providing access to relevant resource and technology, and ensuring that trainers are equipped with the necessary skills and knowledge to deliver effective training.

Keywords: *Training, on-the-job training, off-the-job training, Police officers' performance*

INTRODUCTION

Police officers play a crucial role in maintaining law and order, protecting citizens and promoting public safety (Ross, 2019). As such, their performance and effectiveness are paramount importance. Police officers are responsible for upholding laws, safeguarding people and their belongings, promptly responding to emergency situations and capturing and detaining offenders. To handle these situations effectively, police officers need to

undergo comprehensive training to acquire the necessary expertise and abilities (Kleygrewe *et al.*, 2022).

Globally, significant attention and debate regarding police officers' training and performance has been a matter of utmost importance. There has been an increased emphasis on de-escalation techniques, cultural sensitivity and improved community relations. Some advocates argue for longer and more comprehensive training programs (Blumberg *et al.*, 2019). In Africa, police training has undergone significant reforms so as to promote community trust. For instance, in South Africa police training is emphasized in human rights, constitutional policing, community engagement and the use of force as a last resort while efforts are being made to address issues such as corruption, accountability and professionalism within police force. In Nigeria there have been calls for enhanced training in human rights, community engagement, conflict resolution and modern investigative techniques (Giessing, 2021; Koedijk *et al.*, 2019; Maina & Waithaka, 2017).

In Tanzania, general public, Civil Society Organizations (CSO's), Government Authorities and International Partners recognize the importance of training to get rid of corruption, inadequate response to emergencies and issues of professionalism (Agumisa, 2020). They emphasize on better training programs that focus on community policing, human rights, effective crime prevention, and conflict resolution and community engagement. The Government emphasizes the importance of professionalism, integrity and respect for human rights (Agumisa, 2020).

Despite of the efforts to encourage training to improve police officers' performance, there are still grievances which raise doubts about the performance of the police officers. Criminal activities are still in place in the country, road accidents occur as usual resulting to loss of people's lives and permanent injuries. Again, online theft is still on the top as people are always being robbed through transactions via mobile networks. Again, there have been cases concerning rape and sodomy to minors as well as cattle rustling. This has resulted into the loss of faith among public to their police officers in their delivery of services as well as loss of manpower due to road accidents.

This ground necessitated the study to be made to determine the impact of training on police officers' performance. The study used variables such as on-the-job training and off-the-job training which allowed police officers to learn through direct observation and imitation of experienced colleagues or mentors within work environment where they can witness effective

strategies, problem solving techniques and communication skills and then imitate and adopt those behaviors to enhance their own performance.

Literature Review

The theory used in this study is social learning theory. Social learning theory was developed by psychologist Albert Bandura (1977), proposes that people learn through observation, imitation, and reinforcement of others' behaviors. It emphasizes the role of social interactions, modeling, and cognitive processes in learning and behavior change (Smith, 2012). Bandura highlighted the importance of vicarious learning, self-efficacy, and reciprocal determinism in his theory. Reciprocal determinism suggests that behavior is influenced by personal factors, the environment, and cognitive processes, which interact and affect each other.

One of the strengths of social learning theory is that it provides a comprehensive framework for understanding how individuals acquire new behaviors, skills, and attitudes. Its weakness is that it primarily focuses on environmental and cognitive factors and does not give significant attention to biological or genetic influences on behavior.

On-the-job training: According to social learning theory, police officers can observe and learn from experienced colleagues or mentors within their work environment. They can witness effective strategies, problem-solving techniques, and communication skills, and then imitate and adopt those behaviors to enhance their own performance.

Off-the-job training: In the context of social learning theory, off-the-job training can facilitate the acquisition of new knowledge, theories, and concepts that can be applied to police work. Officers can learn about best practices, legal updates, ethical considerations, and community relations, among other topics.

Empirical literature and Hypothesis Development

Research hypotheses were developed after a critical review of theoretical and empirical studies.

On-the-job training and police officers' performance

On-the-job training is a type of training that takes place within the work environment and involves learning while performing job-related tasks (Tynes & Hooker, 2018). Ogunyemi (2017) and Chonoso *et al.* (2020) found positive relationship between on-the-job training and employees' performance in

Nigeria and Sub-Saharan Africa respectively. Based on the reviewed empirical literature, this study formulated the following hypothesis;

H₁: On-the-job training has a significant positive impact performance of Police Officers

Off-the-job training and police officers' performance

Off-the-job training refers to training activities that are conducted outside the regular work environment and away from the actual job site (Noe, 2016). Several researchers found a positive relationship between off-the-job training and employees' performance. For instance, study by Nnko (2020) found out that off-the-job training had a significant effect on employee performance. Again, Akinwale *et al.*, (2019) revealed that off-the-job training improved employee's job competence, motivation and commitment which resulted to improved job performance and customer satisfaction. Nevertheless, Elamer *et al.* (2020) observed positive relationship between off-the-job training and employees' performance. Based on the reviewed empirical literature, this study formulated the following hypothesis;

H₂: Off-the-job training has a significant positive impact on performance of Police Officers

Conceptual Framework

Independent Variables

Dependent Variables

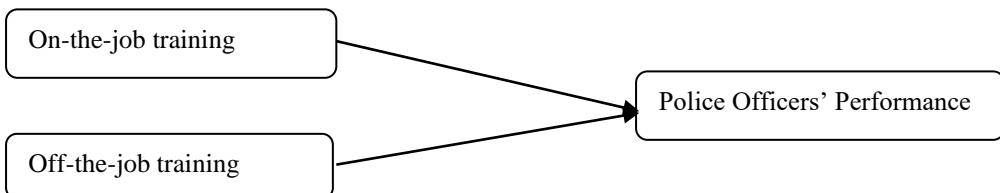


Figure 1: Conceptual Framework

Source: Researcher (2024)

METHODOLOGY

The study used positivist philosophy as it focused on gathering and analyzing empirical data. It also used a quantitative approach which included the collection and analysis of numerical data in order to quantify or measure variables under investigation (Babbie, 2019). This approach was used due to the fact that the study required determining the impact of training on police officers' performance which needed the collection and analysis of numerical

data to seek the relationship between variables of the study. Cross-sectional study design was used because it helped the researcher to collect systematic and reliable quantitative data that was used to answer the research questions and achieve the study objectives. The study involved the total population of 986 police officers working at different departments at Regional Police Commander's Office. Respondents were selected from this population through stratified sampling so as to provide the answers to objectives of the study.

The sample size was drawn from 986 Police Officers' populations so as to get a manageable representation in relation to time, financial resource and the nature of the data required for carrying out the study. The sample size was obtained in response of the formula suggested by Yamane in 1967.

The formula is:

$$n = N \div [1 + N(e)^2]$$

Where,

n = Sample size,

N= Population size (Targeted population) = 986,

e = Margin of error (5%)

$$n = \frac{986}{1 + 986(0.05)^2}$$

Sample size (n) = 284.56~ 285

Data Collection

Structured questionnaire was used in this study because of the nature of the study that is quantitative and positivism philosophy used in this study. This method facilitated easy acquisition of information from the study population. It also ensured high response rate from the respondents since respondents filled themselves while questions were structured.

Variable Measurements

Dependent variable for this study was Police Officer's performance which consisted of quality service delivery, road accidents trends, and crime trends and procedures utilization by police officers. Independent variables for this study were Police Officers' training which consisted of on-the-job training and off-the-job training. These variables were measured through 5-point Likert scale which allowed respondents to express their level of agreement or disagreement with a series of statements related to the police officers training on performance.

Table 1: Variable Measurement

Variable investigated	Description of variable	Measurement of variable	Sources
On-the-job training	This refers to the process of providing employees with the knowledge, skills, and abilities required to perform their job tasks effectively.	On-the-job training programmes such as job rotation, orientation and mentorship	Muganyizi (2018), Khamis (2019).
Off-the-job training	This is a training approach where employees are temporarily released from their regular work duties to participate in specialized training programs or activities.	Off-the-job training programmes such as workshops, seminars and conferences	Aziz <i>et al.</i> (2018), Nnko (2020), Akinwale <i>et al.</i> (2019).
Police Officers' performance	Refers to the effectiveness and efficiency with which police officers carry out their duties and responsibilities in protecting people and their activities, maintaining public safety and enforcing the law.	Quality service delivery, Road accidents trends, Crimes trends, Procedures utilization	Maina & Waithaka (2017), O'Neill <i>et al.</i> (2018).

Data Analysis

After, data had been collected, the researcher numbered the questionnaires and then coded the items and entered them in excel for data cleaning then exported them into SPSS version 20 for analysis. The collected data was analyzed through descriptive statistics in SPSS. This analysis was used to determine the maximum, minimum, mean and standard deviation of the study variables and demographic characteristics of the respondents. Multiple regression analysis was also employed to determine the relationship between independent variables and dependent variables. To ensure the validity of the study data collection tool had questions that were relevant to research objectives. The intended participants were the one participated in the study. This was succeeded by indicating items that required them to indicate their division, rank and their working experience. To ensure reliability of the study the researcher did a reliability test through SPSS software to generate Cronbach's Alpha (α). The larger the value of Cronbach's Alpha, the higher the degree of internal consistency of measurement scales and the vice versa. The acceptance values of Alpha are supposed to be at least 0.70 which

justifies internal consistency (Devellis, 2003). See Table 4 for reliability results.

FINDINGS AND DISCUSSION

Demographic Characteristics of the Respondents

Descriptive statistics for demographic data from the respondents were computed in order to determine their gender, age, education level and their working experience (Table 3). The study found out that, 71.9% of the respondents were males and 28% were females. This indicates that, both genders were considered though male participants were more than females. It does also indicate that more males are employed in police force than the females. Again, participants from all age groups participated in this study though majority of them (41.1%) come from 34 to 41 years old range. The majority of the respondents (33.7%) had certificates, followed by bachelor's degrees (32.3%), diplomas (31.9%) and master's degrees (2.1%). The study also revealed that experienced individuals were examined; the majority of them (57.2%) had 11-20 years of working experience while 28.8% had 1-10 years and 14.0% had above 20 years.

Table 3: Demographic characteristics of the respondents

N/S	Questions	Response	Frequency	Percentage	Mean	Standard Deviation
1.	Gender	Male	205	71.9	1.28	.450
		Female	80	28.1		
		Total	285	100		
2.	Age	18-25	10	3.5	2.71	.846
		26-33	116	40.7		
		34-41	117	41.1		
		42-49	32	11.2		
		50 and above	10	3.5		
		Total	285	100		
3.	Level of education	Certificate	96	33.7	2.03	.864
		Diploma	91	31.9		
		Bachelor degree	92	32.3		
		Master degree	6	2.1		
		Total	285	100		
4.	Experience	1-10 years	82	28.8	1.85	.639
		11-20 years	163	57.2		
		20 years	40	14.0		
		Total	285	100		

N= 285

Source: Data Analysis (2024)

Table 4: Reliability Test Cronbach's Alpha

Variables	Items	Cronbach's Alpha	Status
On-the-job training	3	.827	Reliable
Off-the-job training	3	.833	Reliable
Police officers' performance	4	.867	Reliable

Source: Field Data (2024)

Variable Descriptive Statistics, Reliability and Correlation Analysis Results

Descriptive statistics was made for the independent variables. Police officers' performance had been observed to strongly be influenced by each of the independent variables. Results (Table 5) indicated that on-the-job training had strong mean score (M= 1.9040, S.D= .78075) and off-the-job training had strong mean score (M= 1.9200, S.D= .79425). Strong mean score was found for the dependent variable police officers performance (M= 1.8100, S.D= .81420).

According to Cohen (1988) cutoff for correlation, the correlations between pairs of individual dimensions of the independent variables were between .755 and .850 indicating positive and significant correlation.

Police officers' performance and on-the-job training were found to be strongly positively associated ($r = .755^{**}$, $p < .01$). Again, off-the-job training and police officers' performance were found to be strongly positively connected ($r = .850^{**}$, $p < .01$).

Scale test for reliability analysis was performed to determine the internal consistency of the measurement scales (Table 4). Cronbach's alphas show good internal consistency for all tested variables. On-the-job training (.827), off-the-job training (.833), and officers' performance (.867).

Table 5: Variable Descriptive Statistics, Reliability and Correlation Analysis Results

		Mean	Standard Deviation			
On-the-job training	Pearson	1.9040	.78075	.827		
	Correlation					
Off-the-job training	Pearson	1.9200	.79425	.567**	.833	
	Correlation					
Employees' performance	Pearson	1.8100	.81420	.755**	.850**	.867
	Correlation					

**P<0.01 (Two-tailed)

Source: Data Analysis (2024)

Regression Assumptions Testing Results

The distribution of residuals is represented by a bell-shaped curve in the histogram (Figure 2). The residuals are nearly perfectly centered on 0, as expected in a well-fitting regression model, with a mean of $7.83E-15$ and a standard deviation of 0.996. As illustrated in the figure 3, residuals once plot along the diagonal line, show that there are no outliers. Figure 4, shows that, diagonal dots are dispersed along the diagonal line showing that the data is linear and no outliers present. The case residual dots are dispersed about zero (0) in figure 4, implying equality of variance (homoscedacity).

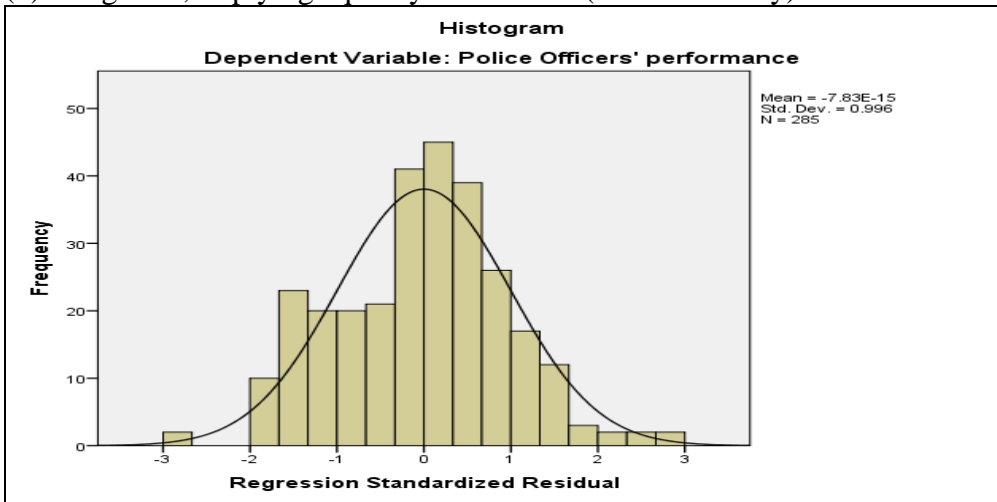


Figure 3: Histogram

Source: Data Analysis, (2024)

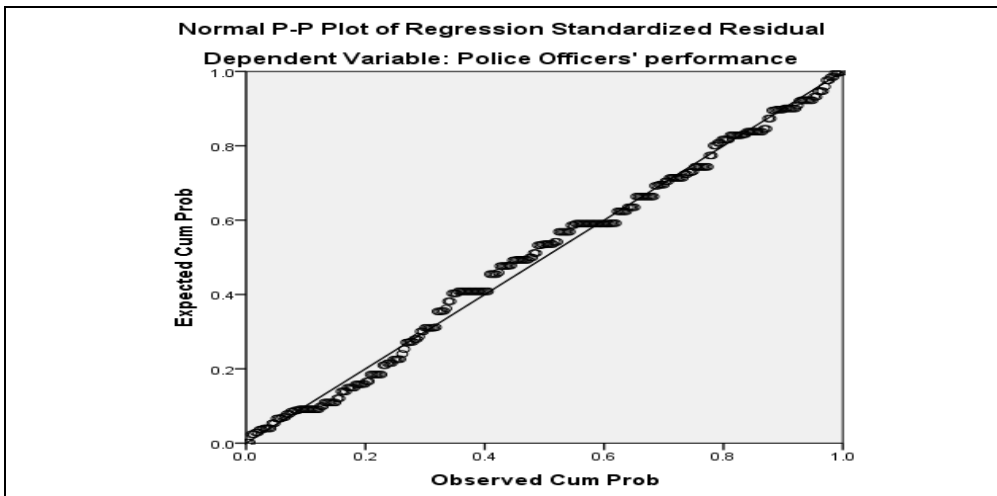


Figure 4: Normal P-Plots for the Standardized Residual Variable

Source: Data Analysis, 2024

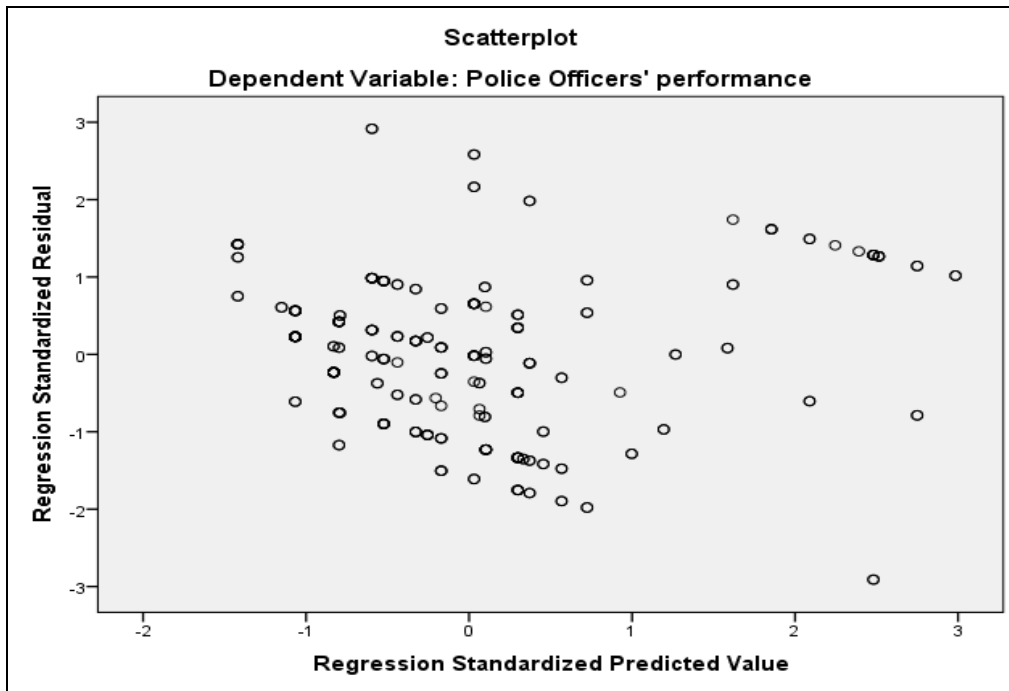


Figure 5: Scatter Plot for the Standardized Residual for Variables

Source: Data Analysis, 2024

Multiple Regression Analysis Results

Multiple regression analysis was carried out to assess the impact of training (independent variables) on police officers' performance (Dependent variable). Results are presented in tables below. Table 6 presents a summary of the model in which the item of relevance is the R^2 statistics, which is .221. This implies that training's impact describes 22.1% of the difference in police officers' performance.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.470 ^a	.221	.215	.59593

a. Predictors: (Constant), Off-the-job training, , On-the-job training

b. Dependent Variable: Police Officers' performance

Source: Data Analysis (2024)

The analysis of variance (ANOVA) results is presented in Table 7. The table contains information which involves F-statistics and its sig. value. The findings indicated that, F-statistics is $F(2,282) = 39.898$, $P < 0.001$. The results support the claim of the model that training impact on police officers'

performance. They indicated that there was strong association between training impacts and performance.

Table 7: ANOVA Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28.338	2	14.169	39.898	.000 ^b
	Residual	100.149	282	.355		
	Total	128.487	284			

a. Dependent Variable: Police Officers' performance

b. Predictors: (Constant), off-the-job training, on-the-job training

Source: Data Analysis (2024)

The results of the regression model's coefficients as presented in Table 8 indicate that, training has a positive impact on police officers' performance. On-the-job training positively, statistically and significantly relates to police officers' performance ($b=.371$, $p<0.01$). Police officers' performance was positively, statistically and significantly correlated with off-the-job training ($b=.283$, $p<0.001$).

According to multicollinearity statistics as presented in Table 8, variance inflation factors (VIF) ranged 1.006 while tolerance value is .994. This implies that, there is no multicollinearity among the independent variables. According to Field (2005), multicollinearity would be suspected if tolerance figures are less than 0.10 or if VIF statistics are 10.0 or higher.

Table 8: Regression Model Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
	(Constant)	1.227	.337				3.641	.000
1	On the job training	.371	.135	.145	2.748	.006	.994	1.006
	Off the job training	.283	.033	.458	8.681	.000	.994	1.006

a. Dependent Variable: Police Officers' performance

Source: Data Analysis (2024)

Discussion

As presented above, the study discovered that, there was a significant positive and statistical relationship between on-the-job training and police officers' performance. This implies that as amount or quality of on-the-job training increases, the police officers' performance tends to improve. Again, the statistical significance means that the observed association was unlikely to be due to chance, indicating reliable link between training and performance. Moreover, the findings suggested that investing in on-the-job

training programs for police officers could lead to better performance outcomes, such as improved job efficiency, effectiveness in law enforcement duties, higher competency in handling situations and overall enhanced service quality. The observed results align with the study by Ogunyemi (2017) which revealed a positive relationship between on-the-job training and employees' performance in Nigeria. They also in line with the study by Chinoso et al. (2020) that, observed positive impact of on-the-job training on employees' performance in Sub-Saharan Africa.

Nevertheless, the discovered results align with results found in the study by Abdiwali & Musa (2019). The study found positive relationship between on-the-job training and employees' performance in Uganda. The study by Muganyizi (2018) revealed that on-the-job training improved commitment of workers, service provision is well delivered and customer satisfaction has been considered in Dar es Salaam.

The alignment might be due to the fact that, the positive relationship between on-the-job training and performance may be a universal phenomenon, applicable across different countries and sectors. The underlying mechanisms and benefits of on-the-job training may transcend geographical and cultural boundaries, resulting in similar outcomes across the studies. Moreover, the methodologies of the aligned studies used in studying the impact of on-the-job training on employee's performance. Most studies employed a quantitative approach and collected data through self-administered questionnaire and analyzed through descriptive statistics and regression analysis. Despite geographical differences, employees in different countries may encounter similar challenges or job requirements that can be effectively addressed through on-the-job training. The training interventions may be tailored to address specific performance gaps or skill deficiencies that are prevalent across various contexts.

Again, the study observed that, off-the-job training positively and statistically relate with police officer's performance. This indicates that, with an increase in off-the-job training, there is an improvement in the performance of police officers. This finding also indicates that the relationship observed is unlikely due to chance alone and is statistically reliable. These results align with the study by Aziz *et al.* (2017) which observed a positive relationship between off-the-job training and employees' performance in Malaysia. They also align with the results revealed by Elamer *et al.* (2020) which observed that off-the-job training had a positive impact on employees' performance. Again, the study results align with the study by Akinwale *et al.* (2019) which also

revealed a positive relationship between off-the-job training and employees' performance in United Kingdom. Additionally, the study results align with findings by Nnko (2020) which discovered that off-the-job training had a significant effect on employees' performance. This implies that the findings are consistent across different context and may have broader applicability. It also indicates that, there might be similarities in the training programmes or policing practices in these countries that contribute to the observed relationship between field training and performance.

Theoretical Implication of the Findings

The results observed in this study align with and contribute to the assumptions of social learning theory. According to the theory, individuals learn through observation and imitation of others' behavior. On-the-job training and off-the-job training provide opportunities for police officers to learn from more experienced officers or experts in a real-world setting. This aligns with the assumption of social learning theory that learning occurs through observing and imitating others. The positive and significant relationship observed between on-the-job training and off-the-job training with police officers' performance supports the assumption that learning from others in a structured and formal training environment leads to improved performance. It suggests that when police officers are exposed to successful role models and have opportunities to learn from their expertise and experiences, they are more likely to perform better in their job.

Methodological Implication of the Findings

The results found in this study imply that the adopted methodologies provide a robust and unbiased framework for assessing the hypothesized relationships, allowing for the identification of potential casual links between the variables of interest. Furthermore, the use of self-administered questionnaire as data collection method suggests that this approach can effectively capture the perceptions and experiences of police officers which can provide valuable insights into factors influencing their performance. These methodological choices underpin the study's conclusion that both on-the-job and off-the-job training are positively related with improved police performance, suggesting that similar research frameworks could be successfully applied in future studies exploring training impacts in other professional contexts.

Practical Implication of the Findings

The observed results suggest that law enforcement agencies should prioritize the implementation of comprehensive training programs that encompass both

in-service and external training opportunities. By investing in continuous development of their officers through a combination of on-the-job skill-building and off-the-job professional development, agencies can potentially enhance the overall performance and effectiveness of their workforce. This approach could lead to improved decision making, problem solving and interpersonal skills among police officers, ultimately contributing to better service delivery, increased public trust and enhanced community safety.

CONCLUSION AND RECOMMENDATION

Conclusion

Basing on the findings of the study, the study concludes that, there is a significant positive impact of on-the-job training and police officers' performance. Again, there is a significant positive relationship between off-the-job training and police officers' performance.

Recommendation

Allocation of resources to enhance on-the-job and off-the-job training programs for police officers. This could involve developing specialized training modules, providing access to relevant resources and technology, and ensuring that trainers are equipped with the necessary skills and knowledge to deliver effective on-the-job and off-the-job training. Establishment of a system for ongoing evaluation of training programs to monitor their impact on police officer performance. This could involve gathering feedback from police officers who have undergone training to identify strengths and weaknesses of the programs and make necessary adjustments.

Areas for Further Studies

Further areas of the study may include assessing the specific aspects of off-the-job training programs that contribute to police officers' performance in Tanzania (this may involve investigating various field training experiences such as community engagement, problem solving exercises or exposure to critical incidents). Investigate cost-effectiveness of training of training programmes. Others are to assess the effectiveness of different training programmes and evaluating training programmes to assess their content, duration and delivery methods of these programmes such as classroom-based training or online courses to determine which approaches yield the best results. These areas would contribute to understanding the specific aspects of training that are most effective in improving the police officers' performance in Tanzania, informing the development and implementation of evidence-based training programmes tailored to the unique needs and challenges faced by the Tanzanian police force.

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Challenges Facing Micro and Small Business Growth in Tanzania: A Case of Mbalizi Town Council

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Abstract

Micro-enterprises are crucial in the economic landscape of many less-developed African countries, including Tanzania. Despite micro-enterprises significance, these enterprises often face challenges that hinder their growth. This paper synthesizes findings from existing literature. A quantitative study was conducted in Mbalizi Town Council, Mbeya region, Tanzania, to explore micro-enterprise growth challenges. The study's sample size was 285 micro-enterprises in Mbalizi Town. Data were analyzed using descriptive and multiple regression analysis. The paper's importance includes the development of sustainable micro-enterprises to support the contribution to the economic development of Tanzania. The study findings revealed that factors such as; lack of business skills, inadequate infrastructure, regulatory obstacles, and limited access to finance are significant challenges faced by micro-enterprises in the region. Furthermore, demographic factors such as; age, gender, experience, and business ownership were found to have no significant correlation with micro-enterprise growth. The study found one behavior in buyers buying goods or services with the principle of who-know-who or relative or same-tribe domination. The paper concludes by offering recommendations for addressing these challenges, including enhanced training programs, improved access to finance, regulatory reforms, and investment in supportive infrastructure. Also, policymakers need to address the challenge of people segregating buying depending on tribalism. By implementing these recommendations, stakeholders can support the sustainable growth of micro-enterprises, thereby contributing to broader economic development in Tanzania.

Keywords: *Micro-enterprises, business growth, economic development, social capital*

INTRODUCTION

Micro and Small businesses dominate the economic life of most of Africa's least-developed countries (Mashenene & Kumburu, 2020). Micro and small businesses are regarded as the driving force of economic growth and poverty alleviation (Nkwabi & Mboya, 2019). UNCTAD (2005) mentioned small businesses as the number one source of income for low-income countries like Tanzania. Tanzania National Baseline Survey for Small, Micro, and Medium

Enterprises (2012) revealed that more than 3 million types of small businesses are operating in Tanzania, of which the majority are informal (URT, 2012). For that case, these micro and small enterprises in Tanzania are reported to employ about 5,206,168 people; of those, 3,447,469 are owners/spouses, 964,246 are paid workers, 718,663 are relatives and friends, and 79,390 are apprentices. Thus, small businesses are essential to the livelihood and economic growth of LDCs (Mashenene & Kumburu, 2020). For micro and small businesses to grow, they need to improve the performance of their operations to increase employment, capital growth, and better livelihood of owners (Kamunge, Njeru, & Tirimba, 2014; Kasirrika, 2018; Danga, Chongela, & Kaudunde, 2019). Having achieved the desired improvement in deployment, growth pattern, and better livelihood, it is termed efficient utilization of resources for micro and small business growth and sustainability.

The success of any business elsewhere in the World depends on many factors, including labour, Capital, land, and entrepreneurship (Hind, Smit, & Page, 2013). In most cases, entrepreneurs set enterprises up by combining the factors of production to realize profit. In Tanzania, despite the role played by small businesses in economic development, most of them are constrained by some factors that hinder their growth performance. For instance, a study by Nkonoki (2010) on factors limiting the success and growth of small and medium-sized enterprises (SMEs) in Tanzania indicated that theft/cheating and lack of trust among the trading sector people, lack of needed talent, lack of education and training and lack of experience are some of the internal factors limiting small business growth in Tanzania. The study by Nkonoki (2010) did not discuss the factors that limit the performance and growth of micro and small businesses. Also, the survey by Mhede (2012) in Dar es Salaam involving entrepreneurs in industrial clusters revealed that the current growth of furniture manufacturing firms is affected by insufficient business skills. However, the study dwelt on the furniture business, which does not tell the extent to which inadequate business skills influence the performance and growth of such micro companies.

Micro-enterprises are the largest group of enterprises in any economy (Gumbo, Ngugi, Gakure, & Ngugi, 2012). There is a universal agreement on their significant participation in economic growth, employment creation, social cohesion, poverty alleviation, and local and regional development played by micro-business Vibha (2005). Micro-enterprises significantly contribute to the socio-economic and political environment of most developed and developing nations and countries progressing from command

to market economies. A healthy and growing micro-enterprise sector is essential in obtaining sustainable competitive advantage and economic development at local, regional, and national levels. Despite all the contributions of the Micro-enterprises to economic development, the growth rate is not promising as the business death rate is high in Mbalizi town (MaCkenzie & Paffthausen, 2019; Garcia, Caten, Campos, Callegaro, & Pacheco, 2022).

The importance of micro-enterprise's contribution to the economic development of Tanzania cannot be neglected. Despite the micro-enterprise being the primary source of employment and income generation for the majority, it is considered a key policy instrument for poverty reduction in the United Republic of Tanzania (URT, 2010; Madata & Chen, 2020). The gap despite the challenges being known, there is still underperformance of micro-enterprises in Tanzania. The Government of Tanzania has developed a sound and promising business policy; however, its implementation is questionable. The social and human Capital in Tanzania challenges the development of micro and small businesses. Social Capital is related to human capital development, which refers to the building of an appropriate balance and quality mass of the human population together with the provision of an enabling environment capable of engaging all willing and able individuals, enabling them to contribute significantly to both self and national growth (Tur-Porcar, Roing-Tiermo, & Mestre, 2018; Terry, 2019; Akunede, Nzeribe, & Ezenekwe, 2022). Several factors are considered as sources of social capital influencers, such as character qualities of the population, cultural values, ethical values, family factors, measure of trust in a country, morale of the population, emotional health, national identity awareness in the population, national unity, religion, social skills and a variety of non-cognitive skills /social adaptability together with the already popular education and physical health-based factors all play a role in influencing the human capital development of a nation (Akunede, Nzeribe, & Ezenekwe, 2022). Public opinion suggests that having responsible families/communities, income distribution, and distributive justice improves the state of social and human Capital for community development.

The Government of Tanzania initiated the development of policies that foster micro-enterprise development and its sustainability. The policy includes SMEs (2003), business (2003), and empowerment policy. Besides all the government efforts, employment and economic contributions are still not promising for micro-enterprises and small business sustainability (URT, 2003; Danga, Chongela, & Kaudunde, 2019).

Micro-enterprises contribute to job creation and income generation, accounting for two-thirds of all jobs worldwide (ILO, 2015). In developed countries, Micro-enterprises contribute nearly 64 per cent to the gross domestic product (GDP) and 62 per cent to employment. For example, Micro-enterprises were the backbone of Japan's economy because they contributed 70 per cent of all employees and more than 50 per cent of the added value (Hind, Smit, & Page, 2013). The micro-enterprises sector is crucial to Africa's growth, contributing more than 45 per cent to employment and 33 percent to GDP. In Uganda, the micro-enterprises sector employs 2.5 million people, accounting for 90 per cent of the entire private sector and contributing 20 percent to the GDP (Amri, 2014). The study used the general variables from the SME policy as a guideline to evaluate the variables and see the relationship with the micro-enterprises, the majority of which are growing sole proprietorships. The variables of the SME policy include legal framework, physical environment, business development services, business training, access to information, technology advancement, and marketing services (URT, Small and Medium Enterprises Policy, 2003: Madata & Chen, 2020; Mashenene & Kumburu, 2020).

In Tanzania, there are about 2.75 million micro-enterprises with approximately 3.16 million employments, and the sector is estimated to contribute about 27 per cent of the country's GDP (URT, 2002; URT, Tanzania Investment Annual Report, 2016). As part of Micro-enterprises, manufacturing has contributed to the rise in Tanzanian GDP; the agricultural sector is the primary source of raw materials (Hind, Smit, & Page, 2013). The government and private industry have been trying to improve agricultural product productivity, including processing and packaging (Danga, Chongela, & Kaudunde, 2019). In the Mbeya region, there are many Micro-enterprise practices from different sectors of the economy, including agricultural products, forest products, agro-processing, and buying and selling products. The micro-enterprises policy acknowledges a small business with up to four employees and or Capital of Tshs. 200m. It was learned that most companies in Mbalizi Town Council in Mbeya qualify as micro-businesses per the table of business classifications.

Table 1: Categories of Business in Tanzania

Category	Employment level	Capital structure
Micro- business	Up to four employees	Up to 5,000,000/=
Small Business	Four up to 49 employees	5,000,000 – 200,000,000/=
Medium Business	Fifty up to 99 employees	200,000,000- 800,000,000/=
Large Business	More than 100 employees	Above 800,000,000/=

Source: SME Policy, 2003; Kazungu et al., 2014

The micro-enterprises policy explains the constraints of small businesses and hindrances to business growth as they were confronted with unique problems, including heavy compliance costs resulting from their size (Funny, McKevit, & Davil, 2015). Other constraints include insufficient working premises and limited access to finance and business development services related to entrepreneurship, business training, marketing, technology development, and information access (Mashenene & Kumburu, 2020). On the other hand, micro-enterprise operators lack information and appreciation for such services and can hardly afford to pay for them. As a result, operators of the micro sector have relatively low skills, no information and knowledge of marketing, and no umbrella association for Micro-enterprise development. At the same time, the institutions and associations supporting Micro-enterprises were weak, fragmented, and uncoordinated partly due to lack of clear guidance and policy for the development of the micro sector (URT, 2003). The study is justified as most Mbalizi depend on farming during the rainy season and micro-business during the dry season. The main question is why most businesses fail within three years. It is crucial to inform the policymakers and stakeholders of the reasons for business failure despite the excellent business environment set by the government.

LITERATURE REVIEW

Despite the sector's importance to the national economy, the growth rate of the Micro-enterprise and its growth in Tanzania is unknown (Tonya, 2015). Some studies have investigated why micro-enterprises slowly growing for an extended period or becoming large businesses. Among the constraints found to face micro-enterprise growth include anti-entrepreneurial culture, under-capitalization, inadequate business training, poor policies, un-formalized frameworks, and poor leadership practices, including poor succession planning (UNCTAD, 2005; Tonya, 2015; Danga, Chongela, & Kaudunde, 2019; Mashenene & Kumburu, 2020). The study by JICA, (2015) indicates that Tanzanian micro-enterprises have been economically underperforming due to poor leadership skills. Emphasizing the importance of succession planning, (Gumbo, Ngugi, Gakure, & Ngugi, 2012) revealed that succession planning plays a role of 42 per cent in the sustainability of Micro-enterprises after the founders' exit. Therefore, succession planning was an activity that most Micro-enterprises would quickly institutionalize. Unfortunately, succession planning efforts were often underdeveloped, unevenly executed, and sometimes ignored (Miles & Dysart, 2007; Danga, Chongela, & Kaudunde, 2019).

This study, intended to establish the factors affecting the micro-enterprise growth in Tanzania, considering all the government's facilitating efforts. The study was done in rural Mbalizi Town in Mbeya, where micro businesses are the major undertaking during the dry season.

Despite the importance of micro-enterprises in Tanzania and the government's efforts to support private and small enterprises for economic development, the sector is economically underperforming (MIT, 2014). Several studies have been conducted to discover the reasons for micro-enterprises underperformance (URT, 2002; Tonya, 2015). The studies indicated that micro-businesses in Tanzania are not performing well; the results are considered with those studies by (Mashenene & Kumburu, 2020; Danga, Chongela, & Kaudunde, 2019). Based on the recommendations from past studies, the government and private sector have been taking several initiatives to curb the Micro-enterprises underperformance problem. Among the efforts being taken include formulation of small and medium enterprises policy, building roads, supplying electricity, improving the telecommunication sector, financing Micro-enterprises, capacity building, upgrading and modernizing agro-industry industry, and establishing organizations that support Micro-enterprises such as SIDO and TCCIA (URT, Small, and Medium Enterprises Policy, 2003). Also, the government developed a guideline for formalizing Micro-enterprises in Tanzania called the Formulation of Micro-enterprises in Tanzania; what are the emerging issues? (URT, 2019). Despite all these efforts, micro-enterprises were still economically underperforming to the expectations; an indication that the problem was still pervasive (Kazungu, Ndiege, Mchopa, & Moshi, 2014; Mashenene, 2016). Underperformance of Micro-enterprises not only threatens new job creation for youths but also attracts an unstable economy contrary to the national vision that manufacturing must reach a minimum of 40 per cent of the GDP for Tanzania to be a semi-industrialized country by 2025 (Mashenene, 2016).

The critical problems for micro enterprises' growth underperformance to the expectation call for further studies to discover more about what was not known about the difficulties facing micro enterprises' growth. Several studies mention the failure or underperformance of Micro-enterprises was a lack of business skills, managerial and leadership skills, working Capital, culture, working premises, and regulatory obstacles (URT, 2002; Kamunge, Njeru, & Tirimba, 2014; Kazungu *et al.*, 2014). The same variables were used to determine the challenges of micro-enterprise growth in Mbalizi Township. Thus, the significant inquiry for this study was to find out and contribute to

the body of knowledge on the factors hindering Micro-enterprises growth in Tanzania, specifically in Mbalizi Town Council in Mbeya region.

The study was based on the transformational leadership theory of organization management. Over the past 30 years, transformational leadership theory has been the most studied and debated in leadership by linking it to organizational success and sustainability (Diaz-Saenz, 2011). The theory was developed by James McGregor Burns in 1978. Burns (1978) and Conger (1999) highlighted that transformation of the required competencies and shared vision from the leader to the followers assists in an effective leadership transition from the leader to the followers to enhance sustainability. In this transformation, the organization maintains its success and sustainability, if not growth and survival.

(Trang, 2016) gives solid evidence to prove that transformational leadership theory was suitable for explaining sustainability planning based on the reflection of leaders who were supposed to implement the micro-enterprise/SME vision concerning sustainability since the vision endures when leadership changes. Transformational leadership refers to the need to foster empowerment concerning organizational restructuring (Conger, 1999). The strengths of transformational leadership theory include being heavily researched for assessing growth and sustainability planning with positive results (Trang, 2016). Also, the theory reasonably aligns with the definition of sustainability planning by insisting that leaders must continuously create a vision (inspirational motivation) and empower and motivate their subordinates to implement the vision (individual consideration). Concerning transformation leadership for micro and small business development in Tanzania, the concern of social and human Capital in developing small businesses has been considered. The transformation leadership theory is suitable for explaining leadership for business growth; the social and human Capital impacts micro and small business development.

Scholars in business transformation and well-being have emphasized the consideration of social and human Capital in the business sustainability of micro and small business development (Terry, 2019; (Tur-Porcar, Roing-Tiermo, & Mestre, 2018; Akunede, Nzeribe, & Ezenekwe, 2022). Social and human Capital includes qualities of population, cultural values, ethical values, family factors, the measure of trust in a country, the morale of the population, emotional health, national identity awareness in the population, national unity, religion, social skills and a variety of non-cognitive skills /social adaptability together with the already popular education and physical

health-based factors all play a role in influencing the human capital development of a nation (Terry, 2019). There is the argument that social and human capital development is not limited to only investment in the business, including all policy measures that favor a country's human population, such as the provision of infrastructural facilities, enabling environment for businesses while reducing tribalism and other social vices all promote human capital development.

Therefore, any effort to increase human knowledge, enhance skills and productivity, and stimulate the resourcefulness of citizens is an effort in human capital development. Investments to entrench good governance, provide supporting infrastructure, and develop the education social systems are investments in human capital development.

Shaykhian, Ziade, & Khairi (2016) have noted the increased integration of business development concerning Social Capital, the benefit of economic growth, and the interrelationship among various cultures and people. Economic interdependence has increased competition among corporations to achieve sustainability and expand demand for products and services to meet customers' expectations. However, social Capital influences business development compared to traditional culture, religious domination, trends in business, and neglecting competition. Social Capital impacts micro and small companies' sustainability when lecturing them to work on business development for sustainability.

Social and human capital development has become a significant concern of all countries, regardless of their development achievements (Akunede, Nzeribe, & Ezenekwe, 2022). Investment in social and human capital through quality education delivery system has become widely recognized by states as one of the most potent strategies for concretizing both short-term and long-term development plans in the face of the prevailing business sustainability, financial and pandemic sustainability (Shaykhian, Ziade, & Khairi, 2016; Terry, 2019). These social human capital development factors or variables, often neglected, are directly related to the high rate of corruption, tribalism, political and religious crisis, ritualism, cultism, theft, social unrest, and other vices hindering the effective and successful production of quality social and human capital.

This paper evaluates the small and medium policy implementation variables that affect micro-enterprise business growth. The main question is, what are the reasons for micro-enterprises failure despite all the government initiatives? The hypothesis is that there is a relationship between SME policy

and the business growth of micro-enterprises in Tanzania. The theory variables were linked with the transformation leadership management theory; however, social and human capital considerations have been explained.

METHODOLOGY

Micro-enterprises are scattered across the length and breadth of the council, with most of them located in Mbalizi town. Mbalizi Town in the Mbeya region was selected because the Township Council has about 1100 micro-enterprises (Mbalizi Town Profile, 2018; URT, Age and Sex Distribution Report, 2022). The interest also came from the farmers who are practicing micro-entrepreneurship in Mbalizi. During the rainy season, most go to farms, and during the dry season, they change to micro-business. The study was a quantitative study using variables from previous studies (Kazungu, Ndiege, Mchopa, & Moshi, 2014; Kamunge, Njeru, & Tirimba, 2014). The study's sample size was 285, generated from the sample size table at a 95% confidence level and 5% precision error (Krejcie & Morgan, 1970). This study used an explanatory cross-sectional research design because it allows data and results to be obtained more quickly (Bhattacharjee, 2012). Also, the study used a survey strategy associated with a deductive approach. The survey strategy allows the collection of large amounts of data from the population and its economic analysis (Saunders, Lewis, & Thornhill, 2009). The paramount importance of using the explanatory research design is its emphasis on studying a problem or situation and explaining the relationship between the variables (Saunders, Lewis, & Thornhill, 2012). The survey strategy allows for data analysis for inferential and descriptive statistics and answers questions about a phenomenon on how, what, and can suggest reasons for the trend. The data collection tool for the study was a structured questionnaire with five-point Likert scale questions. Data were analyzed using the IBM-SPSS package and multiple regression analysis to examine the relationship between the variables and micro-enterprise growth in Mbalizi Town.

RESULTS AND DISCUSSION

Demographics and Business Characteristics

Response Rate

The population of the study was 1100 micro-business owners working in Mbalizi Town Council (URT, Business Baseline Survey, 2012). The sample size was 285, as determined from the sample size determination table proposed by Krejcie & Morgan (1970). The response rate of 279 micro-business owners who participated in the study was 97%, which is reliable for

decision-making and interpretation by policymakers and practitioners in the business sector.

Sex Distribution

The study aimed to explore who owns the micro-enterprises in Mbalizi Town Council. The results showed a higher proportion of female micro-enterprise owners (58.1%), suggesting that women in Mbalizi Town Council are significantly engaged in entrepreneurial activities. This aligns with findings from the International Labour Organization (ILO), which highlights the increasing involvement of women in small-scale businesses in developing countries as a means to support their families and achieve economic independence. However, previous studies have also pointed out that women often face more significant challenges accessing finance and business networks than their male counterparts (Mayoux, 2001; Chibelushi & Costello, 2009; Amri, 2014). Thus, targeted interventions are necessary to address these gender-specific challenges. The empowerment movement has made significant progress in Tanzania regarding women; however, it is high time to consider interventions to support men in micro-business.

Age Group Distribution

The dominance of younger and middle-aged business owners (19-50 years) indicates a vibrant and potentially innovative entrepreneurial population. According to the World Bank (2015), younger entrepreneurs are likelier to adopt new technologies and creative practices. However, this age group may also face significant challenges related to experience and business acumen, as indicated by the relatively high proportion (44.1%) with less than 5 years of business experience, as shown in Table 2 below. This finding is consistent with previous research emphasizing the need for mentoring and support programs for young entrepreneurs to enhance their business skills and sustainability (OECD, 2017). Age grouping impacts business sustainability. It is suggested that age groups should be mixed, allowing the younger generation to learn from elders and vice versa, particularly regarding technology. The importance of age grouping for succession planning in SMEs has been emphasized by Beck, Demircuc-Kunt, & Levine (2005).

Table 2: Age Group

Frequency	Percent	Valid Percent	Cumulative Percent
Less than 18 years	10	3.6	3.6
19-34 Years	129	46.2	46.2
35-50 Years	111	39.8	39.8
51-66 Years	21	7.5	7.5
66+	6	2.2	2.2
Total	279	100.0	100.0

Source: Business Ownership and Experience

The data shows that most (72.8%) respondents own businesses. This high level of ownership indicates an entrepreneurial culture but also underscores the need for support systems to help these businesses grow and sustain. Research by McKenzie & Woodruff (2013) suggests that while many people start businesses out of necessity, their growth potential can be significantly enhanced through access to training, finance, and markets. MSMEs provide the economy with a healthy supply of new skills and ideas and make the marketplace more dynamic; many innovations and inventions across the globe originate from the SME sector and disrupt markets, making lives more accessible for consumers. They provide employment opportunities in local communities and are often a significant source of jobs in rural or underserved areas where opportunities to work in large corporations are not available. By creating jobs, MSMEs help to reduce unemployment rates and stimulate economic growth. For steady economic development, a country needs business owners' experience as a competitive advantage for business growth and sustainability.

MICRO-ENTERPRISES GROWTH CHALLENGES

Lack of Business and Entrepreneurship Skills Training

Nearly half of the respondents (46.7%) have attended entrepreneurship skills training. This participation rate is relatively low and suggests gaps in the availability or accessibility of such programs. Studies by McKenzie & Woodruff (2013) and Nkuah, Tanyeh, & Gaeten (2013) found that continuous training and development significantly enhance the performance and growth of small businesses. The critique here is that existing training programs may not be sufficiently widespread or tailored to meet the specific needs of micro-enterprises. Micro, Small, and Medium Enterprises are instrumental in shaping the economic landscape of emerging markets. The SMEs' ability to innovate, generate employment, and contribute to regional development makes them indispensable (Kotey & Folker, 2007). Despite challenges, the growth potential of MSMEs is undeniable. Initiatives to enhance the development of MSMEs to promote rural and urban employment are crucial for a developing country like Tanzania. For SMEs to contribute to economic growth, more initiatives must be in place for the current and next generations.

Digital Literacy

Digital transformation for small businesses entails converting paper documents into digitized files, creating a digital storage system, enhancing the customer experience through digital tools, increasing security, and more (Chibelushi & Costello, 2009). The study aimed to understand the application

of digital tools in business operations for MSMEs in Tanzania. The results showed that only 32.5% of the respondents know digital business applications. This low level of digital literacy can severely limit the growth potential of businesses in an increasingly digital world. According to Chibelushi and Costello (2009), digital skills are crucial for small businesses to compete effectively, especially in accessing broader markets and improving operational efficiencies.

Additionally, Danga, Chongela, & Kaudunde (2019) recommended enhancing the application of technology in business as there is no way to avoid using technology for business growth and survival. Scholars note that digital transformation helps small businesses become more flexible and faster (Diaz-Saenz, 2011). This means they can quickly respond to market changes, customer needs, and industry developments and compete effectively. Digital transformation isn't just about buying new technology; it is about integrating that technology to align with the overall business strategy.

Managerial and Leadership Skills and Human Resources Planning Human resource planning is one of the most strategic functions the Human Resource Management team incorporates. It analyses its employees' capabilities and the market demand or supply of work (Mayoux, 2001; Danga, Chongela, & Kaudunde, 2019). Effective succession planning is also entrusted to human resource planning and is essential to ensure critical roles are always filled and the business continues to run smoothly. A robust succession plan will also help nurture the most promising talent and provide them with clear career paths, boosting engagement and retention efforts. The study, therefore, wanted to understand the managerial and leadership aspects of human resource planning for MSME sustainability. The results show that a majority (63%) of respondents believe they have adequate knowledge of human resources planning. The result is positive; however, the remaining 37% highlights a significant gap. Previous scholars like Kotey and Folker (2007) have shown that effective human resource management is critical for the growth and sustainability of small businesses. Hence, more comprehensive training programs focusing on HR skills are necessary. Through data-based decisions, MSMEs can help an organization save money and invest in parts of the business by managing the supply and demand of the workforce. HRM forecasting helps a business properly understand its need for employees, find the right employees, and hire them at the right time for growth and sustainability.

Working Capital and Credit Management

Working Capital is a financial metric calculated as the difference between current assets and liabilities (Kibona, 2020). Positive working capital means the company can pay its bills and invest to spur business growth. Working capital management is the process of effectively managing a business's current assets and current liabilities. Small businesses must manage their working capital effectively to have enough cash to meet their short-term obligations. The study aimed to assess how effectively respondents manage their obligations when needed. The results show that more than half (53.9%) of the respondents have knowledge of credit management, which is crucial for financial health. Yet, 31.5% lack this knowledge, suggesting that improved financial literacy programs are needed. According to Beck, Demirguc-Kunt, and Levine (2005), access to finance and financial management skills are pivotal for micro-enterprise growth. It is noted that several factors affecting working capital management include the nature of the business, business fluctuations, seasonal factors, technology, credit terms, credit availability, operating efficiency, and level of competition. Effective working capital management for MSMEs helps businesses cover their financial obligations and boost their earnings. Working Capital means managing inventories, cash, accounts payable, and accounts receivable. Therefore, the 31.5% who lack working capital management should not be neglected; initiatives need to be put forward regarding training and skills development.

Working Premises and Availability of Working Spaces

Premises include any building or structure, land, and means of transport. Neither the building, the structure, nor the means of transport need to be standing on land owned by the same person; they may be anywhere (UN-Habitat, 2015). Several scholars noted that the most common reasons for small businesses failing include a lack of Capital or funding, retaining an inadequate management team, a faulty infrastructure or business model, and unsuccessful marketing initiatives. The study aimed to understand the extent to which infrastructure or business working space contributed to the growth and sustainability of MSMEs. Results show that a significant portion of respondents (65.7%) disagreed that the local government provides affordable working spaces. The results align with findings by UN-Habitat (2015), which highlight that inadequate infrastructure and high rental costs are common barriers for micro-enterprises in developing countries (Danga, Chongela, & Kaudunde, 2019). Several studies show that the growth of micro, small, and medium enterprises (MSMEs) globally depends on a conducive business environment. However, in Tanzania, MSMEs face limited finances, poor

market accessibility, low entrepreneurial knowledge, working spaces, and bureaucracy, which hinder their growth and sustainability. The results show the increased costs for individuals and limited revenue, which could significantly improve Tanzania's national income. Policy interventions are needed to provide affordable and well-planned working environments for these businesses, as the sector's contribution is shown to be 75% of the country's gross domestic product.

Regulatory Obstacles and Licensing and Regulatory Compliance

Regulations are rules enforced by governmental agencies. They are essential because they set the standards for what can and cannot be done in business. Compliance and regulatory frameworks are sets of guidelines and best practices. Organizations follow these guidelines to meet regulatory requirements, improve processes, strengthen security, and achieve other business objectives (URT, Small, and Medium Enterprises Policy, 2003). Regulations ensure the sector follows the same rules and protects citizens. The study aimed to explore the business environment in Tanzania concerning regulatory and compliance issues for MSMEs. Results show that a large proportion (63.8%) of respondents disagreed that obtaining business licenses is straightforward. This regulatory burden is a well-documented barrier to business growth. Djankov, LaPorta, Lopez-de-Silanes, & Shleifer (2002) have shown that complex and costly regulatory processes can significantly hinder the establishment and expansion of small businesses. A compliance and regulatory framework offers several advantages to MSME businesses, such as enhancing decision-making and planning, improving business efficiency and effectiveness, increasing resilience and adaptability, strengthening reputation and trust, and creating value and competitive advantage. Simplifying these processes can create a more conducive environment for micro-enterprise growth and sustainability in Tanzania.

Multiple Regression for Decision-Making

To aid in decision-making, the correlation between various demographic factors and business growth challenges can be analyzed using statistical methods such as regression analysis. Regression Analysis provided in this study shows the following in Table 4:

Table 3: Model of Micro-Enterprise

Model	R	R Square	Adjust R Square	Std. Error of the estimate	Durbin Watson
1	.368 ^a	.135	.102	1.019	2.212

- a. Predictors (Constant), Sex, Age, experience and Business Ownership
- b. Dependent Variable: Micro-enterprises growth and sustainable

The result shows that R Square is 0.135, and Adjusted R Square is 0.012. The R square and the Adjusted R indicate that the model explains 13.5% of the variance in micro-enterprise growth, suggesting that other factors not included in the model might play a significant role. Therefore, it is understood that 13.5% of businesses are vulnerable to stagnation of growth and sustainability.

ANOVA Results:

The significance value (p-value) is 0.378, more significant than 0.05, indicating that the predictors (sex, age, experience, and business ownership) do not significantly predict micro-enterprise growth.

Table 4: ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.548	4	1.137	1.095
	Residual	29.088	28	1.039	
	Total	33.636	32		

a. Dependent Variable: Micro-enterprises growth and sustainability

b. Predictors: (Constant), Sex, age, experience, and Business Ownership

Table 2 shows that micro-enterprise growth is unrelated to sex, age, experience, and business ownership. Therefore, attention should be directed to other challenges affecting the business growth of micro-enterprises in Tanzania. The factors that require critical consideration include regulatory and licensing issues, business working space issues, working capital and credit management, business management and leadership skills, and digital skills.

Despite findings that are not very different from previous studies on micro-enterprise failure factors, this study introduced new insights that require attention. In Mbalizi, business transactions often involve tribal considerations; buyers tend to purchase from traders of their tribe. Dominant tribes in Mbalizi township include; Kinga, Nyakyusa, Nyiha, and Safwa. It was found out that a buyer prefers to purchase products or services from a known tribe trader unless their tribe's traders do not offer the product or service. This tribalism trend can lead to stagnation for those without a robust tribal base and potentially force them to leave business. Addressing this issue is essential when stakeholders plan business development training.

CONCLUSION

Addressing micro-enterprise challenges in Mbalizi Town Council requires a multi-faceted approach involving training, working capital and credit

management, leadership and management skills, digital literacy support, regulatory reforms, and improved infrastructure and working spaces. By implementing these recommendations, stakeholders can significantly enhance the growth and sustainability of micro-enterprises, contributing to broader economic development in Tanzania. The findings of this study align with existing scholarly research and provide a solid foundation for policymakers and development practitioners to design effective interventions that support micro-enterprises in overcoming their growth challenges. The study also noted the tribe denomination where a buyer considers the "who-you-know" principle, which leaves minority groups at a disadvantage.

RECOMMENDATIONS

Based on the findings and scholarly critiques, the following recommendations are proposed:

Enhanced Training Programs

Develop and expand accessible training programs focusing on entrepreneurship, digital literacy, and managerial skills. Tailoring these programs to the specific needs of micro-enterprises can improve their effectiveness. Additionally, the training should address the tribalism trend of buyers. All stakeholders, including government, non-governmental organizations, religious groups, and community leaders, must be involved.

Financial Literacy and Access

Increase efforts to improve financial literacy among micro-enterprise owners and facilitate better access to credit. The study recommends that training could include partnerships with financial institutions to offer targeted financial products and services.

Regulatory Reforms

Simplify the regulatory and licensing processes to reduce barriers to entry and operation for micro-enterprises. Streamlining these processes can save time and reduce costs for business owners.

Supportive Infrastructure

Invest in creating affordable and well-planned working spaces for micro-enterprises. Local governments should consider policies that encourage the development of business hubs and co-working spaces.

Social and Human Capital

Finally, the importance of the family factor in increasing the level of human capital development as well as its quality also indicates the need for the

government to pay attention to the family institution and stream resources toward strengthening the institution of family in Nigeria and not abandoning such task to the churches and other religious bodies in the country. By implementing these recommendations, stakeholders can address the challenges identified and support the sustainable growth of micro-enterprises in Tanzania. The identified challenges that must be addressed include regulatory obstacles, working Capital, managerial skills, leadership skills, digital skills, and business management skills. Also, the business partners need to consider all the variables without neglecting the social and human capital development for micro and small businesses in Tanzania.

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Effect of Personal Resources on Turnover Intentions in Food and Beverage Manufacturing Micro and Small Enterprises in Dar es Salaam Tanzania

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Abstracts

This study examined the effects of personal resources manifested by optimism, self-efficacy, and organisational-based self-esteem on turnover intention in Tanzania's Food and Beverages Manufacturing Sector in Micro and Small Enterprises (MSEs). This study was anchored on the Job Demands Resources Model. A quantitative research approach was applied using a cross-sectional research design. A structured questionnaire was used to collect data from 387 respondents in the food and beverages manufacturing MSEs in Dar es Salaam. Simple random sampling was used to select respondents. The collected data were analysed using IBM SPSS version 26, and the structural equation modeling partial least square (SEM PLS) technique was used to test the study hypothesis. The measures were statistically tested, and Cronbach alpha and composite reliability were confirmed to be above 0.7. This study found a negative insignificant relationship between optimism and turnover intentions and positive significant direct effects of self-efficacy and organisational-based self-esteem on turnover intentions. This study's results have practical implications for the human resources manager of Micro and Small Enterprise to enrich existing knowledge by investing in increasing levels of personal resources such as self-efficacy and organisational-based self-esteem in order to reduce turnover intention and retain employees.

Keywords: *Optimism, Organisational-based self-esteem, Self-efficacy, Personal Resources, Turnover Intentions, MSEs*

INTRODUCTION

Turnover intention is a worldwide problem facing many organisations (Basnyat, & Clarence Lao, 2020; Kachi, Inoue, Eguchi, Kawakami, Shimazu, and Tsutsumi, 2020) and negatively affects organisations due to increasing hiring costs (Skelton, Nattress, & Dwyer, 2020). Human resource skills, knowledge, and talents in the production process are critical to the survival of manufacturing Micro-small enterprises (Endris & Kasseg, 2022; Sherman &

Roberto, 2020; Ngwa et al., 2019). Human resources are considered the most valuable organisational unique resources because they help the organisation achieve its goals (Bandyopadhyay & Jadhav, 2021; Contu, 2020; Jauhari & Yuliant, 2020; Putra & Cho, 2019). Owing to the potential impact of human resources on an organisation's performance, workers can contribute their human capital to the task essential for increasing organisational efficiency and lowering the likelihood of employee turnover (Sun & Yoon, 2022; Naiemaha, et al., 2019). Moreover, Micro-small enterprises (MSEs) in the manufacturing sector face difficulties in surviving the current economic climate and gaining a productivity edge over their competitors. Furthermore, studies have indicated that an individual's intention to quit a job is highly influenced by their employment status and personal resources (Albrecht, Green, & Marty, 2021; Kwon & Kim, 2020; Lesener, Gusy, & Wolter, 2019). Due to its impact on organisational outcomes, turnover intention, influenced by personal resources, is a significant area of interest for academics and human resource management practitioners (Aljohani et al., 2023; Hardaningtyas, 2020; Jauhari & Yulianti, 2020). Organisations aim to minimise employee turnover because of the high costs associated with hiring and training new staff (Babatunde & Onoja, 2023) and the crucial role of human capital in retaining employees. Additionally, a few studies have been conducted on the relationship between personal resources and intentions to leave, among other things (Jauharia & Yulianti, 2020). Hardaningtyas, (2020) have studied the relationship between turnover intentions and personal resources and Kim and Hyun (2017), although the findings of these research differ, limiting the generalizability of the relationship's mechanism. The dispute findings suggested that additional study was required to confirm the relevance of personal resources with turnover intentions at the same time while taking contextual factors in small and micro-organisations into account.

Furthermore, the few studies that have been conducted on this topic are conducted in developed nations (Aljohani et al., 2023; Chen, 2022; Kotzé, 2018). Also, little research has been done on workers in the manufacturing sector, specifically in emerging economies like Tanzania. Therefore, this study was focused on the relationships between personal resources and turnover intentions to bridge the aforementioned gap. It also focused on the Tanzanian Food and Beverage manufacturing MSEs.

LITERATURE REVIEW

Personal resources are the views of individuals on their ability to successfully affect and control their environment (Xanthopoulou et al., 2007). Employees' adaptability and resilience in handling a challenging work environment are

their resources (Bhatti, Hussain, & Al Daghan, 2018). Positive self-evaluations associated with resilience that facilitate an individual's capacity to effectively manage the effects of their surroundings are known as personal resources (Hobfoll, Johnson, Ennis, & Jackson, 2003). The characteristics of persons that are used to manage their working environment are referred to as personal resources for this study. Optimism, organisational self-esteem, and self-efficacy are used in this study as personal resource components. Optimism is defined as "the tendency to believe that one will generally experience good outcomes in life" (Xanthopoulou et al., 2007). Optimism refers to the condition of generating great positive results through belief and life experience which are obtained due to performed activities. (Scheier et al., 1994). Organisational-based self-esteem is defined as "the degree to which organisational members believe that they can satisfy their needs by participating in roles within the context of an organisation" (Pierce et al. (1989). Self-efficacy refers to "individuals' perceptions of their ability to meet demands in a broad array of contexts" (Xanthopoulou et al., 2007).

Lee, Choi, and Hyun (2022) define turnover intention as an employee's voluntary decision to leave their current role and stop being a part of the company. Koo, Yu, Chua, Lee, and Han(2020) define turnover intention as an employee's behavioural propensity to leave the organisation permanently. The preparedness of a person to resign from their current position and leave an organisation is referred to as turnover intention (Hom, Lee, Shaw, & Hausknecht, 2017). The degree to which an employee plans to leave the company is known as turnover intention (Ma & Trigo, 2008). A purposeful and conscious desire to leave the company is known as turnover intention (Tett & Meyer, 1993). In the context of this study, an employee's inclination to leave the company quickly is referred to as turnover intention.

Theoretical Literature Review

The Job Demand-Resources (JD-R) Model demonstrates how an employee's intention to leave is influenced by both job resources and job demands (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The JD-R model incorporates personal resources, establishing a connection between self-evaluation and resilience (Xanthopoulou et al.,2009). Personal resources are psychological, physical, and social demands of a job that people must meet while carrying out their duties (Bakker, Demerouti, & Sanz-Vergel, 2023; Xanthopoulou et al., 2007; Schaufeli & Bakker, 2004). Personal resources which are significant determinants of employee turnover intentions in the workplace include optimism, self-efficacy, and organisational self-esteem (Xanthopoulou et al., 2007). The Job Demands-Resources (JD-R) Model is

the main theory used in this study to describe the relationship between personal resources and turnover intention. The JD-R model has also been used by previous research to study the effects of personal resources on turnover intention (Zeijen et al., 2024; Aljohani et al.,2023; Schaufeli, Shimazu, Hakanen, Salanova, & De Witte, 2019).

Empirical Literature Review

The impacts of personal resources and employee turnover intentions have been the subject of research for decades. Hardaningtyas (2020) conducted a study on the intention to leave and personal. The results of the study demonstrate a favourable correlation between optimism, work engagement, organizationally-based self-esteem, and self-efficacy. The study suggested that more research be conducted to look into additional personal resource elements that affect work engagement and intention to leave. Nevertheless, because the research was restricted to the Indonesian setting, more research is required to determine how personal resources affect turnover intention in an emerging market like Tanzania. Furthermore, a study on the influence of personal resources on turnover intention is carried out by Kim and Hyun (2017). The findings indicate that turnover intention was negatively impacted by employee engagement. The report suggested that future research concentrate on small and medium-sized businesses. Previous studies discovered that personal resources can forecast employee outcomes and negatively influence employee turnover intentions (Aljohani et al.,2023; Chen, 2022; Hardaningtyas, 2020; Kotzé, 2018; and Kim and Hyun, 2017). Moreover, most of these investigations such as came from developed countries in Europe and the USA and not in emerging economies like Tanzania. Also, were done in large organisations and came with different conclusions. Therefore, the previous studies' findings create a contextual and context gap in the emerging economy in sub-Saharan regions like Tanzania's MSEs. This study investigated the relationship between personal resources and turnover intentions in the manufacturing sector, specifically in Tanzanian MSEs that produce food and beverages. The study's independent variables of personal resources (optimism, self-efficacy, organisational-based self-esteem) and the dependent variable of turnover intention are depicted in Figure 1 as a conceptual framework that illustrates the relationships between the research variables of personal resources and turnover intention.

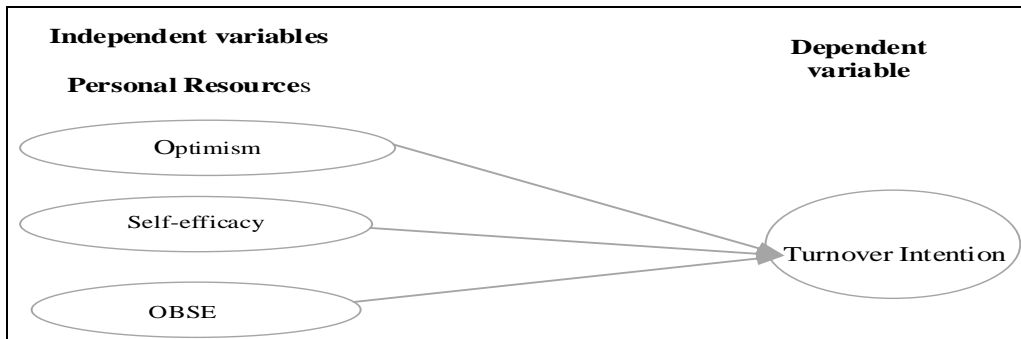


Fig. 1: Conceptual Model
Source: Author (2024)

Hypothesis Development

Personal resources such as optimism, self-efficacy, and organisational-based self-esteem could minimise employee turnover intention. Previous studies have revealed a strong negative relationship between personal resources and turnover intentions (Aljohani et al., 2023; Hardaningtyas, 2020; Jauhari & Yulianti, 2020; Schaufeli et al., 2019), which shows that higher personal resources will lessen the employee’s intention to quit the work organisations. Based on the literature review, we anticipate a negative link between personal resources and turnover intention because personal resources foster personal growth, according to the examined literature. Therefore, this study suggested that higher level of optimism, self-efficacy, and organisational-based self-esteem are related to lower turnover intention. Thus, it can be hypothesised that;

- H₁: Optimism has a direct negative impact on turnover intention*
- H₂: Self-efficacy has a direct negative impact on turnover intention*
- H₃: Organisational-based self-esteem has a direct negative impact on turnover intention*

RESEARCH METHODOLOGY

In this study, the positivist paradigm was applied. A quantitative approach was used to ascertain linkages between personal resources and turnover intentions. An explanatory research design was employed in this investigation. The study also employed a cross-sectional survey design and an analytical approach to determine whether a cause-and-effect relationship existed between the research variables (Creswell, 2012; Simon, 2011; Saunders et al., 2012). Closed-ended questionnaires were utilised in this study to determine the association between the variables. To obtain data from a broad population, a survey technique was employed (Saunders et al., 2012).

The study area was Tanzania's Mainland, and industries were taken from the Dar es Salaam Region. The selection of region is due to several reasons, among them is that Dar es Salaam is the largest commercial city in Tanzania and is the business hub of the country where all kinds of business are undertaken (Bhuzohera, 2024; Malauri, Mpogole, & Wiketye2021; Todd, Msuya, Levira, & Moshi, 2019). Dar es Salaam is also the centre of the economic fabric of Tanzania due to their contribution to national revenue (Bhuzohera, 2024). This study was focused on micro and small enterprises in the food and beverage manufacturing sector. In addition, simple random sampling was used in selecting respondents from the MSEs list (Kothari, 2009; Saunders et. al.,2012). The study population was 2306, and simple random sampling was used to determine the sample size. A sample size of 384 employees was chosen from various employee categories based on the target demographic of the chosen MSEs. IBM SPSS version 26 was used for the analysis of descriptive statistics and Partial Least Squares-Structural Equation Modelling (PLS-SEM) was used to evaluate the construct specification of the measurement model of this study and the structural path model for an empirical test of conceptual model hypotheses.

Model Development

The purpose of the study was to investigate the effects of personal resources on turnover intention in manufacturing MSEs in Tanzania. The model generated model using PLS-SEM was extracted from the theory of JD-R model constructs. The evaluation using PLS-SEM was done by linking indicators of the study variables. The measurement model was extracted from the validated instrument from previous studies to be customised in the Tanzanian context, as shown in Table 1. The structural model of the study consisting of optimism, self-efficacy, and organisational-based self-esteem was hypothesized using the computed path coefficients by PLS-SEM. The independent variables in this scenario are personal resources. Three aspects of personal resources include, optimism, self-efficacy, and organisational-based self-esteem, were measured using Schwarzer & Jerusalem's (1995) measurement of self-efficacy ten (10) items, ten (10) items of organisational-based self-esteem from Pierce, Gardner, Cummings and Dunham, (1989) and ten (10) items of optimism, from Scheier, Carver and Bridges, (1994) were used to measure personal resources. Table 1 provides a summary of the study's dimensions and their measurements.

Table 1: Measurement of Personal Resources

Study Variable	Dimension	Code	Measure	Type of Data	Source
Personal Resources	Optimism	OPM	10 items Aggregated index of 1-5 Likert-likescale	Interval	Scheier, Carver and Bridges, (1994)
	Self-efficacy	SE	10 items Aggregated index of 1-5 Likert-like scale	Interval	Schwarzer & Jerusalem, (1995)
	Organisational based self-esteem	OBSE	10 items Aggregated index of 1-5 Likert-like scale	Interval	Pierce, Gardner, Cummings and Dunham (1989)

Source: Literature Review (2024)

Dependent Variable: Turnover Intention

The turnover intention was assessed by 6 criteria developed by Bothma & Roodt, (2013). Numerous studies have employed the turnover intention scale to gauge how likely it is for employees to leave the company (Kim, 2017; Shuck, 2011; Saks, 2006). Bothma and Roodt (2013) verified the TIS-6, finding that its Cronbach's alpha was 0.80. Previous empirical research has measured turnover intention using the TIS-6 and has been proven in many countries with adequacy reliability and validity (Németh, Deák, Szűcs, Makai, & Hock, 2024; Ofei, Poku, Paarima, Barnes, & Kwashie, 2023; Anjum, Shahzadi, & Wazir, 2022). Table 2 displays the dependent variable's measurement.

Table 2: Turnover Intentions Measurement

Study Variable	Measure	Type of Data	Source
Turnover intention	6 items Aggregated index of 1-5 Likert-like scale	Interval	Bothma & Roodt, (2013)

Source: Literature Review, (2024)

RESULTS

The data screening was carried out to check outliers, missing data, and normalcy to ensure the data satisfied statistical assumptions because the data were analysed using PLS-SEM (Hair et al., 2018). Descriptive statistics expressed through data tables were used to summarise the opinions of the sample respondents about personal resources and intention to intention.

Respondent's Demographic Characteristics

The demographic profile of the study's respondents (n=378) is based on Table 3, which was created using the descriptive data collected from the

targeted respondents. This study used a worker working in food and beverage manufacturing MSEs as the unit of analysis. Gender, age, education, industry, experience, and kind of job were among the demographic characteristics of the responders. The results of the gender composition males are 59.3 per cent while females are 40.7 percent. The majority are male, which relatively outnumbers their female counterparts. Most employees in food and beverage were aged between 20 and 29, with representation at 34.1 per cent, followed by age between 30 and 39 at 22.8 per cent.

Moreover, results show that most F&B employees are educated at the secondary school level 65.9 per cent. Also, for most F&B employees, 48.8 per cent had tenures of under three years, and 29.6 per cent had tenures of four to five years. The produced data shows that most of the respondents were working in food processing, with representation at 69.6 per cent, while 30.4 per cent were working in the beverage sector. Furthermore, results show that 39.4 per cent of F&B employees have experience in the food and beverage sector for less than one year.

Table 3: Demographic Characteristics of the Respondents

Demographic Variable (s)	Category	Frequency	Percentage (%)
Gender	Male	224	59.3
	Female	154	40.7
Age (years)	Below 20	74	19.6
	20-29	129	34.1
	30-39	86	22.8
	40-49	54	14.3
	50 -59	29	7.7
	60 and above	6	1.6
Highest level of Education	Never attended school	2	.5
	Primary school	85	22.5
	O-Level	164	43.4
	A-Level	89	23.5
	Ordinary diploma	16	4.2
	Advanced Diploma or Degree	17	4.5
Type of Industry	Masters' degree	5	1.3
	Food processing	263	69.6
	Beverage	115	30.4
Experience in the F&B industry	0-1 year	149	39.4
	2-3 years	106	28.0
	4-5 years	67	17.7
	6-10 years	21	5.6
	11-15 years	30	7.9
	Above 15years	5	1.3

Source: Researcher, (2024)

Evaluation of the Outer Measurement Model

Reflective constructs were evaluated by assessing the internal consistency, discriminant validity, and convergent validity (Hair et al., 2018). The internal consistency validity was assessed using Cronbach's Alpha (α) and Composite Reliability. The outer loading of the indicators was used to evaluate the convergent validity; the indicators' statistical significance was found to be greater than 0.7, and the AVE value was found to be higher than 0.5. The findings presented in Table 10 verify the convergent validity by demonstrating that all indicator loading was over the 0.7 threshold value and statistically significant with $p < 0.001$.

Construct Reliability

Constructs Reliability, or the internal consistency of the study variables, was evaluated by applying the composite reliability (cp). The findings in Table 4 show that Cronbach's Alpha (α) and Composite reliability for all constructs (job resources 0.933, turnover intention 0.876) is above the recommended criterion of 0.700 (Avkiran, 2018; Nunnally, 1978). The composite reliability was confirmed, therefore demonstrating high internal consistency of the scales.

Convergent Validity

Convergent validity was evaluated by individual indicators whereby indicators of outer loading were considered. The rule of thumb for constructing inductors of outer loadings is above 0.700 (Hair et al., 2017). In this investigation, construct indicators with outer loadings greater than 0.7 were kept, while those with loadings less than 0.7 were taken out. All outside loading indicators were rated higher than the suggested cut-off value of 0.7, the data shown in Table 4, the reflective measurement model of the convergent validity was maintained. Table 4 shows that the latent variables of the reflective measurement models had Average Variance Extracted (AVE) values that were higher than the necessary value criterion of 0.500 Hair et al. (2017). These results show that each variable in the reflective measurement model had excellent and proven convergent validity. Therefore, the results conclude that all indicators used in this study fulfilled the convergent validity.

Discriminant validity

In this investigation, construct indicators with outer loadings greater than 0.7 were kept, while those with loadings less than 0.7 were taken out. All outside loading indicators were rated higher than the suggested cut-off value of 0.7, the data shown in Table 4 maintaining the reflective measurement model's

discriminant validity. Therefore, it can be concluded that discriminant validity was obtained from indicators of personal resources and turnover intentions variables due to their higher loading for each other variable.

Table 4: Summary of the Reflective Measurement Model Assessment- Reliability and Validity

Latent Variable	Indicators	No. of Items	Internal Consistency Reliability		Convergent Validity		
			Composite Reliability (pc)	Cronbach's Alpha (α)	Outer Loadings	AVE	
Personal resources	Optimism	OPM	10	0.966	0.961	0.890	0.742
	Self-efficacy	SEF	10	0.985	0.983	0.960	0.865
	Organisational based self-esteem	OBSE	10	0.961	0.944	0.882	0.737
Turnover intention		TI	6	0.894	0.856	0.802	0.585

Source: Researcher, (2024)

Fornell-Larcker's Discriminant Validity Criterion

The Fornell-Lacker criterion was used to evaluate the discriminant validity. Table 5 presents the findings of the Fornell-Lacker criterion-based discriminant validity assessment. It indicates that the correlation between all reflective variables, as measured by the square root of AVE, is stronger than that of the other construct (Hair et al., 2018).

Table 5: Fornell-Larcker's Criterion Analysis for Checking Discriminant Validity

Variables	OPM	SEF	OBSE	TI
OPM	0.861			
SE	0.932	0.930		
OBSE	0.861	0.921	0.859	
TI	0.578	0.656	0.674	0.765

Source: Researcher, (2024)

Keynote: Square roof of the AVE on a diagonal

Key: OPM = Optimism, SE= Self-efficacy, OBSE = Organizational based self-esteem, TI= Turnover intention

The Heterotrait-Mono-trait Ratio (HTMT)

The discriminant validity was assessed by PLS-SEM by using the Heterotrait-Mono-trait Ratio (HTMT) proposed by Henseler, Ringle, and Sarstedr (2015). The result in Table 6 revealed that all HTMT values were

less between the threshold value of 0.85 - 0.9 (Teo, Lee, & Chai, 2008); hence, the discriminant validity was confirmed.

Table 6: Heterotrait-Mono-trait Ratio (HTMT)

	OPM	SE	OBSE	TI
OPM				
SE		0.843		
OBSE		0.881	0.841	
TI		0.637	0.725	0.761

Source: Researcher, (2024)

Evaluation of the Structural Model

The structural model was assessed by path coefficients (β -values), t-statistics, p-values, model fit, the coefficient of determination R^2 , and predictive of the relevance of the Q^2 criteria.

Measurement of Coefficients Determination (R^2 Value)

The effect size and predictive accuracy for the estimated structural path model are measured by the coefficients of determination (R^2 Value), which quantify the extent to which the exogenous (independent) components explained variance in the structural model (Hair et al., 2017, 2018). The R^2 values range from 0 to 1, with a greater level denoting a higher predictive accuracy (Hair et al., 2018). For dependent variables, the suggested R^2 value limits are 0.190 weaker, 0.333 moderate, and 0.670 considerable (Ringle, Sarstedt, & Straub, 2012; Chin, 1998). Moreover, Hair *et al.* (2017) cautioned on the threshold values of R^2 subjective to interpretation, particularly relative to social sciences. In the current study, the coefficients of determination (R^2 Value) of 0.427 for turnover intention are presented in Table 7. These results show that the structural model estimated for dependent variables of turnover intention (R^2 Value 0.427) has predictive significant accuracy. This finding was consistent with other studies that also tested the effects of job resources on turnover intention (Karatepe et al., 2018; Bailey et al., 2017; Kim, 2017; Bhatnagar, 2012). Based on the findings of the prior studies, the obtained R^2 Values are also common in the behavioural sciences.

Table 7: R^2 Values in the Structural Model

	R^2	R^2 Adjusted
Turnover Intention	0.427	0.422

Source: Researcher, (2024)

Evaluation of Predictive Relevance (Q^2 Value)

The calculated structural route model's predictive value was assessed using Stone-Geisser's Q^2 value (Geisser, 1974, Stone 1974). Using a preset

omission D, the blindfolding approach was used to calculate the Q^2 value (Hair et al., 2017). The blindfolding technique, according to Hair et al. (2017), is applied to dependent variables that stand in for the specifications of the measurement model. Q^2 values of 0.000 or less imply that there is no predictive relevance for the exogenous constructs, but values bigger than zero indicate that the exogenous constructions have predictive importance for the endogenous construct (Hair et al., 2018; Urbach and Ahlemann, 2010). The Q^2 value for the endogenous dimensions of turnover intention was calculated in this study. A technique based on cross-validation redundancy was used to compute Q^2 values. This method approximated the data in the measurement model's reflective dependent variables. Using independent factors that were obtained using the PLS-SEM algorithm, the data in the structural model were utilised to predict the scores of dependent variables. Table 8 presents the results of Q^2 values of turnover intention. Results show that the Q^2 values of dependent variables of turnover intention (0.226) are above zero, which denotes that there is clear support for the model's predictive relevance on the endogenous latent variables.

Table 8: Q^2 Value in the Structural Model

Dependent (Criterion) Variable	Q^2 Values
Turnover intention	0.226

Keynote: Q^2 values > 0.0 - meaningful; Q^2 values < 0.25 - < 0.50 – medium; Q^2 value > 0.5 - large predictive relevance

Source: Researcher, (2024)

Evaluation of the Model Fitness

The model fit assessment was done based on PLS-SEM measures such as standardised root means square residual (SRMR) and normed fit index (NFI). For the current study, as shown in Table 9, the SRMR value is 0.070, which indicates a good fit as the threshold value should be less than 0.08 (Hair et al., 2018). Moreover, the NFI value is 0.819, indicating the fit is moderate, as the value threshold is 0.9 (Byrne, 2013).

Table 9: Model Fit Summary

	Saturated Model	Estimated Model
SRMR	0.063	0.063
d_ULS	2.376	2.376
d_G	1.208	1.208
Chi-Square	2,471.943	2,471.943
NFI	0.814	0.814

Evaluation of the Effect Size (f²)

When the exogenous construct is removed from the structural model, the effect on the endogenous construct is quantified using the effect size f² (Hair et al., 2018).

The formula to calculate the f² effect size is

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{excluded}}}$$

The dependent variable's R² values are determined by whether a certain independent variable is included in the path model or not (Haier et al. 2017). The R² calculated the effect of the independent variable's exclusion on the dependent variable to Haier et al. (2018). The interpretation of f² values based on thresholds of 0.02 to 0.15, 0.15 to 0.35, and above 0.35 represent the independent criterion of a small, medium, and larger effect on the dependent variable, as recommended by Cohen (1988). The effect size f² of the estimated structural route model is shown in Table 10, which indicates that personal resources affected turnover intention.

Evaluation of Structural Path Model

The study hypotheses were examined using the structural mode, the bootstrapping procedure was used to run the full model. The structural model was assessed on how the model's prediction powers related to the research constructs (Hair et al., 2018). The path coefficients' significance and relevance, collinearities, the degree of R²values, the f² impact size, and the predictive relevance Q² value are the primary evaluation criteria (Hair et al., 2018).

Hypotheses Testing: Direct Relationships

Table 10 presents the hypothesised direct relationship. It includes the path coefficients, T-values, the corresponding significance levels, the effect size, and the confidence interval.

Table10: Structural Path Model

Hypotheses and corresponding paths	Path coefficients	T- statistics	f ²	95% confidence interval	P Values
OP → TI	0.027	0.292	0.000	0.206	0.770
SE → TI	0.396	3.219	0.037	0.635	0.001
OBSE→ TI	0.252	2.906	0.027	0.412	0.004

Keynote: f² value <0.02 - <0.15 – small; f² value 0.15 - <0.35 – medium; and f² value >0.35 – large effect size

Source: Researcher, (2024)

Optimism and Turnover Intention

Hypothesis 1 examined the relationship between optimism and turnover intention. It was hypothesized that there would be a negative relationship between optimism and turnover intention. The results in Table 10 show a positively insignificant path from optimism to turnover intention ($t = 0.292$, $\beta = 0.027$, $p \text{ value} = 0.770$) with zero effect size. Therefore, the results prove that hypothesis 1 was unsupported.

Self-efficacy and Turnover Intention

Hypothesis 2 examined the relationship between self-efficacy and turnover intention. It was hypothesized that there would be a negative relationship between self-efficacy and turnover intention. Table 10 results revealed a large effect size (f^2) of 0.037 and a positive and significant path from self-efficacy to turnover intention ($t = 3.219$, $\beta = 0.396$, $p \text{ value} = 0.001$). Therefore, the results demonstrate that hypothesis 2 was supported.

Organisational-based Self-esteem and Turnover Intention

Hypothesis 3 examined the relationship between organisational-based self-esteem and turnover intention. It was hypothesized that there would be a negative relationship between organisational-based self-esteem and turnover intention. The data in Table 10 show a medium impact size (f^2) of 0.027 and a positively significant path from organisational-based self-esteem to turnover intention ($t = 2.906$, $\beta = 0.252$, $p \text{ value} = 0.603$). The findings demonstrate that hypothesis 3 was supported.

DISCUSSION

The study objective was to investigate the effects of personal resources on turnover intentions. The findings revealed that there is no sufficient evidence that optimism negatively influences turnover intention; hence, the first hypothesis is unsupported. This study found a positive relationship between optimism on turnover intention, which means that a higher level of employee optimism cannot lower turnover intention. This finding correlates with Tuten and Neidermeyer (2004), who found a weak relationship between optimism and turnover intention. Also, the finding is against the previous studies of Mirković, 2024 Stephens & Huaibing, 2018 Kim & Hyun, 2017 and Fallatah et al., 2017, who found negative correlations between optimism and turnover intention.

On the other hand, the examined variables of the study prove that the coefficients of personal resources manifested by self-efficacy and organisational-based self-esteem are positively significant in turnover

intention. Therefore, it can be argued that self-efficacy and organisational-based self-esteem have a direct effect on turnover intention; hence, the second and third hypotheses are confirmed. The study found a positive significant relationship which means that a higher level of self-efficacy and organisational-based self-esteem lead to decreased turnover intention. The worker with greater self-efficacy and organisational-based self-esteem has lessened the likelihood of turnover intention. This result is in line with the findings of earlier research (examples: Mirković, 2024; Hardaningtyas, 2020; Stephens & Huaibing, 2018; Kim & Hyun, 2017; Fallatah et al., 2017), which stated that when there is higher self-efficacy and organisational-based self-esteem, the turnover intention will be decreased. Moreover, the study findings show that higher self-efficacy will lead to job satisfaction and improve employee well-being, similar results emerged from the study of De Simone et al., 2018 and Keyko et al., 2016 which found that self-efficacy negatively correlated with turnover intention that self-efficacy increased job satisfaction and reduced turnover intention.

The study outcome also demonstrates that an organisation's use of personal resources such as self-efficacy and organisational-based self-esteem will lessen the likelihood of employee turnover (Hardaningtyas 2020) and increase employee job satisfaction.

In addition, the findings were also supported by the JD-R model which suggested a relationship between personal resources and turnover intention. The JD-R model justifies workers with greater personal resources have better levels of optimism, self-efficacy, and organisational-based self-esteem toward the company (Mirković, 2024; Hardaningtyas, 2020; Kim and Hyun, 2017). This study supports the traditional view of the role of personal resources in the JD-R model, which suggests that personal resources help employees show interest in their tasks and be engaged (Schaufeli & Bakker, 2004). The findings of this study have a practical implementation that organisational management should implement practices of personal resources such as optimism, self-efficacy, and organisational-based self-esteem to lessen the intention of the employee to quit their jobs.

CONCLUSION

This study's findings show the crucial role of the relationship between self-efficacy and organisational-based self-esteem on turnover intention which proves positively significant and positively insignificant of optimism on turnover intention. The research concludes that personal resources such as self-efficacy and organisational-based self-esteem are important in reducing

employee intention to quit. The result confirms the assumptions of the JDR model that personal resources reduce employee turnover intention. Also, our findings can be used as the base for further investigation of the effects of personal resources on turnover intention using the JDR model as the underpinning theory. In addition, organizational management should come up with strategies to enhance personal resources to mitigate employee turnover intention and increase employee well-being and job satisfaction.

Limitations of the Study and Recommendations for Future Research

Despite the contribution of the findings of this study to the human resources literature and practice in the Tanzanian context, this study has some limitations, such as the data being taken from a single country, which limits the generalizability of the findings. The study recommends that future studies should include samples from different countries for results validation. Second, it considers limited variables of personal resources (Optimism, organisational self-esteem, and self-efficacy); further research still needs to consider other factors of personal resources, such as manager behaviour and leadership, that influence turnover intention and also factors which influence employee retention. Future studies may consider longitudinal design which links personal resources and turnover intention. Also, future studies could consider mediating variables of gender and age in the relationship between personal resources and employee turnover intention. Further research should consider other factors of job resources, such as manager behaviour and age, that influence turnover intention. This study recommended that further research be conducted on other aspects of personal resources on turnover intention and more investigation on optimism as a predictor of turnover intention.

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The Influence of Participative Leadership Style on Organizational Performance: A Case Study of The Central Corridor Transit Transport Facilitation Agency in Tanzania

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Abstract

Participative leadership is characterized by leaders involving employees in decision-making processes and valuing their input, has emerged as a critical factor in organizational effectiveness and success. This study investigates the influence of participative leadership style on organizational performance within the Central Corridor Transit Transport Facilitation Agency (CCTTFA). Employing a quantitative research design, data were collected through structured questionnaires administered to a purposive sample of 20 employees, including senior management, department heads, and frontline staff. The research aimed to quantify participants' perceptions and experiences related to participative leadership practices and their impact on organizational performance. Data were analysed using multiple regression analysis to identify the relationship between participative leadership and organizational performance. Findings indicate a significant positive relationship between participative leadership practices and organizational performance metrics within the CCTTFA. Employees who perceived higher levels of participative leadership reported greater engagement, job satisfaction, and overall organizational effectiveness. Based on these findings, this study recommends that CCTTFA senior management and policymakers adopt participative leadership practices to enhance employee engagement and productivity.

Keywords: *Leadership, Participative Leadership, Organization Performance, Leader Development, Employee Engagement*

INTRODUCTION

In today's rapidly evolving business landscape, effective leadership is essential for organizations to thrive and remain competitive. Among various leadership styles, participative leadership has emerged as a compelling approach that emphasizes collaboration, employee engagement, and shared decision-making (Aulia, Cik, & Digdowiseiso, 2024).

The significance of leadership in shaping organizational performance is widely acknowledged in academic literature and practical business settings.

Studies show that leadership style influences not only employee motivation, satisfaction, and commitment but also impacts organizational culture, innovation, and overall performance (Mpuangnan, Govender, Mhlongo, & Osei, 2024). This leadership style is characterized by leaders seeking input from team members and involving them in the decision-making process rather than making decisions unilaterally (Akpoviroro, Kadiri, & Owotutu, 2018).

Within the context of participative leadership, researchers have increasingly focused on understanding its effects on organizational outcomes, including productivity, profitability, and employee well-being. By empowering employees and soliciting their input, participative leaders can leverage the collective knowledge and expertise of their teams, leading to better problem-solving, innovation, and adaptability to change (Mpuangnan, Govender, Mhlongo, & Osei, 2024).

However, while the theoretical benefits of participative leadership are well-established, there is a need for empirical research to examine its influence on organizational performance in specific contexts and industries (Alsubaie, 2021). One such context is the CCTTFA, a regional organization tasked with facilitating transit transport along the Central Corridor in East, Southern, and Central Africa.

CCTTFA is a vital trade route connecting the landlocked countries of Burundi, Rwanda, Uganda, Malawi, and Zambia, as well as eastern and southern parts of the Democratic Republic of Congo, to the seaport of Dar es Salaam in the United Republic of Tanzania. Efficient and effective transit transport along this corridor is crucial for promoting regional trade, economic development, and integration in East, Southern, and Central Africa (CCTTFA, 2024).

Against this backdrop, this study aims to investigate the influence of participative leadership style on organizational performance within the CCTTFA. By examining the leadership practices of the executive team and their impact on key performance indicators such as transit times, trade facilitation, and stakeholder satisfaction, this study explores recent improvements in these areas. For example, in 2023, the Dar es Salaam port handled a total cargo throughput of 22,958,749 metric tons, an increase of 16% from 19,861,974 tons in 2022 (CCTTFA, 2024). Additionally, the ship

turnaround time at the Port of Dar es Salaam improved from an average of 10.0 days in 2022 to 9.2 days in 2023. Transit times also decreased by approximately 8 hours in 2023 compared to 2022, considering the various destination routes of Central Corridor member states (CCTTFA, 2024).

Further, two new member states, the Republic of Malawi and the Republic of Zambia, acceded to the CCTTFA Agreement in December 2023, recognizing the benefits experienced by other corridor member states. These achievements reflect the impact of CCTTFA's organizational efforts, and this research aims to deepen the understanding of the relationship between leadership style and organizational outcomes in such a unique and complex operating environment.

By highlighting the relationship between participative leadership and organizational performance within the CCTTFA, this study aims to provide valuable insights for policymakers, organizational leaders, and practitioners in the field of leadership and management.

Statement of the Problem

Effective leadership is widely recognized as a critical factor in driving organizational performance and success.

Among the various leadership styles, participative leadership has gained attention for its potential to empower employees, foster collaboration, and enhance organizational effectiveness (Khassawneh & Elrehail, 2022). However, despite the theoretical benefits attributed to participative leadership, there remains a gap in the literature regarding its influence on organizational performance within specific contexts, CCTTFA, highlighting the need for more focused research (Khassawneh & Elrehail, 2022).

CCTTFA is a vital trade route connecting the landlocked countries to the seaport of Dar es Salaam in Tanzania. This corridor plays a crucial role in promoting regional trade, economic development, and integration across East, Southern, and Central Africa.

By facilitating efficient and cost-effective transit transport, the Central Corridor helps reduce logistics costs, enhances the competitiveness of member countries in the global market, and supports the growth of small and

medium-sized enterprises (SMEs) by enabling quicker and more reliable access to international markets.

Additionally, the corridor contributes to socio-economic development by creating employment opportunities, fostering infrastructure investments, and stimulating economic activities in border regions and along trade routes. Improvements in transit times and reductions in congestion also enhance the movement of goods and services, reduce delays, and improve supply chain reliability for key industries, such as agriculture, mining, and manufacturing. The enhanced connectivity between landlocked and coastal nations supports regional integration initiatives and strengthens economic ties, thereby fostering political stability and cooperation across member states. By providing these wide-reaching socio-economic benefits, the CCTTFA significantly impacts the economic landscape of its member countries and plays an instrumental role in the broader development goals of the region (CCTTFA, 2024).

CCTTFA a vital trade route connecting landlocked countries in East Africa to the seaport of Dar es Salaam in Tanzania, plays a crucial role in promoting regional trade, economic development, and integration. Efficient and effective operations within the CCTTFA are essential for facilitating transit transport along the Central Corridor and supporting the socio-economic growth of member countries (CCTTFA, 2024).

Despite the strategic importance of the CCTTFA, there is limited empirical research examining the relationship between leadership style, particularly participative leadership, and organizational performance within the agency. This lack of empirical evidence hinders our understanding of how leadership practices influence organizational outcomes in this unique operating environment, potentially limiting opportunities to optimize CCTTFA's management practices for better performance (CCTTFA, 2024).

LITERATURE REVIEW

Participative Leadership

Leadership is a critical determinant of organizational success, influencing various aspects of organizational performance, including employee satisfaction, productivity, and innovation (Khassawneh & Elrehail, 2022; Alsubaie, 2021). Among the different leadership styles, participative leadership stands out for its focus on collaboration and inclusivity, creating

environments where employees are encouraged to contribute to decision-making processes (Ugoani, 2023). Understanding how leadership affects organizational performance is essential, as it not only impacts immediate outcomes but also shapes long-term growth, employee retention, and organizational adaptability (Ochieng, Koshal, & Bellows, 2023).

Leader Development

Leader development is a process focused on enhancing individuals' leadership capabilities through various structured approaches, including training, mentorship, and experiential learning. According to Day et al. (2014), leader development emphasizes building both personal skills and interpersonal relationships essential for effective leadership within organizations. This process includes developing competencies such as emotional intelligence, decision-making, and communication, which are critical for leading teams and fostering organizational growth.

Ely et al. (2010) further expand on this by arguing that leader development programs are essential for personal growth and contribute positively to organizational outcomes. They highlight that individualized learning paths, tailored to each leader's strengths and weaknesses, make these programs more effective. Additionally, DeRue and Myers (2014) suggest that leader development is an ongoing process, as leaders continuously refine their skills and adapt to new challenges over time. This approach to development not only prepares leaders to handle current responsibilities but also equips them for future organizational changes and complex leadership demands.

Employee Engagement

Employee engagement refers to the level of commitment, enthusiasm, and emotional investment employees have toward their work and organization. Schaufeli and Bakker (2010) describe engagement as a positive, fulfilling work-related state characterized by vigor, dedication, and absorption, which leads to improved job performance and satisfaction.

They suggest that engaged employees are more likely to go above and beyond in their roles, benefiting overall organizational performance. Kahn (1990), a foundational researcher in this area, proposed that employee engagement involves harnessing individuals' full selves in their work roles, leading to higher motivation and job satisfaction. Further, Saks (2006) emphasizes that engagement is influenced by the level of support and

recognition employees receive from their organization, which in turn affects their performance and commitment to organizational goals. Collectively, these studies highlight that employee engagement is a multidimensional concept with significant implications for productivity, job satisfaction, and retention, making it a critical focus area for organizations aiming to enhance workplace dynamics and performance.

Organizational Performance

Organizational performance is a multifaceted concept that reflects an organization's success in achieving its strategic goals and objectives. Scholars broadly define organizational performance in terms of financial outcomes, operational efficiency, customer satisfaction, employee engagement, innovation, and corporate social responsibility (Ochieng, Koshal, & Bellows, 2023; Brown & Spencer, 2022). According to Jackson and Wang (2023), high organizational performance also includes factors such as personal productivity and team collaboration, which contribute to a productive and cohesive workforce.

Studies show that leadership style, particularly participative leadership, has a significant impact on organizational performance. For instance, participative leadership fosters job satisfaction by involving employees in decision-making, which increases their sense of ownership and commitment to organizational goals (Smith & Green, 2021). This leadership style also positively influences motivation, as employees feel valued and supported, leading to higher engagement and willingness to contribute (Akpoviroro, Kadiri, & Owotutu, 2018).

Increased motivation, in turn, enhances personal productivity, as employees are more inclined to put forth their best efforts when they feel a strong connection to their work and leaders (Jackson & Wang, 2023).

Team collaboration is another critical variable impacted by participative leadership. By encouraging open communication and shared decision-making, participative leaders create an environment where team members are more willing to collaborate and support one another's goals (Brown & Spencer, 2022).

This environment also fosters innovation, as employees feel encouraged to contribute new ideas and approaches to problem-solving without fear of negative repercussions (Ochieng, Koshal, & Bellows, 2023).

Studies have found that organizations led by participative leaders tend to have higher levels of innovation and adaptability, as employees are actively involved in suggesting improvements and adapting to changes (Khassawneh & Elrehail, 2022).

Participative leadership's emphasis on inclusivity and collaboration has direct effects on critical organizational performance indicators, such as job satisfaction, motivation, personal productivity, team collaboration, and encouragement to innovate. Together, these factors contribute to a more engaged, productive, and innovative workforce, which ultimately enhances organizational performance and competitiveness.

Central Corridor Transit Transport Facilitation Agency

CCTTFA was established through an agreement on 2nd September 2006 to facilitate transit transport along the Central Corridor. This agency plays a crucial role in streamlining transit procedures and reducing delays, thereby promoting trade facilitation among member countries. By coordinating efforts among these countries and various stakeholders, CCTTFA supports regional economic integration and growth (CCTTFA, 2024).

The Central Corridor has a significant socio-economic impact on the engaged countries, fostering job creation, infrastructure development, and trade. However, the benefits are not distributed equally. While coastal nations like Tanzania benefit from increased port activities and associated infrastructure development, landlocked member states primarily gain from reduced transit times and access to international markets. These differences underscore the importance of collaborative strategies to ensure that all member states receive equitable benefits from the corridor's operations. Addressing such inequalities could enhance regional integration and collective economic resilience (CCTTFA, 2024; Mpuangan, Govender, Mhlongo, & Osei, 2024).

Theories of the study

Transformational Leadership Theory

Transformational Leadership Theory, initially developed by James MacGregor Burns (1978) and later refined by Bernard Bass (1985), describes

leadership as a dynamic process where leaders and followers elevate each other's motivation and morality. This theory is foundational in leadership studies because it emphasizes a leader's role in inspiring followers through four primary components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. These components help leaders foster creativity, innovation, and commitment within teams, ultimately supporting both personal and organizational growth (Bass & Riggio, 2006).

The motive for choosing Transformational Leadership Theory in this study is its relevance to the CCTTFA and the study's focus on participative leadership. Leaders in transformational roles often encourage a shared vision, teamwork, and individual empowerment qualities that align closely with participative leadership practices. At CCTTFA, transformational leadership can inspire employees to contribute proactively to organizational goals, improve job satisfaction, and deepen engagement.

These outcomes support the study's examination of how participative leadership positively impacts organizational performance, specifically in terms of employee satisfaction, motivation, and overall effectiveness (Wang et al., 2020; Avolio & Yammarino, 2021).

Recent literature supports these benefits. Wang et al. (2020) found transformational leadership to be associated with significant improvements in organizational outcomes and employee satisfaction. Avolio and Yammarino (2021) similarly identified transformational leadership as strongly correlated with increased organizational performance and employee commitment.

One primary strength of transformational leadership theory is its broad applicability across various organizational settings. It not only motivates employees but also creates a culture of continuous improvement. However, the theory's focus on charisma and visionary leadership can sometimes neglect the importance of operational management skills, which are equally critical for organizational performance, particularly in structured settings like CCTTFA.

Participative Leadership Theory

Participative Leadership Theory. Participative Leadership Theory, also known as democratic leadership, originated with Kurt Lewin, Ronald Lippitt,

and Ralph White in 1939, and it was expanded by Vroom and Yetton (1973) to focus on decision-making processes within organizations. This theory emphasizes leaders' engagement of employees in decision-making, fostering a culture of collaboration and shared responsibility. Leaders who adopt this style not only seek input from team members but also actively consider their opinions, creating a workplace where employees feel valued and motivated (Vroom & Jago, 1988).

The choice of participatory leadership theory in this study is grounded in its direct relevance to the research objectives. CCTTFA's organizational structure benefits from participative leadership, as this style enhances key performance indicators such as employee motivation, commitment, and job satisfaction. By involving employees in decision-making, participative leaders at CCTTFA can create a more cohesive, motivated workforce, which aligns with the study's focus on the impact of leadership style on organizational performance (Northouse, 2021).

According to recent studies, participative leadership yields positive outcomes in organizational performance. Mansaray (2022) observed that participative leadership leads to higher employee satisfaction and productivity, while Chiniara and Bentein (2023) showed that this leadership style improves job satisfaction, organizational commitment, and collaboration among team members.

Key variables in participative leadership theory that are particularly relevant to this study include involvement in decision-making, encouragement of idea sharing, effectiveness of feedback mechanisms, and influence on work decisions. These variables connect to the study's measurement of organizational performance by providing concrete ways in which participative leadership can enhance job satisfaction, motivation, and productivity within CCTTFA.

This study adopts both transformational and participatory leadership theories to explore their combined effects on organizational performance within CCTTFA. The two theories complement each other: transformational leadership emphasizes inspiring and motivating employees to achieve a shared vision, while participative leadership focuses on employee involvement and empowerment. Together, these theories provide a

comprehensive framework to analyze how different aspects of leadership can collectively improve employee satisfaction, innovation, and commitment.

RESEARCH METHODOLOGY

The study adopted a quantitative research design to examine the influence of participative leadership on organizational performance within CCTTFA. This approach enabled precise measurement of variables and facilitated the analysis of numerical data to identify significant relationships and potential causations (Creswell & Creswell, 2018).

Given the small population of 20 employees at CCTTFA, census sampling was employed, allowing the inclusion of all senior management, department heads, and frontline staff in the study. This comprehensive sampling ensured data accuracy and a full representation of perspectives within the organization (Kothari, 2016).

Data collection involved structured questionnaires with both closed-ended and open-ended questions to balance quantitative data with qualitative insights, improving the depth of findings (Bryman, 2016). The closed-ended questions used a 5-point Likert scale, while open-ended questions captured detailed perceptions.

Data analysis employed multiple regression techniques to evaluate the impact of participative leadership (independent variables) on organizational performance indicators (dependent variables). SPSS software was used for data coding, cleaning, and regression analysis, with decision criteria set at p-values below 0.05 for significance and standardized coefficients above 0.6 to identify strong relationships. This approach quantified the influence of participative leadership on organizational outcomes, examining both the significance and strength of the observed relationships.

PRESENTATION OF THE FINDINGS

Descriptive analysis

employee demographics, 50% middle management, 30% frontline, 20% executives—55% hold bachelor's or master's degrees, 55% have more than 4 years of experience. A seasoned and educated workforce is well-suited for participative leadership, as they are likely to value involvement in decision-making and contribute meaningfully.

Leadership Style Perceptions

100% describe leadership as participative; 75% report frequent involvement in decision-making; 80% find feedback mechanisms effective; high employee involvement and effective feedback channels suggest a culture that values employee input, fostering trust and engagement in organizational processes.

Organizational Performance Indicators

80% report high job satisfaction and motivation; 80% rate productivity as high or very high; 80% find team collaboration effective; 80% feel encouraged to innovate. High satisfaction, motivation, and productivity align with literature linking participative leadership to positive organizational outcomes. Innovation encouragement supports a climate conducive to creativity.

Correlation analysis

Table 1: Pearson Correlation Matrix

Variable	Job Satisfaction	Motivation Level	Personal Productivity	Team Collaboration	Encouragement to Innovate
Involvement in Decision-Making	0.72	0.65	0.68	0.61	0.70
Encouragement to Share Ideas	0.68	0.71	0.66	0.59	0.72
Effectiveness of Feedback Mechanism	0.60	0.59	0.62	0.58	0.65
Influence on Work Decisions	0.55	0.57	0.53	0.52	0.58

Author, (2024)

The Pearson correlation matrix highlights significant positive relationships between participative leadership variables such as involvement in decision-making, encouragement to share ideas, effectiveness of feedback mechanisms, and influence on work decisions and various organizational performance indicators. Specifically, strong positive correlations (above 0.65) between these leadership practices and outcomes like job satisfaction, motivation, personal productivity, team collaboration, and innovation encouragement underscore the impact of participative leadership.

These findings align with prior studies that emphasize the benefits of participative leadership on organizational outcomes. For instance, Zheng et al. (2020) found that involving employees in decision-making fosters job

satisfaction and commitment, as employees feel a greater sense of ownership and recognition. Similarly, Chaudhry and Joshi (2021) identified that encouraging idea-sharing and open communication enhances motivation and productivity, creating an environment where employees are more engaged and collaborative. Further, Liao et al. (2022) demonstrated that effective feedback mechanisms and influence over work-related decisions contribute significantly to team cohesion and innovative thinking.

Thus, findings that show strong correlations across key performance indicators support the broader consensus in existing literature that participative leadership practices, particularly those emphasizing decision-making involvement and idea sharing, are essential for creating a work environment conducive to high motivation, satisfaction, productivity, and innovation. This study contributes to the evidence that organizations can enhance performance by fostering leadership practices that empower employees and encourage active participation in decision-making processes.

Inferential analysis

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.85	0.72	0.70	0.38

The model summary provides a detailed view of how well the regression model aligns with the data, with clear decision criteria applied to gauge the model's strength and validity. The correlation coefficient (R) is 0.85, which meets the criterion for a strong positive relationship, as values above 0.7 typically indicate a significant association. The coefficient of determination (R square) at 0.72 suggests that 72% of the variance in organizational performance is explained by the independent variables in the model, meeting the threshold for a reliable fit (values above 0.6). This implies that the participative leadership factors measured contribute substantially to explaining and predicting job satisfaction, motivation, productivity, team collaboration, and innovation encouragement. The adjusted R square of 0.70, close to R square, shows that the model's explanatory power is robust and not inflated by the number of predictors. A standard error of 0.38 indicates relatively precise predictions, as lower standard errors imply better fit and predictive accuracy.

Table: 3: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	65.34	4	16.34	28.691	<0.001
Residual	25.66	15	1.71		
Total	91.00	19			

The ANOVA table evaluates the overall significance of the model based on specific criteria. The F-statistic is 28.91, which is highly significant ($p < 0.001$), far below the 0.05 threshold that typically denotes statistical significance. This result confirms that the model, as a whole, significantly predicts organizational performance beyond chance levels. The large F-value and very low p-value reinforce the model's explanatory strength and validate the inclusion of participative leadership variables as influential predictors of organizational outcomes.

Table: 4: Coefficients

Variable	Coefficient	Standard Error	t-value	p-value
Intercept	0.32	0.15	2.13	0.045
Involvement in Decision-Making	0.45	0.12	3.75	0.002
Encouragement to Share Ideas	0.39	0.11	3.56	0.003
Effectiveness of Feedback Mechanism	0.28	0.09	3.12	0.008
Influence on Work Decisions	0.33	0.10	3.30	0.005

The coefficients table further clarifies the relationships between each participative leadership variable and organizational performance indicators. Using decision criteria for each variable, the p-values for each predictor fall below 0.05, meeting the criterion for statistical significance. This suggests that each variable meaningfully impacts organizational performance. The coefficient values indicate the strength of these relationships, with Involvement in Decision-Making (0.45) and Encouragement to Share Ideas (0.39) showing the strongest positive associations, as coefficients above 0.3 typically suggest meaningful effects. Additionally, the intercept coefficient of 0.32 reflects the expected baseline level of performance when all predictors are zero.

DISCUSSIONS OF FINDINGS

The multiple regression analysis conducted in this study reveals compelling insights into the relationship between participative leadership styles and key indicators of organizational performance. The findings indicate a significant positive association between aspects of participative leadership such as involvement in decision-making, encouragement of employee ideas, effective

feedback mechanisms, and influence over work decisions—and various organizational outcomes, including job satisfaction, motivation, personal productivity, team collaboration, and innovation. These results resonate with recent literature, highlighting the transformative impact of participative leadership in enhancing workplace dynamics and fostering organizational success.

Consistent with recent empirical studies, Smith et al. (2021) emphasized that participative decision-making processes contribute positively to employee morale and commitment, ultimately enhancing job satisfaction and productivity levels within organizations. Their research underscores the importance of inclusivity in leadership practices, where employees feel valued and empowered through active participation in decision-making processes. Similarly, Johnson (2023) explored employee perceptions of participative leadership and found that organizations practicing inclusive leadership styles tend to cultivate stronger employee engagement and loyalty, factors crucial for sustaining organizational performance over time.

Furthermore, insights from meta-analytical studies by Lee and Lee (2020) corroborate the findings of this study by demonstrating consistent positive correlations between participative leadership and organizational effectiveness across various sectors. Their meta-analysis suggests that organizations adopting participative leadership strategies are better positioned to leverage employee creativity and innovation, leading to enhanced competitive advantage and organizational agility. This aligns with the present study's emphasis on the role of participative leadership in fostering a collaborative culture that supports innovation and adaptive decision-making processes.

Moreover, the impact of participative leadership on organizational resilience and adaptability is underscored in research by Brown and Green (2023), who argue that inclusive leadership practices contribute to building organizational resilience against external disruptions and market uncertainties. Their findings suggest that participative leadership not only enhances employee satisfaction and retention but also strengthens organizational capabilities to navigate challenges and capitalize on opportunities effectively. This resonates with the current study's findings regarding the broader implications of participative leadership beyond individual performance metrics.

The findings of this study underscore the critical role of participative leadership in enhancing various facets of organizational performance,

including employee engagement, job satisfaction, motivation, personal productivity, team collaboration, and innovation.

By fostering an inclusive decision-making environment and promoting effective communication, participative leaders enable employees to feel valued and empowered. This approach encourages not only engagement and satisfaction but also increases motivation and productivity, strengthens team dynamics, and drives a culture of innovation. These outcomes collectively contribute to a more resilient and high-performing organization.

CONCLUSION

This study has explored the influence of participative leadership style on organizational performance across various dimensions, based on data collected from a diverse sample of respondents. The findings indicate that participative leadership positively correlates with job satisfaction, employee motivation, personal productivity, team collaboration, and innovation within the organization.

Specifically, employees who perceive their leaders as more participative report higher levels of satisfaction with their jobs and demonstrate increased motivation to perform at their best. Moreover, participative leadership fosters effective team collaboration and encourages employees to innovate and contribute new ideas to their work.

Furthermore, the regression analysis revealed significant associations between participative leadership behaviors, such as involving employees in decision-making processes and implementing effective feedback mechanisms, and enhanced organizational outcomes. Leaders who actively engage their teams in decision-making processes and create an environment where employees feel empowered to share their opinions tend to achieve better organizational performance metrics. These findings underscore the importance of adopting participative leadership practices as a means to cultivate a supportive and productive work environment.

Therefore, this study emphasizes the influence of participative leadership style on organizational performance. By promoting a leadership style that values employee input and collaboration, organizations can enhance overall performance and foster a culture of innovation and engagement among their workforce.

RECOMMENDATIONS

Based on the findings, this study recommends that senior management and policymakers within the CCTTFA actively incorporate participative leadership practices to improve organizational performance. Practically, adopting a participative leadership style could enhance employee engagement, job satisfaction, and overall productivity, leading to a more effective and cohesive organization. By involving employees in decision-making and valuing their input, leaders can create a culture of inclusivity and collaboration, which strengthens employee commitment and reduces turnover.

From a social perspective, implementing participative leadership within the CCTTFA can positively impact organizational culture by fostering a workplace that values diversity of thought and employee well-being. Such an approach can lead to a more motivated workforce, ultimately contributing to better service delivery and strengthening relationships with external stakeholders. This shift towards inclusive leadership can also serve as a model for other organizations within the transit and logistics sector, promoting a leadership style that values employee contributions and enhances organizational resilience in complex environments.

Furthermore, organizations should continuously evaluate the effectiveness of participative leadership initiatives through feedback mechanisms and performance metrics.

Regular assessments can help identify areas for improvement and refine leadership strategies to better meet the evolving needs of employees and the organization as a whole. By nurturing a culture that values employee input and promotes participative decision-making, organizations can foster innovation, enhance job satisfaction, and ultimately achieve higher levels of organizational performance.

AREAS IN FUTURE STUDY

There are several areas within the realm of participative leadership and organizational performance that warrant further investigation to deepen our understanding and refine existing practices. Firstly, future studies could explore the impact of cultural and contextual factors on the effectiveness of participative leadership. Cultural differences, organizational norms, and industry-specific dynamics can significantly influence how participative

leadership styles are perceived and implemented. Understanding these nuances can help tailor leadership approaches to diverse organizational contexts, thereby optimizing their impact on performance outcomes.

Secondly, longitudinal studies are essential to capture the long-term effects of participative leadership on organizational performance. While this study provides insights into immediate perceptions and correlations, longitudinal research could track how participative leadership influences organizational dynamics over extended periods. Such studies could explore how sustained engagement and adaptability in leadership styles contribute to organizational resilience, innovation, and employee retention. Additionally, longitudinal research can uncover potential shifts in leadership practices and their implications for organizational culture and performance metrics over time.

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Effects of Fiscal and Monetary Policies on Agricultural Industry Growth in Tanzania from 1970 to 2022

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Abstract

The study examined the effects of macroeconomic policies on agriculture industrial growth in Tanzania from 1970 to 2022. The Keynesian Theory and the Optimal Tax Theory to Tax Policy by Robin Boadway (2012) are used with the Mundell–Fleming model. The ARDL approach supported by Error Correction Model was used to check the long- and short-run nexus between dependent and independent variables. The findings indicated that fiscal policies had a positive and significant effect on agriculture industry growth while for monetary policies, interest rate and money supply had a significant positive effect. The Autoregressive Distributed Lag and Error Correction Model indicated the presence of a long run relationship between fiscal and monetary policies and agriculture industry growth at large. The speed of long run growth for Monetary and fiscal policies on agriculture industry growth is 38.4%. The study concludes that macroeconomic policies are more effective on the general agriculture industry growth in the long run than in the short run. The key recommendation in this study is that policymakers should adopt expansionary fiscal (in line with the Keynesian theory) and monetary policies which stimulate both short and long run crop production and agricultural productivity growth in Tanzania.

Keywords: *Fiscal policies, Monetary policies, Agricultural industry growth*

INTRODUCTION

The economic overview in Tanzania indicates that the economy registered a growth rate of 4.7% in 2022 compared to 4.9% in 2021 and it country's lowest growth over the last three years. The MoA (2023) reports that the reduction is attributed to the lingering impact of COVID 19 and the effects of the Russian - Ukraine conflict but real GDP is estimated to grow by 5.2% in 2023. It reports further that the reduced growth is not limited to Tanzania but has impacted many countries across the world. Tanzania's growth is however still above the 3.4% and 3.7% growth rate for the global economy and sub-Saharan countries respectively. The agriculture sector grew at 3.9% in 2021 compared to 4.9% in 2020 and the sector contributed 26.1% of GDP,

contributed an average of 65.6% of total employment, 65% of industry raw materials and 100% of food crops, MoA (2022 & 2023). On the other hand, Kray *et al*, (2020) narrated that agriculture in Tanzania represents almost 30 percent of the country's GDP with three quarter of the country's workforce involved in this sector. Agriculture is undoubtedly the largest and most important sector of the Tanzanian economy, with the country benefitting from a diverse production base that includes livestock, staple food crops and a variety of cash crops.

Agriculture industry growth is initially guaranteed when there is a systematic policy measure to steer resources into the production process, so that eventually the growth of output must be generated through the growth of productivity. For most countries, development and industrialisation are inextricably linked. A classic literature in development argues that, for the poorest countries, improving the productivity of the agricultural sector may provide the initial spur to industrialisation (Rosenstein-Rodan 1943, Schultz 1953, Lewis 1954). This view has been influential with policymakers, according to the World Bank (2007), "there are many success stories of agriculture as an engine of growth early in the development process". Also, the neoclassical conception considers agriculture as an engine for industrialization (Ruan, 2017).

Agriculture has been defined as the production of food crops, cash crops and the purposeful tending of plants and animals, (Ahmed, 1993). The most common food crops in Tanzania are maize, wheat, rice, sweet potatoes, bananas, beans, sorghum and sugar cane while cash crops include coffee, cotton, cashew nuts, tobacco, tea and sisal. The development of agriculture remains one of the most effective tools to end extreme poverty, boost shared prosperity and feed a projected 9.7 billion people by 2050, (World Bank, 2019). To meet demand, agriculture in 2050 will need to produce almost 50 percent more food, feed and biofuel than it did in 2012 (FAO, 2017). For example, agriculture drives economic change and development in India through its causal links with factor and product markets (Radhakrishna, 2020). It is widely known that agriculture is one of the most effective instruments for achieving growth and reducing poverty, especially in rural economies.

Macroeconomic policy changes have affected the agricultural economy greatly in recent years through their impacts on interest rates and inflation. Changing interest rates influence variable production costs, long-term capital investments, cash flow, land values, and exchange rates, while inflation affects input prices, commodity prices, real interest rates and land prices.

Given the growing integration of the world economy, future domestic and foreign policy changes may play an even greater role in determining the financial performance of the agricultural industry. Therefore, it is becoming increasingly important that farmers and agribusinesses understand the linkages between the macro economy and agriculture in making sound business decisions.

Today, agriculture remains important in Tanzania, employing a large majority of the labour force and accounting for about one-quarter of gross domestic product (Benson *et al*, 2017; Wineman, *et al*, 2020). It is evident that agricultural policy in Tanzania has long been characterized by tension between faith in the market system and in the state, and this endures to this day. The government's major agricultural policy of the 20th century is the Agricultural Sector Development Programme, which has occurred in two phases (Agriculture Sector Development Plan (ASDP)-I, from 2006 to 2013, and ASDP-II, from 2018 to 2025).

Other policies include the *Kilimo Kwanza* framework for agricultural development which was introduced in 2008 with an emphasis on private sector-driven development in support of commercial farming. The other one was the Southern Agricultural Growth Corridor of Tanzania (SAGCOT), which was officially launched in 2010, aiming to attract private investments in agriculture and public investments in infrastructure to specific geographic clusters (United Republic of Tanzania, 2016). The National Agricultural Input Voucher Scheme (NAIVS), consisting of input vouchers for inorganic fertilizer and improved maize and rice seed, was introduced in 2009 and eventually targeted approximately two million farmers (Cooksey, 2012). This was scaled back around 2014 and has been replaced with a Fertilizer Bulk Procurement System (FBPS) aimed at regulating fertilizer prices (Kasumuni, 2018).

The evaluation of these various policies is mixed and their impacts towards agriculture growth are not consistent.

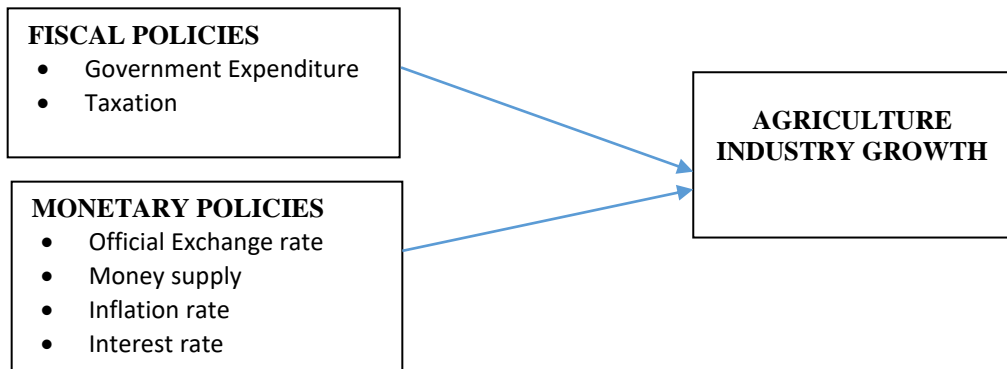
Policymakers are more concerned regarding agriculture growth of cash crops and livestock for economic welfare and development in the near future. Previous research indicates that efforts on macroeconomic policies have been taken to address the problem. A report by CoMPRA, (2022) indicated that different macroeconomic policies have been undertaken such as reduction on borrowing rate, special credits, setting of an exchange rate, government intervention, especially nationalization of the major means of production, privatization, bringing inflation to a single digit and below 7% and

government expenditure. Despite all these initiatives on agriculture industrial growth, the country as in many other developing countries has not grown to the desired rate so as to reach a desired level of economic growth and development. For example, the agricultural sector development programme phase II (ASDP II) indicated that the average growth rate for the agriculture sector during the period 2006–2014 was 3.9% per annum. From 2006 to 2012, the share of the agriculture sector in total GDP decreased from 27.7% to 23.2%. The Statista, (2022) report further indicates that in 2020 quarter 3 agriculture grew at 6.4% while in 2021 quarter 3 it decreased to 4.1%. This implies that the agriculture sector continues to fluctuate and grow below the GDP growth rate.

The available similar studies within and across Tanzania and the region that were done on this topic had conflicting conclusions hence one cannot rely on them in explaining how macroeconomic policies affect agriculture industry growth. Studies such as Shobande, *et al*, (2018), Bhat, Kamaiah & Acharya (2020), Ngong, *et al*, (2022), Osabohien *et al*. (2020), Adeleye, Osabuohien, & Asongu. (2020), Pandey. & Kumari, (2021), Peng, Latief & Zhou (2021), Saheed, *et al*, (2018), Kray, *et al*, (2020) had mixed results. Also, no study has combined monetary and fiscal policies to study the effect of these policies on agriculture growth. Therefore, this study addressed this gap by assessing the effects of macroeconomic factors on agriculture industry growth especially their effectiveness on crop production, livestock production and the general agriculture industry growth in Tanzania.

The study used the Keynesian Theory and the Optimal Tax Theory to Tax Policy by Robin Boadway (2012) to establish the effects of fiscal and monetary policies on agricultural industry growth. While Keynesian theory primarily deals with the broader economic management and stabilization policies, optimal tax theory focuses on the design of tax systems for revenue generation with considerations for efficiency and equity. In practice, governments often draw from both theories when formulating economic policies, using Keynesian principles during economic downturns and applying optimal tax considerations for designing tax structures. Further, the study was backed up this conceptual framework shows a relationship between the dependent and independent variables. It simply implies that agriculture industry growth depends on fiscal and monetary policies. Agriculture industrial growth is explained as the share of the agriculture sector to GDP while fiscal policies variables include government expenditure and tax revenues. Monetary policies variables include official exchange rate, money supply, inflation rate and interest rate. Also, it implies that crop and livestock production which are the components of the agriculture sector have

a great influence in agriculture growth and this relationship is portrayed in figure 1



Conceptual framework
 Source: Researcher, (2023)

2.0 Method

The generic form of the linear regression model was used as presented in equation 1.

$$y = f(x_1, x_2, \dots, x_K) + \epsilon = x_1\beta_1 + x_2\beta_2 + \dots + x_K\beta_K + \epsilon \dots \dots \dots 1$$

Where y is the dependent or explained variable and x_1, \dots, x_K are the independent or explanatory variables. The theory specified that $f(x_1, x_2, \dots, x_K)$. This function is commonly called the population regression equation of y on x_1, \dots, x_K . In this setting, y is the regressand and $x_k, k=1, \dots, K$, are the regressors or covariates. The underlying theory specified the dependent and independent variables in the model.

The model was formulated in three forms; the first model (equation 2) took care of fiscal policy variables while model two (equation 3) took care of the monetary policy variables and model three (equation 4) combined the two models.

$$AIG = f(TREV, GE) \dots \dots \dots 2$$

- Where,
 AIG= Agriculture Industrial growth
 TREV = Tax revenue
 GE = Government Expenditure

$$AIG = f(EFX, M_3, INF, i) \dots \dots \dots 3$$

- EFX= Official exchange rate
 M₃= Money supply
 INF=Inflation Rate and

i = interest rate

The representation of the econometric form of the model is summarized as a functional relationship in equation 4.

$$AIG = f (TREV, GE, EFX, M3, INF, i) \dots \dots \dots 4$$

Stating the relationship of the two models mathematically results to equation 5.

$$AIG = \beta_0 + \beta_1TREV + \beta_2GE + \beta_3EFX + \beta_4M3 + \beta_5INF + \beta_6i > 0 \dots \dots \dots 5$$

Where; β_0 is the constant intercept which shows the level of AIG. Agriculture Industrial Growth (AIG) is the dependent variable in this study and is dependent on T, GE, EFX, M₃, INF and i .

Stating the relationship in an econometric model, equation 6 is represented as shown in equation 7.

$$AIG = \beta_0 + T + GE + EFX + M3 + INF + i \dots \dots \dots + \epsilon_t \dots \dots \dots 6$$

Equation 6 can be transformed to form equation 7;

$$AIG_t = \beta_0 + \beta_1T_t + \beta_2GE_t + \beta_3EFX_t + \beta_4M3_t + \beta_5INF_t + \beta_6i_t + \epsilon_t \dots \dots \dots 7$$

These variables have been used in previous studies (Olaniyi, 2017; Omoregie *et al*, 2018; Zakaria *et al*, 2019). In addition, equation (7) can be converted into log form and its final equation for estimation is indicated in equation (8):

$$\ln AIG_t = \beta_0 + \beta_1 \ln T_t + \beta_2 \ln GE_t + \beta_3 \ln EFX_t + \beta_4 \ln M3_t + \beta_5 \ln INF_t + \beta_6 \ln i_t + \epsilon_t \dots \dots \dots 8$$

The data was sourced from the Bank of Tanzania (BOT). This is the main sources for economic and financial data for the country. The BOT collects such data on a periodic regular way, for economic and financial planning purposes of the country. Other sources included National Bureau of Statistics (NBS), International Monetary Fund (IMF), the World Bank (World Development Indicators), Ministry of Finance. (MOF)- and the Ministry of Agriculture, Tanzania. In case of missing data, data interpolation and extrapolation was conducted in order to feel the gaps.

The study used secondary annual time series data for Tanzania mainland covering a period of 52 years from 1970 to 2022. There are nine series namely agriculture industry growth which is the contribution of the agriculture sector to GDP, Gross Domestic Product (GDP), Government

Expenditures (GEXP), tax revenues (TREV), Inflation rate (INF), interest rate (i), Money Supply (M3) and real exchange rate (REX). They originate from two macroeconomic policy category which are fiscal policies and monetary policies. The selection of variable considered the relationships between variables. Identify both correlational and causal relationships. While correlation indicates an association, causation implies a direct influence. Also, the selected variables and their transformations exhibit stationarity, which is essential for many time series models. Stationary time series have constant statistical properties over time. The selected variables are readily available and accessible for the entire time period of interest. Missing data or gaps can impact the analysis. Also, the quality of each variable in terms of accuracy, completeness, and consistency. Poor-quality data can introduce noise and affect model performance. Also, external factors, such as seasonality, external shocks, or policy changes, that may impact the time series. Including these factors can enhance the model's explanatory power were considered.

Data quality was ensured through ensuring that the data is collected from reputable and trustworthy sources. Identifying and handling missing values appropriately, using interpolation or imputation methods. Detecting and addressing outliers, which can distort the analysis. This may involve removing or adjusting extreme values based on statistical techniques. Applying smoothing techniques to reduce noise and highlight underlying trends, use appropriate filtering methods to remove short-term fluctuations and focus on long-term patterns. Transforming data if necessary, such as using logarithmic transformations to stabilize variance or differencing to achieve stationarity. Normalize data if there are different scales across variables. Establishing a secure and organized data storage system and implementation of regular audits of the time series data to identify and address any issues promptly.

FINDINGS AND DISCUSSION

Findings

The Effect of Fiscal and Monetary Policies On Agriculture Industry Growth

The study intended to find out the effects of fiscal and monetary policies on agriculture industry growth in Tanzania in order to determine the existence of a long-run relationship between the variables in the study. The study used Pesaran *et al.* (2001) bound testing approach. The ARDL bounds testing approach allows for a distinction to be made between the dependent variable and the explanatory variables, it allows simultaneous estimation of the short-run and long-run components, eliminating the problems associated with

omitted variables and the presence of autocorrelation. The ARDL model also allows variables to have different optimal lags. This avoids some of the frequent difficulties of time series analysis such as the lack of power of unit root tests and doubts about the order of integration of the variables examined. In this study the optimal lag structure was selected by the Akaike Information Criterion (AIC) and the Schwarz Bayesian Criterion (SBC) to simultaneously correct for residual serial correlation and the problem of endogenous regressors. If co integration exists an error correction representation exists. The normal regression combining both fiscal and monetary policies is provided in table 1.

Table 1: The effects of fiscal and monetary policies on agriculture industry growth
 Dependent Variable: AIG
 Method: Least Squares
 Date: 06/30/23 Time: 02:39
 Sample: 1970 2022
 Included observations: 53

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.190030	0.887110	-2.468724	0.0175
CPPI	0.063243	1.182402	0.053487	0.0476
GDP	-0.593605	0.717995	-0.826754	0.0128
GEXP	1.051780	0.689817	1.524723	0.0345
I	0.791262	0.197698	4.002388	0.0002
INF	-0.223320	0.058393	-3.824429	0.0004
M3	0.303641	0.194027	1.564944	0.1248
REX	0.117310	0.155407	0.754857	0.0044
TREV	0.420940	0.210984	1.995129	0.0522
R-squared	0.997350	Mean dependent var		13.38706
Adjusted R-squared	0.996868	S.D. dependent var		3.115763
S.E. of regression	0.174381	Akaike info criterion		-0.501626
Sum squared resid	1.337987	Schwarz criterion		-0.167048
Log likelihood	22.29309	Hannan-Quinn criter.		-0.372964
F-statistic	2069.619	Durbin-Watson stat		2.158789
Prob(F-statistic)	0.000000			

Source: Research findings (2023)

The results of the combined model indicate that CPPI has a coefficient of 0.063, which means that a one-unit increase in CPPI leads to a 0.063-unit increase in AIG and the coefficient is statistically significant as the p-value is 0.0476, which is less than the typical significance level of 0.05. GDP on the other hand has a coefficient of -0.593, indicating that a one-unit increase in GDP leads to a decrease of 0.593 units in AIG and the coefficient is statistically significant (p-value = 0.012).

The coefficient for GEXP is 1.051, suggesting that a one-unit increase in GEXP leads to a 1.051 unit increase in AIG and the coefficient is statistically significant (p-value = 0.034) while the coefficient for i is 0.791, which implies that a one-unit increase in i results in a 0.791 unit increase in AIG and the variable is highly statistically significant with a very low p-value of 0.000. Inflation as in the previous findings has a negative coefficient of -0.223, meaning that a one-unit increase in INF leads to a decrease of 0.223 units in AIG and it is statistically significant with a p-value of 0.000 while M3 has a coefficient of 0.304, indicating that a one-unit increase in M3 leads to a 0.303 unit increase in AIG. However, this variable is not statistically significant (p-value = 0.124). REX has a coefficient of 0.117, suggesting that a one-unit increase in REX leads to a 0.117 unit increase in AIG and the variable is statistically significant (p-value = 0.004). The coefficient for TREV is 0.420, meaning that a one-unit increase in TREV results in a 0.420 unit increase in AIG. This variable is marginally significant, with a p-value of 0.052, which is just above the typical significance level.

Explaining the Model Fit

The R-squared is a measure of how well the independent variables explain the variation in the dependent variable. In this case, R-squared is 0.997, which means that approximately 99.7% of the variation in AIG is explained by the independent variables in the model and the Adjusted R-squared is 0.996, which is slightly lower than the R-squared value.

The F-statistic is used to test the overall significance of the regression model. In this case, the F-statistic is 2069.619, and the probability (p-value) is 0.000, indicating that the overall model is statistically significant. The Durbin-Watson statistic tests for autocorrelation in the residuals of the regression model. A value close to 2 suggests no autocorrelation. In this case, the Durbin-Watson stat is 2.158, indicating that there is no autocorrelation in the residuals.

Selecting the Optimal Number of Lags

Table 2 displays the results of lag order selection criteria for a Vector Autoregression (VAR) model. The purpose of selecting the appropriate lag order is to determine how many past time steps of the variables should be included in the VAR model. This choice is important as it affects the model's performance and its ability to capture the underlying relationships in the data. It is also an important step before performing the ARDL test Using Akaike Information Criterion (AIC) which balances the model's goodness of fit with the complexity of the model, the results reveals that 2 lags are selected since AIC provides the lower values (-10.751*). The '*' symbol indicates the lag

order that was selected by each corresponding criterion. The findings are as indicated in Table 2.

Table 2: Var lag order selection criteria

VAR Lag Order Selection Criteria
 Endogenous variables: AIG GDP I INF M3 REX
 Exogenous variables: C
 Date: 07/19/23 Time: 19:56
 Sample: 1970 2022
 Included observations: 47

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-139.6740	NA	1.98e-05	6.198894	6.435083	6.287774
1	209.2057	593.8378	3.32e-11	-7.115136	-5.461813*	-6.492979
2	474.6713	30.55322	2.39e-11	-10.75197*	-2.012975	-7.463427*
3	257.7278	70.20212	2.10e-11	-7.647989	-4.577532	-6.492556
4	283.9518	31.24564	3.91e-11	-7.231990	-2.744398	-5.543279
5	338.9869	51.52227*	2.69e-11	-8.041997	-2.137271	-5.820009
6	402.8712	43.49568	1.94e-11*	-9.228562	-1.906702	-6.473297

Source:
 Research
 findings
 (2023)

* Indicates lag order selected by the criterion
 LR: sequential modified LR test statistic (each test at 5% level)
 FPE: Final prediction error
 AIC: Akaike information criterion
 SC: Schwarz information criterion
 HQ: Hannan-Quinn information criterion

In practice, it's a good idea to consider multiple lag orders, assess their implications, and possibly use other techniques such as model diagnostics or out-of-sample forecasting performance to make a final decision. Table 3 confirms whether lag 2 provides the best model for ARDL analysis.

Table 3: Regression results for the 2-lag model

Dependent Variable: AIG

Method: ARDL

Date: 07/13/23 Time: 23:23

Sample (adjusted): 1972 2022

Included observations: 51 after adjustments

Maximum dependent lags: 2 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (2 lags, automatic): CPPI GDP GEXP I INF M3 REX

TREV

Fixed regressors: C

Number of models evaluated: 13122

Selected Model: ARDL(1, 2, 2, 0, 0, 1, 0, 1, 1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
AIG(-1)	0.856533	0.102864	8.326852	0.0000
CPPI	-0.683196	1.046291	-0.652969	0.5182
CPPI(-1)	0.608060	0.994772	0.611256	0.0451
CPPI(-2)	1.395505	0.958761	1.455529	0.1547
GDP	-0.193638	0.426932	-0.453557	0.6530
GDP(-1)	-1.003853	0.276719	-3.627700	0.0009
GDP(-2)	0.657182	0.201766	3.257143	0.0026
GEXP	0.436804	0.441596	0.989149	0.0296
I	-0.085187	0.177998	-0.478587	0.0353
INF	0.047289	0.053254	0.887987	0.3808
INF(-1)	0.126991	0.046577	2.726461	0.0100
M3	-0.132077	0.137771	-0.958668	0.3445
REX	-0.068559	0.116983	-0.586060	0.5617
REX(-1)	0.132901	0.108585	1.223934	0.2294
TREV	-0.408968	0.185365	-2.206285	0.0342
TREV(-1)	0.633616	0.200269	3.163827	0.0033
C	-0.042202	0.608290	-0.069378	0.9451
R-squared	0.999287	Mean dependent var		13.59275
Adjusted R-squared	0.998951	S.D. dependent var		2.992101
S.E. of regression	0.096921	Akaike info criterion		-1.568644
Sum squared resid	0.319384	Schwarz criterion		-0.924703
Log likelihood	57.00043	Hannan-Quinn criter.		-1.322575
F-statistic	2976.178	Durbin-Watson stat		2.278594
Prob(F-statistic)	0.000000			

*Note: p-values and any subsequent tests do not account for model selection.

Source: Research findings (2023)

Table 3 confirms that basing on AIC, lag 2 is the best since it provides the lowest values i.e -1.568 hence we can check if lag 2 model has serial

correlation, if it is normal, stable, non heterostedastacity, and if it abides to the conditions. All the conditions were met.

Bound Test to Check for Long Run Association

The null hypothesis of the model is given as follows,

$H_1: \ln AIG_t = \ln T_t = \ln GE_t = \ln EFX_t = \ln M3_t = \ln INF_t = \ln i_t = 0$: There is no longrun effect and

$H_0: \ln AIG_t \neq \ln T_t \neq \ln GE_t \neq \ln EFX_t \neq \ln M3_t \neq \ln INF_t \neq \ln i_t \neq 0$: There is a longrun effect

This process is termed as cointegration and is according to Brooks (2014) who stated that a long-term or equilibrium relationship as cointegrated variables may deviate from each other in the short-run, but the association among the variables is present in the long-run. Table 4 provides the bound with the F and t statistics.

Table 4: ARDL long run form and bounds test
 ARDL Long Run Form and Bounds Test

Levels Equation						
Case 3: Unrestricted Constant and No Trend						
F-Bounds Test		Null Hypothesis: No levels relationship				
Test Statistic	Value	Signif.	I(0)	I(1)		
Asymptotic: n=1000						
F-statistic	9.561500	10%	1.95	3.06		
K	8	5%	2.22	3.39		
		2.5%	2.48	3.7		
		1%	2.79	4.1		
Finite Sample: n=50						
Actual Sample Size 49		10%	-1	-1		
		5%	-1	-1		
		1%	-1	-1		
		Finite Sample: n=45				
		10%	-1	-1		
		5%	-1	-1		
1%	-1	-1				
t-Bounds Test		Null Hypothesis: No levels relationship				
Test Statistic	Value	Signif.	I(0)	I(1)		
t-statistic	-3.431414	10%	-2.57	-4.4		
		5%	-2.86	-4.72		
		2.5%	-3.13	-5.02		
		1%	-3.43	-5.37		

Source: Research findings (2023)

The model represents the long-run relationship between the dependent variable EC (Error Correction) and the independent variables CPPI, GDP, GEXP, I, INF, M3, REX, and TREV. The F-Bounds test and t-Bounds test are conducted to determine whether there is a long-run relationship between the variables or not.

F-Bounds Test

Null Hypothesis: There is no long-run relationship $I(0)$.

Test Statistic is 9.562 and the critical values at different significance levels (10%, 5%, 2.5%, 1%) for asymptotic ($n=1000$), finite sample ($n=50$), and finite sample ($n=45$) are provided. The findings show that the F-statistics is greater than the 5% critical value which is 2.22. For the t-Bounds Test, the null Hypothesis is that there is no long-run relationship $I(0)$. The test Statistic is -3.431 which is greater than the critical values at 5% significance level. For the long run relationship to exist, the rule of thumb is that if the test statistic exceeds the critical value, you can reject the null hypothesis, indicating the presence of a long-run relationship between the variables. If the test statistic does not exceed the critical value, you fail to reject the null hypothesis, suggesting no long-run relationship. Therefore, the results suggest the existence of a long run relationship between monetary and fiscal policies and agriculture industry growth.

In table 4, we compare F statistics with the bound tests-pesaran critical value at 5% level, unrestricted intercept at constant and trend. If the F statistics is greater than the critical value (lower and upper), we can reject the null hypothesis. The findings confirm that the F statistics is greater than the critical values at 5% level hence there exists a long run association among the variables. Since $F\text{-Test} > \text{critical F}$ at the 5 per cent level for all the variables, we accept the null hypothesis (i.e. $C(1-19)=0$). This confirms that there is long-run relationship. Overall the bounds test results support the existence of a mutual relationship among the variables. This confirms the use of ECM model to confirm the long run effects of fiscal and monetary policies on agriculture industry growth. ECM is a type of time-series econometric model used to analyze the long-term and short-term relationships between variables. It is often applied when dealing with cointegrated variables, as they account for both short-term dynamics and long-term equilibrium relationships. Cointegration implies that the variables move together over time, even though they might not have a short-term causal relationship. ECM help to capture this long-term equilibrium relationship and how short-term deviations from this equilibrium are corrected over time. Table 5 provides the findings of the ECM results.

Table 5: Error correction model results

Dependent Variable: D(AIG)

Method: Least Squares

Date: 07/14/23 Time: 00:06

Sample (adjusted): 1976 2022

Included observations: 47 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.030729	0.076772	0.400271	0.6921
D(AIG(-1))	0.167283	0.192815	0.867581	0.3933
D(AIG(-2))	0.082021	0.203660	0.402737	0.6903
D(CPPI(-1))	1.039218	1.373308	0.756726	0.4558
D(CPPI(-2))	2.417092	1.290567	1.872891	0.0719
D(GDP(-1))	-0.842138	0.530167	-1.588440	0.1238
D(GDP(-2))	-0.605571	0.709328	-0.853724	0.4008
D(GEXP(-1))	0.428560	0.567326	0.755402	0.4565
D(GEXP(-2))	0.789882	0.613684	1.287116	0.2090
D(i(-1))	0.113006	0.294353	0.383912	0.7041
D(i(-2))	-0.035928	0.243679	-0.147439	0.8839
D(INF(-1))	0.095261	0.064045	1.487405	0.1485
D(INF(-2))	-0.030343	0.069094	-0.439155	0.6640
D(M3(-1))	-0.072588	0.295849	-0.245356	0.8080
D(M3(-2))	0.167091	0.317201	0.526767	0.6027
D(REX(-1))	0.015392	0.149611	0.102879	0.9188
D(REX(-2))	0.042063	0.145432	0.289225	0.7746
D(TREV(-1))	0.278130	0.323658	0.859335	0.3977
D(TREV(-2))	0.104448	0.347222	0.300810	0.7659
D(ECT(-1))	-0.384325	0.700786	-0.548420	0.0439
R-squared	0.986305	Mean dependent var		0.186466
Adjusted R-squared	0.924816	S.D. dependent var		0.147188
S.E. of regression	0.137696	Akaike info criterion		-0.830778
Sum squared resid	0.511928	Schwarz criterion		-0.043482
Log likelihood	39.52329	Hannan-Quinn criter.		-0.534513
F-statistic	1.345282	Durbin-Watson stat		2.021374
Prob(F-statistic)	0.235101			

Source: Research findings (2023)

The ECM findings for the fiscal and monetary policies on agriculture industry growth revealed that the ECT is -0.384 and its P-value is 0.044. The Error Correction Term (ECT) is fractional, negative and significant. Thus, the conditions for ECM are met. The speed of adjustment is 38.43%. This implies that the entire system of the model can get back at long-run equilibrium at a speed of 38.43% annually. Thus, there is system correction of disequilibrium to long run equilibrium. Simply said, the speed of adjustment towards long run equilibrium is 38.43%. Therefore, the all system can get back to long run equilibrium at the speed of 38.43%. The ECM term

is very useful for many practitioners including policy makers such as the central bank as they can analyze how fast their policies impact the economy. Furthermore, the findings indicate that there is no short run effects running from macroeconomic factors to agriculture industry growth. all the variables are insignificant in the short run as the p-values are above 0.05. The model was checked to ensure that it has no serial correlation and it is stable and the results are in appendix.

These tests of diagnostics of the estimates are used to prove the robustness of the results. The models passed the Breusch–Godfrey LM, Breusch–Pagan–Godfrey, the Ramsey RESET and the Jarque–Bera tests. The results imply the model is specified correctly with no serial correlation and heteroscedasticity, and the residuals are normally distributed. The cumulative sum plots (CUSUM and CUSUMSQ) were performed to verify that the estimated model is stable during the time frame and showed no structural breaks. The plots of CUSUM and CUSUMQ are used to examine the stability of the model. Both plots fall within the 5% significance level critical bound, indicating the stability of the model. Similar findings were obtained by Ntim-Amo *et al* (2022).

DISCUSSION

For monetary policies, the findings indicate that interest rate, inflation and money supply had a significant positive effect on agriculture industry growth. However, ECM indicated that there is no short run relationship running from fiscal and monetary policies to agriculture industry but due to the presence of cointegration, there was a long run relationship between fiscal and monetary policies and agriculture industry growth and the speed of adjustment towards long run equilibrium was 38.43%.

In recent years, a vast literature has appeared on the relationship between fiscal policy and long-run economic growth, Tilahun Mengistu, (2022). Governments use fiscal policies to adjust their level of spending and tax collection, often in a counter-cyclical manner, to affect the broader economy. By raising expenditures on the state, lowering tax income, or a mixture of the two, the administration can utilize stimulus spending to increase economic activity (Zhao *et al.*, 2022). Raising government expenditure generally boosts economic growth, either immediately by buying more products and services from the private industry or indirectly by giving money to individuals who could then spend it. Increasing individuals' expendable cash and spending more on goods and services are the two ways to stimulate economic growth by lowering tax collection, Wang *et al* (2023).

The results of the various regression analyses which were carried out using E-view 8.0 shows that total government expenditure has significantly affected the development of the agricultural sector growth in Tanzania, during the period studied.

The findings indicated that fiscal policies affects agriculture industry growth both in the short and long run. Fiscal policies include taxation and government expenditure. This study used tax revenues to represent taxation where the aim was to confirm whether when tax revenues are invested in agriculture development, they will lead to agriculture industry growth which the findings confirmed the presence of the strong positive and significant relationship among the variables implying that tax revenues affects agriculture industry growth in Tanzania. These findings are related to the theory of taxation which state that the proportion of tax levied on individuals should be based on the benefits derived from government activities. The higher the benefit enjoyed from the government activities, the higher the tax paid by the individuals.

The study also used government expenditure as the percentage of gross domestic product to represent government expenditure and the study findings indicated that government expenditure has a strong positive and significant relationship with agriculture industry growth in Tanzania. The result shows that when government increases their total expenditure, it will have a resultant incremental effect of the agricultural sector development. The relationship between the two variables are positive in nature, in the sense that an increase in one, leads to a corresponding increase in the other. Similar results were obtained by Ezu & Nwobia (2023).

According to Ogbanje & Ihemezie (2021), monetary policies affect agricultural economy in diverse manners. Monetary policies play a significant role in influencing agricultural growth within an economy. Agricultural growth refers to the expansion of the agricultural sector's output, productivity, and overall contribution to the economy. Monetary policies are strategies implemented by a country's central bank to regulate the money supply, interest rates, and credit availability in order to achieve certain economic goals. These policies can have both direct and indirect effects on the agricultural sector and they are interdependence in the sense that they affect each other. An implementation of one policy can lead to the change in another policy. For example, a change in money supply or interest rate can affect inflation rate.

Caldara et al. (2020) for example added that a huge increase in the monetary base could lead to an inflation breakout. Also, large bank reserves might make it difficult to meet funds target when that eventually becomes necessary. Similarly, Dhannur & John (2021) indicated that while a stern monetary policy stance tends to adversely affect investments and subsequently the exports, a growth-oriented monetary policy regime would accelerate investments increase export volumes. In the same line Okanya & Paseda, (2020) noted that monetary policy focuses on the control of the quantity of money that is available in an economy at a time as well as the channels through which money is supplied. By regulating money supply, a central bank seeks to influence macroeconomic factors such as inflation, the rate of consumption, economic growth, and overall liquidity. In addition to modifying the interest rate, the central bank of a country may buy or sell government bonds, regulate foreign exchange (forex) rates, and revise the amount of cash that the banks are required to maintain as reserves.

Ogbanje & Okpe (2022) states that central banks often use interest rates as a tool to control inflation and stimulate or dampen economic activity. Lower interest rates can encourage borrowing and investment, which can positively affect agriculture. Farmers might be more inclined to borrow for modernizing equipment, expanding operations, or adopting advanced farming techniques. This, in turn, can lead to increased agricultural productivity and growth. High interest rates for example, which invariably leads to high credit costs, have the potential to affect agricultural growth. Hossin (2020) investigated the link between interest rate fluctuations, financial development, and agricultural growth in Bangladesh using an annual time-series dataset from 1980 to 2014 to examine the causal link between financial development and economic growth and it was demonstrated that the link between deposit rates and economic growth is bidirectional. He also indicates that a deregulated deposit rate of interest will raise financial depth and eventually enhance the economic growth of Bangladesh. These findings are backed up by the results of Ochalibe et al. (2019), Kamenya et al. (2022), and Islam (2020), who discovered that interest rates have a considerable impact on an economy's agricultural development.

For inflation, the findings indicate that for a one-unit increase in inflation rate, the estimated average decrease in agriculture industry growth is approximately 0.20 units and it is significant at 0.001 in the short run. Effective monetary policies strive to control inflation. Moderate inflation can be beneficial for agricultural growth, as it provides a price incentive for farmers to produce more. However, excessive inflation can erode purchasing

power and disrupt economic stability, potentially affecting the agricultural sector negatively.

Other similar studies like that of Ezu & Nwobia (2023) showed that exchange rate has a strong positive impact on the economy.

CONCLUSION

The study noted and appreciated the importance of the agriculture as the backbone sector of Tanzania and economies of other developing countries and that it continues to assist several African nations in surviving and thriving (Ariom *et al.*, [2022](#); Gusev & Koshkina, [2022](#)). The agriculture sector employs around 70% of Africa's workforce and despite this, Africa's agricultural development falls behind that of other continents (Bouët *et al.*, [2022](#); Daum *et al.*, [2022](#); Suri & Udry, [2022](#)). Concern about sustainable agricultural growth is a pressing issue of development (Serova, [2022](#)). Ngong *et al* (2022) for example researched on the great contribution of the agricultural sector to the economic growth makes agriculture a vital component for countries' growth and development ([World Bank, 2020](#)). They concluded that agricultural productivity is still lagging in many African countries with huge proportions of land uncultivated and high unemployment. Africa's value added per worker also lags behind compared to other world regions. This implies that there is a need to raise agricultural productivity to achieve sustainable economic growth.

Basing on the study findings, this study draws the following conclusions, first that fiscal policies are effective to crop production, livestock production and agriculture industry growth both in the short run and in the long run. Second, that a few monetary policies have a significant effect on crop production, livestock production and agriculture industry growth. Thirdly, that a combination of both fiscal and monetary policies has no short run effect on agriculture industry growth but it appears that monetary and fiscal policies can lead to long run agriculture industry growth.

The study recommends that increasing budgetary allocation to agricultural sector in order to enhance the speed at which the sector grows as well as managing the tax system effectively in order to increase tax revenues will go a long way in the development process of a nation. The Government must be keen in the implementation, management and supervision process of her enacted fiscal policies in order to realize short term and long-term crop production and agriculture industry growth. The findings are relevant to stakeholders, and policy makers as they throw more light on the role of fiscal

policy on agricultural output over the years for the purpose of providing evidence-based recommendations on how fiscal policy can further be improved to accelerate the growth of agricultural output in Tanzania.

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Impact of Human Resource Planning on Construction Project Completion in Zanzibar

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Abstract

The study examined the impact of Human Resource Planning on construction project completion in Zanzibar. The quantitative research approach and descriptive research design used in this study. We collected data from a sample of 180 by using the simple random probability technique that was conducted at Zanzibar. The data collected through the questionnaires and SPSS used for data imputation the descriptive statistics that computed to describe the data collected with inferential statistics at 95% confidence level were used. The findings show that HRP in performance management influenced function on the increased effectiveness and accountability in the project management. The findings also revealed that the HRP in performance management was a significant and positively correlated with construction project completion. The study concluded that performance management influenced to development of managerial leadership and coaching skills in construction project implementation. This study recommended that the construction organization and its clients must understand the awareness and flexibility of employees dynamically and competent retention strategies for knowledge transferred.

Keywords: *Human Resource Planning, Construction Project Completion*

INTRODUCTION

Most of the construction companies in worldwide face a lot of restrictions on human resources such as “workmanship defects”, delay and cost overrun issues in their project’s completion. Human resource planning for construction is managing ways in human resource with regarding the growing of the construction company for facilitating the various task in achieving its goals. (Muntu *et al*, 2021). Globally, a project is said to be successful on timely completion of the construction according to the targets (Ashiru and Ashiru, 2019).

HRP improve organizational efficiency, engagement of employees and work quality for the considering such tasks HR preparation, growth compensation management, human resources management, employee training, strategic recruiting, efficiency, health care, employee satisfaction, worker relations as well as provision of employee services (Khan & Abdullah, 2019).

Apart from the HRP increase the performance management due to the presence of the national and foreign markets that lead the organizations in hiring and retaining highly talented workers. Most companies are dependent on their HR team that hold to become the competitive market (Collins, 2021). Therefore, HRP is strongly related to the efficiency of the construction project. In addition to that, HRP and employee retention and engagement in construction projects has been increasingly recognized as crucial. Strategic HRP ensures that staffing needs are met, skills are aligned, and employee engagement is fostered, all of which contribute to higher retention rates and successful project outcomes.

Effective HRP involves forecasting future workforce needs, skill requirements, and potential gaps. In the construction industry, where projects are often temporary and require specialized skills, strategic HRP is crucial for retaining talent. By aligning HRP with project demands, companies can ensure that they have the right people in place, reducing turnover and improving job satisfaction. But, the most and basic constraints to meet the project goals is the construction delay due to lack in expert in the project teams, stakeholders and the contractors (Gashaahun, 2020).

Moreover, there are financial problems or difficulties, unwillingness or inability to sustain operations over long periods of non-payment, inadequate site management, political interference, adequate access to finance and delayed payments for completed work and an unrealistic program of works (Works Schedule) that lead delays in construction projects in Tanzania (Kullaya et al, 2022). Construction projects often involve varying team sizes and skills over time. Effective HRP helps to manage these fluctuations by anticipating staffing needs and mitigating potential disruptions. This proactive approach supports employee retention by minimizing periods of uncertainty and ensuring consistent work opportunities.

The most of construction projects (both public and private projects) face delay in completion which hinders the project performance and resulting into disputes or sometimes contract termination (Zanzibar Housing Corporation, 2022). According to Heever, (2021), the construction delaying cause from different parties in the construction project such part as contractors, clients and external parties. For contractors some of causes as capital difficulties, lack of equipment, work-site or productivities, technologies and professional, project planning, supervision and site managements. The clients have some following causes as of the drawing, overall structures, various orders, financial constraints, slow decision making and deficient in coordination. And lastly, the external factors such as laws and regulation, government permit, shortage of construction materials, weathers and price fluctuations.

Additionally, this is also the factor that is affecting the Zanzibar economy in wastage of resources and projects cost increased. The Revolutionary Government of Zanzibar (RGoZ) got challenges to meet target such as project of Electronic M&E System that cost TZS 27,801,144 not operate due to failure of conducting feasibility and HR (user requirements of the business process). Moreover, it is also reported that there is a lack of HRP and skills in M&E that cause TZS 7,955,397 fail to complete the Ward development project (CAG, 2022) that affect the Zanzibareconomy in wastage of resources and projects cost increased that challenges to meet target.

LITERATURE REVIEW

The theory used in this study is agency theory that includes the principal and agent to reach the project target. Jensen and Mackling developed the Agency theory in 1976 define an agency relationship as “a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent”. The theory assumes that both the principal and the agent are utility maximizer with different interests and that because of information asymmetry.

Nwajei et al, (2022) reported that agency theory has been used most of time to model project relationships and contracting situations where an owner assigns a contractor and/or a consultant to deliver the project on its behalf that the principal is always described as tasked with monitoring the actions of the agent (checking).

It is significant in managing projects and indeed emphasizes on the need of taking the interest of the stakeholder. The construction company requires to have competence team with considering HRP aspect to reach the project target for better keeping relation to their client. Agency theory is applicable to the study in ensuring that resources such as time, finance, human and materials are utilized at the best.

While, the empirical reviews show the different ways of analyzing methods, assess findings, evaluate quality and draw conclusions. Ashiru and Ashiru (2019) conducted research of the sustainability of human resource planning for construction projects using quantitative approach in Nigeria. The aim is to examine the sustainability of HRP for construction projects to justify the aforesaid statement. The authors used the descriptive and inference statistical analysis. The structured questionnaire used to select participants of top management who hold office and making decision to the organization. The results found that HRP improved to minimize the delaying, repeated errors and build team which provided the strong decision which provide a lot of change during the project implementation.

Raghuwanshi (2023) explored the impact of work-life balance on employee retention and organizational performance in Delhi. With aims is to investigate the association between work-life balance policies and employee retention and how they enhance organizational performance in the Is in Delhi. It has been determined in-din-depth and this determination, the explored literature, and past studies have evidenced that the work-life balance has a significant influence on employee performance as well as on employee retention. This study used the primary quantitative, an 80-sample size contributed the perception with the context of the organizational performance. It has been noted that work-life balance is significantly related to employee retention and organizational performance. He concluded that the employees are being promoted via offering balanced work life.

Pariikh&Phugat (2019) conducted the research in assessing the performance management in road construction project in India. The researcher used the interesting trend in the business among global organizations in the technology and consulting space. The results found that there was increased in encouraged the Indian counterparts to critically evaluate the current performance processes and make modifications and to accomplish complex tasks by multidisciplinary teams in the construction

industry. The researchers concluded that the success of a project depends upon how well the personnel can work effectively to accomplish the objectives within scope, cost and quality constraints. Performance management is about directing and supporting employees to work as effectively and efficiently as possible in line with the needs of the organization.

RESEARCH METHODOLOGY

The study applied post-positivism research philosophy that holds an objective that reality exists in the research process independently. It can help to measure, control, predict and test in systematic from the various observation or variable. With this philosophy, the researcher showed the reality from quantitative information or data that gave or provided by the respondents.

The descriptive research design was applied to conduct the study. The target population was 328 staffs were considered with sample size of 180 that was conducted at Zanzibar. The research was conducted in Zanzibar in public offices deal with the construction services and private offices including consultants and contractors to get more information on research topic.

The Simple Random probability technique used in this study of research. The variables investigated using questionnaire to determine the influence of the independent variables on the dependent variable. A questionnaire was preferred by respondents due to anonymity. The data analysis guided by the objectives of the research and their measurement. Statistical Package for Social Sciences (SPSS) version 20.0 used as the tool of analysis in production of tables, descriptive statistics and inferential statistics. It meets the underlying assumptions the regression model in testing the variables.

The correlation between the independent and dependent variable and the significant P- values and inferential analysis used to make judgments. The Correlation coefficients provided the degree and direction of relationships for measuring the relationship or co-variation of two or more dependent variables. The statistical calculation of such correlation done and expressed in terms of correlation coefficients. A multiple regression model utilized to show the connection between the dependent and independent variables. The multiple regression model of the form;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where: Y= Construction Project Completion β_0 = Constant β_1 to β_3 =Coefficients X1= HR training X2= staff anticipated changes X3 = workforce requirements ε =Error term. Inferential statistics will be conducted to determine the relationship nature between variables. Data was interpreted with the help of significance P-values; if the P-value is less than 0.05, the variables deemed to be significant to give an explanation on the changes in the dependent variable.

This study described and examined the relationships within the collected data by a multiple regression analysis. All parametric test assumed some certain characteristics about data, also known as assumptions. Violation of these assumption may change the accuracy of the regression estimates and interpretation of the result. The linearity, normality, homoscedasticity, collinearity, and autocorrelations considered in statistical analysis.

The study used the test covers all relevant aspects of the subject matter to ensure the validity on a test or instrument measures what it is intended to measure. The consistency and stability of a measurement over time and across different conditions at different times for the reliability results. Ethical considerations involve the moral principles guiding research and practice to ensure respect, fairness, and integrity.

Measurement of Research Variables

The independent variable was HRP while the dependent variable was construction project completion. Table 4.1 presents how the variables operationalized and measured.

Table 4.1: Operationalization of Variable

Variable	Type	Operationalization	Indicator
Construction Project Completion	Dependent variable	Utilization of Services or products	<ul style="list-style-type: none"> • Product and Services Satisfaction • Construction Cost
HR Training Programs	Independent variable	Type of HR Training Programs	<ul style="list-style-type: none"> • HR Training Budget • Presence Project Monitoring
Performance Management	Independent variable	Level of Human Resource Utilization	<ul style="list-style-type: none"> • Presence of HR Evaluation Process • Awareness for Improvement
Employee Retention and Engagement	Independent variable	Level of the Competency	<ul style="list-style-type: none"> • Conducive Working Environment • Fulfilment of the Project's Mission

Source: Researcher, (2023)

RESULTS AND DISCUSSION

HRP in Operation Management with its Implementation

This study wanted to measure from the respondents the understanding of HRP on operational management with its implementation in construction project. The results found out that most of the respondents had understanding on operational management with its implementation in construction project. According to Ngo et al, (2019) there was lack of awareness on the operational, affordability design and techniques provided and became the major challenge for the building construction. Additionally, the skill and knowledge needed in designed construction project for providing more and innovation construction project.

In addition to that, there were regular operational evaluations on the construction project that increase the client target which led HRP performance facilitation. According to the Ngo et al, (2019) among the major factor to be considered in construction project was the operational controlling process. It required to have regular evaluation with planning, schedule and cost of the project understandable. The regular operational evaluations were average, high and major factor on the construction (Hamza et al, 2019).

On other side, the construction project evaluation systems had face various obstacles like partial implementation and not fully most of time, insufficient information to stimulate renovation and delivering low quality (Guerriero et al, 2019). Therefore, the construction project evaluation systems required to play an active role in monitoring for higher improvements to be made on promoting construction sustainability.

However, it requires to increasing the awareness of the area of improvement for better HRP performance management in construction. Kassem et al. (2019) reported that there were huge amounts of money spending on public and private infrastructure that required potential awareness for improvement in construction project resulting in efficiency and productivity on the delivery of construction projects becoming strategic priorities in any countries. However, the poor and less improvement in construction project caused major factors of failure in construction.

In addition, most of the countries had project gap faced by improving the performance of the construction industries that had lack in innovation of the project, particularly in its adoption of digital technology. Thus, there

were needs and increasing the awareness of the area of improvement in construction for the transformational process and learn how to adapt with a stronger drive (Woodhead et al. 2018).

Management Functions

According to Anwar et al, (2021) the public institutions often try to progress their performance by renewing products and procedures, minimizing expenses and improving quality. The table 5.1 found that 43 (23.9 percent) of the respondents said the effect of the performance management function increased effectiveness and accountability in the project management (IEAPMGT). In addition, the management accountabilities were among the sources of the recruitment the skilled workers, measured to enhance safety and reduce other construction project risks (Albert et al, 2021).

Additionally, the Table 5.1 portrayed that 37(20.3 percent) of the respondents said the effect of the management functions helped employee to align their achievements with organization objectives (HEA00). Apart from that, 36 (20 percent) of the respondents said the effect of the management functions could boost productivity through improve performance (BPTIP). While Albert et al, (2021) reported that construction projects had adverse effects included significant delays on projects, reduction in productivity rates, material price escalations and inability to secure materials on time.

Also, in the table 5.1 reported that the effect of the management functions developed reward mechanism that improve accomplishment the construction project tasks (DRMIA) according to 31(17.2 percent) of the respondents their responded. 19(10.6 percent) of the respondents mentioned that the effect of the management functions caused to have proper working condition in the stability of the organization (PWCSO). Lastly, the effect of the management functions led to develop managerial leadership and coaching skills in construction project implementation (DMGTLCS) according to 14(7.8 percent) of the respondents mentioned.

The implementation of the construction project improved the communication and management skills among the among business partners at any construction stages and the overall reduction in the cycle time as well as the life cycle cost of a project (Chan, 2019). Apart from that Mosallaeipour et al. (2018) reported that it highly required the human

intervention and coaching in working places to the construction project implementation to enable the project flexibility and meeting the current customer satisfactions.

Table 1: Performance Management Functions

Description	Frequency	Percent
DRMIA	31	17.2
IEAPMGT	43	23.9
BPTIP	36	20
DMGTLCS	14	7.8
HEAAOO	37	20.6
PWCSO	19	10.6
Total	180	100

Source: Field Survey, (2023)

Descriptive Statistics on the Performance Management

From the table 5.2 showed that performance management had means 1.36 and its standard deviation had 0.48 according to 180 of the respondents. The results also showed that performance evaluation had means 1.38 and its standard deviation had 0.48 according to 180 of the respondents. The awareness of the area of improvement got the means 1.31 and its standard deviation had 0.46 according to 180 of the respondents. Lastly, the table 4.17 showed the results of performance management function had means 3.22 and its standard deviation had 1.66 according to 180 of the respondents. Thus, the performance management, the performance evaluations, the awareness of the area of improvement and the performance management function that, there were strongly agreed on the performance management.

Table 2: Performance Management

Description	N	Mean	Std. Deviation
Performance Management	180	1.36	0.95
Performance Evaluations	180	1.38	0.98
Awareness of the Area of Improvement	180	1.31	0.92
Performance Management Function	180	3.22	2.66

Source: Field Survey, (2023)

Inferential Analysis

This study also tested, investigated with also measure and describe the strength and direction of a relationship between two quantitative, the correlation being more about association and regression about prediction

and understanding relationships. The continuous variables and Pearson's correlation coefficient (r) is a measure of the association strength between the two variables. The tests of the possibility of multicollinearity that allows determining the overall fit of the model and the relative contribution of each of the predictors to the total variance explained, presents the model summary, analysis of variance and the coefficients of the independent variables.

Correlation Analysis Results of Dependent and Independent Variables

The results of Table 5.3 revealed the result of Pearson's Correlation Coefficient between variables. It was found that the construction project completion (CPC) has significant correlation ($r=0.151^*$, p value < 0.05) with the performance management (PMGT). Also, it was found that the PMGT has significant correlation ($r=0.235^{**}$, p value < 0.05) with the HR training (HRT). And finally, it was found that the employee retention and engagement (ERE) have insignificant correlation ($r=0.2^{**}$, p value > 0.05) with the HR training (HRT). This indicated that the employee retention and engagement had direct effect on the construction project completion timely.

Table 3: Correlation Analysis Results

Variables		CPC	PMGT	HRT	ERE
CPC	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	180			
PMGT	Pearson Correlation	.151*	1		
	Sig. (2-tailed)	0.04			
	N	180	180		
HRT	Pearson Correlation	0.11	.235**	1	
	Sig. (2-tailed)	0.13	0.00		
	N	180	180	180	
ERE	Pearson Correlation	0.05	-0.14	0.02	1
	Sig. (2-tailed)	0.50	0.07	0.80	
	N	180	180	180	180

** . Correlation is significant at the 0.01 level (2-tailed)

Source: Field Survey, (2023)

Testing Multicollinearity

This study used the multiple regression models to predict the value of a specified dependent variable based on the values of two or more independent variables whether exist or have a high correlation with each other. It can also happen if an independent variable is computed from other

variables in the data set or if two independent variables provide similar and repetitive results. The results of the findings were presented in the table 5.4.

Table 41: Multicollinearity Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
The performance management	0.93	1.08
HR Training	0.94	1.06
The employee retention and engagement	0.98	1.02

a. Dependent Variable: the construction project completion

Source: Field Survey, (2023)

The Variance Inflation Factor (VIF) value of 4 or more and a tolerance value of less than 0.2 presents a possibility of multicollinearity. The findings in table 5.6.2 indicated that the tolerance values were above 0.2 and that the VIF values were below 4 indicating that there was no possibility of multicollinearity between variables. Thus, the regression analysis was used to show the relationships between the dependent and independent variables.

Regression Analysis

Regression analysis is also used to understand which among the independent variables are related to the dependent variable and to explore the forms of these relationships. Also, it was used to examine the relationship between the dependent variable (effective and efficiency).

Model Summary

The coefficient of determination presented that mentioned the degree to which variations in the dependent variable can be portrayed by changes in the independent variables. A percentage of variation in the dependent variable that is described by all the independent variables also be explained as. The results were presented in Table 5.5.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.830 ^a	.634	.517	.47753

a. Predictors: (Constant), ERE, HRT, PMGT

Source: Survey Data, (2023)

The independent variables contributed to 51.7% on dependent variables as represented by the adjusted R². Consequently, the other factors not considered in this research contribute to 48.3% on construction projects.

The coefficient of correlation value of 0.83 indicates that there was a positive and strong correlation between independent and dependent variables.

Analysis of Variance

The study required to establish the overall significance. The results were presented in the Table 5.6.

Table 5.6: Analysis of Variance

Indicators	Sum of Squares	df	Mean Square	F	Sig.
Regression	137.393	3	3.464	2.037	.011
Residual	40.135	176	0.228		
Total	141.528	179			

Source: Survey Data, (2023)

The findings in the Table 5.6 above showed that the overall model was significant. The overall model was significant as shown by a calculated F statistic of 2.037 (p value 0.011). The calculated F statistics was large than the critical F statistic. The findings indicated that the independent variables are good predictors of dependent variables.

The Regression Coefficients

The regression coefficients of independent variables in this study was presented in Table 5.7 below. The coefficients mentioned the direction and change of dependent variable because of change in the independent variables.

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.096	.120		9.146	.000
PMGT	.041	.022	.142	1.845	.047
HRT	.019	.019	.077	1.011	.031
ERE	.018	.020	.068	.914	.036

Source: Survey Data, (2023)

As per the SPSS generated table 4.4.3.3above, the equation

$$Y = \beta_0 + \beta_1 \text{PMGT}_1 + \beta_2 \text{HRT}_2 + \beta_3 \text{ERE}_3 + \varepsilon$$

$$Y = 1.096 + 0.041\text{PMGT}_1 + 0.019\text{HRT}_2 + 0.018\text{ERE}_3$$

Using the regression equation above, the dependent variable of the construction project completion (CPC) was 1.096 when all independent

variables, such as performance management (PMGT), HR training (HRT), and employee retention (ERE) were involved.

The results in Table 5.7 above indicated the result was significant and PMGT showed positive significant effect on construction project completion since P value was ≤ 0.05 . This implies that an increase in the performance management (PMGT) lead to construction project completion (CPC). Bitamba (2020) reported that the performance of the construction project depended on the availability the construction resources during the project implementation. Also, author mentioned that the project management team performance on the day-to-day decisions at the site was found to be the most important item affecting the factors related to project management. Furthermore, the performance management showed positive in setting the long-term strategies on the construction project completion to maximize the opportunities and alleviate risks (Ahmed, 2018). Contrary the project performance management and project success which had low coefficient with the validation of only the positive influence on project completion successfully. That was to say, it required to the clients and construction company to keep more consideration on the risk management practices in the project implementation.

Apart from that, the HR training (HRT) also had positive and significantly since the P value was ≤ 0.05 . The results indicate that presence of the quality trained staff, leadership management, and previous experience in the construction project yield the highest level of productivity and improved an understanding of the lead time required (Bitamba, 2020). In addition, the HR training helped to focus on creating a competent, experienced and professional workforce based on skills, upgrading and knowledge as well as on the enhancement of their skills and abilities that is the most important for the construction projects. Moreover, it also helps to participate energetically in the measurement process and activities which dramatically enhance their construction performance (Ahmed, 2018). The present of the strong human capital and trained base to enable them in stimulating innovation for a systematic and long-term strategy to fulfill construction objectives effectively (Jayabalan et al., 2020). Lasisi et al. (2020) highlighted the role of training and development in the organization that enhances the level of construction innovation development thereby contributing and enhancing employee proactivity.

In summing up, the employee retention and engagement (ERE) had positive and significantly effect on construction project completion with a

P value ≤ 0.05 . Ganesh (2023) reported that the employee retention and engagement are the key determinant of long-term and powerful secret success in construction projects for having the valuable talent. Also, the author mentioned that they were crucial for the productivity, continuity, and the development of a positive work environment in construction activities by fostering job satisfaction, loyalty, commitment, and a supportive work environment.

Further, employee retention and engagement had a significant and a positive effect in construction project performance. This result indicates that where highly employee retention and engagement was utilized, the effect of competency manpower in the construction industry was great and very visible in it ends products. Realization of projects completion for handling the technical phase of such contract early that helped to raise efficiency, decrease of accidents, less management, increased organization stability that quality and availability of skilled project team is considered a vital factor in the effectiveness of the project performance (Paul and Kanu, 2018).

CONCLUSION AND RECOMMENDATIONS

The study aimed at finding out the evaluation of the influence of Human Resource Planning on construction project completion in Zanzibar. Based on the results of this study found the following conclusion.

The study concluded that the effect of the performance management influenced function increase effectiveness and accountability in the project management so that it helpsemployees to align their achievements with organization objectives on the construction project completion. Additionally, the study concludes that the performance management influenced to develop managerial leadership and coaching skills in construction project implementation.

The performance management influenced function effect on the construction project completion as it increases effectiveness and accountability, helped employee to align their achievements with organization objectives. The study recommends that there is a need the construction organization to keep more effort on the construction implementation with the project performance management for boosted productivity and the stability of the construction organization sustainability. Additionally, the performance management function improves performance on the construction project completion by setting

individual and team goals which are aligned with the project and setting goals, monitor progress, and offer feedback.

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Woodhead et al. (2018) Digital construction: from point solutions to IoT ecosystem.

The Impact of COVID-19 on the Performance of SMEs in Mwanza Tanzania

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Abstract

COVID-19 left many businesses stagnant with others falling for bankruptcies. Some businesses survived the shock but struggled to normalize their performance since consumers' confidence did not fully recover. This study examined the impact of COVID-19 on the surviving businesses in Tanzania by using a sample of 125 owners of SMEs from Mwanza City. Data was analyzed using regression analysis. The findings revealed that COVID-19 negatively impacted SMEs in terms of financial and operational performance while impacting positively on innovative performance as it forced them to increase the use of technology for marketing and advertisements, buying, and making payments through mobile money services. This study realized for many SMEs the prominence of adopting digital tools and online platforms to remain in operation even in times of market shocks, lockdowns, and restrictions. The findings are relevant as they inform stakeholders on how the COVID-19 pandemic affected businesses; which calls for SMEs to learn diversifying their income streams to mitigate risks associated with market disruptions. The study recommends government support and strategies to help SMEs improve their businesses which include monetary aid, tax relief, and subsidies including programs to facilitate digital adoption and transformation. This change not only would help them remain buoyant during the market shock but also put forward their businesses for impending development in a rapidly changing digital landscape.

Keywords: *COVID-19; financial performance, SME Performance, innovative performance*

INTRODUCTION

In December 2019, the coronavirus was identified in China causing severe respiratory disease originating from SARS-CoV-2 (WHO, 2020). This novel killer disease created shocks to individuals and governments. As of 1st May 2021, confirmed cases of COVID-19 were 4.5 million and 121,000 deaths from sub-Saharan Africa (United Nations Economic Commission for Africa, 2020). Meanwhile, for Tanzania, the report showed 26,483 cases and 734 confirmed deaths (OECD, 2020). As a result, many countries closed their borders, individuals were locked down and flights were canceled; causing blocks in the movements of goods and services.

In Tanzania, COVID-19 was reported in March 2020 when the first patient was discovered at Kilimanjaro Airport. Subsequently, the Tanzanian government-imposed restrictions on international travel, requiring travelers to present a negative COVID-19 test upon arrival (MoH, 2020; WHO, 2020). COVID-19 as a killer disease left permanent marks and tears by losing millions of lives worldwide while leaving businesses stagnant with many filing for bankruptcy (OECD, 2020). For instance, J. Crew, Neiman Marcus, Hertz Global Holdings, Pears Import, Dean & DeLuca, and Century 21, all filed for bankruptcies due to a decline in travel, social distancing measures, and debt pressure aggravated by the pandemic (Bloomberg, 2020). However, some businesses survived the COVID-19 shock but still struggling to go back to the original level since consumers' confidence did not fully recover. This phenomenon justifies the need to examine the impact of COVID-19 on the surviving businesses and to find better strategies that will enhance their current and future performance. This becomes even more important for Tanzania where little was then known about how COVID-19 affected businesses and what was the progress on the survived businesses.

Tanzania is a developing country where nearly 76% of the workforce operates within the informal sector (NBS, 2019). This figure highlights the important role that informal employment plays in the country's economy, which suggests that the owner of the household must go outside to look for daily bread through self-employment in small businesses or working as a casual laborer. Second, most people in Tanzania buy goods and services through the physical exchange of goods and services (on a cash basis). Since COVID-19 imposed social distancing rules, some SMEs and their customers feared the exchange of goods for cash (UNCTAD, 2022). Initially, this problem caused owners to close down their businesses as people were required to stay at home. Until the President of the Fifth Phase Government, the Late John Pombe Magufuli allowed minor movements in the country, consumer confidence partially normalized. However, it did not fully recover as some SMEs had completely closed their businesses due to failure to pay daily expenses such as rent, wages, and bills (Saidu and Aifuwa, 2020). The closure of many businesses resulted in a negative impact on the micro economy because the business chain is inter-twined between consumers and providers of goods and services.

Prior studies examined the impact of COVID-19 by focusing on determinants of macro economy such as import restrictions, export barriers, increased tax on import duty, and unemployment (Nguyen and Luu, 2020; Kaur and

Kumar, 2020; Omar et al., 2020; Lu et al., 2020). Other studies examined the pre-and post-Covid periods to determine a statistical difference in various classifications of SMEs by modeling factors for technology adopters and nonadopters in COVID-19 periods (Dirga et al., 2021; Bartik et al. 2020; Kalemli-Ozcan, et al., 2020; OECD, 2020; Dai et al., 2020; Nurunnabi et al., 2020; ECCP, 2020; Juergensen et al, 2020). Through a modeling equation, the reported findings were inconclusive. However, one common phenomenon was reported as the increased standard of living, food insecurity, and lowering global GDP (OECD, 2020; Dirga et al., 2021).

Few studies have examined the impact of COVID-19 on SMEs based in Asian continents, Europe or America. For example, in Vietnam (Nguyen and Luu, 2020); Sri Lank (Robinson and Kendatharan, 2020); European countries (Jill et al 2020; ECCP, 2020; Bartik et al., 2020); Pakistan (Shafi et al, 2020 &Kumar and Ayedee 2021), China (Lu et al., 2020 &Dai et al. 2020; Sunet. al, 2021 & Hao et al., 2020) and Malaysia (Omar et al., 2020). These studies identified five main areas of how COVID-19 affected SMEs, namely, the health of the employees, absenteeism at workplaces, reduction in business volume, and scarcity of raw materials (Bartik et al., 2020; OECD, 2020). For example (Bartik et al. (2020) found that COVID-19 affected negatively the health of employees causing absenteeism at workplaces which affected the business operations and financial stability of the firms. COVID-19 also caused financial difficulties, a decrease in turnover, and decreased consumer demand for goods and services (OECD, 2020). A few studies that explored the problem in Africa were from Nigeria (Saidu and Aifuwa 2020); which makes Tanzania to be less explored and has scanty literature. Therefore, this study examined how COVID-19 affected the surviving businesses by focusing on Mwanza City. The findings revealed that COVID-19 negatively impacted SMEs in terms of financial performance and operational performance; while it impacted positively in terms of innovative performance.

LITERATURE REVIEW

COVID-19 which was declared a global pandemic by the World Health Organization (WHO, 2019), has several infected people, more than 45 million, and caused more than 1 million deaths as of the end of October 2020 (OECD, 2020). Through the human-to-human transmission of Covid-19 restrictions to movements became mandatory which led to the lockdown of communities and hence automatic business closures (Akpan et al, 2020). The economic cost of the COVID-19 pandemic was reported as more severe than

any such historical pandemic ever occurred in the world. It is estimated that the global output dropped by \$77 Billion of global GDP (Raga, 2020). More so, the economic downturn was also reflected in individual countries as well especially developing countries such as Tanzania. In Tanzania, COVID-19 initially resulted in people fearing to move to marketplaces to buy necessities and other goods and services. There was no official lockdown but many people chose to stay at home to follow other measures from neighboring countries and elsewhere. This partial lockdown resulted in low money circulation and hence it affected business operations and financial stability.

Diffusion of Innovation (DOI)

DOI is one of the oldest models of technology which was started by Rogers in early 1962 and later on expanded by Rogers (2003). The model provides explanations related to how, why, and the extent of spreading new ideas or innovation over time in different cultural settings. DOI defines diffusion as the progression by which technology is transferred through specific channels in a social structure by considering four elements, namely (1) the presence of new technology, (2) proper dissemination channels, (3) time, and (4) social system (Rogers, 2003). Specifically, DOI states that individuals and groups will decide to adopt innovation based on five conditions, namely (1) relative advantage, (2) comparability, (3) complexity, (4) triability, and (5) observability. Relative advantage is the point where new technology is perceived as superior to the old norm it replaces. Compatibility is the extent of value generated from the use of innovation. SMEs that recognize and implement innovations with clear advantages can improve their operational performance by streamlining processes, reducing costs, and enhancing product quality (Rogers (2003). Complexity is the extent of difficulty or ease in understanding and or using innovation. Simpler innovations are more likely to be adopted and can lead to quicker improvements in operational performance. Meanwhile, triability is the extent to which the innovation can be tested before the adoption takes place, and observability is the extent how which the new technology is perceived as providing concrete outcomes.

Rogers (2003) pointed out four main groups of adopters of innovation to include (1) innovators, (2) early adopters, (3) early majority, (4) late majority, and (5) laggards. During COVID-19 Businesses that quickly adopted innovations such as cashless payment services, online services, and remote work solutions were able to maintain their business and hence improve their performance. Similarly, businesses that found new

technologies compatible with their existing operations and easy to implement were more likely to adopt them quickly and hence they remained in operations. Meanwhile, the late majority and the laggards are the risk-averse who take too long to adopt change for fear of losing the invested cash. DOI becomes the ideal theory to underpin this study as it details the actual scenario of the COVID-19 pandemic and how SMEs lost their customer base due to delays in diffusion to technological changes.

Hypothesis development

Financial performance

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues (Bartik et al., 2020). Financial performance has also been used to mean a measure of a firm's overall financial health over a given period. Determinants of financial performance include gross profit margin, net profit margin, working capital, current ratio, quick ratio, leverage, debt-to-equity ratio, and inventory turnover (Wood and Sangsters, 2018). As businesses grow, these determinants also report significant positive increases over time. The COVID-19 pandemic affected the determinants of financial performance. In the pandemic period and post-COVID-19, SMEs have suffered low consumer confidence and low purchasing power as a result it negatively affected the financial stability of the firms (Nguyen and Luu, 2020; Bartik et al., 2020). This was mainly attributable to unemployment which caused customers to spend less and to change their consumption patterns (Omar et al., 2020). When consumers' purchasing power falls, it adversely affects the main components of working capital in a typical profit-oriented business. This means that falling in selling volume will result in a decline in accounts receivable, quick ratio, and inventory turnover ratio; as goods will continue to exist on the shelves (Bartik et al., 2020). As a result, working capital will continue to dwindle resulting in low borrowing capability of the firm. Two years after the COVID-19, most SMEs have recovered their business but still have low borrowing capacity, low gross profit margin, and small working capital circles (Nguyen and Luu, 2020). This means consumer confidence in using cash to buy bulk goods and services takes time to normalize. Therefore, this study puts one hypothesis as follows:

H1: COVID-19 negatively affected the financial performance of SMEs

Operational Performance

Operational performance is defined as the synergy between various units of the organization and the ability to produce greater output jointly (Dai et al., 2020). Operational performance has also been defined as the level where all business departments collaborate to accomplish specific business goals (Dai et al., 2020; Lu et al., 2020). Generally, operations processes facilitate greater efficiency of the firm. Determinants of operational performance include on-time delivery of goods and services, accurate budget deliveries, and quality outputs (Ravindra and Padmakanthi (2021). Good operations can be streamlined to eliminate wastage at every stage of operations; as a result, cost is minimized, production is streamlined, and value addition over time (Lu et al., 2020). In a typical business environment, there are three main departments; namely, production, sales and distribution, and administration. Due to the pandemic of COVID-19, some of these departments were merged as a means of cost-cutting strategy. Since some employees were terminated due to a fall in revenue and general financial instability, the result of this is low-performance levels in all departments. Operational performance also includes consumption demand of products, cost or merchandise, access to raw materials, and marketing (Nguyen and Luu, 2020). Hence, COVID-19 has negatively affected these items as the cost of import increased during the COVID-19 period and never went down in post-COVID-19 periods, especially for Tanzania. The study therefore hypothesis that:

H2: COVID-19 negatively affected operational performance of SMEs

Innovative Performance

Innovation performance (IP) is the ability to transform technological processes inputs into outputs, thus resulting in innovation market success, product improvements, and value addition (Ravindra and Padmakanthi (2021). In a typical business model, innovation is measured in terms of market expansion (cross border), collaboration, creativity, cost-cutting mechanisms, time-saving, on-time delivery, and value addition of products (OCCP, 2020). The announcement of the COVID-19 pandemic which restricted human-to-human contact, made SMEs quickly adopt new technologies than ever before. Colleges started emphasizing online classes, governments adopted e-governments, and many businesses adopted e-commerce technologies, and never went back to manual processes. Studies have found out that during the pandemic, e-commerce trend adoption among emerging markets was too aggressive to the extent that users of technology of mobile e-commerce and e-commerce adoption by October 2020 had reached

78 percent (Deloitte, 2021). In Tanzania, which was the focus of this study, many SMEs started using mobile banking as a gateway to receiving cash and making payments. The usage of social media became more common and it gained more fame than at any other time. Most SMEs in many countries including Tanzania use WhatsApp, Facebook, Instagram, and YouTube to advertise their products and services (Syaifullah et al., 2021). Social media is reported as one of the most effective ways of information in Tanzania surpassing Television sets and radio broadcasting (Gemma, 2020). It is anticipated that during the COVID-19 era, the number of social media users increased by 13% in Tanzania (Todd, 2020). These new trends in technological adaptation are anticipated to somehow help SMEs manage their marketing strategies and sell their goods online. It is, therefore, a positive determinant of performance improvement resulting from the COVID-19 pandemic. We therefore hypothesize that:

H3: COVID-19 positively affected Innovative performance of SMEs

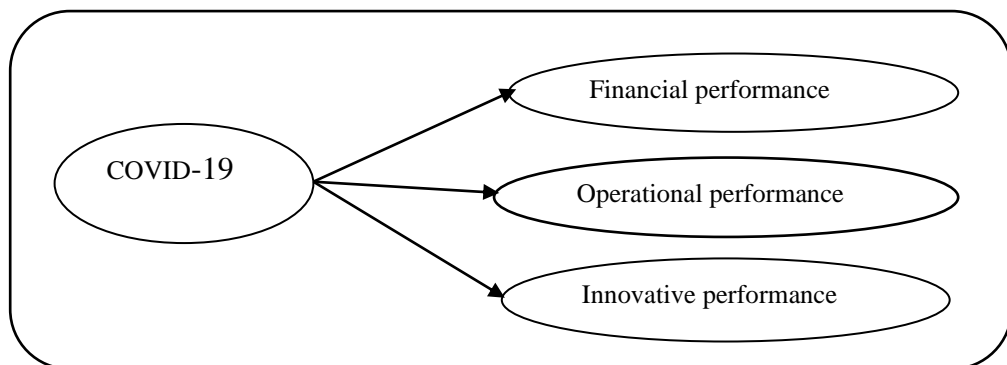


Figure 1: Conceptual Framework

Figure 1 above, shows that COVID-19 impacted the financial, operational, and innovative capabilities of SMEs. These three variables were validated quantitatively through a regression equation and the results were reported therein to validate the following hypothesis:

H1: COVID-19 has negatively affected the financial performance of SMEs

H2: COVID-19 has negatively affected the operational performance of SMEs

H3: COVID-19 has positively affected Innovative performance of SMEs

RESEARCH METHODOLOGY

A quantitative research design was adopted by testing a causal relationship between two variables which are the impact of COVID-19 and the

performance of SMEs. In line with this, a review of existing literature and empirical studies provided variables that established the nature of the cause and the effects on the impact of COVID-19 on the performance of SMEs. Performance was measured in three variables: financial, operational, and innovative performance as summarized in the Conceptual Framework. The SMEs in Nyamagana District in Mwanza City were surveyed and asked to rate the factors of COVID-19 and how it affected their business performance. The study considered registered SMEs in the Nyamagana District with several employees between 4 and 50. The study did not consider SMEs under informal sectors famously known as Wamachinga. A total of 200 questionnaires were distributed to owners of hotels and guest houses, restaurants, supermarkets, and other convenience stores; saloons, stationery shops, private kindergarten schools, and boutiques. A total of 125 questionnaires were returned dully filled which was a 62.5% response rate.

Testing Parametric Assumptions

Firstly, we conducted data screening to confirm missing values in the questionnaire before entering into SPSS (Pallant, 2007). It was important to double-check the indicators in the survey to ensure that all items were answered to avoid missing values. It was found that all the data were clean and there were no missing values. Missing values would result in increased error terms and other problems in validating the instruments (Field, 2013). Therefore; the entire 125 questionnaire response rate was retained. Secondly, we conformed to the non-existence of outliers. Outliers are extreme values that could either be too high or too small a value (Field, 2013). Scholars have proposed the impact of outliers in the data as a possibility of distortion of parameters and estimation errors which might make the data obscured and unable to predict significant variables (Hair et al., 2019). To uncover the outliers, the study used *the "explore"* command from the SPSS which enabled the detection of indicators with severe cases and those that showed abnormal patterns (Pallant, 2007). The results showed all items had almost similar loadings and there were no extreme values or abnormal behaviors in the data sets.

Thirdly, Skewness and Kurtosis tests were run to check whether there was a normal distribution curve (Cohen, 2018). Generally, a set of data that is not normal, can distort findings and difficult to show significant factors (Cohen, 2018). It is recommended that the values for Skewness and Kurtosis should be close to plus or minus 2 and or minus 4 for minimum and maximum values respectively (Cohen, 2018). The results showed that the minimum

value for skewness was -2.149 and the maximum was 2.608 while the minimum value for Kurtosis was 1.092 and the maximum value was 2.412 (Appendix I). These results confirm that the data is within acceptable normal distribution curves (Cohen, 2018), and therefore, further parametric analysis can be conducted. Lastly, Pearson Product correlation (r) test was conducted to confirm the existence of a linear relationship between variables and to also test for multicollinearity. If the variables show extreme correlations with other variables (i.e. $r > .90$), it is said to have multicollinearity problems (Tabachnick and Fidell, 2013). The results showed that the lowest correlation was 44.9% ($r = 0.449$) between FP and OP while the highest correlation was 66.2% ($r = 0.662$) between IP and COV (Table 7.13). These results suggest that there was no multi-collinearity among the variables (Tabachnick and Fidell, 2013).

FINDINGS

Table 1: Profile of Respondents (n=125)

Q1: Gender			N=125
1	Male	74%	93
2	Female	26%	32
Q2: Age brackets			N=125
1	Below 25	5%	7
2	25-35 years	39%	48
3	36-45 years	29%	35
4	46-55 years	13%	17
5	Above 55 years	14%	18
Q3: Business Size (Capital Capacity)			N=125
1	Less than 10M	60%	75
2	10-20M	21%	26
3	20M-50M	9%	10
4	50M-100M	6%	8
5	Above 100M	4%	5
Q4: Type of Business			N=125
1	Hotels	9.6%	12
2	Guest House	7.2%	9
3	Restaurant	4.8%	6
4	Supermarket	3.2%	4
5	Convenient stores	22.4%	28
6	Saloons	24%	30
7	Stationery shop	8%	10
8	Private kindergarten	3.2%	4
9	Boutique	17.6%	22

Table 1 shows the percentage of the respondents based on gender. From a total of 125 respondents, 74% were males (93 respondents) while 26% were

female (32 respondents). Concerning the age of respondents, most were (39% - 25-35 years old), followed by 29% (36-45 years old). There were about 13% (17 respondents between 46-55 years old) and also 14% (18 respondents who were above 55 years old) and lastly, there were 5% (7- respondents who were below 25 years old). Meanwhile, with regards to the type of SMEs or type of business status, as was composed of the questionnaire, respondents were asked to rank their businesses as whether it is Small, Medium, or Large. Table 2 shows that the majority of the respondents (88% or 85) were running small businesses, meanwhile, (24% or 30) had Medium businesses while (8% or 10) respondents rated their businesses as large. Lastly, in terms of capital capacity, it was revealed that the majority of the respondents (60% or 49) had a capital capacity above 10M, followed by 21% (26 respondents) with a capital capacity of 10M-20M. There were about 6% or 8 respondents having capital capacity in the range of 50M-100M; and lastly 4% equivalent to 5 respondents who had capital capacity of above 100M. These findings indicate that most of the SMEs contacted were small business owners whose capitals were within 10M-20M shillings. This study examines the capital structure determinants of SMEs in Tanzania which is contrary to other countries like Poland, Czechia, Slovakia, Hungary, Bulgaria, and Romania whose capital base is higher (Kumar et al., 2020; Czerwonka & Jaworski, 2021). It, therefore, highlights the role of firm-specific factors and the influence of a business-friendly established environment.

Table 2 below shows that there is a positive linear relationship between the four constructs of COVID-19, namely, financial performance (FP), operational performance (OP), and Innovative performance (IP). The table also confirms that there are no extreme values of relationship between the variables.

Table 2: Pearson Correlations (r)

		FP	OP	IP	COV
FP	Pearson (r)	1			
	Sig. (2-tailed)				
	N	125			
OP	Pearson (r)	.449**	1		
	Sig. (2-tailed)	.001			
	N	125	125		
IP	Pearson (r)	.457**	.325**	1	
	Sig. (2-tailed)	.000	.000		
	N	125	125	125	
COV	Pearson (r)	.471**	.533**	.662**	1
	Sig. (2-tailed)	.000	.000	.001	
	N	125	125	125	125

**Correlation is significant at the 0.01 level (2-tailed)

Exploratory Factor Analysis (EFA)

Test was made on factor loadings in the EFA with VARIMAX rotation to confirm whether the indicators fit within their expected constructs (Malhotra, 2009). A benchmark of 0.60 was set as a default in SPSS for the inclusion or exclusion of items in its expected factor (Tabachnick and Fidell, 2013). Three items (FP5, OP3, and IP1) showed multiple loadings and they were subsequently dropped and EFA was rerun (Osborne, 2015). The final results indicated that all items had a minimum loading of .60 which is an acceptable threshold as shown below in Table 3.

Table 3: Exploratory Factor Analysis (EFA)

	1	2	3	4
FP1	.779			
FP2	.634			
FP3	.879			
FP4	.797			
OP1		.809		
OP2		.802		
OP4		.812		
OP5		.779		
IP2			.864	
IP3			.804	
IP4			.791	
IP5			.709	
IP6			.788	
COV3				.676
COV2				.675
COV3				.687

Kaiser Meyer Oklin (KMO) and Bartlett’s Test of Sphericity Test were checked to reconfirm the factor loadings. Scholars define KMO as a measure of sampling adequacy that produces a confirmation of the indicators in the constructs of EFA (Cohen, 2018). The results in Table 4 below revealed a KMO value of .716 and Chi-Square was 3456.205 which was significant at.000. These results confirm that the sampling was adequate for running further inferential analysis (Pallant, 2007).

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.716
Bartlett's Test of Sphericity	Approx. Chi-Square	3456.205
	Df	453
	Sig.	.000

After performing EFA, the indicators were merged (FP1+FP2+FP3+FP4); (OP1+OP2+OP4+OP5), and (IP2+IP3+IP4+IP5+IP6) by using a "*transform variable*" command in the SPSS. This procedure enabled us to merge the statements to form one main variable for Regression. However, since some variables were dropped, it was necessary to re-run the reliability test of Cronbach Alpha (Hair et al., 2019); and the results are shown below.

Table 5: Reliability Test

Variable	No. of items	Cronbach Alpha
Financial Performance (FP)	4	.918
Operational performance (OP)	4	.921
Innovative performance (IP)	5	.911
COVID-19(COV)	3	.913

From the reliability results (Table 5), it was revealed that the values for all the indicators within the variables had higher Cronbach Alpha loadings of above .9, which is regarded as highly reliable data (Hair et al. 2019). Specifically, FP with 4 items had Cronbach Alpha values of .918; OP which had 4 items had Cronbach Alpha loadings of .921, IP with its 5 items had a Cronbach Alpha value of .911; and COV which was a dependent variable with three indicators had a Cronbach Alpha value of .913. These results indicated higher reliabilities than before data were confirmed in the EFA.

Linear Regression

Linear regression was conducted at three levels where the independent variable (COV) was regressed separately against each construct of the dependent variable and the findings were based on each separate hypothesis.

H1: COVID-19 negatively affected the financial performance of SMEs

The first hypothesis tested the relationship between COVID-19 on the financial performance of SMEs. The regression commands in SPSS produced three tables simultaneously which were (1) the model summary (R), (2) the ANOVA table, and (3) the Coefficient Table. These are named Table 6, Table 7, and Table 8 respectively.

Table 6: Model Summary

Model	R	R Square	AdjustedR Square	Std. Error of the Estimate	Durbin-Watson
1	.641 ^a	.613	.551	.4532	1.4242

a. Predictors: (Constant), FP

b. Dependent Variable: COV

Table 7 above shows an initial summary of the regression results with one variable (Financial performance-FP) which was regressed against one dependent variable which is Covid-19 (COV). The regression value which is the model results (R) is .641, while the R² value was .613 and adjusted R² was .551 with a standardized error of the estimate of .4432. These findings indicate that the variable COV (Independent variable) is an acceptable measure of varied performance (dependent variable) for the SMEs of the selected sample.

Table 7: ANOVA^a

Model		Sum-of Squares	Df	Mean Square	F	Sig.
1	Regression	12.125	11	1.863	18.76	.000 ^b
	Residual	10.772	104	.110		
	Total	22.897	125			

a. Dependent Variable: FP

b. Predictors: (Constant), COV

ANOVA as the second explanation of the regression results confirmed the interaction effects between variables, between and within the groups; hence, providing confirmations for further analysis (Hair et al.,2019). One-way ANOVA (Table 7) was run to relate the mean values of COVID-19 to dependent variable financial performance. The F-test confirmed the relationship existed between the independent variables and the dependent variable which was statistically significant at .000. The Regression equation is summarised in the following equation:

$$\hat{Y} = \alpha + \beta_1 X_{FP} + \epsilon$$

Where:

$$\hat{Y} = \text{COVID-19}$$

- β = Partial regression coefficients
- FP = Financial Performance
- ϵ = Error term.
- α = Constant

The final regression results are presented in the table below of Coefficients.

Table 8: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6.434	1.496		21.195	.000		
	FP	-.418	.123	.147	1.046	.000	.772	1.387

a. Dependent Variable: COV

The interpretation of the table above (Table 4) is that if other factors remain constant, the independent variable (COVID-19-COV) negatively affected the dependent variable (financial performance) by -.418 (Beta coefficient) and the relationship was significant at .000.

H2: COVID-19 negatively affected operational performance of SMEs

The second hypothesis intended to find how COVID-19 impacted the operational performance of SMEs. Again, the regression commands in SPSS produced three tables namely, (i) the model summary (Regression (R) table (ii) the ANOVA table, and (3) the Coefficient table, which are Table 9 Table 10, and Table 11.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.681 ^a	.662	.601	.3433	1.3452

a. Predictors: (Constant), COV

b. Dependent Variable: O

Table 10 shows the initial results of the regression for the second research objective. The variable COVID-19 (COV) was regressed against one dependent variable (Operational performance-OP). The regression value which is the model results (R) is .681. Meanwhile, the R-Square value was .662 and the adjusted R² was .601; with a standardized error of the estimate was .3433. These findings from the data indicate that the variable COV (Independent variable) is an acceptable measure of operational performance

(dependent variable) for business performance among SMEs at Nyamagana. Also, the DW test showed values of 1.3452. which falls within the acceptable threshold according to Dubin Watson (1971); indicating a normal distribution of residuals.

Table 10: ANOVA^a

Model		Sum-of Squares	Df	Mean Square	F	Sig.
1	Regression	14.114	11	1.678	14.56	.000 ^b
	Residual	11.782	104	.110		
	Total	25.896	125			

a. Dependent Variable: FP

b. Predictors: (Constant), COV

Table 10 shows the summary of the Analysis of Variance known as ANOVA. ANOVA in the second research objective indicated that there is an interaction effect between the two variables (operational performance and COV). The relationship was statistically significant at .000; with F-Statistics showing 14.56 of the effect size. The F-test which confirmed the relationship between the two variables was statistically significant at .000. The Regression equation for the second variable is:

$$\hat{Y} = \alpha + \beta_1 X_{COV} + \epsilon$$

Where:

\hat{Y} = Financial Performance

β = Partial regression coefficients

OP = COVID-19

ϵ = Error term.

α = Constant

The following regression results are presented in the table of Coefficients.

Table 11: Regression Coefficients

Model		Unstandardized		Standardized	T	Sig.	Collinearity	
		Coefficients					Coefficients	Statistics
		B	Std. Error	Beta	Tolerance	VIF		
1	(Constant)	4.312	1.211		24.165	.000		
	COV	-.521	.124	.152	1.057	.000	.812	1.451

a. Dependent Variable: OP

The interpretation of the table above (Table 11) is that if other factors remain the independent variable (COVID-19-COV) negatively affects the dependent variable (operational performance) by -.521 (unstandardized beta coefficient) and the relationship was significant at .000.

H3: COVID-19 positively affected Innovative performance of SMEs

The third and last hypothesis predicted the effect of COVID-19 on the innovation performance (IP) of SMEs. Three tables of automatic regression commands on the SPSS software produced the following results as shown in Tables 12, Table 13, and Table 14.

Table 12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.712 ^a	.678	.635	.3887	1.5152

a. Predictors: (Constant), COV

b. Dependent Variable: OP

Table 12 shows the regression results for the relationship between one variable (COVID-19-COV) which was regressed against one dependent variable (Innovative performance-IP). The results revealed that (R) is .712. Meanwhile, the R-Square value was .678 and the adjusted R² was .653; with a standardized error of the estimate was .3887. These findings from the data indicated that the variable COV (Independent variable) is an acceptable measure of operational performance (dependent variable) for business performance among SMEs at Nyamagana. The DW test revealed values of 1.5152 which falls within the acceptable threshold according to Dubin Watson (1971); indicating normal distribution of residuals for the tested variables. Meanwhile, the ANOVA table below confirmed the existence of the relationship between COV and IP. The F-statistics showed values of 19.61 which were significant at .000. The final results are depicted in Table 13 below.

Table 13: ANOVA^a

Model		Sum-of Squares	Df	Mean Square	F	Sig.
1	Regression	14.114	11	1.467	19.61	.000 ^b
	Residual	13.770	104	.141		
	Total	27.884	125			

a. Dependent Variable: IP

b. Predictors: (Constant), COV

ANOVA which was confirmed by the F-test confirmed the relationship between the two variables (COV & IP), which was statistically significant at .000. The Regression equation for the third variable is as follows:

$$\hat{Y} = \alpha + \beta_3 X_{COV} + \epsilon$$

Where:

- \hat{Y} = Innovative Performance
- β_3 = Third Partial regression coefficients
- OP = COVID-19
- ϵ = Error term.
- α = Constant

The following regression results are presented in the table below (Table 4.19) of Coefficients to answer the last research objective (objective 3)

Table 14: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.432	1.723		26.261	.000		
	COV	.365	.134	.167	1.224	.000	.722	1.521

Dependent Variable: IP

The interpretation of Table 15 above is that if other factors remain constant, the independent variable (COVID-19-COV) positively affected the dependent variable (operational performance) by .3.65 and the relationship is significant at .000.

DISCUSSION AND INTERPRETATION

The result of the regression summary for all three models was confirmed to be statistically significant. In both cases, R Square (R^2) was above 60% with adjusted R^2 of above 55% which loaded with minimal standard error of estimate. Similarly, the F-test statistics for the three models were significant. The implication of these results shows that the selected predictors of (COVID-19) could explain the variations in business performance in both financial performance, operational performance, and innovative performance of SMEs in Mwanza Tanzania. Financial performance was considered a dependent variable during COVID-19 as business performance depended on the situation of the diseases and the lockdown which halted trading. The results from the survey data revealed that COVID-19 negatively affected the financial performance of SMEs. The regression results revealed a co-efficient value of -.545 and a t-value of 0.438 which was significant at .000. These results meant that COVID-19 affected the SMEs negatively and made them backward in economic power. Similar findings were reported in other parts of the world where they tested post-COVID-19 outcomes on businesses. For example, Bartik et al. (2020) and Dai et al. (2020) reported economic downturn for SMEs that were previously successful in pre-COVID-19

periods and eventually sustained collapse. They found that their operation and profitability levels reduced greatly and thanks to the government intervention in Singapore some businesses managed to recover. Similar results were documented by Dirga et al. (2021) and Gossling et al. (2021).

Meanwhile, the study found out that the operational performance of the business was also affected negatively by the COVID-19 pandemic. Past studies reported that the pre-COVID-19 operational activities of many SMEs were reduced due to the lockdown and falling consumer purchasing power (Nguyen and Lu, 2020). This study found a negative relationship between COVID-19 and business operations. The relationship was statistically significant which indicates that businesses were affected by the pandemic. Similar results were reported by Lu et al. (2020) and Nguyen and Lu (2020). Their findings which were based in the Asian continent revealed that the pandemic halted the operations and cross-border linkage and trading which eventually lowered the internal business operations of SMEs.

Lastly, the Innovative Performance (IP) was found to be positively related to the COVID-19 variable. The regression results showed a positive relationship between COVID-19 and innovative performance and the relationship was significant. This indicates that the use of technological tools after the COVID-19 pandemic had increased significantly. Similar findings were documented in other countries (Omar et al., 2020; Saidu et al., 2020; Syaifullah et al., 2021). For example, Syaifullah et al. (2021) found an increased online marketing and procurement of goods and services during and after the pandemic. These results affirmed that SMEs have become better ICT adopters due to mandatory preventive measures to reduce direct contact among people. In other words, SMEs realized the prominence of adopting digital tools and online platforms to remain in operation during market shocks, lockdowns, and restrictions.

CONCLUSION AND RECOMMENDATIONS

In light of DOI Theory (Rogers, 2003), the study emphasizes the importance of financial vitality, diversification, and the role of SMEs in driving change. During COVID-19, businesses that quickly adapted to new market environments and customer preferences were more likely to survive and prosper. Meanwhile, the late adopters of technology and the laggards who were risk-averse most likely failed to operate lost customers, and faced business closure.

Many SMEs established significant resilience and flexibility during the COVID-19 pandemic. They swiftly revolved around new business models, such as online sales and delivery services, to cope with COVID-19 measures. Regardless of their flexibility, SMEs faced substantial economic challenges, including cash flow issues, low demand, and problems in accessing monetary support. These challenges resulted in layoffs of employees, reduced operations, and even bankruptcy of some businesses. Nonetheless, the impact of COVID-19 varied across different sectors. Sectors such as retail business, convenience stores, supermarkets, hospitality, and tourism were most affected while sectors such as ICT, telecommunications, healthcare, and e-commerce realized average growth. This study highlights the importance of direct government support and strategies to help SMEs rebuild their businesses. This includes fiscal measures, tax relief, interest-free loans, public-private partnerships, and subsidies. The government can initiate platforms that facilitate digital adoption and improvement.

The study recommends that future studies should be done by involving a large sample size in various cities to get a bigger picture of the situation. Similarly, future studies should use both quantitative and qualitative data to get more explanations of the respondents and to be able to suggest a way forward for the government and other players in the business ecosystem. Since the government expects to receive tax from these businesses for economic development, supporting them will help improve both individuals (micro-economic) as well as macroeconomic development of the country. The study found some SMEs shifted from town centers to the outskirts of the city to avoid too much rental expenses. The government can support them by building areas of business that are permanent like the Machinga complex in Dar es Salaam City. Nonetheless, there were areas where the government shifted some of the SMEs that were not fully in operation at the time of data collection.

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APPENDIX I: NORMALITY TESTS

	N	Mean	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
FP1	125	1.54	-2.129	.025	1.677	.046
FP2	125	1.35	-1.687	.025	1.230	.046
FP3	125	2.08	-1.374	.025	1.886	.046
FP4	125	2.34	-1.802	.025	1.308	.046
FP5	125	1.62	-2.149	.025	2.118	.046
OP1	125	1.39	-1.830	.025	2.491	.046
OP2	125	1.43	.270	.025	-1.961	.046
OP3	125	1.82	-.694	.025	-1.210	.046
OP4	125	1.48	-1.240	.025	2.105	.046
OP5	125	1.56	-.231	.025	-1.984	.046
IP1	125	1.49	-1.712	.025	1.906	.046
IP2	125	1.26	-.868	.025	1.269	.046
IP3	125	1.40	-.365	.025	-1.471	.046
IP4	125	0.51	-.038	.025	-2.037	.046
IP5	125	1.37	-.130	.025	-1.199	.046
COV1	125	1.37	-1.593	.025	2.412	.046
COV2	125	1.35	-1.490	.025	2.033	.046
COV3	125	1.40	-.111	.025	-1.961	.046
Valid N (listwise)						

Social Media Marketing and Performance of Gas Energy Companies: A Systematic Literature Review

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Abstract

The study applied a systematic literature review to assess social media marketing variables in relation to the performance of gas companies. This is the best author's knowledge on writing systematic literature reviews on social media marketing and performance of gas companies around the world. The purpose of this paper was to synthesize findings from multiple studies, allowing researcher to see the bigger picture, and identify patterns, trends and consistencies of phenomena. In addition, the paper employed a systematic literature review method to sum up the phenomena under study. A systematic study of 48 papers from 7 academic databases and publishers on social media marketing was conducted, analyzing themes, countries, scope, methodology, methods, and publication trends. The study revealed that there is a positive effect of social media marketing on the performance of gas companies. In conclusion, gas companies may maintain their market share and develop devoted clientele by effectively utilizing the Social Network Marketing (SNM) factors. Facebook, Instagram, and Twitter were likely to be utilized by many papers to help the gas industry, particularly in Russia, France, and the UK.

Keywords: *Social media, Marketing, Performance, Gas, Companies*

INTRODUCTION

Social media marketing is a popular communication channel used by businesses in recent marketing campaigns, involving application programs, platforms, and media resources to encourage user involvement and content sharing (Bilgin, 2018; Cahyati *et al.*, 2023). Social media has significantly contributed to the performance of many companies. Customers have access to different sources of shared information from other customers regarding their experiences and recommendations (Tajvidi & Karami, 2017).

Globally, the use of social media marketing in business performance played a great role, whereby Russian Gazprom is the most active one in terms of the quantity of gas and oil production, which published content in the years 2019–2022. About 290 posts were published in the profile, with a gradual

increase in the number of followers on their Instagram account (Ibrahim, 2021; Marchand *et al.*, 2020; Sagapova *et al.*, 2022).

Shell (United Kingdom) reviews the use of Instagram accounts over oil and gas companies, whereby results of Shell showed the lowest activity in terms of published content in their official Instagram profile, as only 29 posts were published between January 2019 and August 2022, and lastly Total Energies (France), During 2019, the official profile of Total Energies showed very low activity, as only two posts were published (Aji *et al.*, 2020; Aktiviteleri *et al.*, 2018; Ceyhan, 2019; Charoensukmongkol & Sasatanun, 2017; Chen & Lin, 2019; Seo & Park, 2018; Zabarna *et al.*, 2023).

Social media's impact varies globally, with countries with good internet infrastructure fostering more productive interactions between enterprises and the public through various channels like online networks, microblogs, blogs, video sharing platforms, and social bookmarking sites (Ahmad *et al.*, 2017; Dulek & Aydin, 2020; Sagapova *et al.*, 2022; Charoensukmongkol & Sasatanun, 2017).

Business companies of both developed and developing countries have witnessed highly poor use of social media marketing in the gas and energy sectors despite the high growth of internet infrastructures (Sagapova *et al.*, 2022; Foltean *et al.*, 2020; Santini *et al.*, 2020; Msonga & Swallehe, 2022; Chatterjee *et al.*, 2021; Aji *et al.*, 2020). Studies (Churk, 2022; Silvano & Mbogo, 2022; Ritagrace & Batonda, 2022; Misganaw & Singh, 2019) have demonstrated the value of social media as a tool for boosting consumer engagement and increasing competitiveness for businesses.

Despite optimism towards social media and the popularity of the topic in the business setting, the rate of use of social media in the gas sector has remained relatively low because of a lack of knowledge of how to capitalize on and realize the technology's benefits (Song *et al.*, 2019; Olanrewaju *et al.*, 2020; Febriyantoro, 2020; Scutto *et al.*, 2017; Tajudeen *et al.*, 2017; Aji *et al.*, 2020).

Several studies and reviews have attempted to bring out the results of the efforts put into social media. The results of the study by Syaifullah *et al.* (2012) on MSMEs' Business Performance During the COVID-19 Pandemic and Social Media Marketing showed that Facebook, Instagram, and What's App favorably impact MSMEs' business performance during the COVID-19 pandemic.

However, such studies did not assess how YouTube marketing practices and Twitter marketing practices affect corporate performance. Furthermore, the results of a study by Pongwe and Churk. (2022) on the effects of social media marketing platforms on sales revenue at Tanzania Telecommunication Corporation revealed that Instagram increased sales revenue; however, the study did not assess how website marketing practices, e-mail marketing practices, and mobile marketing practices affect corporate performance.

In addition, the findings of a study by Anning and Acheampong (2017) on the antecedents of social media usage and performance benefits in small and medium-sized enterprises (SMEs) showed that Facebook and Twitter have a positive effect on performance in small and medium-sized enterprises (SMEs). The research did not, however, examine how mobile marketing, e-mail marketing, and website marketing methods impact company performance.

The study also didn't address how social media marketing affected the performance of the gas and energy industries. In this systematic review, the researcher tried to assess the variables of social media marketing in the performance of gas and energy companies' studies such as Facebook, Twitter, Whatsapp, YouTube, and Instagram as used by Dulek & Aydin, 2020; Sagapova *et al.*, 2022; Charoensukmongkol & Sasatanun, 2017).

The researcher also assessed if scholars from previous studies have showed an association between social media marketing and the performance of gas companies. Furthermore, the researcher observed the data analysis methods for social media studies, the limitations of the literature, and recommended areas for future research.

METHODS

The study employed a systematic literature review to sum up the phenomena under study. A study has established social media as an instrument used to guarantee the success of gas enterprises. Researchers created a multi-phased method to study the literature in order to investigate how social media affects the performance of gas firms. The study makes an effort to review prior material in order to determine how social media affects the performance of gas corporations throughout the world.

Typically, the systematic literature review extracts publications from seven electronic libraries and publishers: Google Scholar, Emerald, Taylor & Francis, Elsevier, Jstor, Sage, and EBSCO. The review is an exhaustive one;

hence, the keywords the researcher used were as follows: Google Scholar, Taylor & Francis, Elsevier, and Jstor. “Social media,” “marketing,” “performance,” “Gas”, “companies,” Sage, EBSCO, and Emerald. “Social media,” “marketing,” “gas,” “Companies”, “world.”.

Google Scholar was the first library used to access and get direction in the field of social media. The search for the other six libraries and publishers focuses on the research question. The limit of research papers must be published in English under the subjects of business, marketing, social science, humanities, economics, oil and gas engineering, and development.

Globally, the use of social media has grown in popularity in recent years. For instance, since its launch in 2004, Facebook has been reported to have more than a billion active members, as per a 2012 report (Vinerean *et al.*, 2013). The article attributes the reason to a lack of data. Social media's distinctive features and enormous popularity have altered traditional marketing strategies like advertising and promotion (Vinerean *et al.*, 2013; Rohm, Hanna, & Crittenden, 2011).

Social media has also altered customer behavior, ranging from information acquisition to post-purchase actions like vocalizing or acting in ways that indicate discontent (Mangold & Faulds, 2009) and patterns of Internet usage (Bruce *et al.*, 2023; Choedon & Chan Lee, 2020; Sagapova *et al.*, 2022). Thus, researchers began the review at the beginning of the new millennium, reviewing papers published from 2008 to 2023. These shortlisted papers are first manually screened for inclusion and exclusion criteria. The papers are then screened by reading the abstract and title to filter according to the theme and criteria (Table 1). Further, some that do not match the theme and criteria are excluded from the study after reading the full papers (Table 1).

Table 1: Article Search Process

Type of database	Initial search	After merge, duplicate paper and screening of tittle and abstract	Final search
Google scholar	714		12
Emerald	238		7
Taylor & Francis	98		4
Elsevier	612	48	10
Jstor	318		7
Sage	216		5
EBSCO	74		3

Source : Literature Review (2023)

RESULTS AND DISCUSSION

This section discusses the social media marketing and performance of gas companies' specifications in the analysis of selected literature, data type and source, conclusion, recommendation, and suggestions for further research. The results of much reviewed literature showed that there was a positive and significant relationship between social media use and firms' performance. The views presented above concur with those of Alalwan (2018), who investigated the impact of social media advertising features on customer purchase intention in Jordan and concluded that Facebook, Twitter, and Instagram had an impact on customer purchase intention.

Peerayuth and Sasatanun (2017) conducted a study on social media use for CRM and business performance satisfaction in Thailand, and the results showed that Facebook and Instagram contribute to business performance. Mohammadpour et al. (2014) conducted a study in Iran concerning a survey of the effect of social media marketing on the online shopping of customers. The findings showed Facebook and Twitter support much online shopping by customers.

The findings of Mohammadpour et al. (2014) look the same as the results of Razak and Latip (2016), who conducted the study on factors that influence the usage of social media in marketing in Malaysia and concluded that Facebook and Twitter mostly support digital marketing. Furthermore, the study of Febriyantoro (2020), who conducted research on exploring YouTube marketing communication: brand awareness, brand image, and purchase intention in the millennial generation in Indonesia, concluded that Youtube, WhatsApp, Facebook and Instagram are mostly social media channels that promote brand awareness, brand image, and purchase intention in the millennial generation.

The views of Febriyantoro (2020) matched those of Silvano and Mbogo (2022), who conducted a study on the impact of social media marketing on small business sales in Tanzania. The results concluded that Facebook and Instagram support small business sales in Tanzania. Furthermore, Pongwe and Churk (2022) conducted a study on the effects of social media marketing platforms on sales revenues at a Tanzanian telecommunications corporation. The findings indicated that Instagram and WhatsApp are good platforms that provide a positive impact on sales revenues at Tanzania Telecommunication Corporation.

In addition, Misganaw and Singh (2019) conducted a study on e-marketing adoption in Ethiopian tourism businesses, and their findings concluded that social networking marketing supports tourism businesses in Ethiopia. The results of Misganaw and Singh (2019) are associated with those of Maria et al. (2019), who conducted research on the effect of social media marketing, word of mouth, and the effectiveness of advertising on brand awareness and intention to buy. The results showed that social media tested positive relationships based on correlations.

Contrary to this, Scuotto et al. (2016) conducted a study on the effect of social networking sites and absorptive capacity on SMEs' innovation performance in the UK. The results revealed that social media marketing channels have little contribution to the performance of SMEs. These results concur with those of Foltean et al. (2018), who conducted a study on customer relationship management capabilities and social media technology use and their consequences for firm performance.

The findings showed that social media technology usage has little consequence for firm performance. Generally, the findings imply that social media marketing with variables like Facebook, Twitter, the Whatsapp, Instagram, and YouTube has positive and significant impacts on the performance of gas companies.

Analysis of selected literature

The researcher grouped the publications over time, with each group having five years of publication starting in 2008 (the last group consists of six years). Figure 2 indicates the consistent increase in articles being published on social media marketing. The years 2017 and 2019 show an increasing trend in publications (see Figure 1).

Inclusion criteria: the paper should be in the English language. Knowing how social media marketing affects gas firms' performance is a major concern, and lastly, reviews should originate from business, marketing, social science, the humanities, economics, oil and gas engineering, and development. Furthermore, on the side of exclusion criteria, books, pamphlets, and reports are excluded from Google Scholar, Emerald, Taylor & Francis, Elsevier, Jstor, Sage, and EBSCO. Lastly, the paper's result is based on social media marketing, which can not be extrapolated.



Figure 1. Publication trend (grouped)

1. [Redacted]
2. [Redacted] Justification; 1 is number of publication and 2 is year of publication.

Source: Literature Review (2023)

Data Type and Source

The 48 papers that simply make use of numerical and observable data are the subject of this investigation. Cross-sectional data and panel data are used in about similar numbers. Panel data performs 5% better than cross-sectional data, with a 55% share. It is noteworthy that current patterns indicate a rise in the utilization of panel data.

The results showed that 77% and 58% of journal papers using panel data and cross-sectional data, respectively, utilized secondary data sources. Both sources are used in 11% of all papers. A similar pattern can be seen in all seven libraries and publishers. Figure 4 displays the outcomes from the information source. A sizable 68% of papers employ secondary data for study. Surveys conducted by a third party are used in a few databases, which may be biased.



Proportion of publication

panel data

Cross sectional data

Figure 2: Data source

Source: Literature Review (2023)

Table 2: Research Tittle Analysis

S/N	Variable (s)	Authors	No of studies	%
1.	Social media marketing	Pongwe and Churk (2022), Silvano and Mbogo (2022), Msonga and Swallehe (2022), Misganaw & Singh (2019), Maria <i>et al.</i> (2019), Febriyantoro (2020), Razak and Latip (2016), Mohammadpour <i>et al.</i> (2014), Peerayuth and Sasatanun (2017), Tajvidi and Karami (2017), Bilgin (2018), Ahmad <i>et al.</i> (2017), Scuotto <i>et al.</i> (2016), Foltean <i>et al.</i> (2018), Santini <i>et al.</i> (2020), Ahmad <i>et al.</i> (2018), Anning and Acheampong (2017), Song <i>et al.</i> (2019), Olanrewaju <i>et al.</i> (2020), Scuotto <i>et al.</i> (2017), Alalwan (2018), Tajudeen <i>et al.</i> (2017), Yu <i>et al.</i> (2018), Chen and Peng Lin (2019), Drus amd Khalid (2019), Alalwan <i>et al.</i> (2017), Kwahk and Kim (2016), Chong <i>et al.</i> (2018) , Almohaimmeed, (2019), Chatterjee <i>et al.</i> (2021) Marchand <i>et al.</i> (2020) , Ibrahim. (2021), Syaifullah <i>et al.</i> (2012) Charoensukmongkol and Sasatanun (2017) Oztamura and Karakadilar (2014), Musa <i>et al.</i> (2016), Aktiviteleri <i>et al.</i> (2018), Lee <i>et al.</i> (2014), Chen and Lin (2019), Vinerean <i>et al.</i> (2013), Seo and Park (2018), Ismail (2017), Ceyhan. (2019), Maria <i>et al.</i> (2017).	30	62.5
2.	Performance	Ahmad <i>et al.</i> (2018), Chile (2018), Sagapova <i>et al.</i> (2022),Muchardie etal. (2016), Bruce <i>et al.</i> (2023), Choedon and Chan Lee (2020), Aji <i>et al.</i> (2020), Dulek and Aydin (2020), Gonzalez <i>et al.</i> (2014), Schivinski and Dabrowski (2014), Cahyati <i>et al.</i> (2023), Wu <i>et al.</i> (2021), Yu et al. (2018), Ahmad et al.(2018), Hart (2016).	18	37.5

CONCLUSIONS

In this paper, the performance of gas firms is compared to the effects of social media marketing. The researcher specifically looked at gas corporations globally: Shell PLC, Total Energy, Gazprom, BP, and Lukoil. The findings show that Instagram, Facebook, Twitter, YouTube, and Whatsapp have an impact on the performance of gas companies.

These are crucial aspects because gas companies may maintain their market share and develop devoted clientele by effectively utilizing the aforementioned social network marketing (SNM) factors. Facebook, Instagram, and Twitter were likely to be utilized by many papers to help the gas industry, particularly in Russia, France, and the UK.

Furthermore, governments from different countries should prepare favorable ICT policies that can allow technological transformation and support the use of social media platforms in gas sectors. They should also develop fair tax policies on computers and allied equipment that can be used as tools for doing digital marketing in gas sectors. Basically, the reviews can develop a conceptual model that can be used as a tool for digital marketing by applying social media platforms to gas sectors.

However, security concerns and network issues have been major limitations in many digital marketing campaigns for goods and services in the gas sector. Another limitation is the difficulty of using the e-payment method that many customers face due to network problems, which makes it difficult for some customers to use digital money, especially in developing nations. It used to be a problem in industrialized countries as well, but this has been well resolved for businesses in Europe that utilize SET to encrypt credit cards for digital transactions that are secure.

RECOMMENDATION

The key recommendation of this paper is that gas companies should take the time to generate engaging content for their social media accounts in order to draw in their target audience if they intend to employ social media as a cutting-edge marketing instrument.

SUGGESTIONS FOR FURTHER RESEARCH

In order to compare or make generalizations, research of a similar nature may be conducted in other economic sectors, such as agriculture, mining, and tourism, utilizing a variety of media. In addition, other researchers might

have room to look into marketing communication and reputation building of leading African oil and gas companies; analysis of digital marketing trends in the global fuel and energy complex (experience for Tanzania); forecasting the Tanzanian oil markets based on social media information during the Russia-Ukraine crisis.

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The Effect of Credit to the Agriculture Sector on Coffee Export Growth in Tanzania

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Abstract

Coffee is among the traditional exports that contribute to the economic growth in Tanzania. Depending on the increasing efforts of the country to increase foreign exchange earnings, coffee exports can be met by increasing coffee production and export exports. Schumpeter (1912) pointed out that well-functioning banks spur technological innovation by identifying and funding entrepreneurs with the best chances of successfully implementing innovative products and production processes. In this respect, it is crucial to investigate the coffee export growth and the factors affecting coffee export growth. This study aimed to examine the effect of credit on agriculture and coffee export growth in Tanzania. In the study, with the aim of examining the relationship between agricultural credit and coffee export growth in Tanzania, 1991 – 2022 data on credit to agriculture by commercial banks and the value of coffee exported annual data covering the period given above were sourced from Bank of Tanzania and Tanzania Coffee Board. The statistics analysis tool is the Vector Error Correction Model (VECM) technique. The results of VECM estimation show that agricultural bank credit has a positive significant effect on coffee export growth in the long run. This implies that the increased number of loans issued to the agriculture sector by commercial banks also promotes coffee export growth in Tanzania. This study suggests that an agricultural credit mechanism needs to be developed to increase the agricultural financing opportunities for the realization of the use of recommended agricultural practices including the use of fertilizers, pesticides, modern seeds, and the adoption of new technology by coffee growers. The paper concludes by suggesting that policy intervention in the form of availability of credit supply on flexible terms to farmers could be effective in improving export performance as farmers could be able to purchase inputs and modern equipment to increase productivity. These findings will inform policymakers and coffee stakeholders on the best actions and decision-making regarding the importance of farmers.

Keywords: *Farmers, Coffee Export Growth, Credit to Agriculture Sector, Vector Error Correction Model*

INTRODUCTION

Tanzania is an enormous resource base- with a huge expanse of fertile arable land that can sustain a highly productive and profitable agricultural sector (URT, 2022). If these resources are managed well, they could support a vibrant agriculture sector capable of generating foreign exchange through farm exports. Despite having these endowment resources, the agriculture performance in terms of productivity and crop quality is not impressive. This is evidently by coffee which is one of the traditional exports with more than 90 percent of the total national output being exported, however, its export volume has been showing a decreasing trend over the three decades (BOT,2022). The sector has also continued to be characterized by low productivity and quality, making it suffocate in competing global markets. The record shows coffee prices have been low and inefficient throughout the production and marketing value chain. For instance, in 2021, Tanzania's coffee average price was US\$ 2.42/kg while Ethiopia recorded an average price of US\$ 3.41/kg (ICO, 2021). The coffee price trend in the last thirty years is also seen below the coffee-producing East African regional countries such as Ethiopia, Uganda, and Kenya.

Despite the country's potential to produce specialty coffee due to its ecological positioning, small-scale farmers have not yet realized its benefits. Notwithstanding, the noticeable improvement in recent trade of goods and services exports, the composition of the coffee export has not changed much. This is exhibited by its growth in exports value remaining stagnant and the share of total exports has reduced to less than 5 percent compared with 36 percent reported in 1985 (TCB, 2022). The low sector performance and lack of better pay have resulted in farmers in some areas uprooting coffee plants and shifting to other alternative crops such as horticultural produce. Theoretical and empirical evidence suggest that the availability of financial services particularly accessibility of credit has a lot to do with boosting the performance of productive sectors like agriculture. This truth relies on the way the financial sector of the country is connected to farm operations (Okafor, 2020).

In Tanzania, the coffee sector is dominated by small-scale farmers. The majority of them are small-scale coffee growers and are rural-based with poor access to useful information and a lack of access to credit finance. Lack of access to credit by these farmers constrain their acquisition of recommended inputs to increase their output. The enduring lack of credit access faced by coffee growers has also significant consequences for technological adoption, productivity, and crop quality to compete in the

global market which in turn limits coffee export growth. Given that, financing agriculture through credit from financial institutions is a very important catalyst for the agriculture sector's prosperity, the government has set targets and actions to increase formal financial services to farmers. This has been made possible by financing medium and large-scale agriculture through the guarantee schemes operated by the Bank of Tanzania (BOT) and Kilimo Kwanza initiatives (URT, 2020).

The other important moving stage that has been taken by the government is that of setting up specialized banks for financing agricultural investment and activities such as the Agricultural Development Bank (AgDB) and Tanzania Investment Bank (TIB). Their establishment was aiming to ensure that, the mainstream banking industry adequately catered to the urgent need of farmers. It also intended to increase the level of lending to the agriculture sector by lowering interest rates estimated from 17% to 9% which will help to reduce the cost of loans and increase crop productivity (BOT, 2020). Along with these efforts, the Bank of Tanzania (BOT) has played a sizeable role in this endeavor by using direct and indirect instruments to regulate the functioning of the banks and financial institutions in the country to direct the economy in the desired direction. The Bank has recently through policy measures to promote lending in the agriculture sector by allowing a reduction of the Statutory Minimum Reserve Requirement (SMR) to commercial banks to raise liquidity in the banking sector (BOT, 2022). Other measures undertaken were for the Bank to extend a special credit facility amounting to one trillion Tanzanian shillings to commercial banks with the condition to extend an acquired loan to agriculture at an interest rate not exceeding 10 percent per annum. However, the agriculture sector especially small-scale farmers still constrained by the accessibility of credit from commercial banks for financing their farming activities in particular the purchase of recommended inputs which in turn may enhance export growth.

The broad objective of this study is to investigate agricultural credit and coffee export growth in Tanzania. The specific objective of the study is to: -

- i) Analyze the trend of credit disbursed by commercial banks to agriculture and the value of coffee exports.
- ii) Estimate the relationship between agriculture credit and the value of coffee export.

To this end, the contribution of this study is in two ways as follows: -

First, the study helps to determine to what extent agriculture credit has been enabling high coffee productivity and crop quality to compete in the global

markets for enhancing coffee export earnings growth. It is assumed that credit obtained by farmers from commercial banks is used for the purchase of recommended inputs, expanding their farming activity, and adoption of new technology. Second, this study will also help to inform policymakers and coffee growers on understanding how financial institutions through the credit provision feed into farm operations for efficiency. The paper is organized as follows: - the first section depicts the introduction of the study. The second section provides a literature review, and methodology, while the fourth section highlights empirical results. The fifth section provides a discussion of the findings and the final section gives a conclusion and policy recommendations.

LITERATURE REVIEW

Theoretical Literature Review

The work is anchored on the bank lending credit channel theory based on Bernanke & Gertler's (1995) model where a contractionary monetary policy results in a reduction in bank deposits which in turn ends up reducing aggregate loan supply. According to the theory, monetary policy works by affecting bank loans and deposits so that, monetary policy besides shifting the supply of deposits also shifts the supply of bank loans by affecting the balance sheet of borrowers and lenders.

The theory explains that the credit channel should be considered as a mechanism that reinforces the traditional money channel. It considers that, for the banks to facilitate credit to the productive sector, depends on various factors conditioning the relationship between the monetary authority's intervention and the economic agent's expenditure decisions. These are institutional frameworks governing the financial system and economic agent's financial position. The underlying theory of the credit channel, suggests that firms have few substitute sources of funds beyond bank borrowing. The theory presumes that; banks' actions might affect the supply of loans from the banking system which in turn real spending in the economy. The theory has been popular in studying the impacts of banks' conditions on the provision of credit and the transmission mechanism of the monetary policy. Through credit channel theory, access to credit could have a significant contribution to the production function of small-scale farmers. It gives the opportunities to invest in farm inputs to enhance productivity which in turn will affect the level of farm exports.

Empirical Review

Empirical studies on the effects of banks' credit and agricultural output are replete globally. Among this plethora of research endeavors, many have

investigated and tried to establish the relationship between credit issued by financial institutions referred to as lenders and the performance of the agriculture sector.

For instance, Nordjo & Adjasi, (2020) evaluated the impact of access to production credit on the productivity of small farmers using Propensity Score Matching (PSM) to estimate the average treatment effect of access to production credit on the productivity of small farmers in Ghana. The result of the study revealed small farmers with access to production credit increased productivity through investment in farm inputs.

Adewale et al., (2022), conducted a study to examine the effect of farmers' credit on agricultural productivity from 1981 to 2016 in Nigeria using the Ordinary Least Squares (OLS) model. According to the results, agricultural bank credit exerts a significant positive effect on agricultural output in Nigeria.

Ngong et al., (2023) conducted a study to investigate the impact of bank credit on agricultural productivity in the Central Africa Economic and Monetary Community (CEMAC). The data from 1990 to 2019 were analyzed by using the autoregressive distributed lag technique.

The results show a long-term co-integration among the variables used. According to the study results. Banks' credit has positive and significant effects on agricultural productivity in the CEMAC) during the study period.

Florence & Nathan (2020), conducted the study in Uganda to examine the short-run and long-term relationship between commercial banks' credit and Uganda's agricultural GDP performance. The study applied the Autoregressive Distributed Lag (ARDL) approach to analyze quarterly data from 2008 to 2018. In the long run, the study found credit to have a significant positive impact on agricultural output; while in the short run, the study found bank credit not to have an immediate impact on agricultural output.

Athanasius (2017), conducted a study to examine the relationship between banks' credit and agricultural sector performance in Nigeria from 1980 to 2014 using LSM and ECM. The study found that banks' credit to agricultural supply has a positive and significant relationship with agricultural Gross Domestic Product (GDP). The other study was conducted by, Olorunsola et al., (2017) to investigate the relationship between credit to agriculture and agricultural output in Nigeria. The study applied a nonlinear autoregressive

distributed lag (NARDL) model by analyzing quarterly data from 1992 to 2015. The results show no evidence of asymmetry in the impact of credit to output growth in the agricultural sector (positive and negative changes) in the short-run but different equilibrium relationships exist in the long-run.

Bahsi & Cetin (2020) examined the impact on the agricultural production value of agricultural banks in Turkey by the Ordinary Least Squares (OLS) technique. The study used time series data spanning from 1998 to 2016. The results from the empirical study show that agricultural credit does not directly contribute to agricultural production, and there was a very weak relationship. Ita et al., (2020) conducted a study to examine the effect of commercial banks' lending on the growth of the agricultural sector in Nigeria by using a multiple regression statistical technique. The study specifically examined the impact of total loans and advances on the agricultural sector output, to examining the impact of lending rate on the agricultural output and to establish the relationship between commercial bank liquidity and the agricultural sector output. The findings revealed that there was a positive and significant relationship between loans and advances, interest rates, liquidity, and bank assets on agricultural output.

Zabatantou et al., (2023) using the ESR model estimated by the maximum likelihood method found that on average the effect of agricultural credit on agricultural productivity is 92.2% indicating that, the majority of farmers in Congo who have obtained agricultural credit have a high probability of improving their productivity.

Okafor (2020) examined the effect of banks' credit on the agricultural output in Nigeria using the Ordinary Least Squares (OLS) technique. The study found that commercial bank credit has a positive effect on agricultural output in Nigeria and has increased agricultural production in Nigeria for the study period.

Although there a numerous study regarding agricultural credit and farm performance as reviewed above, only a limited number of studies in this field have been carried out in Tanzania.

The reviewed studies have revealed mixed results some majority showing a positive and significant effect of agricultural credit on farm performance' while others show a credit to agriculture to have no effects on farm performance (Olorunsola et al., 2017 and Bahsi & Cetin 2020). In addition, from the reviewed previous studies no study has attempted to examine the

effects of commercial banks' credit on different value chain segments such as marketing, they all focus on farm output and productivity which presents a research gap in this respect.

RESEARCH METHODOLOGY

Data Sources

The study used secondary annual time series data for all the variables under consideration from 1991 -2022 which is about 31 years. The selection of this timeframe based on the fact that this time marks the period when major reforms in the coffee sector and financial sector were occurred. The main sources of data were from reputable institutions responsible for this information which are the Bank of Tanzania (BOT) and Tanzania Coffee Board (TCB) various reports.

In this study, paper, four macroeconomic variables have been selected from amongst variables which include agricultural credit, inflation rate, discount rate, and annual growth money supply as explanatory variables while the dependent variable is coffee export growth explained by the value of coffee exports (CEG). The key reason for studying the selected variables is that they have been used by previous studies (Ita et al,2020; Athanasius, 2017; Bahşi & Çetin 2020; Nordjo, & Adjasi, 2020) as considered to have a significant relationship with monetary policy which influences the real economy.

Table 1: Summary of Variables

Variable	Description and Measurement Variable	Source
CEG	Coffee export growth refers to a value obtained from coffee sold abroad measured in millions of USD.	Tanzania Coffee Board (2022)
CrAgr	Agriculture credits are the aggregate amount of the commercial banks' system credit issued to the agricultural sector.	Bank of Tanzania (1991-2022)
INF	Headline inflation is a change in the price level of the entire CPI basket.	Bank of Tanzania (1991-2022)
DISC	This is the discount rate (%) at which commercial banks borrow funds from the central bank.	Bank of Tanzania (1991-2022)
M2	The money supply growth rate is the percent of the total amount of money circulating within an economy.	Bank of Tanzania (1991-2022)

Source: Researcher (2023)

Model Specification and Estimation Technique

In an attempt to investigate the effects of credit to the agriculture sector on coffee export growth in Tanzania as set out in the objective of the study, this study adopted the model in the study conducted by Adewale et al., (2022), on the analysis of the effect of credit to farmers and agricultural productivity in

Nigeria. The model states that $AOUT = f(ABCR, BLR, FREX)$ whereby, AOUT presents the agricultural gross domestic product as an independent variable, and ABCR, BLR, FREX are all dependent variables representing, Banks' credit to agriculture, banks' lending rate and foreign exchange rate respectively. This model was modified as follows;

$$CEG = f(CrAgr, DISCR, INF, M2) \dots\dots\dots 2$$

The model further was statistically specified as follows: -

$$CEG_t = \beta_0 + \beta_1 CrAgr_t + \beta_2 DISCR_t + \beta_3 INF_t + \beta_4 M2_t + \mu_t \dots\dots\dots 3$$

Where

CEG; is the dependent variable representing the value of coffee exported; while CrAgr, DISCR, INF, and M2 are independent variables for Credit to agriculture, discount rate, inflation rate, and broad money supply annual growth rate, respectively as explanatory variables.

β_0 represents a regression constant; while regression intercept = $\beta_1, \beta_2, \beta_3$, and β_4 which stand for the weight of the unit change of the explanatory variables that is parameter or estimation coefficient of explanatory variables; and stochastic error terms = μ_t

By considering that, the data used in this study are time series data, and therefore it is important to capture long run and short run effects on the model, equation 3 was further modified into mathematical form in natural logarithm (ln), as shown below: -

$$\ln CEG_t = \beta_0 + \beta_1 \ln CrAgr_t + \beta_2 \ln DISCR_t + \beta_3 \ln INF_t + \beta_4 \ln M2_t + \mu_t \dots\dots 4$$

The data was analyzed with econometric techniques involving descriptive statistics, Augmented Dicker Fuller for unit root test, and Johansson technique for co-integration test for a long-run relationship. The Vector Error Correction Model was used to regress independent variables (Credit to agriculture, discount rate, inflation, and money supply growth rate) on the dependent variable (coffee export growth) as follows: -

$$Y_t = \beta_0 + \beta_1 + \beta_1 Y_{t-1} + \sum_{i=1}^m Y_i X_{it} + \mu_t \dots\dots\dots 5$$

Where:

- Y_t = Coffee export growth
- Y_{t-1} = Lagged coffee export growth
- X_{it} = Independent variables

β_0 = Constant or intercept

β_1 = *model* coefficient of the lagged coffee export growth

Y_i = Model coefficients of the independent variables

μt = Error Term of structural shock

RESULTS

Summary statistics

Before econometric estimation, the study examined the statistical characteristics of the variables under the study to check how they are behaving for the selected timeframe. Table 2, shows the descriptive statistics of coffee export value (CEG) and explanatory variables (*CrAgr*, *INF*, *DISCR*, and *M2*) over the sample period.

Table 2: Summary statistics of the study Variables (1991-2022)

	CEG	CrAgr	DISCR	INF	M2
Mean	111.86	667.61	14.33	10.23	17.28
Median	111.19	520.58	15.99	6.13	15.09
Maximum	186.61	1884.91	27.00	35.28	39.26
Minimum	35.22	13.92	3.70	3.29	3.76
Std. Dev.	40.21	631.48	6.65	8.08	8.09
Skewness	-0.11	0.48	0.31	1.54	0.76
Kurtosis	2.04	1.92	2.24	4.59	3.26
Jarque-Bera	1.25	2.76	1.24	15.46	3.08
Probability	0.54	0.25	0.54	0.00	0.21
Observations	31	31	31	31	31

Source: Source: author's computation and reviews 13 output, 2023.

The descriptive statistics show that coffee exports, credit to agriculture, discount rate, inflation, and growth money supply have a mean of 111.86 million USD, 667.61 billion per annum in aggregate value, 14.33 percent, 10.23 percent, and 17.28 percent, respectively. The standard deviation for coffee exports, credit to agriculture, discount rate, inflation, and growth money supply is 40.21; 631.48; 6.65; 8.08, and 8.09 respectively. Save for coffee export growth, credit to agriculture, discount rate, inflation, and growth money supply has a positive distribution as indicated by the skewness. On kurtosis, Credit to the agriculture sector, discount rate inflation, and growth money supply are highly picked relative to the normal distribution with a value above two (2) implying that, the distribution is leptokurtic (Table 2).

Trend of Value of Coffee Exports and Agriculture Credit

The data show that, improving trend in the value of coffee exported during the study period. The fastest-growing value of coffee exports was observed

between 2021 and 2022 (Figure 1). The success may be the implementation of the coffee development strategy with the ambition of enhancing the production and value of exports by harmonizing multi-sectoral engagement to support and drive the transformation of the coffee industry.

Furthermore, in accordance with the analysis, credit issued to the private sector in aggregate has also exhibited quick improvement over time. The results may reflect, the efforts taken by Central Bank to make accessibility of credit in influencing the real sector development. However, the share of credit to the agriculture sector is seen to grow at a slow pace (Figure 2).

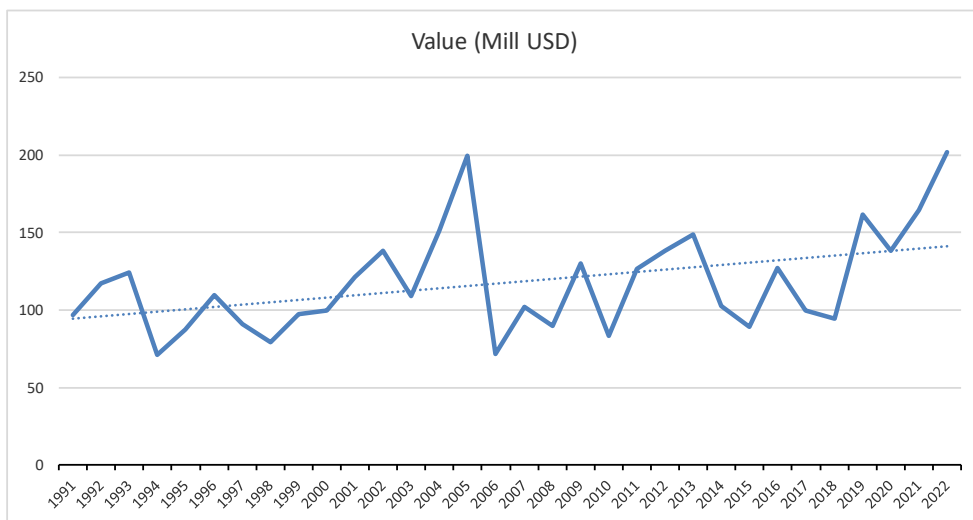


Figure 1: Value of Coffee exports

Source: Bank of Tanzania and Tanzania Coffee Board

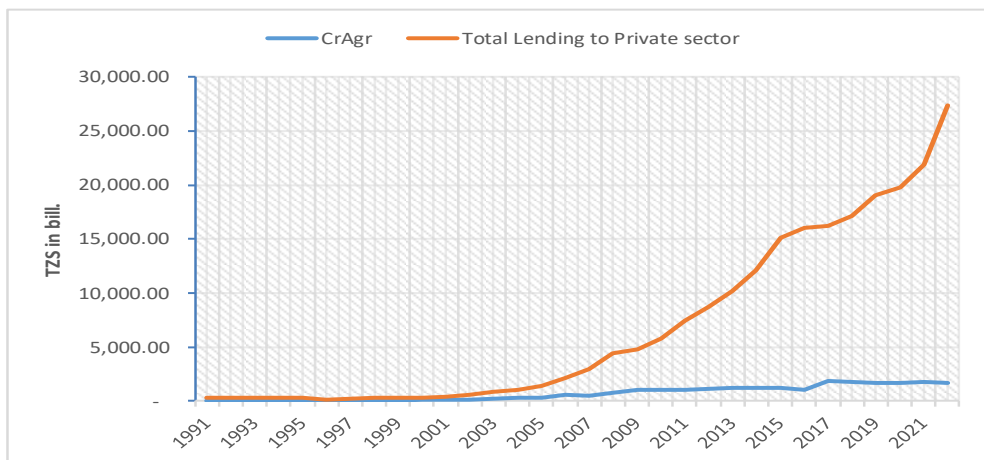


Figure 2. Share of Commercial Bank lending to agriculture Sector 1991- 2021

Source: Bank of Tanzania, Various issues and Author's Computation

Diagnostic Test Results

This paper applied the Augmented Dickey-Fuller (ADF) test for stationarity and the Johansen test for co-integration in performing diagnostic tests. The stationarity tests were undertaken for all study variables. The test was done to determine if they were stationary or non –non-stationary.

Stationarity Tests Results

To avoid spurious results and nonsensical regression the study undertakes a stationarity test. The Augmented Dickey-Fuller (ADF) test was applied to test for stationarity.

From the result in Table 5, all variables (*LnCrAgr*, *LnDISCR*, *LnINF*, and *LnM2*), became stationary at first differencing.

From the results, probability is below 0.05 levels of significance which indicates that the variables are integrating at order one I (1). The results are given in Table 3 below: -

Table 3: Augmented Dickey-Fuller (ADF) Test Results

Variable	ADF Calculated value		McKinnon 5% Critical value	Prob.	Order of Integration
	At level	At 1 st difference			
LnCEG	-1.5545	-6.2705**	-2.9639	0.0000	1(1)
LnCrAgr	-0.9889	-4.7643**	-2.9639	0.0006	1(1)
LnDISCR	-1.9302	-5.9476**	-2.9639	0.0001	1(1)
LnINF	-1.7995	-5.6574**	-2.9640	0.0001	1(1)
LnM2	-2.0334	-10.3894**	-2.9639	0.0000	1(1)

**Significant at 5%

Source: Author’s Computation and EViews 13 Output 2023.

Determination of Optimum Lag

Optimal lag length was more important in the estimation procedure. To determine the optimal lag length, the information criteria considered were the Akaike Information Criteria (AIC), Schwarz; 's Bayesian information (SIC), and the Hanna-Quinn Information Criteria (HQC). The objective of performing the information criteria is to select the number of parameters that minimize the value of the information criteria. Table 4. shows the optimum lag structure. The outcome indicates that the majority of the selection criteria select the optimum lag length of 2 at a 5% level of significance. Hence, the lag length of 2 will be used in estimating the VECM and the Johansen co-integration test.

Table 4. Determination of Optimum Lag Results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-50.5363	NA	0.0000	4.4259	4.7646	4.5234
1	70.9763	168.2482*	0.0000	-1.1520	1.557726*	-0.3717
2	145.6370	63.1745	3.21e-10*	-3.125921*	1.9549	1.662841*

Source: Source: author’s computation and Eviews 13. Output 2023

Co-integration Test (Johansen Co-Integration Test)

Cointegration tests were performed to test if the variables have a long-run relationship.

The results from the Johansen Co-integration analysis were presented in Tables 5 and Table 6; where the trace statistics and eigenvalue examine the null hypothesis of non-co-integration against the alternative of co-integration. Therefore, analysis of annual data from 1991 to 2022 seems to support the proposition that, there exists a long-run relationship among the dependent variable and independent variables under the study. The values of trace statistics were greater than relevant critical values which showed the existence of at most 2 co-integrating equation (s) at 0.05 statistically significant level (Table 5).

The maximum eigenvalue test in Table 6 confirmed the presence of a long-run relationship among the variables under the study with at least one co-integrating equation at a 0.05 statistically significant level. We, therefore, reject the null hypothesis and conclude that there exists a long-run relationship between the dependent and independent variables.

Because the series for the estimated model is co-integrated, we proceed to fit the Error Correction Model for the study.

Table 5: Johansen Co-Integration Trace Test
Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.** Critical Value
None *	0.8797	157.8874	125.6154	0.0001
At most 1 *	0.7712	102.8174	95.7537	0.0149
At most 2	0.6071	64.4718	69.8189	0.1240
At most 3	0.5787	40.1856	47.8561	0.2159
At most 4	0.3284	17.7120	29.7971	0.5874

Trace test indicates 2 cointegrating equation(s) at the 0.05 level

* Denotes rejection of the hypothesis at the 0.05 level

Source: Authors’ Computation and EViews 13 Output

Table 6: Johansen Co-Integration Maximum Eigenvalue Test

Unrestricted Cointegration Rank Test (Max-eigenvalue)				
Hypothesized		Max-Eigen	0.05	Prob.**
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Critical Value
None *	0.8797	55.0700	46.2314	0.0045
At most 1	0.7712	38.3456	40.0776	0.0774
At most 2	0.6071	24.2862	33.8769	0.4349
At most 3	0.5787	22.4736	27.5843	0.1971
At most 4	0.3284	10.3517	21.1316	0.7111

Source: Authors' Computation and EViews 13 Output. 2023

Max-eigenvalue test indicates 2 co-integrating equation(s) at the 0.05 level; * denotes rejection of the hypothesis at the 0.05 level;

Vector Error Correction Model (VECM) Results and Analysis

After the evidence of co-integration among the variables Vector error correction model (VECM) was found to be the most appropriate model to be used. This was performed based on, findings from the Johansen co-integration tests showing that *CrAgr*, *DISCR*, *INF*, and *M2*, are co-integrated in the long run. Therefore, the next step was to run the vector error correlation model (VECM) to test the hypothesis. The optimal lag length of the model used in estimating VECM to run regression was 2 as determined with vector autoregressive (VAR).

Table 7: Long-run relationship

	Coefficient	Std. Error	t-Statistic
C	-0.4891	-	-
D(D_LNCEG(-1))	1.0000	-	-
D(D_LNCrAgr(-1))	0.1597	-0.0153	10.4531**
D(D_LNDISCR(-1))	0.3341	-0.0169	0.8260
D(D_LNINF(-1))	-0.9900	-0.0196	5.4476**
D(D_LNM2(-1))	0.1825	-0.0192	9.5262**

Source: Authors' Computation and EViews 13 Output 2023

** denotes significant at 5%

Table 7 shows the Vector Error Correction Estimates of coffee export growth as an endogenous variable. From the above regression coefficients, we can express the long-run model as follows: -

$$\text{LnCEG}_t = -0.4891 + 0.1597\text{LnCrAgr}_t - 0.3341\text{Ln DISCR}_t - 0.9900\text{LnINF}_t + 0.1825\text{LnM2}_t + \mu$$

The results from the estimated model show that, except for DISCR all other variables are statistically and significantly affect the coffee export growth in Tanzania in the long run for the study period.

Agricultural Credit (CrAgr): For credit to the agriculture sector, the coefficient of (CrAgr) is positive (0.1597) with t –Statistics of 10.4531 which

means that credit to the agricultural sector has a positive and significant effect on coffee export growth in the long run. A unit increase in credit to the agriculture sector (CrAgr) will cause coffee export growth (CEG) to increase by 0.1597 units in the long run, *ceteris paribus*.

Inflation rate (INF): For the inflation rate the coefficient of (INF) is negative (-0.9900) with t- Statistics of 5.4476 which means that an increase in inflation rate has a negative and significant effect on coffee export growth in the long run, *ceteris paribus*. This signifies that a unit increase in the inflation rate will cause coffee exports to grow by 0.9900 units in the long run.

Money supply growth rate (M2): As for the money supply growth rate, the coefficient of (M2) has a positive (0.1825) with t-statistics 9.5262 which means that growth money supply has a positive and significant effect on coffee export growth in the long run. This indicates that a unit increase in money growth rate will cause coffee export growth to increase by 0.1825 units in the long run.

Discount rate (DISCR): In the case of the discount rate (*DISCR*) the coefficient of DSCR is negative (0.3341) with t statistics 0.8260 which means that the discount rate has a positive and insignificant effect on coffee export growth. This indicates that a unit increase in the discount rate will cause coffee export to increase by 0. 3341 units however this effect is not significant. In addition to long-run results, Table 8 below shows the short-run dynamics.

Table 8: Short-Run Dynamics of VECM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.1321	0.2118	-0.6240	0.5434
D(D_LNCEG(-1))	0.0831	1.4839	0.0560	0.9562
D(D_LNCrAgr (-1))	0.4030	0.8317	-1.6868	0.1155
D(D_LNDISCR(-1))	-0.7377	0.8311	-0.8876	0.3909
D(D_LNINF(-1))	-0.4412	1.3451	-0.3280	0.0421
D(D_LNM2(-1))	0.1822	0.5518	-0.3302	0.7465
ECM(-1)	-0.5243	1.6528	-0.3172	0.7561
R-squared	0.5353	Mean dependent var.		-0.1561
Adjusted R-squared	-0.5163	S.D. dependent var.		1.0272
S.E. of regression	1.1328	Akaike info criterion		3.3884
Sum squared resid	16.6834	Schwarz criterion		4.1428
Log-likelihood	-33.1325	Hannan-Quinn criterion.		3.6247
F-statistic	6.6681	Durbin-Watson stat		1.4476
Prob(F-statistic)	0.0343			

Source: Authors' Computation and EViews 13 Output 2023

The estimation results from Table 6b the coefficients of credit to the agriculture sector and money supply growth rate are both positive (0.4030 and 0.1822) with t Statistics of -1.6868 (prob. 0.1155) and -0.3302 (prob. Value off 0.7465) respectively; which means that credit to the agriculture sector and money supply growth rate has a positive and insignificant effect on coffee export growth because the prob value is greater than 5% significant level. This indicates that a unit increase in credit to agriculture and money supply growth rate will cause coffee export to increase by 0.1155 units and 0.7465 units respectively in the short run ceteris paribus, though this effect is not significant.

Inflation rate (INF): For the inflation rate, the coefficient is negative (0.4412) and with t statistics of -0.3302 and prob value of 0.0421 which means that the inflation rate has a negative and significant effect on coffee export growth because the probability value is less than 5% of significant level. This indicates that a unit decrease in the inflation rate will cause coffee exports to grow by 0.0421 units ceteris paribus in the short run.

Likewise, the coefficient of the discount rate is negative (0.7377) with t statistics of -0.8876 and prob value of 0.3909 which means that the discount rate has a negative and insignificant effect on coffee export growth in the short run because prob. Value is less than 5% significant level. This means that a unit decrease in the discount rate will cause coffee exports to grow by 0.7377 units in the short run when all factors are held constant.

Finally, From the estimation results in Table 7b above, the simultaneous test (F-statistics) in the study model results obtained at 6.6681 with Prob. Equal to 0.0343 which means it is statistically significant at a 5% level of significance and the model is a good fit. The Durbin-Watson statistics of 1.4476 which approximated to 2 indicates that there is no autocorrelation detected in the model. The R-square is 0.5353. This means that 53% of the total variation in coffee exports can be explained by changes in the values of the independent variables while the remaining 47% is due to other stochastic variables outside the model. The negative sign and coefficient of the residual (i.e. ECM) meet the requirement for short-run adjustment to long-run equilibrium.

Diagnostic Tests

The diagnostic check was conducted for some fundamental aspects of the research model in terms of the VEC Residual Serial Correlation LM test, test

for normality, heteroscedasticity, multicollinearity test, and stability test using CUSUM Residuals to validate the model. The results have been given in Figure 3; Figure 4, Table 8a; Table 8b, and Table 8c below: -

Stability Test

To evaluate the strength of the regression estimate stability test by cumulative sum (CUSUM) was conducted on the residuals of the regression estimates. The stability test showed that, the model is adequately specified and that the parameters of the models did not suffer from any structural instability throughout the study. This is because the plot of CUSUM is within the boundary line of a 5 percent significant level as seen in Figure 3.

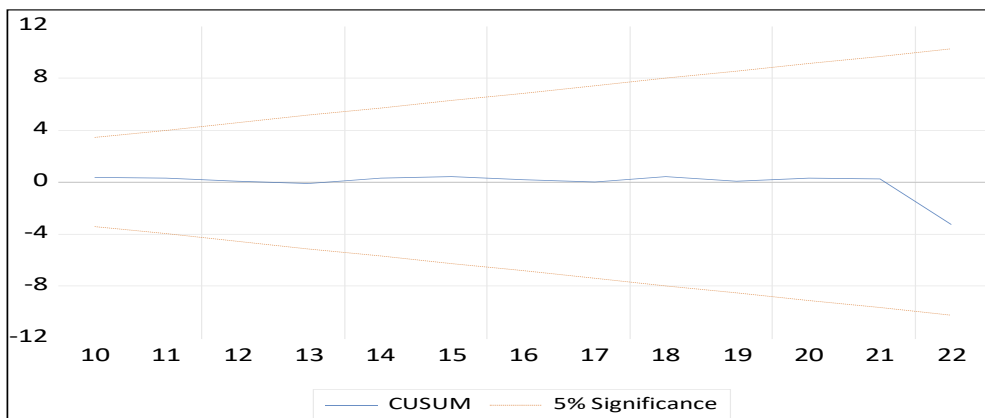


Figure 3: Plot of CUSUM Residuals
Source: Authors' Computation and EViews 13 Output

VEC Residual Serial Correlation LM test

The auto-correlation tests were conducted using Breusch-Godfrey (BG). As per BG, the following results are shown in Table 9. The results of auto-correlation tests indicate that Obs*R-squared is 1.7175 with the Prob. Chi-Square (2) of 0.4237 which is greater than five percent, therefore, we accept the null hypothesis that there is no serial correlation in the series residual.

Table 9: VEC Residual Serial Correlation LM Test Results

F-statistic	0.937858	Prob. F (2,24)	0.4053
Obs*R-squared	2.319662	Prob. Chi-Square (2)	0.3135

Source: Author's computations and Eviews 13. output

Tests for Normality

The normality test carried out in the study using the Jarque-Bera, test with a result of 1.410251 and the probability value 0.494046 being greater than 5

percent (Figure 4). The results indicate that the overall for the entire research model residual is normally distributed.

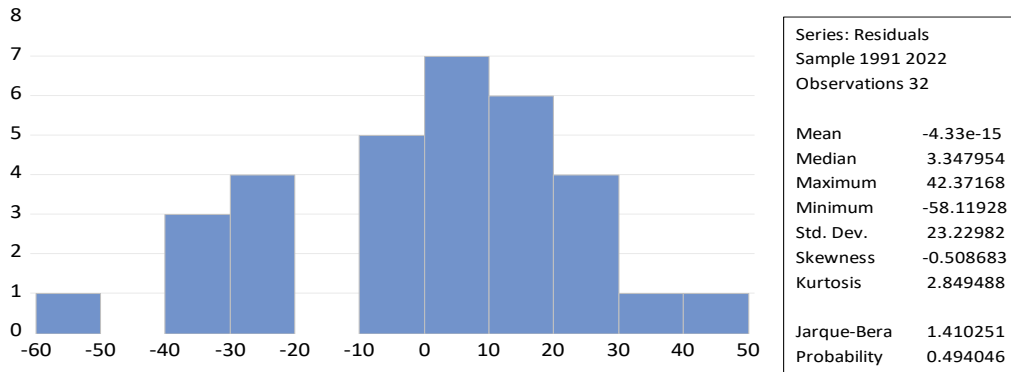


Figure 4: Normality Test results

Source: Authors' Computation and EViews 13. Output 2023

Heteroscedasticity Test

A heteroscedasticity test was done in order to determine if there was heteroscedasticity between the variables after running the model as indicated in Table 10.

From the results of the heteroscedasticity tests conducted using Breusch-Pagan-Godfrey PBG the Obs * R-squared is 7.502937 and the Pro. Chi-Square (2) of 0.1858 which is greater than 5 percent, therefore, we accept the null hypothesis that there is no heteroscedasticity.

Table 10: Heteroscedasticity Test Results

Heteroskedasticity Test: Breusch-Pagan-Godfrey

Null hypothesis: Homoskedasticity

F-statistic	1.592651	Prob. F(5,26)	0.1972
Obs*R-squared	7.502937	Prob. Chi-Square(5)	0.1858
Scaled explained SS	4.580359	Prob. Chi-Square(5)	0.4692

Source: Authors' Computation and EViews 13. Output 2023

Multicollinearity Test

From the results in Table 11 below, it can be seen that the Centered VIF value is less than 10. If the VIF appears to be less than 10, then it can be concluded that in the regression model, there is no multicollinearity and the regression model is feasible to use.

Table 11: Multicollinearity Test Results

	Coefficient Variance	Uncentered VIF	Centered VIF
D_LNDISCR	0.0258	1.8580	1.7839
D_LNM2	0.0128	1.7937	1.7486
D_LNINF	0.0360	1.9036	1.7815
D_LNCRAGR	0.0052	3.0119	2.9990
C	0.0522	16.0645	NA

Source: Authors' Computation and EViews 13. Output 2023

DISCUSSION OF THE FINDINGS

The study found that agriculture credit exerts a significant positive effect on coffee export growth in Tanzania in the long run but not so in the short run. This finding supports the results of The result are in line with the findings of Adewale et al., (2022); Ngong et al., (2023), and Athanasius (2017), who found that banks' credit to agriculture has positive and significant effects on agricultural exports in the long run. Also, the results are similar to that of Ita et al., (2020) where commercial banks' lending on the growth of the agricultural sector in Nigeria was found to positively and significantly affect agricultural sector performance including agricultural exports growth in Nigeria. Thus, our obtained findings confirm that agricultural credit insured by commercial banks significantly increased coffee export growth in the long run. These results imply that the efforts taken by the government to make credit available to the agricultural sector at an affordable rate was a welcome development, and further steps should be taken to ensure the stability of the banking sector. The reason behind this is that credit facilities in the context of Tanzania are essential for small-scale farmers who commit 90% of the total coffee output. Access to credit services helps farmers enhance their agricultural production and increase productivity through the purchase of inputs. This will intern results to enhance coffee export earnings as well.

From the study results, inflation was found to have a negative and significant effect on coffee export growth in both the short run and long run. This could have been caused by the fact that agriculture is more responsive to a change in inflationary pressure. Persistence increase in inflation leads to an increase in the prices of exported goods which might reduce the competitiveness of coffee exports in the international markets; but also it can impact the cost structure of the coffee industry by raising the prices of inputs such as labor, fertilizer, machinery, and transportation costs. High input costs can tend to reduce profit margins for coffee producers and exporters. Therefore, if the inflation is significantly high, it might limit the ability of coffee producers to

expand production, potentially impacting the value of coffee exports. The results are in line with the study results by Mbunduki (2024) who found inflation to have a negative and significant effect on coffee export growth in Tanzania in the long run. According to his results, inflation appears to have significant effects because farm production costs are more responsive to changes in the inflationary pressure.

The results provide strong evidence that, the money supply growth rate as measured by M2 leads to increased coffee export growth in Tanzania. According to the results, the money supply growth rate was found to have a positive and significant effect on coffee export growth in Tanzania. This indicates that, as the money supply growth rate increases by one unit, influence coffee export growth by 0.1825 units in the long run. The same results were found different from the study result by Shamsoddini et al., (2021) conducted in Iran, who found money supply to have no significant effect on agricultural prices which impacts export growth.

CONCLUSION AND RECOMMENDATION

The results presented and analyzed above underscore the strategic role of the government in making credit available to agriculture such as coffee from financial institutions in accelerating economic growth. This is evidenced by the results above which indicate that, there is a positive and significant relationship of the credit issued by commercial banks to coffee export growth in the long run and short run.

Therefore, based on the results above, we reject the null hypothesis that "Credit to the agriculture sector, does not have a significant effect on coffee export growth in Tanzania"; and we accept the alternative hypothesis. This can lead to the conclusion that one of the most important determinants of growth in coffee exports is the availability of productive credit in a required quantity at a reasonable cost. This can be translated that, it is opined that greater attention in policy strategies on the availability and affordable credit to agriculture sector should be accorded the coffee sector performance in terms of export growth. By doing so, the government should be able to promote and consolidate progress in the agriculture export growth in particular coffee, which is among the six prioritized traditional export crops with a high potential and capability of contributing to the national economic growth.

Based on the above study, it can be well concluded that agriculture credit remains an important factor for supporting indirectly the development and

growth of coffee exports through purchasing modern production inputs such as fertilizers, pesticides, and agriculture machinery. Due to this fact, this study therefore ends up by recommending the following: -

Firstly, the procedure of credit to small-scale farmers by commercial banks should be made simple and easy. By doing so, it will provide opportunities for small-scale farmers to obtain funds from credit sources to finance their agricultural activities. The government through the Bank of Tanzania should establish a special credit facility for cash crops including coffee. The facility should have channeled through AMCOS and not through commercial banks to shorten the unnecessary lending procedures to enable small-scale farmers to obtain credit on time to facilitate agricultural activities.

Limitations

The bigger limitation the Researcher encountered was of missing of the data for some years between the study timeframe. For consistency the data on the value of coffee were sourced from the Tanzania Coffee Board, data for some years were not published on time during the study specifically the Dada for the last two years however the research opted to use the data from Bank of Tanzania reports.

Areas for further studies

This study has identified several areas where further research is necessary to continue intensifying knowledge about agriculture financing. However, a comprehensive investigation of the effects of lending rates on coffee production is essential for enhancing coffee output production and crop quality is one of the vital areas.

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Effects of Perceived Vulnerability on Enhancing Prevention Intention of Fire Outbreaks in Public Markets in Dar Es Salam Tanzania

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Abstract

This study investigates the effects of perceived vulnerability on the intention to prevent fire outbreaks in public markets located in Dar es Salaam, Tanzania. Employing rigorous quantitative research methods, the study conducted surveys with a total of 384 participants, comprising traders and market management personnel across various markets in the Dar es Salaam Region. The selection of participants utilized a simple random sampling technique, ensuring representation from 10 different markets. Data collected from these surveys were analyzed using a robust structural equation model. The findings from the analysis revealed a notable result: perceived vulnerability did not exert a statistically significant influence on the intention to prevent fire outbreaks in these public markets. Despite the lack of a direct impact, the study underscores the importance of addressing underlying factors that contribute to perceived vulnerability. By understanding and mitigating these factors, such as inadequate fire safety infrastructure or insufficient training in fire prevention measures, stakeholders can enhance the perceived vulnerability construct's relevance and effectiveness in shaping comprehensive fire prevention strategies. In conclusion, this research highlights the complexity of factors influencing fire prevention behaviors in public markets. It calls for targeted interventions aimed at bolstering the perceived vulnerability framework to better align with practical fire prevention efforts, thereby safeguarding public markets and promoting community safety in Dar es Salaam, Tanzania.

Keywords: *Perceived Vulnerability, Prevention Intention of Fire Outbreaks, Public Markets*

INTRODUCTION

Market fire outbreaks have become a significant concern in both developed and developing countries (Hatmoko and Larassati, 2021; Oneugubu *et al.*, 2021). Examples include the Sentul market fires in Malaysia in 2017 and

2019 (Pressreader, 2020; New Traits Times, 2019), the Daegu market fire in Korea in 2016 (The Korea Herald, 2016), and the Kolibo public market fire in the Philippines in 2019 (Panay News, 2019; Rappler, 2019). Other notable incidents are the Camden Lock market fire in England in 2017, the Sunrise Oriental market fire in the USA in 2017, the La Merced market fire in Mexico in 2019, and the Gariahat market fire in India in 2019 (Hatmoko and Larassati, 2021).

This trend indicates a continual increase in fire outbreaks over time (Bushesha and Ndibalema, 2017). For instance, Nigeria experienced 39 market fires from 2012 to 2013, causing significant property and capital losses for traders (Popoola *et al.*, 2016). Between 2015 and 2018, the country faced four additional market fire incidents (Hatmoko and Larassati, 2021). Uganda dealt with nine market fire cases from 2010 to 2022 (VOA, 2011; Daily Monitor, 2021; URN, 2022; The Independent, 2022), while Kenya recorded 12 market fire incidents from 2015 to 2022 (The Citizens, 2022; BBC News, 2018; Hilary *et al.*, 2020; NTV, 2016). In Tanzania alone, there were 28 market fire threats between 2010 and 2022 (URT, 2022; Mwidge and Rogath, 2014; Hilary *et al.*, 2020; The Citizen, 2020; The Citizen, 2021; The Citizen, 2021).

Given the evidence, it is evident that fire outbreaks in public markets pose a significant threat to traders, as these markets often serve as the primary source of income for many individuals. Various studies (Martin *et al.*, 2007; Karemaker *et al.*, 2021; Jansen *et al.*, 2020) have shown that factors derived from the Protection Motivation Theory (PMT) are highly predictive in determining intentions to adopt preventive measures for fire-related disasters, such as wildfires, residential fires, and bushfires (Kinateder *et al.*, 2015). Jansen *et al.* (2020) found that vulnerability is a predictor of prevention intention, while severity and self-efficacy have a weaker relationship with prevention intention. However, these findings do not specifically address public markets in Tanzania, particularly in the Dar es Salaam region.

The occurrence of fire outbreaks in Tanzanian public markets is on the rise. Nonetheless, the Tanzanian government has implemented various measures to mitigate the impact of these outbreaks by enacting laws and regulations aimed at improving fire safety (URT, 2007). The Fire and Rescue Force (FRF) conducts inspections, provides training, organizes fire awareness campaigns, and initiates programs such as "NINACHO NAJUA KUKITUMIA" to reduce the likelihood of fire outbreaks (URT-Fire incident report, 2017; ITV, 2020). There is a perception that public awareness and

preparedness campaigns have improved in recent years (Every *et al.*, 2015). However, there have been 16 reported incidents of market fires in Dar Es Salaam from 2010 to 2022, causing significant losses for traders in terms of property, financial capital, injuries, and even fatalities (URT, 2022). Therefore, the researcher will use PMT as the primary theory for this study, as it has proven effective in predicting prevention intentions related to various fire hazards, including wildfires, residential fires, and bushfires (Kinateder *et al.*, 2015; Martin *et al.*, 2009; Karemaker *et al.*, 2021; Jansen *et al.*, 2020). Additionally, self-efficacy has been found to predict prevention in market fires (Fitria *et al.*, 2020). Importantly, there is a lack of studies conducted in Tanzania on the impact of perceived vulnerability on the intention to prevent fire outbreaks in public markets. Thus, this study aims to explore the effects of perceived vulnerability on enhancing the intention to prevent fire outbreaks in public markets.

LITERATURE REVIEW

The Protection Motivation Theory (PMT)

The Protection Motivation Theory (PMT), introduced by Rogers in 1975, has been extensively used to predict behaviors aimed at reducing risks (Rogers, 1975; Sommestad *et al.*, 2015). PMT posits that engaging in protective behavior is influenced by an individual's motivation for self-protection (Ezati *et al.*, 2021). The theory comprises two main appraisals related to behavior change. The threat appraisal involves an individual's belief in the severity of a threat (perceived severity) and the likelihood of being affected by it (perceived vulnerability) (Ezati *et al.*, 2021). The coping appraisal includes response efficacy, which is an individual's belief that the recommended behavior will effectively mitigate the danger, and self-efficacy, which is the confidence in one's ability to perform the behavior (Ezati *et al.*, 2021).

Rogers anticipated that PMT would be applied in various ways, a prediction that has been confirmed as it is now used across multiple disciplines for safety prevention (Rogers, 1975; Westcott *et al.*, 2017). Furthermore, the number of studies on PMT has tripled since 2014, demonstrating its growing utility and advancement in research (Mou *et al.*, 2022). PMT is adaptable, allowing for modifications, and can serve as a tool for postmortem analysis of past disasters to identify gaps and inform future disaster management strategies (Mou *et al.*, 2022; Kudejira *et al.*, 2022). Additionally, PMT can explain individuals' behaviors in protecting themselves from danger and is applicable to various social issues and diverse fields (Westcott *et al.*, 2017; Marikyan *et al.*, 2022).

However, PMT has certain limitations. It does not fully consider a broad range of environmental factors, cognitive processes, and moderators that could influence protective motivation (Rogers, 1975; Marikyan and Papagiannidis, 2022). Additionally, PMT assumes that individuals make rational decisions, overlooking the fact that people can sometimes behave irrationally (Marikyan and Papagiannidis, 2022). Research by Martin *et al.* (2007) and Ezati *et al.* (2021) found that individuals consider risk mitigation when they perceive a vulnerability to the threat of wildfire. Moreover, perceived severity, vulnerability, response efficacy, and self-efficacy are associated with adaptive behavior, while an increase in rewards and response cost can hinder adaptive behavior (Inouye, 2014; Liu and Jiao, 2017; Pechmann, 2003; Scheithauer, 2012; Sheeran *et al.*, 2014; Westcott *et al.*, 2017). Specifically, Ezati *et al.* (2021) found that rewards and response costs specifically impede protective behavior. This theory is relevant to the study objective because perceived vulnerability, a key variable from PMT, is utilized in this study to examine its impact on enhancing the intention to prevent fire outbreaks in public markets.

Empirical Literature Review

Vulnerability pertains to the perceived likelihood of a risk occurring (Forbes-Mewett *et al.*, 2019). Dupey (2021) revealed that the perception of vulnerability to prevent fire risks is influenced by the type of residence. Peveglio *et al.* (2018) argue that vulnerability alone may not be adequate to establish comprehensive preventive measures for the risk of wildfires. Nonetheless, vulnerability is deemed to be a suitable approach for planning preventive efforts for firefighting resources, thereby reducing the cost of suppression (Fischer *et al.*, 2014). Fischer *et al.* (2014) also suggested that individuals experiencing fear and anxiety associate vulnerability with engaging in risk reduction behavior. It is essential to note, however, that these studies were conducted in developed countries, with many focusing on the USA and Australia, primarily in the context of wildfires and bushfires rather than public market fires.

On the contrary, Elenwo's (2020) study in Nigeria disclosed that a lack of awareness and preventive measures contributes to market fires, leaving traders susceptible to such incidents. The study also contended that traders who smoke cigarettes expose the entire market community to the risk and vulnerability of fire outbreaks. Additionally, the storage of flammable materials in markets emerged as a factor contributing to vulnerability in market fires (Elenwo, 2020; Oneugbu *et al.*, 2021). The vulnerability of market fires is frequently ascribed to building materials and insufficient

preventive measures (Alabi *et al.*, 2021; Popoola *et al.*, 2016). It was also revealed that the design of exit and entry points in markets, along with activities conducted within them, adds to their susceptibility to fires (Alabi *et al.*, 2021). Alkali (2022) determined that the presence of flammable materials such as timber heightens the perceived vulnerability among traders in markets. Additionally, religious beliefs regarding fire risks in markets were found to influence prevention and effective response (Abunyewah *et al.*, 2022), and market fires received comparatively less attention in terms of awareness (Aboagye *et al.*, 2018). However, it is essential to note that all these studies were conducted in Nigeria and Ghana, and they lacked a theoretical framework, raising questions about the reliability of the results in addressing the issue at hand. Therefore, this calls for further research on the topic. Therefore, this recommends for the study to be conducted. Based on the above explanations, it was hypothesized that: *H1: There is a positive relationship between perceived vulnerability and prevention intention on outbreaks of fire in public markets.*

METHODOLOGY

This study followed the positivism research philosophy, which emphasizes the belief in objective truth, facts, and laws, and uses hypotheses to draw conclusions (Mohajan, 2020). Positivism seeks to identify, measure, and evaluate phenomena, providing rational explanations to establish causal relationships between variables (Hair *et al.*, 2010). Due to its quantitative and positivistic nature, a deductive approach was used in this study to illustrate the relationship between theory and reality. An explanatory research design was chosen to gain a deeper understanding and to build, elaborate, extend, or test hypotheses (Rahi, 2017).

According to Saunders *et al.* (2012), explanatory studies use a survey strategy to collect and analyze data quantitatively through descriptive and inferential statistics. Additionally, these studies use a variety of data collection methods, including questionnaires, structured observations, and interviews (Taherdoost, 2020). This research was conducted in the Dar Es Salaam region, focusing on traders in public markets due to the high frequency of fire outbreaks in these areas. Dar Es Salaam experienced 16 market fire incidents between 2010 and 2022, compared to fewer incidents in other regions like Mbeya, Mwanza, Geita, Arusha, Kilimanjaro, and Songwe (URT, 2010-2022). Data were collected from individual traders and market management across various markets, including Mabibo Garment (7 traders), Simu 2000 (24 traders), Magomeni (17 traders), Kisutu (29 traders), Ferry (9 traders),

Kibanda (11 traders), Ilala (155 traders), Mchikichini (65 traders), Tazara Vetinari (21 traders), and Temeke Stereo (46 traders).

The sample size was determined using Cochran's formula (1977) to allow for a large sample size and reduce sampling error in social research, with a 5% margin of error considered acceptable (Taherdoost, 2020). However, a large sample size does not guarantee precision (Bell *et al.*, 2022). Thus, a sample size of 384 was chosen. The author used a probability sampling technique, incorporating multistage and random sampling, to obtain a representative sample for generalizing the findings (Acharya *et al.*, 2013). The sampling frame consisted of 64,753 traders from public markets in Dar Es Salaam (URT, 2024). According to Krejcie and Morgan (1970), the required sample size for this population was calculated to be 381, which is practically equivalent to the 384 participants. This sample size justifiable for several reasons; the calculation of the sample size of 381 was based on a 5% margin of error and a 95% confidence level, which are standard parameters in social science research. A slight increase to 384 ensures that the margin of error remains within acceptable limits, providing a more precise estimate of the population parameters. Increasing the sample size slightly from 381 to 384 enhances the statistical power of the study. This means the study is more likely to detect a true effect or difference when one exists, thereby improving the reliability and validity of the findings. Ensuring a sample size of 384 helps achieve better representation of the population. This slight increase accounts for any potential non-responses or data that might occur, ensuring that the final analyzed sample closely mirrors the target population. Thus, according to Krejcie and Morgan's (1970) table for determining sample size, for a population of approximately 65,000 traders, a sample size of around 381 is recommended. Using 384 participants aligns with these guidelines, ensuring the sample is sufficiently large to generalize the findings to the broader population.

Multistage cluster sampling was employed to ensure a representative sample, covering Ilala, Kinondoni, Temeke, Ubungo, and Kigamboni. Trade officers assisted in obtaining necessary information about the traders. Primary data was collected using self-administered questionnaires to minimize costs. The data was analyzed using IBM SPSS software, with Structural Equation Modeling (SEM) conducted using IBM AMOS software. SEM was chosen for its comprehensive statistical approach to examining relationships among observed and latent variables, adopting a confirmatory approach that specifies inter-variable relationships (Hair *et al.*, 2010).

Ethical considerations were observed throughout the study, ensuring voluntary participation and maintaining anonymity and confidentiality, as recommended by Saunders et al. (2019). The researcher avoided data fabrication and falsification, properly cited published and unpublished documents, and acknowledged other researchers' work to prevent plagiarism. A clearance letter from the director of postgraduate studies at the Open University of Tanzania was obtained before data collection and submitted to government offices for data access. Additionally, an official permission letter from the respective municipalities was acquired to access traders in the public markets, ensuring the validity and reliability of the study.

PRESENTATION OF FINDINGS AND DISCUSSION

Out of the 384 participants surveyed, 57.6% were male and 42.4% were female, as shown in Table 1. This reflects the inclusion of both genders in the study. Despite a higher number of male participants, the results indicate a balanced gender representation in the data collection process. Consequently, the findings provide insights into the factors affecting the intention to prevent fire outbreaks from the perspectives of both male and female participants in public markets in Tanzania.

Regarding the age distribution of the 384 participants, detailed in Table 1, 34.6% were between 18 and 30 years old, 30.5% were within the 31-40 years range, 26.8% were aged 41-50 years, and 8.1% were 51 years or older. The majority of respondents, totaling 65%, fell within the 18-40 years age bracket. This demographic includes young and active individuals known for their hard work and energy. They are seen as capable of providing assistance and taking prompt action during fire outbreaks in the market. This age group is perceived as being able to quickly respond to and mitigate fire incidents.

In terms of educational background among the 384 respondents, 33.3% had completed primary education, 47.7% had secondary education qualifications, and 19.0% had attained college or higher education levels. The predominant educational levels among respondents were secondary and primary education, with these groups mainly employed in the market. Those with higher education qualifications tended to seek employment in other sectors, including government institutions, as outlined in Table 1.

Table 1 Demographic Characteristics of Respondents

Gender of respondents	Frequency	Percent
Gender		
Female	221	57.6
Female	163	42.4
Age		
18-30 Years old	133	34.6
31-40 years old	117	30.5
41-50 years old	103	26.8
Education		
Standard VI	128	33.3
Secondary	183	47.7
Collage and above	73	19.0
Total	384	100.0

Source: Field Data (2024)

Measurement Model for Vulnerability (VR)

The vulnerability measurement model was initially specified with the observed variables VR2, VR3, VR1, and VR4 for conducting confirmatory factor analysis. IBM AMOS 20, employing maximum likelihood estimation, was used for the analysis. Following the analysis of the vulnerability measurement model, the model fit indices indicated the following results: CMIN/df = 4.150, GFI = 0.989, AGFI = 0.944, CFI = 0.982, and RMSEA = 0.091. These findings suggested a poor fit of the model based on established fitness criteria, as detailed in Table 4.

According to Schumacker and Lomax (2004) and Hooper *et al.* (2008), a well-fitting model should achieve a CMIN/DF of 3 or less, indicating an acceptable fit, a CFI greater than 0.90 indicates good fit, an RMSEA less than 0.08 indicates acceptable fit, and a GFI of at least 0.9 indicates acceptable fit. To enhance the model fit during the confirmatory stage, one item, namely eL1VR2, was removed. After the removal of eL1VR2, the confirmatory factor analysis was rerun, and the findings for model fit indices were as follows: CMIN/df ratio = 2.66, $p = 0.070$, GFI = 0.998, AGFI = 0.987, CFI = 0.999, and RMSEA = 0.025, as illustrated in Figure 1.

Based on these results of model fit indices, a vulnerability model with three items was deemed fitting. The remaining items, VR1, VR2, and VR4, were then moved to the covariance level.

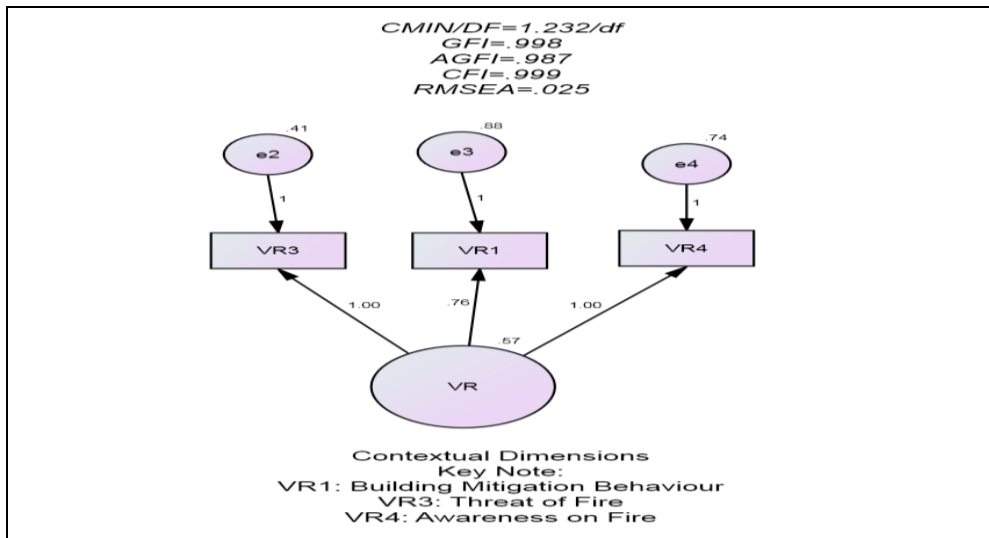


Figure 1: Vulnerability measurement Model

Source: Researcher (2024)

Measurement Model for the Prevention Intention (PI)

In the confirmatory factor analysis, the measurement model for assessing prevention intention included the observed variables PI4, PI3, PI2, and PI1. The confirmatory factor analysis was conducted using IBM AMOS 20 with maximum likelihood estimation. The results following the analysis indicated the following findings: CMIN/df = 2.430, GFI = 0.993, AGFI = 0.967, CFI = 0.965, and RMSEA = 0.065, as illustrated in Figure 2.

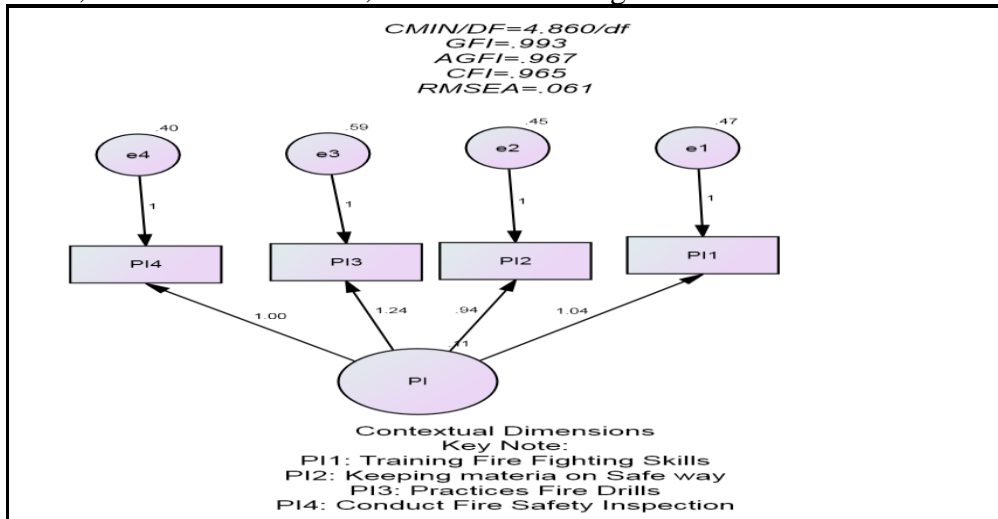


Figure 2: The PI Mesurement Model

Source: Researcher (2024)

Summary of Measurement Model on CFA

The confirmatory factor analysis presented a summary of the measurement model for all variables under study. The results indicated that some variables were fitted during the initial run, while others were fitted during the second run. According to Hoe's (2008) recommended threshold levels, the model's fitness was considered acceptable if the Comparative Fit Index (CFI) was greater than 0.90, suggesting a good fit. Additionally, the Root Mean Square Error of Approximation (RMSEA) should be less than 0.08, indicating an acceptable fit, and the commonly used χ^2 statistic should have a ratio of 3 or less (χ^2/df ratio). The accepted results based on these criteria are detailed in Table 2.

Table 2: Summary of Measurement Model on CFA

Items	Initial Stage of CFA Indicating Unsatisfactory Measurement Model Fit					Final Stage of CFA Indicating Good Measurement Model Fit					Remarks
	CMID/Df	GFI	AGFI	CFI	RMSEA	CMID/Df	GFI	AGFI	CFI	RMSEA	
	VR	4.150	0.989	0.944	0.912	0.091	2.66	0.998	0.987	0.999	
PI	2.430	0.993	0.967	0.965	0.065	-	-	-	-	-	Accepted in 1st run

Source: Researcher (2024)

Testing the Relationship between Perceived Vulnerability and PI of Fire

Analysis was conducted using Structural Equation Modelling (SEM) to ascertain the positive influence of perceived vulnerability on prevention intention regarding fire outbreaks in public markets, as outlined in Table 6. The path leading from perceived vulnerability on prevention intention on outbreaks of fire in public markets in Table 6 is used to examine the relationship between perceived vulnerability and prevention intention on outbreaks of fire in public markets. A positive standardized path coefficient ($\gamma = 0.037$) using standardized estimate results in Table 3 indicates that perceived vulnerability had positive influence which is on prevention intention on outbreaks of fire in public markets. As argued by Hoe (2008) who argued that a standardized path coefficient (γ) should be at least 0.2 in order to be considered significant and meaningful for discussion. The results in the current study confirm a poor relationship between perceived vulnerability on prevention intention on outbreaks of fire in public markets.

Apart from standardized coefficient, further analysis was done using critical ratio and p-value to determining the influence of perceived vulnerability on prevention intention on outbreaks of fire in public markets. Findings from this study revealed a critical value (C.R = 0.188 which is <1.96) and higher

significance level of $p=0.851$. Hox and Bechger (2007) argued that a relationship, which has yielded a critical ration greater than 1.96 and p -value less than 0.05 is considered significant. Due to these findings the alternative hypothesis (H_a) which state **Alternative H_a : There is a positive relationship between perceived vulnerability and prevention intention on outbreaks of fire in public markets rejected while the Null H_o : There is no positive relationship between perceived vulnerability and prevention intention on outbreaks of fire in public markets accepted.**

Table 3: Basic Model Un-standardized and SRW

Path	Estimate	S.E.	C.R.	P	SRW	Remarks
PI <--- VR	.018	.094	.188	.851	.037	Not accepted
VR1 <--- VR	.670	.085	7.848	***	.527	Accepted
VR3 <--- VR	.775	.089	8.724	***	.683	Accepted
VR4 <--- VR	1.000				.745	accepted

Source: Researcher (2024)

Discussion of Findings on the Relationship between Perceived Vulnerability and PI of Fire

The research investigated the correlation between Perceived Vulnerability and the Prevention Intention regarding Fire Outbreaks in Public Markets. The study sought to determine whether Perceived Vulnerability has positive effects on the Prevention Intention for Fire Outbreaks in Public Markets. Both exploratory and confirmatory factor analyses were employed to establish the model fit for items strongly associated with perceived vulnerability. The fitting items, namely building mitigation behavior, the threat of fire, and awareness of fire incidence, were utilized to assess the effects of perceived vulnerability on the prevention intention for fire outbreaks in Public Markets.

In this context, the path leading from perceived vulnerability to prevention intention for outbreaks of fire in public markets displayed a positive standardized path coefficient ($\gamma = 0.037$). However, the standardized estimate revealed that perceived vulnerability had positive but insignificant effects on the prevention intention for fire outbreaks in public markets. This finding contrasts with Mou, *et al.* (2022) assertion that a standardized path coefficient (γ) should be at least 0.2 to be considered significant and meaningful for discussion. The current study's results confirm a weak relationship between perceived vulnerability and prevention intention for fire outbreaks in public markets. Additionally, the findings exhibit a value (C.R = 0.188, which is <1.96) and a higher significance level of $p = 0.851$. Mou, *et*

al. (2022) a relationship yielding a critical ratio greater than 1.96 and a p-value less than 0.05 is considered significant. This implies that perceived vulnerability currently has positive but insignificant effects on the Prevention Intention for outbreaks of fire in public markets. This indicates that the perceived vulnerability is not motivating individuals to engage in prevention intentions for fire outbreaks in public markets. This lack of influence may be attributed to the inadequate development of mitigation behavior in people's minds, resulting in low explanatory power. Additionally, individuals possess limited experience with the threat of fire, perceiving it as a normal occurrence without taking proactive measures. Moreover, there is insufficient awareness of fire incidents, leading to a lack of knowledge about signs of fire outbreaks in marketplaces and awareness of actions to suppress fire outbreaks. These findings suggest that factors contributing to perceived vulnerability, such as building mitigation behavior, the threat of fire, and awareness of fire incidents, have low explanatory power or are influenced by other factors, making it challenging to achieve positive effects on prevention intentions for fire outbreaks in public markets.

This study's findings align with empirical research conducted in other contexts, emphasizing the broader relevance and applicability of the results. However, the current study presents notable differences compared to Kusonwattana *et al.* (2022). Their research utilized 366 valid responses gathered through convenience sampling. They employed a combination of structural equation modeling (SEM) and an artificial neural network (ANN) hybrid approach to analyze various factors under the extended and integrated protection motivation theory and the theory of planned behavior. These factors included geographic perspective, fire perspective, government response, perceived severity, response cost, perceived vulnerability, perceived behavioral control, subjective norm, and attitude, all assessed simultaneously to gauge individuals' intentions to prepare for fire disasters. This comprehensive approach allowed for a nuanced understanding of the multiple influences on fire disaster preparedness.

This research represents the first comprehensive investigation into the behavioral intention to prepare for mitigating human-made fire disasters in the Chonburi Province region of Thailand. The study revealed a significant indirect impact of perceived vulnerability on the intention of fire prevention (β : 0.020; $p = 0.014$). This suggests that individuals who perceive themselves, their location, family, and friends as vulnerable to fire are more likely to take preventative measures. These findings are consistent with the research by Bushesha and Ndibalema (2017), who evaluated the effects of

perceived vulnerability on fire awareness and safety in public universities in Tanzania, focusing on The Open University of Tanzania and the University of Dar es Salaam.

Bushesha and Ndibalema's (2017) study aimed to investigate individuals' awareness and knowledge of the causes of fire incidents, identify those who had witnessed fire incidents, assess knowledge of essential firefighting and safety facilities, evaluate individuals' ability to combat fire incidents using locally available firefighting gear, examine their capacity to use modern firefighting equipment and safety facilities, and measure the universities' efforts to enhance community awareness of firefighting appliances and safety measures. The research adopted a phenomenological qualitative research design, employing questionnaires, in-depth interviews, focus group discussions (FGDs), and observation approaches to collect data from 76 respondents obtained through purposive and random sampling. The collected data were analyzed both quantitatively, using simple descriptive statistics with SPSS software, and qualitatively, using content analysis. The study found that community awareness on fire outbreaks and safety was low, indicating that perceived vulnerability had no positive and significant effects on fire incidence. This lack of awareness was attributed to inadequate training for facility users, insufficient enlightenment on fire prevention, and poor fire outbreak management.

In contrast, Kurata et al. (2022) examined factors influencing the perceived effectiveness of Typhoon Vamco (Ulysses) flood disaster response among Filipinos in Luzon, Philippines. They found that perceived vulnerability had a low-significance effect on people's behavior, suggesting that other factors may be more influential in shaping disaster response behaviors. Conversely, Kusumastuti *et al.* (2022) demonstrated that, despite its low significance, people still proactively take action to mitigate the negative impact of disasters, highlighting the complex relationship between perceived vulnerability and proactive disaster preparedness. Additionally, Weichselgartner and Pigeon (2015) emphasized that knowledge and experience of a disaster may lead to low perceived vulnerability but result in a better understanding of disaster risks and mitigation strategies.

The findings differ from those of Mweetwa (2018), who investigated fire incidence preparedness by the Mazabuka municipal council in urban markets. Mweetwa's research focused on establishing human capacity and equipment, determining major preparedness projects undertaken, and identifying challenges faced by the fire department. Using a descriptive research design

with a qualitative approach, the study employed purposive, convenience, and simple random sampling techniques. Fire officers and market committee members were interviewed through focus group discussions to gather current information on fire incidence preparedness, while the chief fire officer and market master were administered questionnaires and interviews. The findings indicated that the majority of the personnel at the Mazabuka municipal council fire department were still mere fire officers, with only four officers holding higher ranks. The department had a water tender with modern equipment, a well-conditioned ambulance, and a utility van. The study suggested that perceived vulnerability had positive impacts on fire prevention, driven by the availability of modern equipment and trained personnel.

Similarly, Mubita et al. (2023) examined the effectiveness of fire safety management strategies in selected markets in Lusaka city. The study employed a descriptive research design involving qualitative data collection and analysis. Using purposive sampling, the researchers selected markets and participants, including 10 marketeers and 2 market managers from each of two markets. Data were collected through Focus Group Discussions (FGDs) and in-depth interviews. The findings indicated that effective fire safety management in markets required a combination of proactive measures and emergency preparedness. The study underscored the importance of perceived vulnerability in ensuring that fire safety strategies remain effective and relevant in preventing fire incidents.

These findings support the argument that perceived vulnerability does not positively influence prevention intention regarding outbreaks of fire in public markets in Tanzania. This lack of influence may be attributed to the fact that most people have not experienced or been exposed to market fires, which diminishes their proactive engagement in fire suppression. According to Kachenje *et al.* (2010), many public buildings, including public markets, exhibit limited fire management capacity, particularly low public vulnerability, awareness, and the availability of means and facilities for firefighting. Therefore, special attention is required in developing countries such as Tanzania to ensure that perceived vulnerability plays a more significant role in prevention intention during fire outbreaks in public markets.

Furthermore, these findings align with the results of Kihila (2017), who discovered significant gaps in fire safety knowledge and preparedness among

the respondents. Specifically, approximately 51% of the respondents were unable to operate installed firefighting facilities. This lack of operational knowledge poses a significant barrier to effective fire response during emergencies. Additionally, about 80.7% of the respondents had never received any training on firefighting and prevention. Training is crucial for equipping individuals with the skills and confidence needed to respond effectively to fire incidents. Moreover, an alarming 95.6% of respondents had never participated in fire drills. Fire drills are essential for practicing evacuation procedures and ensuring that individuals know how to react swiftly and safely during an actual fire emergency. The absence of such drills indicates a serious gap in preparedness. Furthermore, 81.5% of respondents were unaware of the contact details for fire responders, highlighting a critical communication breakdown that could delay emergency response and exacerbate the consequences of a fire outbreak. These statistics collectively indicate that a majority of individuals were not adequately prepared or equipped to handle fire incidents, making the containment of a fire outbreak in public places exceedingly challenging.

On the contrary, the findings of this study indicate that perceived vulnerability to fire incidents is not significantly correlated with the intention to prevent outbreaks of fire in public markets. This suggests that simply feeling vulnerable or at risk does not necessarily translate into proactive preventive measures. However, individual components of vulnerability, such as building mitigation behavior, the perceived threat of fire, and awareness of fire incidents in the marketplace, exhibit a positive and significant association with the intention to prevent fire outbreaks. These components highlight that specific, actionable factors related to vulnerability can influence prevention intentions.

The study suggests that perceived vulnerability may gain more significance when considered alongside other factors not included in the present research. For instance, factors such as community education, availability of firefighting resources, institutional support, and cultural attitudes towards fire safety might interact with perceived vulnerability to influence prevention intentions. Therefore, the central perspective derived from this study is that perceived vulnerability, in isolation, was deemed insignificant in influencing the prevention intention regarding fire outbreaks in public markets.

It is possible that unexplored dimensions, not measured in this study, exist in real-life scenarios, affecting the efficacy of perceived vulnerability in shaping prevention intentions for fire outbreaks in public markets. These dimensions

could include elements such as social cohesion, trust in local authorities, past experiences with fires, and the perceived effectiveness of existing fire safety measures. These factors could potentially enhance the effect of perceived vulnerability on the prevention intention concerning fire outbreaks in public markets. Understanding and integrating these dimensions into future research could provide a more comprehensive view of how perceived vulnerability influences fire prevention behaviors and lead to more effective fire safety strategies.

CONCLUSION

This study examined the impact of perceived vulnerability on the intention to prevent fire outbreaks in public markets in Tanzania. Utilizing quantitative research methods, the study surveyed 384 participants, including individual traders and market management in the Dar es Salaam Region. The analysis employed standardized estimates and critical ratios within Structural Equation Modeling (SEM) to evaluate the relationship between perceived vulnerability and the intention to prevent fire outbreaks. The findings revealed a positive but insignificant standardized path coefficient ($\gamma = 0.037$), indicating that perceived vulnerability had a negligible effect on prevention intentions. According to Hoe (2008), a standardized path coefficient (γ) should be at least 0.2 to be considered significant and meaningful. The study's results also showed a critical value (C.R = 0.188 and $p = 0.851$), underscoring the insignificance of the relationship. Bechger (2014) noted that a relationship is significant if the critical ratio exceeds 1.96 and the p-value is below 0.05, criteria that the findings did not meet. Consequently, the study concludes by rejecting the alternative hypothesis (H_a) that posited a positive relationship between perceived vulnerability and prevention intention regarding fire outbreaks in public markets, while accepting the null hypothesis (H_o) which states there is no positive relationship.

RECOMMENDATION

The results demonstrated a positive yet statistically insignificant effect of perceived vulnerability on the intention to prevent fire outbreaks in public markets. This finding suggests that while individuals may feel vulnerable to fire hazards, this perception does not significantly translate into a stronger intention to take preventive measures. Several underlying factors could contribute to this lack of significance, warranting further investigation.

For instance, it is essential to explore whether other variables, such as lack of awareness, insufficient access to resources, or cultural attitudes towards risk and prevention, may moderate or mediate the relationship between perceived

vulnerability and prevention intention. Additionally, psychological factors such as fatalism, complacency, or distrust in the effectiveness of preventive measures could also play a role. Understanding these dynamics could provide valuable insights into why perceived vulnerability alone is not a strong predictor of preventive behavior in this context.

Moreover, the study's scope was limited to a single region in Tanzania, specifically the Dar es Salaam region. This geographical limitation raises questions about the generalizability of the findings. Different regions may have varying levels of infrastructure, access to firefighting resources, community awareness programs, and cultural attitudes, all of which could influence the relationship between perceived vulnerability and prevention intentions. Therefore, it is crucial to extend the research to multiple regions within Tanzania and potentially other countries to determine whether the observed patterns hold true across different contexts.

Conducting similar studies in various regions would help validate the model and provide a more comprehensive understanding of the factors influencing fire prevention intentions. Such comparative research could highlight regional differences and commonalities, offering a broader perspective on the adoption of fire prevention measures. This expanded scope could also identify best practices and tailored interventions that are effective in diverse settings, ultimately enhancing fire safety in public markets globally.

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Influence of Attitudes and Subjective Norms on Intentions to Purchase Counterfeits Products in Tanzania: Mediating Role of Consumer Education

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Abstract

This study's specific objective encompassed assessing the influence of attitudes and subjective norms on intentions to purchase counterfeits while examining the mediating role of consumer education in influencing these intentions. The study was conducted in Tanzania and employed survey-based methods and advanced statistical analyses to investigate the complex dynamics of consumers' behaviour in the social perspective of a developing economy. The size of the sample was 202 household heads whereas the research employed Structural Equation Modeling (SEM), integrating Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Findings revealed significant effects of subjective norms and attitudes on purchase intentions, with consumer education showcasing mediating role on attitude and purchase intentions of counterfeit products. Since attitudes and purchase intention are mediated by consumer education, these results imply that interventions aimed at reducing the intentions to purchase counterfeit products could base on altering attitudes, educating individuals about the risks and ethical concerns associated with counterfeit products might help to counteract their inclination to right purchase behaviour.

Keywords: *Education, Attitudes, subjective norm, Purchase Intention, Mediation analysis*

INTRODUCTION

Consumer behavior is a complex and dynamic field that marketers worldwide seek to understand, often relying on estimations of consumer intention due to its pivotal role in shaping actual behavior (Ahmad *et al.*, 2014; Othman *et al.*, 2020). The significance of purchase intention lies in its portrayal of a customer's efforts and considerations before committing to a product or service. Described as a plan for a future purchase, purchase intention not only serves as a predictor of actual consumption but also reflects the likelihood of such consumption occurring (Tseng *et al.*, 2021). As Asshidin *et al.* (2016)

noted that businesses frequently use purchase intentions to forecast sales, making it a central aspect of contemporary marketing practices. This underscores the urgency of understanding the influencing factors of purchase intention, particularly in counterfeit context.

Counterfeit products, characterized as illegal replicas of authentic items, have become a significant concern globally. Consumer behaviour in counterfeits purchase intention has been gained popularity worldwide such as in East Asia including People's Republic of China (Islam, 2023). Similarly, the United State and Europe as developed countries as also experiencing the mushroom of the counterfeits in the market (Chow, 2021). Various factors influencing the consumer purchase intentions in the context of counterfeits products have been studied in the developed countries but because of dynamic nature of consumer behaviour, still there is no unifying factors to determine the purchase intentions of counterfeits products have has been established (Tunçel, 2022). On the side of Africa, limited studies of consumer behaviour specifically in purchase intention have been done in Africa including East Africa resulted to few empirical literature and conclusion on the factors influencing purchase intentions of counterfeits products (Garas, 2023; Ndereyimana *et al.*, 2023,). Thus, the current situations call for more studies on consumer behaviour.

In Tanzania, a developing economy transitioning to a free market, the prevalence of counterfeit products has risen, posing challenges to consumers and the country's economic growth (Nandonde, 2022). Despite the risks associated with counterfeit purchases, consumers of different level of education continue to exhibit high purchase intentions, often driven by price considerations (Mushi, 2019). This increases questions the role of consumer education in determining their decisions and understanding the associated risks. Consumer education is not only a demographic factor but also considered a potential mediator in the intricate web of attitudes, subjective norms, and purchase intentions (Ngo *et al.*, 2023).

The literature indicates that the consumer education significantly influences behavioral intention and behavior (Akhter 2003, Widyanto & Sitohang, 2022). Consumer education encourages better informed decisions because of enhancing abilities in collecting, processing, and analyzing products information (Dangi *et al.*, 2020). Education influences consumers' strategies for acquiring information and evaluating products. However, in Tanzania, where a considerable portion of the population lacks literacy, the ability to assess the effects of purchasing counterfeit products is limited, with a

predominant focus on price considerations (Mushi, 2019). The scarcity of literature exploring the links between consumer education and the determinants of purchase intention, such as attitude and subjective norms, creates a research gap. The current study desires to address this gap by incorporating consumer education as a mediator on the links between attitude, subjective norm, and purchase intention of counterfeit products in the Tanzanian context. The study dwells on mediation analysis rather than moderation analysis because there are limited studies on mediation analysis in aforementioned relationships as reported by Ngo *et al.* (2023), but also consumer education serves better as a mediator than a moderator as it reveals causal pathways between variables, explaining how and why effects occur rather than solely indicating under what conditions they occur respectively. Thus, mediation analysis technique is considered to be crucial method for understanding the mechanism among casual-outcome effect.

The current study assesses the core constructs of attitude, subjective norm, and behavioral intention in understanding consumers' intention behaviour related counterfeit products. Therefore, this study is building to the Theory of Reasoned Action (TRA) developed by Ajzen (1975). According to Ajzen (1975), human behaviour can be determined by behavioural intention as the main predictor of the behaviour. Again in this theory, behavioural intention is determined by only two main variables which are attitude and subjective norm that's why many scholars end up using the three variables when applying this theory. By expanding TRA to include external variables like consumer education, the study sought to produce a more detailed understanding among the nuanced factors influencing consumer behaviour regarding counterfeit products. This expansion of TRA has received limited attention in previous studies, and the proposed model seeks to contribute to filling this research gap.

In essence, the prevalence of counterfeit products in Tanzania presents not only economic challenges but also social dilemmas. Understanding the influence of consumer education in mediating the relationships of attitude, subjective norms, and purchase intentions is crucial for developing targeted interventions, strategies and policies. The study contributes to the theoretical understanding of consumers' behaviour as well as to practical implications for businesses and policymakers seeking to address the complexities associated with counterfeit products in a Tanzania.

This study's objectives are therefore, firstly, to examine the influence of attitude (AT) towards counterfeit products on purchase intention (PI).

Secondly, is to examine the influence of subjective norms (SN) on purchase intention of counterfeit products. Thirdly, is to assess the mediating function of consumer education (EDU) on both the links between attitude (AT) and subjective norms (SN) on consumers' purchase intention towards counterfeit products.

THEORETICAL LITERATURE REVIEW

Theory of Reasoned Action (TRA) is used to guide this study. Fishbein and Icek Ajzen (1975) developed TRA, which defines "behavioural intention of any action based on attitude and subjective norms." The definition of attitude is "the belief that arises from an evaluation of the potential benefits and drawbacks of engaging in a particular behavior." Subjective norms refer to the perception of pressure to participate in action as a result of the influence of other people. TRA is widely used framework that has been used extensively in research to study particular types of behavior, including consumer behaviour, health, and communication behavior. The theory is frequently used by researchers to examine behaviour that carry a high risk of danger such as unethical and deviant conduct (Al Balushi et al., 2023). Predicting and explaining human behavior is one of the main strengths of TRA. It can also guide cross-cultural and serve as a model for creating behavior-changing interventions. Additionally, it is not too difficult to comprehend and use (Hale *et al.*, 2002; Hosseini *et al.*, 2015). However, the TRA has some weaknesses, one among them is a chance that attitudes and norms will be confounded, the reason for this is that subjective norms and attitudes can be reinterpreted as one another. Moreover, the main issue is that, TRA did not take into account the mediating effect of consumer education in the relation between TRA variables (Asvinigita *et al.*, 2022; Hale *et al.*, 2002). Therefore, researchers such as LaCaille (2020) suggested that additional of the mediating variable (consumer education) can be used to overcome TRA's weaknesses led to extend theory and enhance its ability to influence the intentions and behaviours.

EMPIRICAL LITERATURE REVIEW

Attitude and Purchase Intentions

Consumer behaviour studies have been conducted in many developed countries for different products and theories but limited studies were done in developing countries. Using a regression and correlation analysis, Bupalan *et al.* (2019) investigated the effect of attitude towards counterfeit on purchase intention in Malaysia. The data was collected from the sample size of 114 consumers through the use of online google form and physically using questionnaire at the shopping malls. The study found attitude had positive

and significant results on purchase intention towards counterfeit products. The findings are similar with results of Bhatia (2018) in India and De Matos, *et al.* (2007) in Brazil. Based on the study findings, it was recommended that need of having another study of the same kind to unveil the influence of attitude towards counterfeit on purchase intention consumers in other countries in order to enhance the generalization of the findings.

In Africa, the study conducted by Garas (2023) in Egypt investigated the impact of perceived risk, attitude ethical judgment, value consciousness, susceptibility to social influence and neutralization on counterfeit clothes and accessories purchase intention. The study employed cross-sectional survey through questionnaire to collect primary data from 361 counterfeit buyers. The relationships between the variables were tested by structural equation modeling (SEM) whereby result indicated that attitude influences purchase intention. The study suggested similar study to be conducted with different sample size to validity the results.

Furthermore, one of the similar studies was also conducted in Tanzania by Nandonde (2022), which examined factors behind consumption of counterfeit Goods in Developing Economy a case of Tanzania. The sample size of this study was 200 consumers, where the collection of the data was done using the questionnaire with convenience sampling technique in Dar es salaam. By the use of confirmatory factors analysis (CFA), the data were analysed and results indicated that attitude is insignificantly influencing purchase intention of the consumers of counterfeit mobile phones. However, the study was limited to smart phone consumers in Tanzania only thus, it was not easy to show the consumers' experience on other brands. Therefore, several studies needed to be carried out to measure experience of consumers in other counterfeit brands.

Subjective Norms and Purchase Intention

Al Balushi *et al.* (2024) conducted a study involving 679 samples of two universities students in Oman and Qatar. The purpose of the study was to examine the impact of brand consciousness, social influence (subjective norm), integrity and performance risk on the purchase intention of consumers towards non-deceptive counterfeits. The responses were obtained using structured questionnaire and partial least square-structural equation modeling was employed to analyse the relationship between the variables. The findings of the study indicated that subjective norm had a significant influence on intention to purchase non-deceptive counterfeits in all samples.

Similarly, the study done by Aldousari (2024) in Kuwait focused on understanding the socio-psychological motivations following the purchase counterfeit of luxury brands. This study was qualitative in nature in which data was collected by using semi-structured interviews and netnography on 21 respondents who are aware of counterfeit luxury brands and addition 372 comments obtained for instgram. Content analysis was used to analyse the collected data. The findings revealed that social conformity (subjective norm) influence the purchase intention of counterfeit luxury brands. The findings aligned with findings of Molina-Castillo *et al.* (2021) who based on the study of demand for digital and physical counterfeits in three countries in Europe. However, the reviewed studies were conducted in developed countries so due to cultural and geographical difference, it is important to conduct other studies in African settings to have more information of purchase intention of counterfeits.

Moreover, Mushi and Noor (2019) conducted a study in Tanzania examine the influence of subjective norm, self-regulatory efficacy and moral judgment in predicting purchase intention of counterfeit products. The study was guided by theory of planned behaviour (TPB) and cross-sectional survey using questionnaire was used to collect data from 491 in consumers of generation Y as the key users of music.

The data were analysed using structural equation modeling (PLS- SEM) which revealed that subjective norms is negatively related to purchase intention of pirated music CD. The results showed a negative correlation between subjective norms and the intention to buy counterfeit goods. The findings aligned with those of Nandonde (2022) in Tanzania who found that social pressure had no significant effects on the purchase of fake mobile phones in Tanzania. The results of study reported by Mushi (2020) in Tanzania had shown a positive relationship between Tanzanian consumers' purchase intention and the subjective norm of illegally copied music CDs. Therefore, because of limited studies on consumers behaviour intention of counterfeit products in Tanzania, it is imperative to conduct more studies in order extend the body of literature.

Consumer Education, Attitude, Subjective Norm and Purchase Intention Relationships

Cortez *et al.* (2023) on the study aimed to investigate the factors that may influence the purchase intention of rapid COVID-19 tests in Mexico. Specifically, the study assesses the influence of the each factor (gender, education, age and geographic location) on purchase intention of rapid

COVID-19 tests. The study involved descriptive research design with cross-section survey where data were collected from 246 respondents through questionnaire. The sampling techniques applied in this study were convenient sampling to sample the respondents from the population. The data were analysed by using descriptive analysis, correlation and probit model to produce the results. It was found that the education has positive relationship with purchase intention. The results are similar with the results obtain from the study of Qi and Ploege (2019), thus the there is direct correlation between education and purchase intention. However, this study was taken in Mexico so there is a need to conduct the same study in other countries to extend the literature.

Furthermore, Ngo *et al.* (2023) conducted a study in Vietnam to assess the factors affecting the purchase intention of safe certified vegetables. The study used 361 sample of the consumers and data were collected through questionnaire. In this study, stratified sampling was used applied as the type of sampling technique. The collected data were analysed by structural equation modeling (SEM) to test the hypotheses. However, the study focused only on the certified vegetables and did not include other products such as counterfeits products therefore more studies of testing the influence of consumer education on purchase intention of the other products are important to have more understanding of consumer behaviour.

Furthermore, previous studies have primarily focused on the direct relationships between attitude, subjective norm, consumer education, and purchase intention, overlooking indirect relationships. Ngo *et al.* (2023) recommended an extension of literature on interrelationship between fundamental determinants of purchase intention and external factors like demographics. However, most empirical literature of purchase intentions focused on moderation analysis using demographic factors such gender, age and income, with limited attention to mediation analysis, particularly using attitude as a mediator in relationships (Garas *et al.*, 2023; Ndofirepi *et al.*, 2023), thus creating avenues to conduct studies under mediation analysis involving demographic variables such as consumer education, as suggested by Ngo *et al.* (2023). This study acknowledges a research gap in this area and seizes the opportunity to investigate an indirect path to purchase intentions through education.

This study posits education as a mediating variable, shaped by Baron and Kenny's (1986) definition of mediating effects. Education significantly influences consumer behavior due to increased assessment propensity,

making it a reliable indicator. Qi and Ploege (2019) observed the direct impact of education on purchase intention and a favorable attitude. However, researches exploring the connection between attitude and purchase intention through consumer education remain limited. This study again argues that the relationship between consumer education and the intention to purchase counterfeit products is influenced by close relationships (social influence or subjective norm). Therefore, there is an urgent need for researchers to better understand the interrelationships among attitude, subjective norm, education, and purchase intention, particularly regarding counterfeits.

Conceptual Framework

This study was mainly based on the proposed model of TRA (Ajzen & Fishbein, 1975) as indicated in Figure 1. The model included subjective norm and attitude as the independent variables, purchase intention as dependent variable. Another variable is consumer education which was added as external and mediating variable as proposed by Ngo *et al.* (2023). However, the details of all variables involved in this study have been discussed in the previous sections.

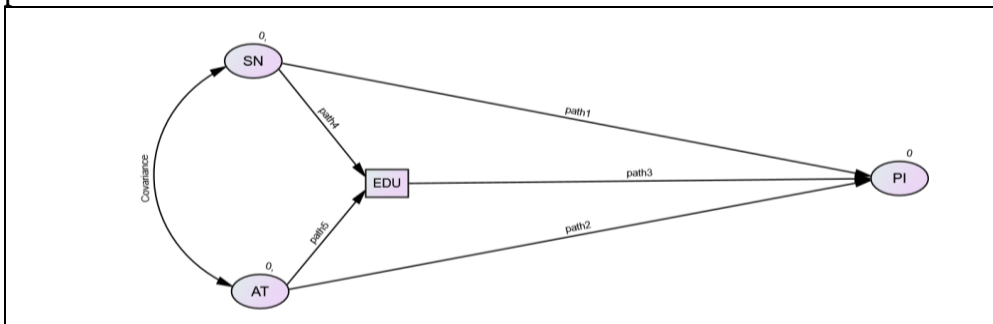


Figure 6: Conceptual Mediation Model

Where: PI: purchase intention of counterfeit products, EDU: consumer education, AT: attitudes and SN: subjective norms.

Hypotheses

These hypotheses aim to test specific relationships between attitudes and subjective norms, consumer education, and their collective influence on purchase intentions of counterfeit products. Through empirical testing, these hypotheses can provide insight into the nuanced dynamics and influences shaping individuals' intentions to make purchases in relation to education and societal perceptions. From the relationships reviewed and explored, here are four testable hypotheses based on the mediation analysis:

Specifically, individuals with more favorable attitudes toward counterfeit products, coupled with education, will exhibit negative purchase intentions compared to those with unfavourable attitudes but educated.

Hypothesis 1-H1 (path 5 to path 3): consumer education significantly mediates the relationship between attitudes toward purchase intentions of counterfeit products.

It is expected that individuals influenced by positive societal views on education, alongside education will demonstrate a stronger inclination toward purchase intentions compared to those influenced by negative social norms but educated.

Hypothesis 2-H2 (path 4 to path 3): Consumer education significantly mediates the link between subjective norms and purchase intentions of counterfeit products.

This hypothesis suggests that attitudes toward counterfeit products will still directly predict purchase intentions, independent of the influence of education as a mediator.

Hypothesis 3- H3 (path 2): Attitude towards counterfeit products has significant effect on purchase intentions.

It is anticipated that even though there is no consideration of the education, individuals' social influence (subjective norms) about education will still contribute a substantial role in shaping purchase intentions

Hypothesis 4 -H1 (path 1): Subjective norm toward counterfeit products has significant effect on purchase intentions.

METHODOLOGY

The study is purely quantitative in nature because it has involved numbers and statistics during data analysis. However, the study employed deductive approach with explanatory design. The study was conducted in Dar es salaam as the major commercial centre in Tanzania, particularly in the three former districts namely Ilala, Kinondoni and Temeke. These districts were chosen because there are highly populated with many businesses. Tanzania consumers were involved as the population of the study. The sample was drawn from the sampling frame of 276 streets obtained (64, from Ilala, 65 from Temeke and 63 from Kinondoni) and 707,576 households (229,191 from Ilala, from 277, 645 Temeke and 200,740 from Kinondoni) in Dar es salaam (Tanzania National Bureau of Statistics-NBS, 2022). In the present study, the streets were considered as major sampling unit as they allocated households where the individual respondent for this research were found.

Therefore, using the formula of Bankier (1998) for sample size calculations and proportionate sampling technique, 14 streets were obtained including four from Ilala, five from Temeke and five from Kinondoni as well as 192 households (64 from Ilala, 65 from Temeke and 63 from Kinondoni). In order to ensure the good representation of the sample, researchers used multistage sampling technique as initial sampling procedure to come up with clusters as primary sampling units. The reason of using multistage sampling technique is that the technique is suitable to the studies involving large and geographically spread population. However, most of the household studies in the previous household survey indicated five percent of no-response rate (TDHS, 2015). Thus the consideration of five percent non respondents into 192 amount to 202 households. Therefore, the present study involved they survey 202 respondents (household heads) from individual households by using of close ended structured questionnaire. Systematic random sampling was used where by systematic interval was calculated from households listed in each street. From each interval, a street was chosen until all 14 streets were identified. Similar procedures as for selections of streets were done to select the number of the households in each street.

Data Analysis

The research analysis process encompassed pivotal stages including descriptive statistics using SPSS software version 26 and inferential statistics utilized Structural Equation Modeling (SEM) through Amos software. Before, descriptive statistics analysis was performed, the data were screened. During the data screening stage, a detailed investigation of the dataset was done to check and handle outliers, missing data and data distribution in order to ensure data quality and suitability for analysis. The outliers were checked by box plots while missing data were examined by list-wise deletion of the case. Moreover, the SEM assumptions were tested to ensure the data produces the valid outcome. Normality was tested by skewness and kurtosis value and linearity was examined using bivariate scatter plots. On the side of multicollenarity assumption, factor correlation matrix was used to correlation between the variables.

Subsequently, in the EFA, the pattern matrix and Cronbach's Alphas were detailed (Table 3). During the EFA, extraction method employed was maximum likelihood, iterating through 5 cycles. Additionally, the rotation method used Promax with Kaiser Normalization, converging after 5 iterations. This analysis aimed to uncover the fundamental factor structure within the variables. Any items showing poor loading onto the factors were potentially identified and considered for removal, refining the measurement

model to bolster its reliability and validity. These rigorous procedures were fundamental in guaranteeing robust and meaningful outcomes in the research investigation.

Structural Equation Modeling (SEM) stands as a robust research instrument amalgamating regression, factor analysis and mediation analysis (Kline, 2020). It accommodates latent variables embodying unobservable constructs (Kline, 2020). SEM excels particularly in depicting causal links between these latent constructs and observable variables. It utilizes a measurement model to assess the correlation between indicators and latent variables, alongside a structural model that unveils causal pathways (Wang & Wang, 2020). Fit indices are employed to evaluate how well the model aligns with the data, rendering SEM an indispensable guide for researchers (Little, 2021). SEM consists of EFA and confirmatory factor analysis (CFA) which enhance its robustness (Fabrigar *et al.*, 1999). EFA exposes latent patterns and associations, refining the measurement model. CFA validates this model by confirming that observed indicators adequately represent latent constructs (Byrne, 2016). SEM, building upon CFA, introduces causal pathways and connections among latent variables (Kline, 2016).

Mediation analysis was employed in the study to delve deeper into the relationships among variables. This analytical technique helps uncover the underlying mechanisms by which one variable influence another through an intermediary variable. By examining these pathways, mediation analysis sheds light on how and to what extent the effects of an independent variable on a dependent variable are mediated or influenced by a third variable. This approach allows researchers to widen knowledge of the complex interplay between different factors and their impact on the outcomes studied, adding depth and nuance to the research findings. In the present study, we sought to understand the intricate relationship between attitudes, subjective norms, consumer education and purchase intentions. Through mediation analysis, we investigated how education functions as a mediator in two key paths: first, between attitudes toward consumer education and purchase intentions; and second, between subjective norms towards consumer education and purchase intentions (equations i and ii).

$$PI = \beta_0 + \beta_1 \times AT + \beta_2 \times SN + \beta_3 \times EDU \text{ ----- (i)}$$

$$EDU = \alpha_0 + \alpha_1 \times AT + \alpha_2 \times SN \text{ ----- (ii)}$$

Where:

- $\beta_0, \beta_1, \beta_2, \beta_3$ are the intercept and coefficients for attitudes (AT), subjective norms (SN), and consumer education (EDU) respectively in the purchase intention (PI) equation (i).
- $\alpha_0, \alpha_1, \alpha_2$ are the intercept and coefficients for attitudes (AT) and subjective norms (SN) respectively in the education (EDU) equation (ii).

RESULTS OF THE STUDY AND DISCUSSION

The results indicated that no presence of missing data and outliers were found during data screening which imply that the data were suitable for the analysis. Also, the SEM assumptions results indicated that the data were normally distributed for all variables showing values from -2 to +2. There was linear association between independent variables and dependent variables indicate no cases of linearity exist thus the data were fit for further analysis. However, there were also no problems of multicollenarity observed as correlations coefficient of among the paired variable ranged from 0.315 to 0.532 which are within the tolerance coefficient value of 0.9 proposed by Kline (2011).

Descriptive Statistics

The data is summarized in Table 1, which delineates the distribution of individuals based on age groups, educational levels, and gender within the studied sample. Age-wise segmentation reveals three main groups: Early Mature (18-35 years), comprising 14.5% of the total sample; Late Mature (36-55 years), representing the largest segment at 80%; and Older (above 55 years), constituting 5.5% of the total sample.

In terms of educational attainment, the sample shows varied levels: a minute 0.4% of individuals have non-formal education, while primary, secondary, and diploma levels collectively encompass a substantial portion, ranging from 16.7% to 40.9%. Higher education levels—First Degree, Masters Degree, and Ph.D. degree—collectively account for 4.3% of the total sample, depicting a smaller representation compared to primary and secondary education levels.

Gender distribution indicates that males constitute 52.5% of the total sample, distributed across various age and education categories, with a notable

presence in the Late Mature age group. Conversely, female make-up 47.5% of the sample also spread across different age and education categories, predominantly within the Late Mature age bracket.

Observations from this breakdown highlight that the Late Mature age group holds the highest representation across both genders. Additionally, primary and secondary education levels dominate the educational profile of the sample. Notably, there appears to be a relatively lower proportion of individuals with non-formal education or higher academic degrees (Masters, PhD) compared to those with primary to secondary education.

This comprehensive breakdown provides insights into the demographic composition of the sample concerning age groups, educational attainment, and gender distribution, offering a snapshot of the diversity within the studied population.

Table 1: Descriptive Statistics

			AGE GROUPS			EDU							Total
			Early Mature "18-35"	Late Mature "36-55"	Older "above 55"	Non Formal education	Primary	Secondary	Diploma	First Degree	Masters Degree	PhD Degree	
SEX	Male	% within SEX	14.5%	80.0%	5.5%	0.0%	13.1%	34.5%	14.5%	30.3%	6.9%	0.7%	100.0%
		% of Total	7.6%	42.0%	2.9%	0.0%	6.9%	18.1%	7.6%	15.9%	3.6%	0.4%	52.5%
	Female	% within SEX	25.2%	71.0%	3.8%	0.8%	20.6%	48.1%	9.9%	19.1%	1.5%	0.0%	100.0%
		% of Total	12.0%	33.7%	1.8%	0.4%	9.8%	22.8%	4.7%	9.1%	0.7%	0.0%	47.5%
Total		Count	34	160	8	1	39	83	21	52	5	1	202
		% within SEX	19.6%	75.7%	4.7%	0.4%	16.7%	40.9%	12.3%	25.0%	4.3%	0.4%	100.0%
		% of Total	19.6%	75.7%	4.7%	0.4%	16.7%	40.9%	12.3%	25.0%	4.3%	0.4%	100.0%

Exploratory Factor Analysis (EFA)

The Factor analysis of Total Variance Explained reveals critical insights into the data's underlying structure. Three factors were identified, with Factor 1 (Attitudes) explaining 48.754% of the variance, Factor 2 (Subjective norms) accounting for 21.32%, and Factor 3 (Purchase intention) contributing 10.343%. Together, these three variables cumulatively explain 80.416% through the sum of squared loadings of the dataset's variability, capturing substantial patterns within the observed variables. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy, at 0.924, indicates the dataset's high suitability for factor analysis. This suggests strong interrelations among variables, supporting the relevance of factor analysis in this context. Bartlett's Test of Sphericity, with an approximate Chi-Square value of 5817.562, 102 degrees of freedom, and a significance level of 0.000, rejects the null hypothesis. This signifies significant correlations between variables, affirming the suitability of factor analysis to examine the underlying structure of the data (Table 2).

Table 2: Variance Explained, Sampling Adequacy and Fit Tests

Total Variance Explained				KMO and Bartlett's Test			Goodness-of-fit Test		
Factor	Initial Eigenvalues			Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.924	Chi-Square	df	Sig.	
	Total	% of Variance	Cumulative %						Bartlett's Test of Sphericity
1	8.776	48.754	48.754	df	153				
2	3.838	21.32	70.074	Sig.	0.000				
3	1.862	10.343	80.416						

The Pattern Matrix illustrates strong associations between variables and identified factors. Factor 1 shows robust correlations with Attitudes (AT) items (AT5, AT4, AT3, AT1, AT8, AT2, AT7, AT6) ranging from 0.951 to 0.718, indicating a cohesive pattern among these attitude-related variables. Factor 2 exhibits significant associations with Subjective Norms (SN) and Purchase Intentions (PI) variables (SN3, SN2, SN5, SN1, SN7, SN4) from 0.946 to 0.806, forming a distinct cluster under this factor. Furthermore, Purchase Intentions variables (PI4, PI2, PI3, PI1) strongly align with Factor 3, showing correlations from 0.98 to 0.899, emphasizing a unique relationship specific to purchase intentions (Table 3).

The Factor Correlation Matrix indicates moderate positive correlations between Factors 1 and 2 (0.315) and slightly stronger correlations between

Factors 1 and 3, and 2 and 3 (0.437 and 0.532, respectively), hinting at potential underlying connections between the variables. Regarding reliability, Cronbach's Alpha demonstrates strong internal consistency: Factor 1 scores highest at 0.955, followed closely by Factor 3 at 0.975 and Factor 2 at 0.940. These values underline the reliability and coherence of the identified factors in representing the measured constructs (Table 3).

Table 3: Factors Pattern - Correlation Matrices and Reliability Results

Pattern Matrix			
	Factor		
	1	2	3
AT5	0.951		
AT4	0.905		
AT3	0.882		
AT1	0.852		
AT8	0.835		
AT2	0.832		
AT7	0.81		
AT6	0.718		
SN3		0.946	
SN2		0.855	
SN5		0.839	
SN1		0.836	
SN7		0.807	
SN4		0.806	
PI4			0.98
PI2			0.955
PI3			0.953
PI1			0.899
Factor Correlation Matrix			
1	1	0.315	0.437
2	0.315	1	0.532
3	0.437	0.532	1
Reliability Analysis			
Cronbach's Alpha	0.955	0.940	0.975
Number of Items	8	6	4

Confirmatory Factor Analysis (CFA)

The model of confirmatory factor indicated fit statistics fitting well to the model. The Comparative Fit Index (CFI) exceeds the threshold at 0.976, signaling an excellent fit. Additionally, the Normed Fit Index (CMIN/DF) stands at 2.096, falling within the "Excellent" threshold. The Standardized

Root Mean Square Residual (SRMR) value of 0.036 also signifies an excellent fit, well below the acceptable range. The Root Mean Square Error of Approximation (RMSEA) at 0.063 proposes an acceptable fit, resulted to the acceptable threshold. Finally, the p-value for the PClose test, at 0.022, is within the acceptable limits, supporting the model's adequacy. Overall, the majority of fit measures demonstrate excellent or acceptable fit, affirming the model's reliability in explaining the relationships among the observed variables (Table 4, see also Figure 2).

Table 4: Model Fit Statistics Results

Model Fit Measures				Cutoff Criteria*			
Measure	Estimate	Threshold	Interpretation	Measure	Terrible	Acceptable	Excellent
CMIN	270.362	--	--	--	--	--	--
DF	129	--	--	--	--	--	--
CMIN/DF	2.096	Between 1 and 3	Excellent	CMIN/DF	> 5	> 3	> 1
CFI	0.976	>0.95	Excellent	CFI	<0.90	<0.95	>0.95
SRMR	0.036	<0.08	Excellent	SRMR	>0.10	>0.08	<0.08
RMSEA	0.063	<0.06	Acceptable	RMSEA	>0.08	>0.06	<0.06
PClose	0.022	>0.05	Acceptable	PClose	<0.01	<0.05	>0.05
Standardized RMR	0.034						

*Note: According to Hu and Bentler (1999) recommended combinations of fit measures. Our preference aligns with their suggestions, particularly favoring a combination where CFI > 0.95, SRMR < 0.08, and RMSEA < 0.06. These criteria collectively provide a robust indication of a well-fitting model, enhancing confidence in the model's accuracy and validity in explaining the relationships within the analyzed data.

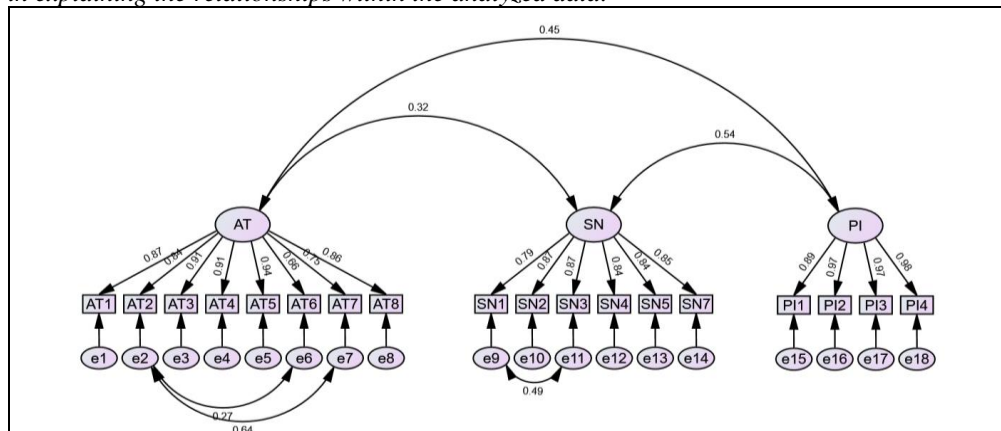


Figure 7: Final CFA Model

In the model of CFA, validity measures encompass key parameters such as Average Variance Extracted (AVE), Mean Variance Extracted (MSV), Construct Reliability (CR), and Maximum Shared Variance (MaxR (H)) across three key factors: Attitudes (AT), Subjective Norms (SN), and Purchase Intentions (PI). The CR values for AT, SN, and PI stand notably high, at 0.953, 0.938, and 0.976 respectively, demonstrating strong internal consistency. The AVE values, measuring the amount of variance captured by latent constructs, indicate substantial percentages of variance explained for each factor: 0.718 for AT, 0.716 for SN, and notably higher at 0.91 for PI. These results affirm the convergent validity of the factors. Additionally, the HTMT (Heterotrait-Monotrait) analysis showcases the relationships between factors, with significant correlations depicted by *** symbols, indicating noteworthy associations between AT and SN, AT and PI, and SN and PI, further reinforcing the model's convergent and discriminant validity. (Table 5, see also figure 2).

Table 5: Confirmatory Factor Analysis Model Validity Measures

Model Validity Measures															
Validity Analysis								Validity Results - Confidence Intervals				HTMT Analysis			
Factors	CR	AVE	MSV	MaxR(H)	AT	SN	PI	AVE	Lower 95% CR	Upper 95% CR	Lower 95% AVE	Upper 95% AVE	AT	SN	PI
AT	0.953	0.718	0.203	0.966	0.847			0.718	0.935	0.966	0.648	0.784	n/a		
SN	0.938	0.716	0.293	0.94	0.320***	0.846		0.716	0.901	0.965	0.604	0.822	0.296	n/a	
PI	0.976	0.91	0.293	0.985	0.451***	0.541***	0.954	0.91	0.955	0.99	0.843	0.959	0.423	0.521	n/a

*Note: Significance of Correlations: $p < 0.100$, * $p < 0.050$, ** $p < 0.010$, *** $p < 0.001$. Thresholds are according to Fornell and Larcker (1981) and Henseler, Ringle, and Sarstedt (2015). No validity concerns here. Thresholds are 0.850 for strict and 0.900 for liberal discriminant validity. There are no warnings for this HTMT analysis.*

SEM Path and Mediation Analysis Results

Table 6 presents the Structural Equation Model (SEM) fit measures statistics, crucial in assessing the model's adequacy in explaining the relationships among the observed variables. The Chi-Square test (CMIN) produced 179.88 value and 143 degrees of freedom (DF). The CMIN/DF ratio, at 1.258, falls within the "Excellent" range (between 1 and 3), suggesting a favorable fit among the model and the data. Moreover, other fit statistics further support the robustness of the model: The Comparative Fit Index (CFI) scored 0.994, exceeding the threshold of 0.95 for an "Excellent" fit. The Standardized Root Mean Square Residual (SRMR) and Root Mean Square Error of Approximation (RMSEA) both stand at 0.025 and 0.031, respectively, showcasing excellent fits as they fall below the threshold values of 0.08 and 0.06. Additionally, the PClose value, indicating the close fit model to the data, registers an excellent result at 0.994, exceeding the threshold of 0.05. These collectively high-performing fit measures underscore the strong coherence between the proposed SEM model and the empirical data, affirming its validity in explaining the relationships among the specified constructs.

Table 6: Structural Equation Model Fit Measures Statistics

Model Fit Measures				Cutoff Criteria			
Measure	Estimate	Threshold	Interpretation	Measure	Terrible	Acceptable	Excellent
CMIN	179.88	--	--	--	--	--	--
DF	143	--	--	--	--	--	--
CMIN/DF	1.258	Between 1 and 3	Excellent	CMIN/DF	> 5	> 3	> 1
CFI	0.994	>0.95	Excellent	CFI	<0.90	<0.95	>0.95
SRMR	0.025	<0.08	Excellent	SRMR	>0.10	>0.08	<0.08
RMSEA	0.031	<0.06	Excellent	RMSEA	>0.08	>0.06	<0.06
PClose	0.994	>0.05	Excellent	PClose	<0.01	<0.05	>0.05
Standardized RMR	0.0239						

The Structural Equation Modeling (SEM) path and mediation analysis (Table 7, Figure 3) yielded crucial insights into the relationships among Consumer education (EDU) introduced as the mediator, Attitudes (AT), Subjective Norms (SN) and Purchase Intentions (PI). Path analysis elucidated direct as well as indirect effects between these variables, providing a comprehensive understanding of their interplay. The direct path coefficients revealed significant influences. EDU exhibited a negative effect on AT (-0.332, $p <$

0.001), implying that consumers education was associated with unfavourable attitudes towards counterfeit products. However, the influence of Consumer EDU on SN was non-significant (0.03, $p = 0.473$). Notably, PI was positively influenced by both AT (0.44, $p < 0.001$) and SN (0.5, $p < 0.001$), showcasing those positive attitudes and subjective norm contributed to stronger purchase intentions of counterfeit products. Similar findings were consistent with the findings of Ajzen, (1991), Ajzen & Fishbein (1980), Tseng *et al.* (2021) Cortez *et al.* (2023), De Matos *et al.* (2009), Jain & Khan (2017) and Kasber *et al.* (2023).

Mediation analysis delved into the indirect effects, revealing intricate pathways. The indirect path SN_EDU_PI was non-significant (0.008, $p = 0.376$), suggesting no mediation effect via subjective norms between consumer education and purchase intentions thus confirming that subjective norm can directly influence the purchase intention of counterfeit products without the presence of mediating variable (consumer EDU) as indicated by Tseng *et al.* (2021) and Kasber *et al.* (2023).

However, the mediation path AT_EDU_PI was significant (-0.089, $p = 0.006$), indicating that the consumer education partially mediated the relationship between attitudes towards counterfeit products 'purchase intentions. The results are supported by the suggestions of Kumar and Kaushal (2017) and (Akhter, 2023). That is consumer education influences attitude leading to high levels of purchase intention for normal products but the results would be negative for counterfeit products. The total effects highlighted the cumulative impact of variables on each other. Consumer EDU's total effect on AT and SN was notable (-0.332 and 0.03 respectively), emphasizing its direct influence. Meanwhile, PI's total effect was driven significantly by AT and SN (0.351 and 0.508 respectively), indicating their substantial contributions to purchase intentions. (Table 7, see also Figure 3).

Overall, these findings underscore the nuanced relationships within the model. The impact of consumer education on attitudes, alongside the influential roles of attitudes and subjective norms on purchase intentions, elucidate the intricate mechanisms shaping individuals' intentions towards purchases concerning their educational attitudes and societal perceptions. These insights provide valuable directions for interventions or targeted strategies to influence purchase behavior of counterfeit products through tailored approaches addressing attitudes and subjective norms in educational contexts.

Table 7: Path and Mediation Effects

Path Analysis Results							
			Estimate	S.E.	C.R.	P	Label
EDU	<---	AT	-0.332	0.042	-7.908	***	path5
EDU	<---	SN	0.03	0.042	0.718	0.473	path4
PI	<---	EDU	0.268	0.089	3.009	0.003	path3
PI	<---	AT	0.44	0.069	6.34	***	path2
PI	<---	SN	0.5	0.067	7.491	***	path1
Mediation Results							
Indirect Path	Unstandardized	Lower	Upper	P-Value	Standardized		
	Estimate				Estimate		
SN_EDU_PI	0.008	-0.009	0.034	0.376	1		
AT_EDU_PI	-0.089	-0.147	-0.037	0.006	1.000**		
Total Effects							
	AT	SN	EDU	PI			
EDU	-0.332	0.03	0	0			
PI	0.351	0.508	0.268	0			
Direct Effects							
	AT	SN	EDU	PI			
EDU	-0.332	0.03	0	0			
PI	0.44	0.5	0.268	0			
Indirect Effects							
	AT	SN	EDU	PI			
PI	-0.089	0.008	0	0			

Note: Significance of estimates: $p < 0.100$, $* p < 0.050$, $** p < 0.010$, $*** p < 0.001$

The study's findings regarding the relationship between consumer education, attitudes, and purchase intentions can be attributed to various influential factors. Education might influence individuals' perceptions and knowledge about counterfeit products. Consumer education could lead to increased awareness of the risks associated with counterfeits, resulting in less favorable attitudes toward purchasing these products (Wang *et al.*, 2020). Additionally, disparities in educational accessibility and quality can impact attitudes. Limited access to quality education might lead to high favorable attitudes of counterfeits, subsequently affecting purchasing decisions in educational domains. Individual perceptions of the value and benefits derived from education are pivotal in shaping attitudes (Garas *et al.*, 2023). If individuals perceive education as a valuable investment that positively impacts their lives, this perception can drive more favorable attitudes, thereby influencing their purchasing decisions. Moreover, levels of information and awareness about

educational options and their perceived value might differ among individuals. Higher awareness and informed decision-making can contribute to more negative attitudes towards fake products, subsequently affecting purchase intentions (Ashraf, 2021).

Subjective norms resulted from by peers, family, or societal expectations, also significantly shape attitudes and behavior. Social pressures or endorsements regarding educational choices can impact attitudes and influence subsequent purchase intentions (Dangi *et al.*, 2020).

Consumer education might not significantly impact subjective norms related to counterfeit products. Other factors, such as social influences or personal experiences, could have a more dominant effect on shaping subjective norms irrespective of educational attainment. According to Bhatia (2018), economic factors such as affordability, access to financial resources, or the perceived return on investment in education, might influence attitudes towards educational products or services and subsequent purchasing behaviors. Understanding these multifaceted reasons behind the findings provides valuable insights into the intricate relationship between education, attitudes, and purchase intentions. It enables policymakers and stakeholders to develop targeted strategies and interventions aimed at positively influencing consumer behaviors and educational perceptions within a developing economy.

The findings also revealed that favorable attitudes (AT) and strong subjective norms (SN) towards purchasing counterfeit products positively influence individuals' purchase intentions. The same findings were aligned with the previous findings of Bupalan *et al.* (2019), Othman *et al.*(2020) and Garas *et al.* (2023). People tend to be more inclined to buy counterfeits if they have positive attitudes toward them or if their social environment strongly supports such purchases. Although consumer education negatively influence attitudes towards counterfeit products, these attitudes still play a mediating role between education and purchase intention. This suggests that while education might shape attitudes negatively, it doesn't eliminate their influence on purchase intentions entirely. Other factors or mitigating circumstances might moderate this relationship. However, the education partially mediating this path on TRA in explaining purchases intention. Hence the findings confirm TRA in predicting purchase intention and actual behaviour as suggested by Hale *et al.* (2002) that the external variables can be included in the existing relationship in TRA to enhance the relationships.

Consumer education might not significantly mediate the relationship between subjective norms and purchase intention in this context. This suggests that consumer education might not significantly alter the influence of social norms on an individual's purchase intention regarding counterfeit products. These results imply that interventions aimed at reducing the purchase intention of counterfeit products could focus on altering subjective norms. Educating individuals about the risks and ethical concerns associated with counterfeit products might help to counteract their inclination towards purchasing these items.

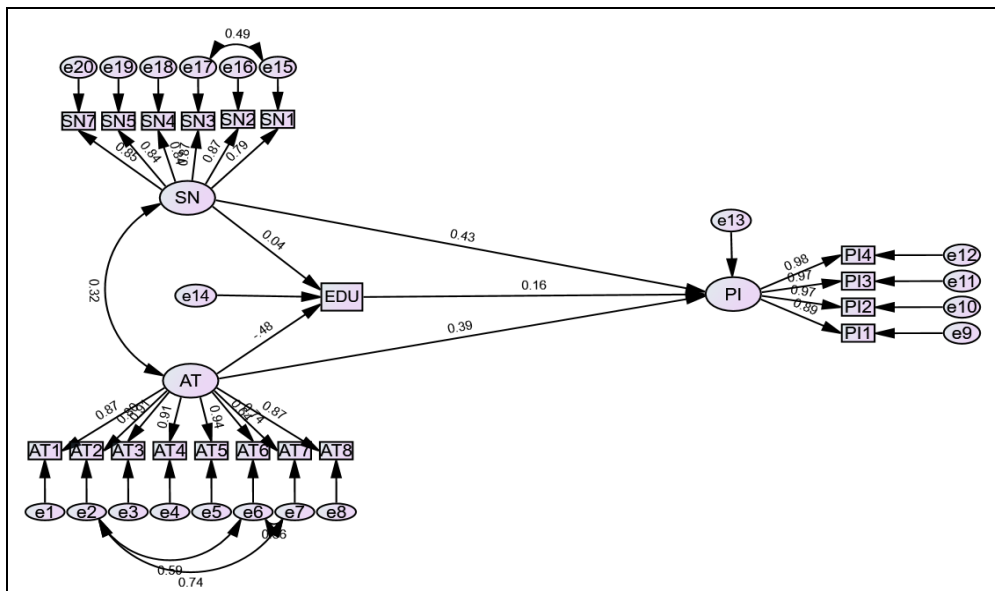


Figure 8: SEM-Mediation

CONCLUSION

Attitude and subjective norms have positive and significant influence on purchase intention in the direct path. This implies that the increase of both favourable attitudes towards counterfeits and subjective norms lead to the increase of purchase intentions of counterfeits. Hence the attitude and subjective norms are crucial factors influencing consumers purchase intentions of counterfeits. Based on the findings from indirect path, it is concluded that consumer education do not mediated the relationship between the subjective norm and purchase intention thus implied that the relationship between can not be strengthened by the presence of consumer education. The findings also confirm partially and significant mediated relationship between attitude and purchase intention. Hence attitude may be a good contributor of purchase intention but the results may be enhanced when consumer education

is added into that relationship. This is because consumer education may influence their knowledge, perceptions and risks associated with intention to purchase counterfeits. It is therefore concluded that consumer education provided important theoretical contribution on the link between attitude and purchase intention in counterfeits. Past scholars focus on studying either relationship between attitude and purchase intention or education and purchase intention separately.

Furthermore, this study contributes to the body of knowledge since it supports the theory of reasoned action-TRA (1975) which purported that behaviour intentions can be influenced subjective norm and attitude and also be able to accommodate the external variables. Therefore, the significant relationship between attitude and purchase intention through consumer education implies that the theory is suitable in explaining relationships between these variables in counterfeits products.

RECOMMENDATIONS FROM STUDY FINDINGS

Based on the findings of this study, there are both practical and policy recommendations that are suggested for a Tanzania to leverage insights into consumer behavior in terms of attitude, subjective norms, consumer education and purchase intentions.

Practically, government and marketers may focus on the findings of this study to eradicate marketing of counterfeits products by implementing several strategies of anti-counterfeiting practices. Government and other foreign brand manufacturers should cooperate in coordinating anti-counterfeiting campaigns to enhance the effects of the prevention factors and reduce that of the driving factors on attitudes towards counterfeits, subjective norms and purchase intention. In addition, the study recommends that foreign brand manufacturers and retailers should consider the differences of consumers' behaviour exist in different countries which will guide in developing different marketing strategies tailored in every country. Based on the present study findings, most of the consumers have positive attitude towards counterfeit products and subjective norms with strong purchase intention hence marketers should provide ethical training and marketing campaign to consumers about the risks of counterfeits products. Furthermore, investment in education is pivotal for shaping attitudes and purchase intentions. Prioritizing accessible and quality education through increased investment and enhanced infrastructure can significantly impact societal perceptions, thereby influencing consumer behaviors. Collaborative efforts among educational institutions, governments, and communities are essential

to highlight education's value and foster a culture emphasizing its importance. Supporting informed consumer decision-making is crucial, especially in educational contexts.

On the view of policy recommendations, it is recommended that consumer protection policies should be strengthened to regulate counterfeit goods, intensifying penalties to deter sellers and buyers. Government through its agencies should foster international collaboration to fortify trade policies targeting counterfeit reduction, potentially forming agreements to combat cross-border counterfeit trade. Provide specialized law enforcement training to combat counterfeit distribution networks effectively, bolstering law enforcement capabilities. Policies geared to promote financial literacy, transparent information about educational products/services and incentives for educational investments are essential. It is also recommended that stakeholders should continue researching and monitoring as they are vital for policy making. Moreover, ongoing studies tracking shifts in attitudes, subjective norms, and purchasing behaviors ensure policy adjustments align with evolving consumer behaviour dynamics that contributing to informed decision-making and adaptive strategies.

LIMITATIONS AND AREA FOR FURTHER STUDY

The present study used only one mediating variable the consumer education, other studies may use more than one mediating variable and different mediating variables to come up with more robust findings. The study used cross sectional survey strategy employing questionnaire so the future studies may focus on longitudinal study to assess the long-term influence of consumer mediation on TRA variables to expand the findings. Furthermore, the present study concentrated in Tanzanian consumers as a developing country in Africa, further studies should be carried out in other African countries and outside the Africa to increase the generalizability of the findings.

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