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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

Pan African Journal is a bi-annual journal of the Faculty of Business Management (FBM) at The Open University of Tanzania (OUT). PAJBM is a peer reviewed open access journal which focuses on promoting research publications and dissemination of research findings undertaken by Africans and international scholars from business and management related disciplines. PAJBM is committed to publishing scholarly empirical and theoretical research articles, which have a high impact on the business and management fields as a whole.

One of the objectives of this journal is to encourage publication from different field of studies that helps to enrich further the discourse on business and management issues. Readers can particularly notice progress made in this journal. We take this opportunity to thank the authors for sending their manuscripts and excellent book reviews for publication.

On behalf of the board of the Pan African Journal of Business Management and my co-editor, I am glad to present the volume 8, issue 1 of the journal. The Journal which was established in 2017 has now published 15 issues, two issues in a year. The Journal is now indexed in AJOL. Average download per article is increasing and, on an average, there are 10 downloads per paper. All these are promising signs. We could not reach this stage without the constant support of Board members and intellectual generosity of the readers and contributors (authors and reviewers).

This current issue focuses in addressing issues such as; the role of Maasai culture in Tourism Industry Development in Ngorongoro Conservation Area, Local Communities' perceptions of Astro-tourism in Tanzania: A case of Mbozi Meteorite in Tanzania, Analysis of costs of inputs for sunflower production at Mkalama District in Tanzania, Challenges facing small scale furniture industries in Dar-es-salaam Region, Tanzania, influence of trust on customer loyalty in the Small and Medium Enterprises sector , Assessment of the factors affecting the intention to adopt mobile marketing among the aging population in Zanzibar, Enhancing the effectiveness of public sector monitoring and evaluation systems in Zanzibar through stakeholders' engagement, interaction effect between loan officers' characteristics and loan default rate on crowd funding approval, empowerment setbacks and coping strategies in the COVID-19 Crisis of female food vendors in Tanzania, and College Managerial Practices for promoting English language teaching and learning in Tanzania: A case Study of Grade ‘A’ public teachers’ training colleges.

Editorial board hopes that readers will find the articles in this current issue useful and a good contribution to the academic knowledge and debates in the respective areas.

Dr. Bukaza Chachage
Chief Editor

The Role of Maasai Culture in Tourism Industry Development in Ngorongoro Conservation Area, Tanzania

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Abstract
The tourism industry is the world's largest industry and is being utilized for economic development and rapid growth in many developing countries. In Tanzania the tourism industry is growing at an annual rate of almost 5% and contributes 17% to GDP. Tanzanian tourism is based on wildlife tourism which requires not only programs for the conservation and protection of flora, fauna and the environment but also for job and wealth creation for the indigenous population who often pay a cost in lost land usage for conservation and tourism. The analysis encompasses a comprehensive examination of the myriad ways in which the vibrant tapestry of Maasai culture is artfully woven into the fabric of tourism activities. From immersive cultural encounters to the vibrant portrayal of traditions, this article scrutinized the techniques through which Maasai culture has become an integral facet of the visitor experience. The manifold benefits that this cultural fusion bestows upon the local community, catalyzing positive economic and social change within the Maasai population. Balancing the imperative of safeguarding Maasai culture's integrity with the necessity of meeting the ever-evolving demands of the tourism market represents an intricate and continuous endeavor in the dynamic landscape of the Ngorongoro Conservation Area.

Keywords: *Maasai Culture, Ngorongoro Conservation Area, Cultural Tourism, Cultural Preservation, Tourism Industry*

INTRODUCTION

Tourism is widely recognized as one of the most progressive industries that helps guide global sustainable development. The inter-relationships between tourism, culture, and heritage have been the center of discussion among scholars and researchers at both national and international levels. Culture, environment, and heritage are regarded as one of the most important factors that successfully attract tourists to destinations (Olmo, 2022).

Many countries rely on tourism as a crucial source of income and jobs (Bishar&Robertine, 2022). In Europe specifically, there has been an increased focus on sustainable approaches to promote destinations by emphasizing local cultures rather than mass-marketing techniques employed elsewhere around the world (Bishar&Robertine, 2022).

Africa's tourism industry has a long history dating back to the colonial era when Europeans explored and hunted in the continent. However, it was only in the mid-20th century that tourism became a significant industry in Africa. Several African countries have developed successful branding, and promotion strategies to attract tourists. At first, countries like Kenya, Tanzania, and Egypt embraced tourism due to their diverse natural and cultural resources that attracted visitors The Ngorongoro Conservation Area (NCA), situated in northern Tanzania, is renowned for its extraordinary natural beauty and biodiversity. According to (NCA, 2022), data shows that, in 2018/2019 NCA received 725,535 tourists and generated Tshs.143.9 billion becoming the highest revenue earner per unit area of any conservation site in the country. This track record performance testifies that the naturalness of the facility (NCA) is in a good shape thereby disqualifying the unfounded claims that the area is degraded due to presence of Maasai and hence, losing international recognition.

However, beyond its stunning landscapes and diverse wildlife, the Maasai culture, an indigenous ethnic group that has inhabited the area for centuries, plays a significant role in the development of the tourism industry in the region. This article discusses how the integration of Maasai culture into the NCA's tourism offerings has contributed to the sustainable development of the tourism sector and the local Maasai community.

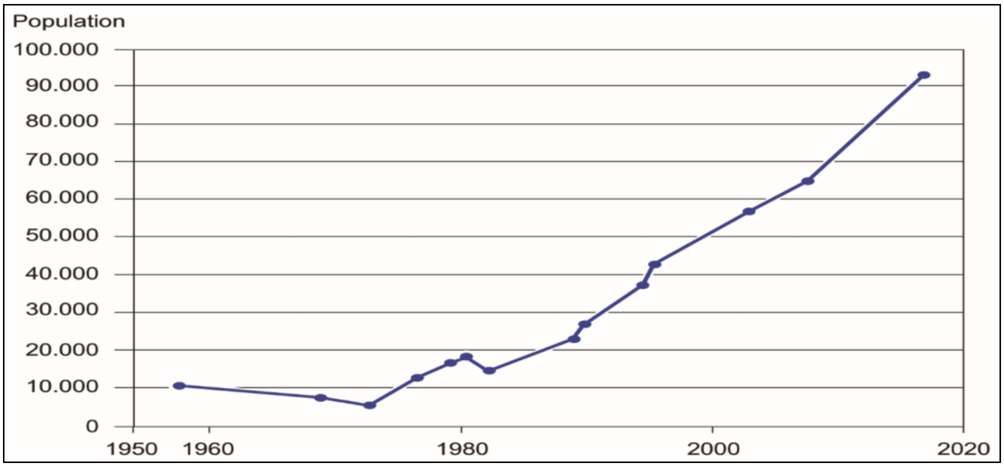

Figure 1: Population trend of Ngorongoro Conservation Area (1954–2017)
Source: Botha et al., (2021)

Theoretical Literature Review

This theoretical study establishes that the Maasai culture plays a pivotal role in the development of the tourism industry in Ngorongoro Conservation Area, Tanzania. The incorporation of Maasai traditions and customs into tourism activities not only provides economic benefits to the local community but also fosters cultural preservation and appreciation. However, it is essential to address the challenges associated with cultural tourism to ensure that the Maasai culture continues to thrive while contributing to the sustainable development of the region's tourism sector. Balancing cultural authenticity with market demands is a delicate but necessary task to ensure the long-term success of this unique and mutually beneficial partnership.

According to Krittayaruangroj et al., (2023) employing a community-based approach to tourism development, based on a social learning/mobilization framework, can aid the implementation and sustainability of the development as often such projects have greater community support and buy in from an inclusive. Social mobilization theory fails to explain social movement communities, which are large networks of individuals and other groups surrounding social movement organizations, and providing them with various services Critics also argue that it fails to explain how groups with limited resources can succeed in bringing social change and that it does not assign sufficient weight to grievances, identity and culture as well as many macro-sociological issues.

Citizen participation theory stipulates that local people should take part in planning, execution, utilization and assessment of social amenities or facilities designed to improve their welfare(Correia *et al.,* 2023) Citizen participatory theory is deeply rooted in the very concept of community development which enjoys that whatever is done to improve the welfare of a people must endeavour to elicit the enthusiasm and participation of such a people. Participatory theory is said to improve implementation process, rather than delaying implementation of completed plans while decision are reviewed through appeal and adjudication(Azaria et al., 2023).

Empirical Review

The Maasai people are known for their distinctive customs, clothing, and traditions (Semwaiko et al., 2023). They are a pastoralist community, primarily relying on cattle herding and subsistence farming. The Maasai are famous for their colorful attire, intricate beadwork, and unique housing structures known as bomas, which are circular, thorn-fenced settlements. Their rich cultural heritage is a valuable asset for the tourism industry in Ngorongoro (TANAPA, 2019). We have attempted to provide some salient features of the Maasai community. TheMaasai people are renowned for their distinct customs and traditions that have been passed down through generations (URT, 2023). These traditions encompass various aspects of daily life, from social hierarchies and rituals to communal decision-making processes. The Maasai's strong sense of identity is rooted in their customs and traditions, which have been integral to their resilience and cultural preservation (Bergman & Olausson, 2023). The Maasai are primarily a pastoralist community, relying heavily on cattle herding for their sustenance and livelihoods. Cattle are not only a source of food but also a symbol of wealth and social status among the Maasai. This pastoralist lifestyle has shaped their identity and cultural practices for centuries (Unks*et al*., 2023).

In addition to cattle herding, many Maasai communities engage in subsistence farming, cultivating crops such as maize, millet, and beans. Farming complements their pastoralist activities and provides a buffer against periods of drought or livestock-related challenges (URT, 2022b). Maasai beadwork is another hallmark of their culture (Wijngaarden, 2018). Beads hold profound symbolism and are incorporated into jewelry, accessories, and clothing. Beadwork patterns and colors convey different meanings and play a vital role in Maasai self-expression and storytelling. These exquisite bead creations are highly sought after by tourists and have become an important source of income for the Maasai (Frankema&Hillbom, 2020).

According to URT, (2019) Cultural tourism in NCA involves showcasing the Maasai way of life to tourists. Visitors have the opportunity to interact with the Maasai, participate in cultural activities, and gain insights into their daily lives. Cultural tourism activities include traditional dance performances, visits to Maasai villages, and witnessing rituals like weddings and ceremonies. Interactions with the Maasai: Visitors are given the opportunity to interact with the Maasai people, fostering cultural exchange and cross-cultural understanding. These interactions enable tourists to engage in conversations, ask questions, and share experiences with the Maasai, bridging cultural divides and promoting mutual learning (Wijngaarden, 2016).

Participation in Cultural Activities: Cultural tourism activities in the NCA extend far beyond mere observation. Tourists can actively participate in a range of cultural activities that showcase the essence of Maasai life. These activities may include learning traditional skills, like beadwork or herding, and participating in rituals and ceremonies. One of the primary goals of cultural tourism is to provide visitors with insights into the daily lives of the Maasai. This involves experiencing the routines, chores, and responsibilities that define Maasai existence (Koto, 2015). Tourists gain a deeper appreciation for the challenges and triumphs of Maasai life within the NCA.

In a nutshell, cultural tourism in the Ngorongoro Conservation Area offers a multi-faceted and interactive experience that not only allows tourists to witness Maasai culture but also actively participate in and engage with it. These immersive encounters are instrumental in promoting cross cultural understanding and appreciation while supporting the economic development of the Maasai community.

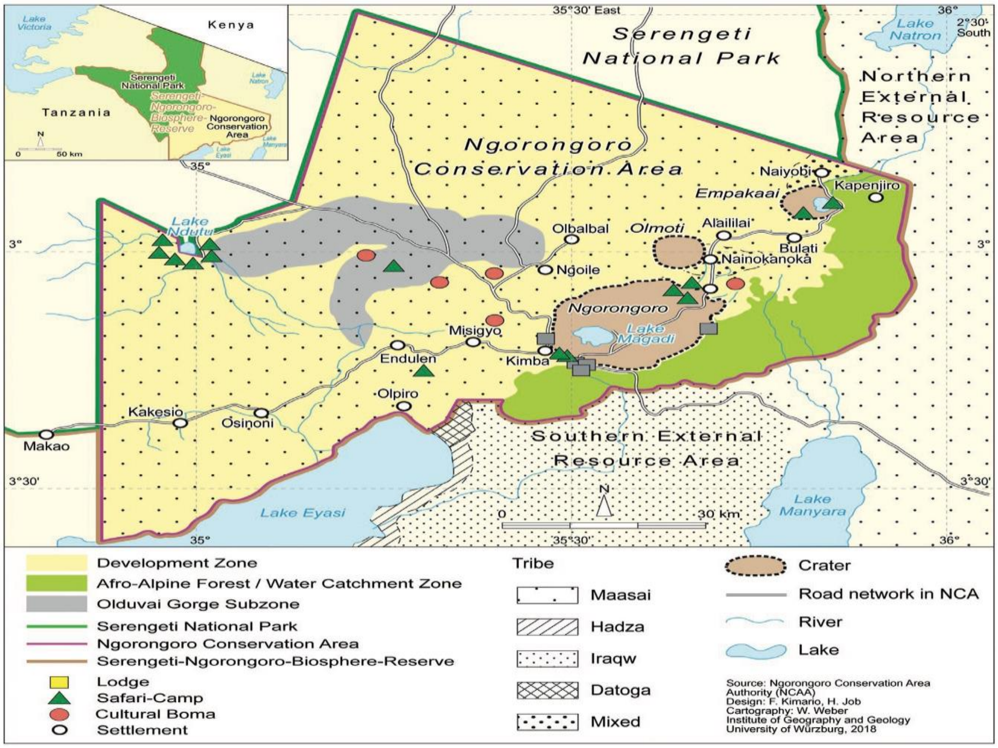

Figure 2: The Ngorongoro Conservation Area where the review exercise targeted

This place where the pastoralist population close to 90,000 individuals are threatened by the looming evictions

Source: Botha et al., (2021)

Economic Benefits for the Maasai Community

According to UNDP, (2022) explains the integration of Maasai culture into the tourism industry has generated significant economic benefits for the local community. Maasai individuals and communities earn income by selling traditional crafts, guiding tourists, and hosting cultural experiences. This economic empowerment has improved the standard of living among the Maasai and reduced their reliance on traditional livelihoods, such as cattle herding. Cultural tourism activities have become a reliable source of income for many Maasai individuals and communities. Maasai artisans, both men and women, create traditional crafts such as beadwork, jewelry, and handicrafts, which are highly sought after by tourists. These crafts are not only beautiful and intricate but also unique to Maasai culture. Tourists purchase these items as souvenirs, providing a sustainable source of income for the artisans and their families (Zhu et al., 2023).

Many Maasai individuals have become certified tourist guides, offering their expertise to visitors who wish to explore the NCA. These guides are not only knowledgeable about the wildlife and landscape but also provide valuable insights into Maasai culture, history, and traditions. Guiding services allow the Maasai to earn a livelihood by sharing their cultural knowledge and facilitating authentic experiences for tourists (Olemong'I, 2023). The Maasai offer tourists the opportunity to engage in cultural experiences that are both educational and entertaining (Fiske, 2023). Visitors can participate in traditional Maasai dance performances, witness important ceremonies such as weddings or initiation rites, and even spend time in Maasai villages, learning about daily life, rituals, and practices. These experiences are not only enriching for tourists but also generate income for the Maasai hosts.

In some cases, revenue generated from cultural tourism is shared with the broader Maasai community (Malleo&Mtengwa, 2018). This approach ensures that the economic benefits are distributed more equitably, benefiting a wider group of Maasai people rather than just a few individuals. Revenue sharing model often involve community-based tourism initiatives, where a portion of the proceeds goes toward community development projects, such as building schools, healthcare facilities, or infrastructure improvements. Cultural tourism has allowed the Maasai to diversify their sources of income. In the past, the Maasai were heavily reliant on cattle herding and subsistence farming (Xu et al., 2022). While these traditional livelihoods are still important, cultural tourism has provided an additional stream of income, reducing the community's vulnerability to fluctuations in livestock markets or environmental factors that can impact agriculture (UNDP, 2022a) and (Makwindi, 2022).

Preservation of Traditions

According to Njau&Losaru, (2017), by engaging in cultural tourism activities, the Maasai have a vested interest in preserving their cultural heritage. This preservation is crucial for the continued vitality of their traditions and customs in the face of modernization and outside influences. Moreover, it helps educate both local and international visitors about the importance of cultural diversity and the need for its protection.

According to ILO, (2023), the preservation of Maasai traditions through cultural tourism in the Ngorongoro Conservation Area is of paramount significance, as it not only safeguards their rich cultural heritage but also imparts valuable lessons in cultural diversity and preservation. Here's a deeper exploration of the preservation of traditions. Cultural tourism activities serve as a means of cultural resilience for the Maasai. In the face of modernization and external pressures, the participation of Maasai individuals in these activities provides a platform for the continuation and safeguarding of their age-old traditions (UNESCO, 2020). It helps the Maasai community remain connected to their roots and cultural identity.

Many Maasai customs and knowledge are passed down orally from one generation to the next. Cultural tourism allows for the preservation and transmission of this invaluable cultural knowledge (ILO, 2019). Elders and cultural experts within the community have the opportunity to share their wisdom and experiences with younger generations and interested tourists, ensuring the continuity of oral traditions. Engaging with tourists in cultural activities often revitalizes customs and practices that may have been fading or evolving due to external influences. The need to present authentic and meaningful cultural experiences often encourages the Maasai to revisit and rejuvenate aspects of their traditions (Ahmed, 2023).

Cultural tourism serves as a mutual learning experience (Sukanen, 2022). While the Maasai share their culture with visitors, they also gain insights into other cultures and perspectives. This exchange fosters an appreciation for cultural diversity and underscores the importance of preserving indigenous traditions worldwide (Hiswara et al., 2023).

In conclusion, the preservation of Maasai traditions through cultural tourism not only fortifies the Maasai cultural identity but also exemplifies the broader importance of safeguarding indigenous cultures worldwide. This form of cultural preservation is not a static endeavor but a dynamic and evolving process that enables the Maasai people to adapt their traditions to the modern world while retaining their core cultural values and practices.

Materials and Methods

This study used a qualitative approach to understand the role of Maasai culture in Tourism Industry Development in Ngorongoro Conservation Area, in Tanzania on secondary data approach through of use of literature revies studies. Thus, this research was an exploratory and descriptive in nature, based on qualitative inquiry, a powerful source of grounded theory that is inductively generated through the researcher's observations, and interviews in the field (TB, 2018).

Documentary literature review provided secondary data or second-hand information. The researcher employed documentary sources of data so as to have a thorough understanding of the past, present and predict the future trends the role of tourism sector on the livelihoods of local communities. These data were collected from various sources like scholarly journals, thesis, books, documents and reports from Ministry of Natural Resources and Tourism, Bank of Tanzania, Tanzania Wildlife Research Institute, (TAWIRI), newspapers and other website sources.

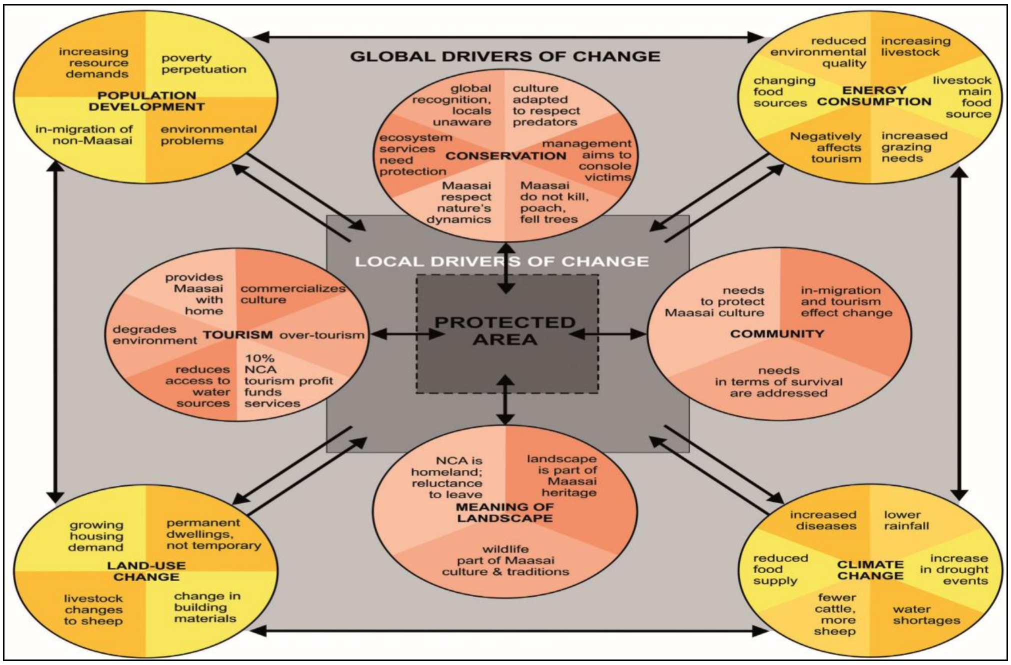

Figure 3: Summary of NCA's role in the Global-Local Drivers of Change framework
Source: Botha et al., (2021)

CHALLENGES AND CONSIDERATIONS

According to Botha et al., (2021) explains the challenges and considerations in the integration of Maasai culture into the tourism industry in the Ngorongoro Conservation Area are integral to sustaining the cultural and economic benefits. These challenges highlight the importance of careful planning and ongoing dialogue: One of the central challenges is the risk of cultural commodification (Nurhadi et al., 2022). When Maasai culture is portrayed as a commodity for profit, it can lead to the trivialization of sacred traditions and practices. The over-commercialization of cultural experiences can erode the authenticity of these traditions and compromise their cultural significance.

Simon et al., (2023) Explains, striking a balance between preserving cultural authenticity and meeting the demands of the tourism market is a continuous challenge. As cultural tourism evolves, there may be pressures to adapt or modify cultural practices to meet tourists' expectations. This balance requires ongoing community engagement and a commitment to protecting the integrity of Maasai traditions. The economic success of cultural tourism cansometimes shift the focus away from traditional Maasai livelihoods, such as cattle herding and subsistence farming. It is crucial to ensure that these economic alternatives do not undermine the core activities that define the Maasai way of life (Flamand, et al. 2020).

In conclusion, while the integration of Maasai culture into the tourism industry has brought about numerous benefits, it is essential to recognize and address the challenges that may emerge. A balanced and inclusive approach that prioritizes cultural authenticity, equitable distribution of benefits, and environmental sustainability is key to ensuring the long-term success of cultural tourism in the Ngorongoro Conservation Area while respecting and preserving the Maasai culture. Ongoing dialogue, collaboration, and responsible management are essential components of addressing these challenges effectively (Melubo& Lovelock, 2019).

FINDINGS

Tourism Attraction, Facilities, and Visitors Traffic in NCA

Tourism wise, Ngorongoro Conservation Area (NCA) is of great importance to the National and Global community. In the 2018/2019 financial year, NCA generated TZS 143.9billion and contributed TZS 23 billion as dividends to the government. With that amount, NCA was the only protected area that generated more revenue per unit area than any other protected area in East Africa.

The findings revealed that, the volume of visitors to the NCA has been growing over time with some fluctuations because of economic and social influences withing and outside the country (Figure 1).

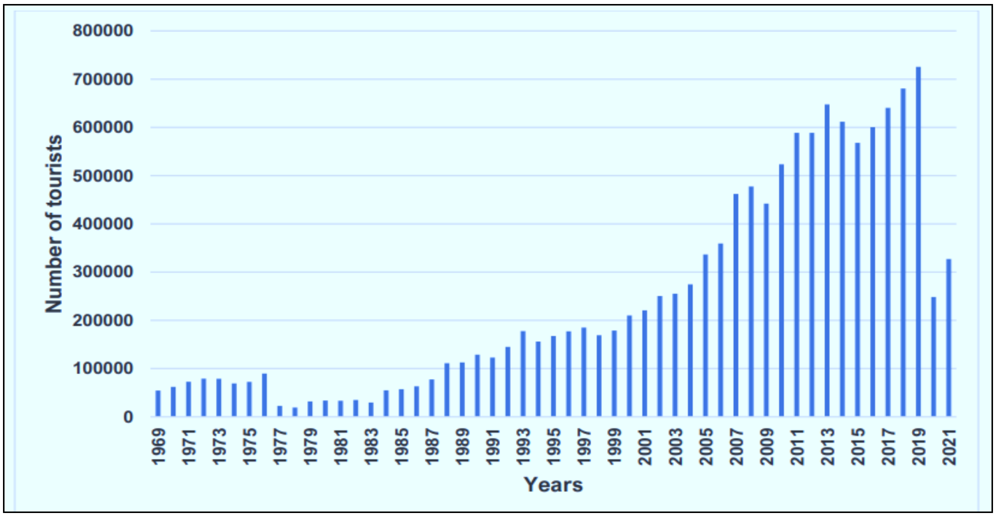

Figure 1: Tourist trends in NCA from 1969 to 2021

Source:NCA, (2022)

Livestock Population Trends in Ngorongoro

The figure 2 shows that, the livestock census recorded 461,588 to 831,563, accordingly. In 2013 cattle count was 131,509 and332,079 (for sheep and goats); and in 2017 the cattle mounted to 238,826 and smallstocks summed 570,636 (Fig. 13). DANIDA carried out the human and livestock censusin NCA in 1994 and the total animal counted was 308,762. Out of this number, cattlewere 115,468, and sheep and goats count were 193,294. The application of the Dejure approach caused an increase of 44.49%, in 2017.

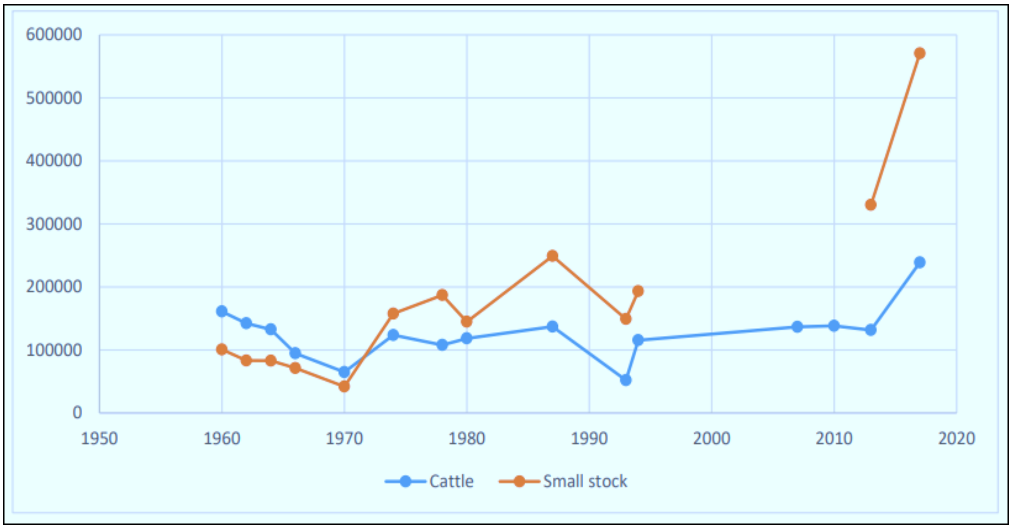

Figure 2: Livestock population counts for over 60 years
Source: NBS (2021)

Cultural Tourism Activities

Cultural tourism activities practiced in NCA include traditional dance, Maasaibomas, arts and crafts and practice of real traditional way of living such as eatingtheir food and testing their drinks. Also, observation made by researcher showed that cultural tourism activities undertaken in NCA are arts and crafts, practice of Maasai way of living.

Figure 3: Crafts Made by Local People in NCA
Source: NCA (2022)

CONCLUSION

Cultural tourism, in the NCA, offers a gateway for visitors to immerse themselves in Maasai culture. It transcends passive observation, encouraging active participation, cross-cultural interaction, and profound learning. Traditional dance performances, visits to Maasai villages, and the witness of significant rituals provide a dynamic and immersive experience for tourists. It is a living canvas where Maasai culture comes to life, fostering mutual understanding and appreciation.

Nevertheless, the integration of Maasai culture into the tourism industry is not without its challenges. Issues of cultural commodification, misrepresentation, equitable revenue sharing, and maintaining cultural authenticity require careful consideration and management. Striking a balance between preserving the integrity of Maasai traditions and meeting the dynamic demands of the tourism market remains an ongoing endeavor (IUCN, 2023).

In essence, the integration of Maasai culture into the tourism industry in the Ngorongoro Conservation Area is a remarkable story of cultural preservation, economic empowerment, and cross-cultural exchange. It showcases the ability of a community to embrace its cultural heritage as a valuable asset and a means of sustaining economic prosperity. It is a model of harmonious coexistence, highlighting the imperative of preserving cultural authenticity while embracing the challenges that come with it.

As the Ngorongoro Conservation Area continues to evolve, so does its relationship with the Maasai culture (Penrod et al., 2022). The success of this partnership hinges on responsible management, ongoing dialogue, and a commitment to maintaining the delicate balance between tradition and modernity. Ultimately, the story of the Maasai culture in the Ngorongoro Conservation Area is a testament to the enduring power of cultural heritage and its role in fostering a sustainable and harmonious coexistence. It is a reminder that cultural diversity is not only a source of enrichment but a shared responsibility that we must protect and celebrate.

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Local Communities' Awareness and Perceptions of Astro-tourism in Tanzania: A Case of Mbozi Meteorite

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Abstract
Tourism is one of the fastest growing economic sectors and the largest industries in the world. Among the many branches of tourism that this study considers is nature-based tourism, with a particular emphasis on a special interest tourism product referred to as astro-tourism. Astro-tourism focuses on activities related to observing night skies and celestial phenomena in natural spaces, as well as terrestrial meteorites relicts. Astronomical views such as rainbows, beautiful sunsets, sunrises, and astronomical phenomenon such as solar and lunar eclipses can attract many tourists all around the world. In Tanzania, the Mbozi Meteorite (*kimondo*) is emerging as an opportunity for tourism destination in the country. The main objective of this study was to assess local communities' perceptions and awareness of Mbozi meteorite as one of the aspects of astro-tourism. A mixed research approach with questionnaires, in-depth interviews and observations was used to collect data from 110 respondents who were randomly selected for the study from local communities/villages in the neighbourhoods of Mbozi meteorite site. 15 key informants were purposefully selected from Songwe region including local community leaders/elders, tourism entrepreneurs (Agents, tour guides, shopkeepers, curio, art & crafts), and government officials. Both descriptive and thematic analyses were used to analyze quantitative and qualitative data. Findings revealed that the local community members are aware of the presence of *kimondo*, and they associate it with varied taboos and traditions. Further they noted that despite being there for decades, it is just of recent that *kimondo* has attracted attention and attracted a number of visitors and tourists. The number of tourists has increased in the locality hence bringing up new opportunities and threats. The study recommends for community education and involvement in tourism activities that will improve their livelihoods.

Keywords: *Astrotourism, Meteorite, Emerging Tourist attractions, kimondo, local communities*

INTRODUCTION

Tourism is one of the most important sectors in stimulating economic growth across different countries globally, promoting sustainable development and generating employment (Owusu & Siaw, 2015). According to the World Travel and Tourism Councils' economic report (2013/2014), in 2013 tourism industry supported 8.9% of the total employments across the global. It is the third-largest export category (after fuels and chemicals) and in 2019 accounted for 7% of global trade. For some developing countries such as East African countries, it can represent up to 20% of their GDP and, overall, it is the third largest export sector of the global economy (UNWTO, 2020).

In Africa, tourism is also an important income-generator where about a third of all direct tourism GDP in 2018 was attributed to wildlife (WTTC, 2019). It provides foreign exchange, employment, incomes and public revenue. It is one of the top five sources of foreign currency for 83% of developing countries. WTTC (2020) stated that, the industry is important for many least developed African countries such as Madagascar, Rwanda, Tanzania and Uganda - where the wildlife tourism sector is important for economies and livelihoods.

In Tanzania, tourism is among the fastest growing economic sectors and one of the largest industries in the country (Mamadi, 2004); estimated to account for about 12.2% of the country's workforce, 17.5% country's GDP and 25% of the foreign currency (Kideghesho *et al*., 2021). Tanzania is predominantly of wildlife nature (MNRT, 2002) which attracts the tourists, the foreign exchange earnings for an economy and also generates other economic benefits which include income, employment and revenues (Kweka *et al.*, 2003). The government of Tanzania views tourism as a significant industry in terms of job creation, foreign currency generation and poverty alleviation (MNRT, 1999). The tourism sector is receiving greater attention than ever before from government and international development agencies (MNRT, 1999).

Tourism has many branches and faces to include wildlife tourism, nature based tourism and cultural tourism to mention a few (Damijanić & Sergo, 2013; Huang, Li, & Cai, 2010). Among the many branches of tourism that this study considers is nature-based tourism, with a particular emphasis on a special interest tourism product referred to as astrotourism. Astrotourism, as for other forms and components of tourism is a service industry which relies on two forms of knowledge (Eagle, 2014), namely, the knowledge (local knowledge) of the night sky, also referred to as ethno-astronomy (Holbrook, Medupe, & Urama, 2008), and an appreciation for the night sky in the modern scientific paradigm (Soleimani *et al*., 2019). Thus, it can be argued that the night sky is not the product being sold, but knowledge.

Since time immemorial, human beings in their different cultures have been inspired by the night skies (Collison & Poe, 2013). Indigenous cultures across the world have been influenced by the stars and their arrangements on the sky, and have used the positions of the stars for agriculture and navigation. Star gazing has traditionally been associated with different cultural values and beliefs. In modern times however, the majority of celestial objects are no longer visible to more than 50% of the world's population who live in cities, obscured by light pollution. This has led to the global rise of a new branch of sustainable, nature-based (rural) tourism referred to as astrotourism (Soleimani *et al*., 2019).

Astrotourism is viewed and defined differently by different scientists. Spennemann (2008) defines astrotourism as 'the travelling of private individuals to specific locations to satisfy a desire to view the planets and stars either unaided (naked eye) or with the aid of an optical device, e.g. telescope'. However, this definition lacks the breadth of the astrological experience and the spiritual connection that astro-tourists can experience when gazing at the night sky. Cater (2010) referred astrotourism as space travel, neglecting terrestrial (land based) astrotourism in his definition. Ingle (2010:4) refers astrotourism as 'creating a tourism asset from nothingness', one could argue that the night sky is far from nothing as the universe is inextricably linked to life on this planet. In contrast, Collison (2012) viewed the phenomenon of stargazing as people travelling to a destination where dark skies, free from artificial light pollution, can be enjoyed, naming it astronomical tourism or simply astrotourism, a simple but accurate description of the activity. Najafabadi (2012) refers astronomical tourism as the potential of sites to attract astro-tourists to a particular destination, focusing on the destination rather than the activity. Although stakeholders have always looked at the stars, stargazing as a tourist activity is relatively new and has been largely overlooked by the academic community, rendering the need to explore the behaviour and experiences of this hitherto neglected emergent tourist (Fayos *et al*., 2014). Weaver (2011) further elaborates on the idea that astrotourism is a type of ecotourism through activities which are focused on observation and appreciation of celestial phenomena. Kanianska *et al*. (2020) agree with this idea and add that since its greatest assets don't need maintenance and development and are always available and unique, it is one of the most sustainable forms of tourism (Soleimani *et al*., 2019).

According to Tapada *et al*. (2021), Astrotourism comprises of recreational and/or educational activities which are developed around the cosmos, astronomical phenomena and the ways of understanding them, both past (e.g. cosmogonies, mythologies, etc.) and present, including the latest scientific findings as well as the instruments and technologies that astronomers use in astronomy nowadays. Astrotourism provides a sustainable and meaningful tourism experience, aligning with the conservation of natural resources and cultural heritage in situ (Dowman, 2019). It can be implemented at minimal cost, requiring little infrastructure – stargazing can be done with the naked eye for free, or with binoculars which are not too costly (Buckley, 2020). Astrotourism also offers opportunities for science education, sharing indigenous knowledge, and active participation, enriching both the tourist and benefiting host local communities (Tosun & Jenkins, 2016). For these reasons, astrotourism contributes to several of the UN's Sustainable Development Goals (SDGs) (United Nations, 2015). Moreover, astronomy's universal appeal attracts a diverse audience, ranging from scientists and amateur astronomers who deliberately plan visits to dark sky areas, to the general public encountering astrotourism experiences serendipitously (Buckley, 2020). Such activities may include stargazing, eclipse chasing, astrophotography courses, and visits to observatories, International Dark Sky Places (IDSPs), or archaeo-astronomical sites (Dowman, 2019). In the context of this study, Astro-tourism focuses on activities related to observing night skies and celestial phenomena in natural spaces, as well as terrestrial meteorites relicts such as the Mbozi meteorite.

Astrotourism is one of the different types of tourism that the countries offer (Soleimani *et al*., 2019). It not only allows people to learn Astronomy while travelling, but also offers travelling for relaxation. It does not only offer daytime tour where you can enjoy different activities under the sun, but also lets you experience a new activity under the light of the moon and billions of stars. According to Fletcher (2017) Astrotourism offers opportunities for hands-on learning and skill development; and in collaboration with local schools and educational institutions, it can foster appreciation for science and astronomy among community members. Astrotourism makes use of unpolluted nightscapes as a natural and infinite resource. As dark skies become scarcer, many countries in the Global South including Tanzania have a unique opportunity to offer their dark skies to travellers who seek to reconnect with the heavens.

In addition to observing celestial phenomena in the night skies, astrotourism encompasses activities related to the observation of terrestrial meteorite remnants, including meteoroids, shooting stars, and meteorites. A meteoroid refers to a particle of debris in the Solar System, ranging in size from sand to boulder, that collides with Earth (Brown et al., 2002). The visible trajectory of a meteoroid entering Earth's (or another celestial body's) atmosphere is termed as a meteor, commonly known as a shooting star or falling star (Brown et al., 2002). If a meteoroid reaches the ground and endures the impact, it is classified as a meteorite (Brown et al., 2002). Instances where multiple meteors appear within seconds or minutes are designated as meteor showers (Yeomans, 1991). Etymologically, the term 'meteor' finds its origins in the Greek word meteōros, signifying 'high in the air' (Harper, 2021). A meteorite is a solid fragment of debris from an extraterrestrial object, such as a comet, asteroid, or meteoroid, originating in outer space and surviving its passage through the atmosphere to impact the surface of a planet or moon (Nehru et al., 2017). In essence, a 'Meteorite' is a rock in the Solar System that collides with Earth and withstands the impact (Nehru et al., 2017).

There are millions meteorites that have fallen on the earth surface (Dietz, 1994; Nehru *et al.*, 2017, Brown *et al.*, 2002). The largest meteorite recorded by astronomers in the Hoba Meteorite which is found in Namibia, weighing about 66 tonnes (Figure 1.). Mbozi meteorite in Tanzania is the 8th in the list.

Figure 1: World's Largest Meteorite, Hobba Meteorite
Source: Dietz, H. (1994)

Different cultures have different perceptions of the meteorite. Hindus for example traditionally believed that the meteorites are nothing but the forms of those who fall to be reborn after having enjoyed the fruits of their meritorious deeds in Heaven. They are divided into five categories viz.

Ignescent Balls, Meteors, Thunder-bolts, Lightning and Shooting Stars (Comets) (Subba-Rao, 2020).

Tanzania, renowned for its diverse tourist attractions encompassing natural wonders, cultural heritage, and historical and archaeological sites, is home to gems like the Mbozi Meteorite. These attractions, including the Mbozi Meteorite, draw significant interest from the international tourism markets. The contemporary fascination with the cosmos has given rise to Astrotourism, as stakeholders increasingly delve into the mysteries of the universe. Jiwaji (2016) notes that Tanzania's strategic geographical location and its skies free from light pollution make it an ideal destination for astro-tourist activities, seamlessly integrated into the existing tourism offerings. The Mbozi Meteorite, affectionately known as "kimondo," is gradually gaining recognition as a promising tourism asset for the country. Despite its potential, it is noteworthy that Tanzania currently lacks a formalized astrotourism industry, underscoring the need to gauge community awareness on astrotourism, particularly emphasizing the Mbozi meteorite. The primary objective of this study is to evaluate the perceptions and awareness of local communities regarding the Mbozi meteorite as a crucial aspect of astrotourism.

METHODOLOGY

Mbozi District (where the meteorite is found) is one of the districts in Songwe Region, Tanzania. It is located at the south western part of Mbeya Region, between latitudes 8^{o} and 9^{o}12' south of the Equator and Longitudes 32^{o}7'30'' and 33^{o}2' East of the Greenwich Meridian. It shares borders with Mbeya district to its eastern part, Ileje district to the south, Momba district to its western part and Chunya district to the north, and to the west by Rukwa Region. The major ethnic groups in terms of their number are the Nyiha, who account for over 50% of the total population. The other ethnic groups are Nyamwanga, Wanda, Nyakyusa, Ndali, Lambya, Malila, and Safwa. The major socio-economic and income generating activities in the district include agriculture, livestock production and marketing, conservation and harvesting of existing natural resources and small industrial production.

Mbozi Meteorite ranks as the world's 8th biggest, is situated some 65 kilometers southwest of the town of Mbeya City, in Mbozi district, and weighs about 25 metric tons. It is approximately 3 meters long and 1 meter tall. The Mbozi Meteorite is the most well-known tourist attraction in the Songwe area, located at Latitude: -9° 06' 60.00" S and Longitude: 33° 03' 60.00" E.

Figure 2: The Mbozi Meteorite (*kimondo*)
Source: Field Study, 2023

A meteorite is a piece of extraterrestrial material that was big enough to prevent being entirely consumed when it entered the atmosphere of Earth (Nehru *et al*., 2017). However, the piece is tiny enough to escape exploding; just about a third of the estimated 500 meteorites that enter the earth each year hit land, and only about 10 are detected and documented (Nehru *et al*., 2017). Locals have known about the Mbozi Meteorite, which they name Kimwondo or kimondo, for generations, but the lack of legends about its quick and unmistakably fiery arrival suggests that it happened long before the current residents arrived, over a millennium ago. Only the tip of the meteorite was visible when it was formally found in 1930. The slope around the Mbozi Meteorite was excavated to show the entire meteorite, leaving a pillar of earth behind it that was subsequently strengthened with concrete to act as a plinth. The uneven notches on its pointy end were formed by souvenir seekers chopping chunks off — no simple work considering the strength of the meteorite's nickel-iron composition (Mbozi Meteorite Project, 2021).

Unlike most meteorites which are made up of stony-irons or silicates, the Mbozi meteorite is unique due to the fact it is mostly made up of iron (90.45%), nickel (8.69%) and with minor quantities of copper, phosphorus, and sulfur (Mbozi Meteorite Project, 2021).

A mixed research approach with questionnaires, in-depth interviews and observations was used to collect data from 110 respondents who were randomly selected for the study from local communities / villages in the neighbourhoods of Mbozi meteorite site. 15 key informants were purposefully selected from Songwe region including local community leaders/elders, tourism entrepreneurs (Agents, tour guides, shopkeepers, curio, art & crafts), and government officials. Both descriptive and thematic analyses were used to analyze quantitative and qualitative data.

RESULTS AND DISCUSSIONS

Demographic characteristics of respondents

Socio-economic and demographic characteristics of respondents are presented in Table 1. Results revealed that majority of respondents (52.7%) of respondents were males. Most of respondents (30.9%) were aged between 30-39 years, and more than four fifth were aged between 20 and 49 years. In terms of education level, 44.64 had primary education and about a third (32.14%) had O-Level education. Findings further revealed that majority of respondents (41.9%) engaged on farming as the main economic activity, followed by petty/small businesses. Demographic characteristics of respondents largely determine and influences their perceptions and awareness to astrotourism.

Table 1: Socio-economic and Demographic Characteristics of respondents

Gender of Respondents	**Frequency**	**Percent**
Male	58	52.7
Female	52	47.3
Age of Respondents	**F**	**%**
Below 20 years	5	4.5
20-29	22	20
30-39	34	30.9
40-49	27	24.6
50-59	13	11.8
60+	9	8.2
Marital Status	**F**	**%**
Married	74	67.3
Single	25	22.7
divorced	3	2.7
widow	8	7.3
Education Level of respondents	**F**	**%**
Not educated	8	7.14
Basic primary education	50	44.64
O-level education	35	32.14
A-level education	3	3.56
College education	11	9.82
University	3	2.7
Main Occupation of respondents		
Farmers	46	41.9
Business	39	35.2
Public servant	17	15.2
Entrepreneur	3	2.9
Pastor	5	4.8

Source: Field Survey,2023

Findings revealed that majority of respondents (local community members) (98%) are aware of the presence of *kimondo*, and they associate it with varied taboos and traditions.

Perceived Use of Kimondo

Majority of respondents (59.1%) reported that they use Kimondo for traditional rituals such as praying for fortune, praying for success in their business as well as healing (Figure 1). On the other hand, 23.7% and 23.4% use the meteorite for learning as well as businesses respectively.

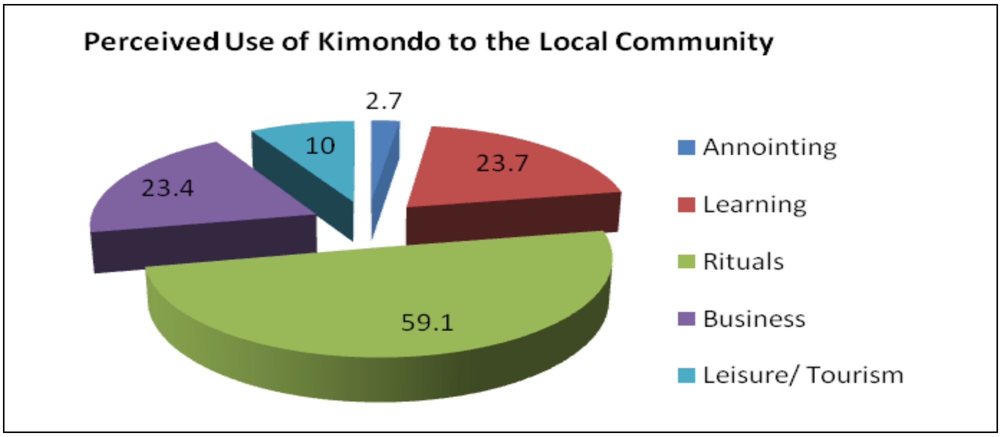

Figure 3: Perceived use of Kimondo by the local community

It was further reported most local people in the surroundings and far away, visit the meteorite to make prayers for different requests from God and ancestors. One key informant reported:

> *'My friend was suffering from unknown disease, and after visiting traditional healer, he was advised to visit the meteorite and make some rituals there. After the rituals he was healed and up to now he is well and pays visit the meteorite once in a while'.*

Another elderly respondent said:

> *'in the earlier days when we were still young, elders in our clan used to visit the meteorite site to offer sacrifices and make prayers. When there was any ailment or a problem in our area, elders would visit and make prayers, and the problem ended'.*

Thus, it is evident that the indigenous local communities surrounding Mbozi meteorite use it for traditional rituals. Some Local people visit *Kimondo* with beliefs that they will get good luck and succeed in business and other livelihood activities. Sometimes traditional practitioners/doctors' advices them to visit and make prayers at the Kimondo and offer sacrifices.

Perceived benefits of Mbozi meteorite to local communities

Respondents were asked of their perception on whether the presence of Mbozi meteorite in their locality to be beneficial (an asset) or loss (liability). About two thirds of respondents (65.4%) were of the view that the meteorite was an asset rather than a liability (Figure 2). Only about 7.3% were not comfortable of the meteorite in the area and considered it as a liability. 18% were not sure whether the meteorite was beneficial or not.

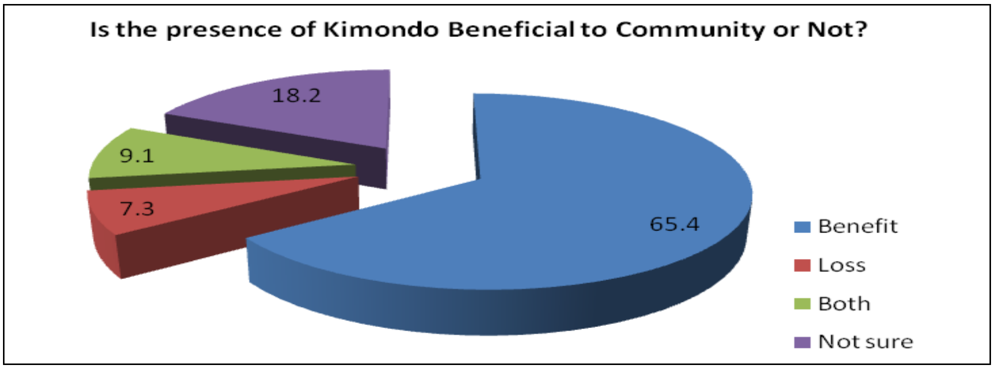

Figure 4: Whether the presence of meteorite is beneficiat or not

Regarding the benefits that local community get from the presence of the meteorite, majority of respondents (60%) argued that social services has improved tramendously due to the presence of the meteorite. These include Water supply projects, road maintenance project, electricity supply project, environmental conservation, and constuction of a museum (Figure 5, Figure 6). One third of respondents (34%) reported to have improver their bussinesses due to the presence of the meteorite in their local area (Figure 5). Insignificant number of respondents were of the view that they benefit through interaction of different people/ tourists who visit the meteorite, hence increasing their networks.

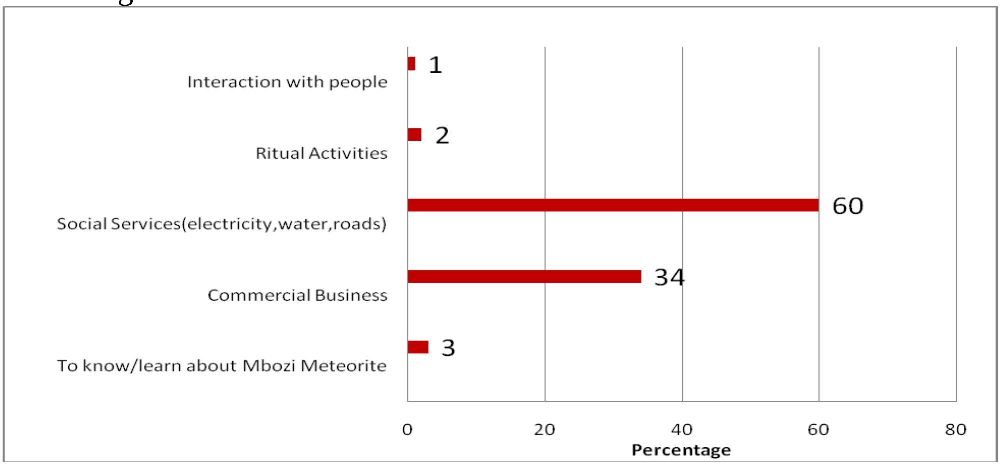

Figure 5: Benefits of *Kimondo* to Local Community

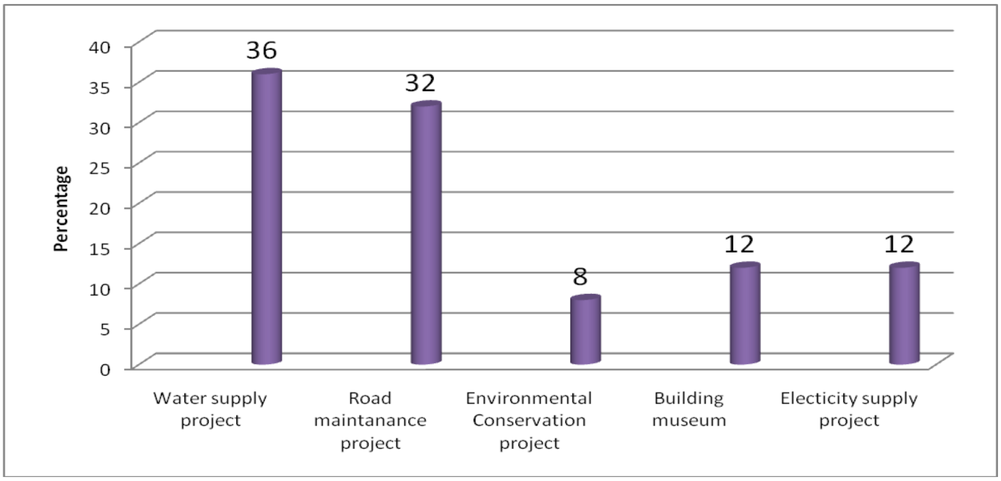

Figure 6: Social services facilitated by the presence of the Mbozi meteorite

Perceived Threats / Worries Due to Presence of the Meteorite

Apart from the benefits highlighted by majority of respondents, some respondents had some worries/threats that may be associated with the presence of the meteorite. There are presented in Figure 7.

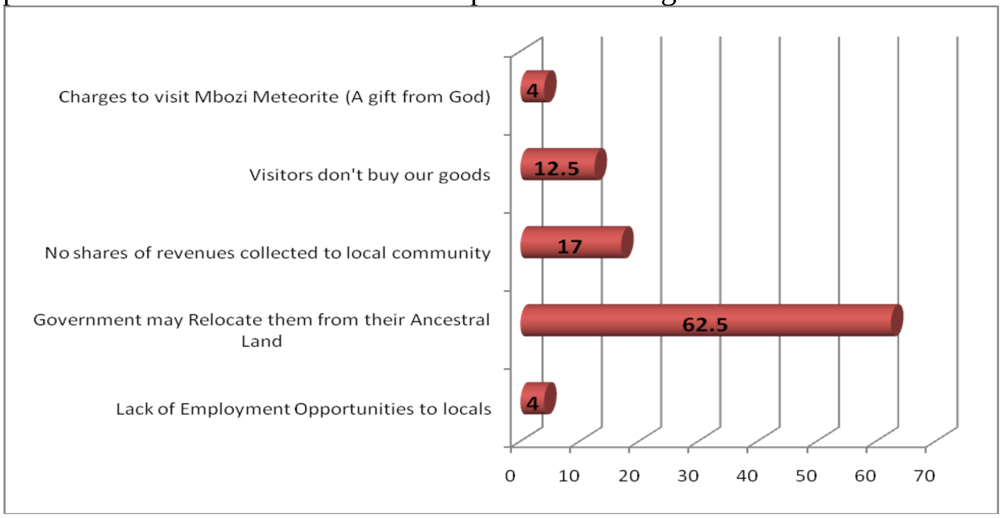

Figure 7: Perceived threats associated with the meteorite

About two thirds of respondents (62.5%) were worried that with the improvements in the meteorite site, they may be relocated from their ancestral lands. This worry is associated with rumours that the site will be expanded to provide adequate services to cater for astrotourism services. And as such they will be denied of their land and traditional rights for the meteorite. One respondent exclaimed:

> *'this meteorite is ours, we inherited it from our ancestors, it is our ancestral land. We are however compelled to pay entrance fee just to pay visit to our own heritage!!'*

Another respondent argued that:

> *'We have seen what happened recently in Ngorongoro District, where the local Maasai were evicted from their ancestral lands in the Ngorongoro Conservation Area and were relocated to Msomera village in Handeni district. Similar cases were also reported in Loliondo, where the local people were forcefully evicted from their ancestral lands in the name of conservation of wildlife and natural resources. The same authorities that supervised the eviction are now in Mbozi meteorite site. It is no wonder in the near future we will also be evicted from this land in the name of meteorite conservation and development'.*

From local people's perspectives, it is evident that despite the many benefits brought by *kimondo* recently, there is also an increase of fear among the locals of their ancestral lands.

These findings are in line with Buckley (2019) who argues that the influx of tourists and infrastructure development may pose challenges to the delicate ecosystems in dark sky regions. Consequently, their potential for night sky observation may be jeopardised. Mitigation strategies must be in place to minimize environmental footprints. Additionally, astrotourism initiatives should be sensitive to local cultural norms and practices. Collaborative planning with communities is crucial to avoid cultural commodification and ensure respectful engagement of the local communities (Dolnicar *et al*., 2021).

Perceived Improvements to Attract More Tourists in Mbozi Meteorite Site

Despite the benefits and worries relating to Mbozi meteorite site, respondents were of the view that the site has not attracted tourists compared to other sites in the country. 38.5% of respondents proposed for more publicizing of the Mbozi meteorite through different media such as television, radio, social media and other means (Figure 8). About a third (31%) proposed for improvements in the social services such as tarmac road to the site, as well as establishment of the camping site astrotourism night observations. In addition, education and public awareness campaigns about Mbozi meteorite and involvement of the locals in the conservation of the meteorite site was paramount.

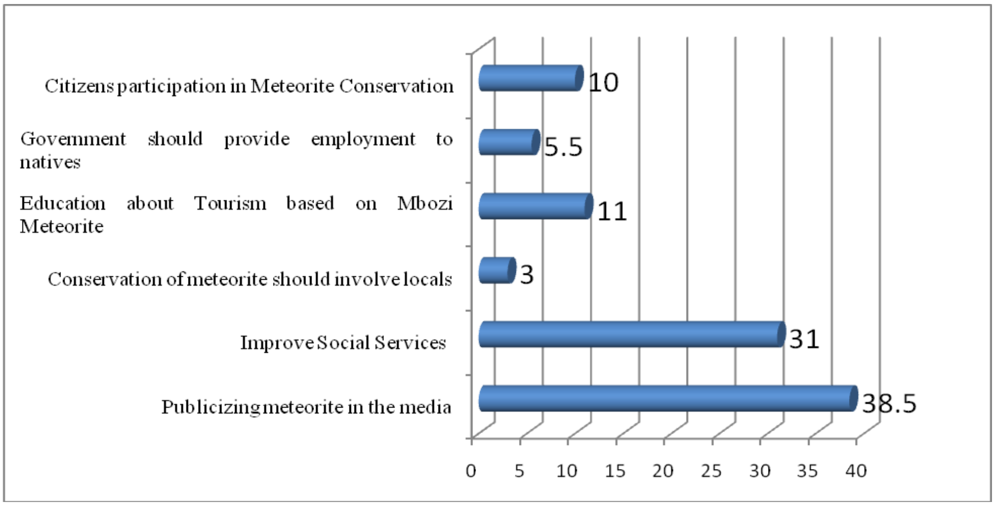

Figure 8: Areas for improvements

There is a need for the government to work together with the local community in Mbozi to take advantage of astrotourism potential available through Mbozi meteorite site and make improvements of services to visitors. It was noted that there is no even a water kiosk close to the site let alone other services. Local tour guides need to be involved while promoting and marketing tourism services in the southern highlands of Tanzania. Muloin, Timmons, & Murphy (2015) argue that successful astrotourism initiatives require active involvement and participation from local communities. Lack of community engagement may lead to resistance or conflicts.

The Mbozi meteorite site currently lacks essential tourist services, including hotels and guest houses, to accommodate and cater to visitors who come to explore the meteorite and other tourist attractions. This deficiency leads to the perception among many tourists that necessary services are distant from the meteorite sites, dissuading some from visiting altogether. Consequently, this situation hinders the influx of tourists, causing both the Ngorongoro conservation area and local communities to miss out on valuable foreign currency. It is imperative for the management to address and rectify this issue in the near future.

CONCLUSION AND RECOMMENDATIONS

The Mbozi meteorite is under the preservation and conservation of Ngorongoro Conservation Area. However, the local community involvement in the process of preservation and conservation has not adequately been taken into consideration. The findings of this study revealed that local community members were aware of the presence of the Mbozi meteorite in their area and had different perceptions on its use for various ways. They had observed a number of benefits accrued from the presence of the meteorite including different projects aimed at improving social services in the local area. However, they were still worried of their fate regarding their ancestral lands.

Astrotourism presents a celestial opportunity for local communities to harness economic, cultural, and educational benefits. To ensure its sustainability, stakeholders must adopt a community-centric approach, involving residents in planning, decision-making, and benefit-sharing. Balancing the economic advantages with environmental and cultural preservation is essential for the long-term success of astrotourism ventures.

It is recommended therefore that the government through Ngorongoro Conservation Areas Authority (NCAA) should put in place security system for the meteorite and visitors who visit the site. Also, NCAA should promote the presence of Kimondo at Mbozi in Ndolezi village through different means such as the social media, so as to get more visitors/ tourists and hence increase incomes of the local community. Apart from preserving the meteorite, NCAA should put in place telescopes for sky observations. This will attract more visitors, both locals and from outside the country to learn more about astronomy and astrotourism. Lastly, it is equally important to involve local communities and other stakeholders when it comes to sensitive issue expanding the site for developmental purposes to avoid conflicts with the community as has been observed in other parts.

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Analysis of Costs of Inputs for Sunflower Production at Mkalama District in Tanzania

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Abstract

The paper analysed the input costs on the sunflower production at Mkalama district in Singida region using variables prices of fertilizer, plough, pesticide, land hired per acre, labour hired, hoe, improved seed (50kg) and Local seed (50kg). For this aim, descriptive statistics and an econometric analysis was conducted in 120 randomly selected sunflower farmers in Mkalama district. Descriptive statistics and OLS regression model were used to analyze the extent of input costs on the sunflower production by respondents. The results revealed that fertilizer, plough, labour hired and Local seed (50kg) inputs had the highest average total cost of inputs. The results of econometric model showed that fertilizers, ploughs, pesticides, land hired per acre, hoes and improved seed (50kg) were the most important inputs, significantly contributed to total production of sunflower seeds; While, the use of labour hired and Local seed (50kg) has negative relationship with output of sunflower. The paper found out that price per bag of fertilizer, price per plough, price per pesticide and price per acre of land hired are positive and statistically significant influence on the sunflower production (Beta= 0.535, 0.302, 0.502, 0.197, P>0.001). The paper concluded that major problems confronting sunflower production were found to be inputs cost which always affects the yield of sunflower. This paper recommended that the Government of Tanzania should enhance the productivity of the agricultural sector through the subsidies provision of the required inputs, which would minimize the total cost of production and speed up the productivity process of sunflower in Tanzania.

Keywords: *Costs of Inputs, Economical analysis, Econometric model, Sunflower production,*

INTRODUCTION

Worldwide, the sunflower is an important agricultural cash crop grown for its edible oil and fruits both for human and livestock consumption in most of the sunflower growing countries like Ukraine, Germany, Russia, European Union and Argentina (Marinda, 2022). In the world, 11% of crude vegetable oil production is supplied by sunflowers (Marinda, 2022). In Ukraine, sunflower is the second crop followed by wheat in sowing area with more than 6 million ha. It is sown through all 25 regions with the mottles distribution mainly influenced by relief, rainfall and crop rotation (Zymaroieva et al., 2021). According to the data shown in 2018, the major sunflower-producing countries in 2020 include Ukraine (576,0000 ha), the Russian Federation (6,942,000 ha), Argentina (1,426,000 ha), China (957,000 ha), Romania (1,025,000 ha), Bulgaria (842,000 ha), Turkey (689,000 ha), Hungary (625,000 ha), France (634,000 ha), and the United States (618,000 ha). Global oil production and consumption, both for food and non-food uses, are expected to double over the next two decades. Specifically, there is an anticipated threefold increase for oil palm, a 2.2-fold increase for sunflower, a doubling for soybean, and a 1.8-fold increase for canola Pilorge, (2020).

During the COVID-19 outbreak, various factors such as; labor shortages, lockdown restrictions, disrupted transportation, and supply-chain issues occurred and thus led to a decline in demand and production. However, global growth is projected to resume in the medium term, with consumption predicted to be 16% higher by 2030 compared to the base period of 2018–2020, (SAGL, 2023). The global pandemic has also heightened consumer awareness of health concerns, leading to a growing preference for healthy cuisine worldwide (FBI, 2023). Sunflower products play a vital role in the food industry as they can be processed into cooking oil, cereal, confections, and more. Notably, sunflower products, especially those rich in linoleic acid, are favored in most of Europe, the Asia-Pacific region, and South America. Confections and food-grade sunflower seeds are widely used as ingredients. The consumer retail sector, which dominates the food-grade seed market, is expected to expand both domestically and internationally due to increased demand for processed foods made with sunflower oil and other seeds (MI, 2023).

Furthermore, drought due to water shortage affects crop productivity as sunflower survive more in stress environments than other cereal crops. Sunflower crops are commonly found growing in a limited water environment in such a situation, it is expected that making water available through irrigation would drastically increase soil water content with expected increase as situations may warrant. In most cases, the sunflower is often restricted to marginal soil or low water land as compared to maize or soybean that prefer a high moisture environment. Hence, the effects of climate change on sunflower production in most regions of the world could offer new cropping opportunities. In Europe, growing of oilseed sunflowers using chemical fertilizers and pesticides is currently practiced. The less adaptation of some major crops like maize, rice, and wheat in the tropical and temperate regions due to climate change has influenced their yields (Konyalı, 2017).

In sub – Saharan Africa, sunflower is one of the important oilseed crops grown throughout the world as a source of premium oil and dietary fiber that significantly contributes to human health (Khan, Choudhary, Pandey, Khan, & Thomas, 2015). In some countries like South Africa, growing of sunflowers might be more competitive to other crops like maize, soybean, and sorghum (Vijayakumar et al., 2016). Due to the continuous increase in the human population, the demand for edible sunflower seeds, oil, and by-products has also increased, and to meet the demand, there is a need to intensify efforts to expand sunflower output (Taher, Javani, Beyaz, & Yildiz, 2017). Today, the international oilseed market is dominated mainly by sunflowers and other oilseed crops such as soybean, rapeseed, peanut, cottonseed, etc.

In Africa tropical countries, Tanzania production stands at 108 000 MT per annum, Sudan (18 000 MT), Kenya (12 000 MT), Angola, Mozambique, and Zambia (each about 11 000 MT). Most of the sunflower oil is consumed in these countries of origin and less than 30% reaches the international markets. Low exports of sunflower oil are attributed to high demand in domestic markets, low quality and standards which restrict entrant to international markets, and low output of most small-scale processors (Berglund, 2015). In Tanzania, agriculture continues to be the main backbone of the economy of most of the rural population. According to URT (2008) over 80% Tanzanians live in rural areas where agriculture and the use of natural resources are crucial to their livelihoods. Sunflower represents one of the key sub-sectors of agriculture in Tanzania (RLDC 2008). In world, the leading commercial producer of sunflower seeds includes Russia, Peru, Argentina, Spain, France and China (The George Mateljan Foundation, 2001-2010). In Iran, the economical and energy analysis as well as environmental analysis are important necessities in agricultural production (Mobtaker et al., 2010).

The Government of the United Republic Tanzania (URT) assigns a particular importance to agricultural development because; agriculture and particularly farm activities still constitute the major component of the Tanzanian economy. It provides livelihood to more than 70% of all the population. It accounts for about 24% of the GDP, 30% of total exports and about 65% of raw materials for domestic industries. It provides significant linkages, both backward and forward linkages with other nonfarm sectors. Furthermore, it accounts for the national inflation since; about 50% of the inflation basket is related to food availability (URT, 2021). Agriculture thus, constitutes the back born of the Tanzanian economy, and agricultural sector advancement remains a key task the nation government has to achieve.

Sunflower is one of Tanzania's most important cash crops grown mostly within the central regions of Tanzania. The country ranks 11th in the world for largest sunflower seed production and is the 2nd largest producer in Africa behind South Africa, accounting for 35% of the continent's total production yet the country imports nearly 50% of edible oil, African countries account for 5.5 per cent of the world's production (FAOSTAT, 2018). Furthermore, the statistics shows that local production of both factory and home extracted sunflower seed oil in Tanzania contributes about 40% of edible oil requirement of 330,000 tonnes, on which the 60% gap is filled by imports.

Sunflower oil is one of the most popular oils in the world, in Tanzania sunflower production offers multiple livelihood opportunities, as it produces important and valuable vegetable oils and animal feeds that are sold to internal and external markets (Ugulumu et al., 2014). It is estimated that about 4 million smallholder farmers engage in sunflower production (URT, 2013). Sunflower is grown in most regions across Tanzania as the crop is drought resistant and less susceptible to diseases; consequently, the semi-arid areas of the central zone and the southern coast of Tanzania are favorable for sunflower production (Kajimbwa et al., 2010).

The current production from Singida region shows that there is low productivity as the average smallholder yields are only 240kg/acre, which is only 33% of their potential. Similarly, smallholder farmers in Mkalama district have a productivity of 454kg/acre which is only 47% of the potential productivity which could be achieve by cultivating high-yielding and drought tolerant hybrid seeds. Poor production attributed to poor seed selection, low planting density, and poor crop management (URT, 2021).

Currently, annual demand for edible oil in Tanzania is estimated to be 570,000 Tons and which is increasing annually at a rate of 3 percent (FAOSTAT, 2021) Tanzania imports about 60% of its edible oil needs (Salisali, 2017) . Therefore, the ever-increasing demand for edible oils worldwide and within the regional, has enticed numerous countries to invest and develop the subsector especially supporting primary producers, processors, and other edible oil value chain actors. This trend has also been witnessed in Tanzania, where sunflower production has progressed from being an obscured subsistence crop grown in only few places in 1990 with production of only 3000 Tons to become a leading domestically produced oil crop with the production level of 205,000 Tons in 2021. These efforts are aimed to meet the increasing demand for edible oil in Tanzania which is estimated to reach 1.08 million Tons in 2030 from the current 570,000 Tons (FAOSTAT, 2021) .

Many challenges facing the agricultural sector are known to have an influenced crop yield and their product, can vary from one country to another due to different weather conditions in season and time. The major constraints affecting sunflower production in Tanzania and other countries can be attributed to the shortage of improved seeds varieties to farmers for planting, harsh weather conditions, erratic/low rainfall, unreliable markets, and price fluctuations. Others include; high cost of farm input, disease attack, insect-pest infestation on the plant-crop, birds attack, lack of farm machinery, unpredictable rainfall, ignorance/lack of awareness, poor extension services, and stiff competition from edible oil imports. As farmers continue planting on farmland in and out of season, this could lead to problems of disease build-up such as leaf spot and head-rots, which can easily be controlled by crop rotation, irrigation methods, and the use of biopesticides (Ebrahimian, et al., 2019).

In this paper the main objective was to analyse the costs of inputs for sunflower production of smallholder farmers in Mkalama district at Singida region. Furthermore, sunflower is grown highly in district by small-scale farmers and has a great potential for improving welfare in household. So, there is wide gap between the potential yield of sunflower and inputs actual costs obtained in the field to the farmers. Therefore, the analysis of this paper is to figure out those productions input costs which are limiting the production of sunflower in the Mkalama district.

Theory of the Firm and its Application

According to the Theory of the Firm, every producer, especially farmers, strives to maximize output while lowering expenses and increasing profits (Debertin,2012). However, in most cases, it is not possible to optimize all of them; that is, some farmers will produce more efficiently than others given the same inputs and technologies. However, in estimation techniques in econometrics, it allows for differences in observed decisions towards optimal ones due to inefficiency in optimization or random shocks by some farmers (Mlote et al., 2013). The assumption is that the firm exhibits constant returns to scale with a production possibility set fully described by unit isoquant while considering two inputs and one output. The implication is that every set of inputs along the unit isoquant is considered as technically efficient while any point above and to the right of it is defines inefficient producer. The boundary of the production possibilities set is known as PPF. It is the important part of the production possibilities set because at any point on it shows the efficient production due to the opportunity cost that the producer will make on the selection of inputs. Its slope reflects the opportunity cost because it describes what must be given up in order to acquire more products. They are concave towards the origin due to the principle of diminishing marginal return. This helps the producers to determine the maximum capacity or output that they can achieve with the available resources/method of production (good agriculture practice).

Literature Review

Sav, *et al.*, 2016, examined production potential of oil seeds, its development, the position of sector in economy, problems in sector within the foreign trade and applied politics in their study of improved crop varieties is related to various socioeconomic and institutional factors, the relationship between contract farming and the seed improved crop varieties has not been examined yet. Furthermore, studies on the adoption of improved crop varieties have largely ignored the relationship between farmers' adoption decisions, and risk aversion and their liquidity constraints as well as the availability of seeds of improved varieties and they suggested recommendations in regard to these problems.

Hamad et al. (2002) studied the production and marketing constraint of sunflower in Pakistan in which the study was divided into production factors and marketing factors. The production factors included yield of sunflower as the dependent variable and, number of ploughs, seed rate, number of irrigations, and number of bags of urea, sowing methods, pests attack as independent variables. The marketing constraints examined were non-existence of proper markets for sunflower producers and absence of a government procurement centers. The study used a sample of 70 farmers whose responses were analyzed using regression analysis. The study revealed that ploughings, irrigation, urea and the use of drill sowing contributed positively to the per acre yield of sunflower in the study area. The results on the marketing constraints indicated that government procurement system was found completely lacking. The study showed that this lead to farmers dispose of their produce to both villages, oil mills and private companies which exploited farmers by paying low price for their produce.

Studies in other countries with similar results include the one done by Nwachukwu (2017) in Nigeria that strongly suggests that the main factors significantly affecting adoption of good agriculture practices include cultural values, institutionalized land tenures, cropland size, poverty, literacy level, technology complexity, agricultural extension services, age and sex. On the other hand, the study of Katungi et al. (2016) suggests that adoption of climbing beans in Rwanda depends on elevation, rainfall, and cropping systems. Another study done in Nigeria by Fadare et al. (2015) reports that the farm size, access to extension services, education level, marital status, access of the household head influence adoption decision of maize farmers in the country. Other adoption studies with results in line with those reviewed in this study include the one done by Mlenga and Maseko (2015) in Swaziland, Beshir (2014) in Ethiopia, Wossen *et al*. (2017) in Nigeria, Mwangi and Kariuki (2015) and Abebe and Bekele (2015) in Ethiopia.

Baloyi (2010) conducted a study on analysis of constraints facing smallholder farmers in the agribusiness value chain in Tanzania; the study discussed the factors such as lack of human capital, high transaction cost, lack of information on markets, transport problems, technological barriers. The study discovered that many smallholder farmers were illiterate, with poor technological skills, which seemed to be obstacles in accessing useful formal institutions that can disseminate technological knowledge. It shows that majority of emerging producers lack knowledge on financial and marketing skills and it was found that producers were not able to meet the quality standards set by fresh produce markets and food processors.

Mazibuko, *et al* 2018 conducted study on influencing smallholder farmers agricultural infrastructure availability, accessibility and satisfaction in Tanzania which in turn influence them to consider short term off-farm sources of household income which are not sustainable. The study emphased that despite the increasing demand for sunflower and production potentials, a multitude of challenges and risks at times pose obstacles towards successful participation of households in sunflower value chain activities particularly in the nodes relating to cultivation, storage and processing before marketing. Therefore, the study concluded that the socio-economic determinants influencing participation of smallholder farmers in sunflower value chain activities. Towards operationalising the study objective, it was hypothesised that socio-economic factors do not influence smallholder farmers’ decision to participate in sunflower value chain activities. The study recommended that aforementioned production related factors sometimes contribute as barriers towards effective production and market participation by smallholder farmers.

METHODOLOGY

Study Area and Data Collection

Data used in this study were obtained from 120 sunflower farmers from Mkalama district, Singida region, Tanzania. A survey approach was used to collect quantitative information on different inputs used for the production of sunflowers as well as the output and socio-economic structure of farms. For sampling, the population of the sunflower small farmers are unknown due to the nature of the sampling area. Tabachnick and Fidell (2007) suggest that a sample size of the unknown population is obtained using a formula: N>104 + m (where N is the sample size and m is the number of independent variables) for testing individual predictors. The simple random sampling method was used Tabachnick and Fidell (2007) suggest a sample size to adopt $\boldsymbol{N > 104 + m}$ for multivariate data analysis for testing individual predictors.

Where;

N is the number of sunflower producers in unknown target population

m is the number of independent variables)

$N > 104 + 8$

$N > 112$

Therefore, the minimum sample size should be not less than 112, the sample size is 120.

The population of the Study

According to Kothari (2007), the term population means an entire group of individuals, events or objects that have common observable characteristics. It refers to all elements that meet certain criteria for inclusion in a given universe. The study used case study-based approach and targeted population was smallholder’s farmers. According to the 2022 population and housing census (URT, 2022), the number of household’s size of Mkalama District Council was 48,503 which is among are dealing with sunflower farming. The choice was on the fact that each respondent has different insights, information and experiences related to sunflower production in study area.

The Study Area

The study was conducted in Mkalama Districts, Mkalama district is one of the six districts of Singida Region of Tanzania. It is bordered to the East by the Manyara Region, to the South by the Iramba District, North by Singida rural district and to the West by the Meatu District. According to the 2012

Tanzania national census, the population of the Mkalama District was 188,733 (URT,2013). The study was carried out in four wards namely; Tumuli, Iguguno, Nduguti and Nkalankala where in each ward two villages were selected by considering the high volume of sunflower production.

Econometric Model of Sunflower Production

The costs of inputs used in the production of sunflower were specified in order to calculate the total production costs in the study. The inputs may be in the form of fertilizer, plough, pesticide, land hired per acre, labour hired, hoe, improved seed (50kg) and Local seed (50kg). The calculation of input costs, the relation between the costs of different inputs value was investigated using a prior mathematical function relation. In specifying a fit function relation, the Cobb Douglass production function was selected. The Cobb Douglass function has been used by several authors to investigate the relationship between various inputs and output of crops (Singh et al., 2004; Hatirli et al., 2006; Rafiee et al., 2010); it is a power function can be expressed in a mathematical form as follows (Singh et al., 2004):

$$Y_i = \alpha_0 \prod_{j=1}^{k} \chi_{ij}^{\alpha j} \ell^{\mu i} \quad \text{...........(1)}$$

$$(i = 1,2.....n;\ j = 1,2.........k)$$

Using a linear presentation, the function can be rewritten as:

$$\ln Y_i = \alpha_0 + \sum_{j=1}^{k} \alpha_j \ln(\chi_{ij}) + \mu_i \quad \text{...........(2)}$$

where: Yi, denotes the yield of the i^{th} farmer, X_{ij}, is the j th cost input used by the i th farmer for the cultivation of crop, α_0, is a constant term, α_j, represent the regression coefficients of j th input, which is estimated from the model and u_i, is the error term. Assuming that when the input costs are zero, the crop production is also zero (Singh et al., 2002; Hatirli et al., 2006):, then equation (1) reduces to a form presented in equation 2.

$$\ln Y_i = \sum_{j=1}^{k} \alpha_j \ln(\chi_{ij}) + \mu_i \quad \text{...........(3)}$$

In this functional form the parameters to be estimated, αi, represent the elasticity of output with respect to each input i which implies the percent change in output augmentation from a 1% increase in the i^{th} input cost.

Model Specification

The total production of sunflower is affected by average costs of inputs. Data was analyzed with Cobb-Douglas function to observe the effects of different capital input on sunflower yield. Following equation was formed for input costs affecting the production of sunflower in Mkalama district as under assuming that total production is a function of input costs, for analysing the impact of each input cost on sunflower yield. This paper regards the production of sunflower inputs costs in a given area of study. Given that these measurements will be made on each observation, a bivariate probit model will be adopted. Using a probit regression model the dependent variables took values: 1 if individual input went for pricing and 0 if the individuals input did not go for pricing. This model assumed that the error is normally distributed. A probit regression model is adopted to show whether there will be positive, negative or no association between sunflower production and the independent variables. Based on the theoretical framework, factors that determined uptake of sunflower production in Tanzania were explored using binary probit regression model that lies on an interval of between 0 and 1.

This relationship is being expressed as:

1 if the event takes place (an individual uses inputs costs for production)
Yi =
0 otherwise

Equation (1) expressing the prices for production can then be rewritten as:

$y^*_i = x_i{'}\beta + \varepsilon_i$
Where: y^*_i is variable showing the sunflower production,
$x_i{'}$ is a vector of variables related to the individual inputs costs
β is a vector of parameters and
εi error term

$Y = 1$ if $y^*_i > 0$ i.e $(x_i{'}\beta + \varepsilon_i) > 0$ and
$Y = 1$ if $y^*_i < 0$ i.e $(x_i{'}\beta + \varepsilon_i) < 0$

The values 0 and 1 are used in order to allow the definition of probability of occurrence of an event as a mathematical expectation of the variable Y.
This study aims to establish the relationship between the independent variables and the outcome variables for differences models, the Eq. (3) can be expanded in the following form;

$$\ln Y_i = \alpha_0 + \alpha_1 \ln x_1 + \alpha_2 \ln x_2 + \alpha_3 \ln x_3 + \alpha_4 \ln x_4 + \alpha_5 \ln x_5 + \alpha_6 \ln x_6 + \alpha_7 \ln x_7 + \alpha_8 \ln x_8 + \mu_i \text{......(4)}$$

Where χ_i $(i = 1,2,3,.......8)$ stand for input costs of sunflower production χ_i ;

Fertilizer	=	(χ_1)	1 if access, otherwise 0	Dummy
Plough	=	(χ_2)	1 if access, otherwise 0	Dummy
Pesticide	=	(χ_3)	1 if access, otherwise 0	Dummy
Land hired per acre	=	(χ_4)	number of acres	Continuous
Labour hired	=	(χ_5)	number of people	Continuous
Hoe	=	(χ_6)	1 if access, otherwise 0	Dummy
Improved seed (50kg)	=	(χ_7)	number bags	Continuous
Local seed (50kg)	=	(χ_8)	number bags	Continuous

Basic information on the costs of inputs and output were entered into Excel's spreadsheet and simulated using SPSS 23.0 software programs.

Analytical Tools of Sunflower Production

In this paper, the economic analysis of sunflower production was carried out by considering the costs of various inputs. The descriptive statistical and econometric methods were used to analyze the primary data collected from smallholder household heads using structured questionnaire. Descriptive methods such as measures of averages and percentages; and statistical methods such as one-way ANOVA tests and two-sample t-test was used to describe and analyze the costs of inputs per season of the sunflower production of the sample households. The probit regression analysis was used to answer the first research question. Multivariate linear regression analysis used to analyse the level of inputs costs of the farmers. SPSS software package was used to run the probit regression and multivariate linear regression models, and to analyze the quantitative data. Quantitative data were entered in Microsoft excel were all necessary arithmetic conducted for estimation of costs.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Respondents

The socio-economic characteristics assessment for the farmers is shown in Table 1. The gender distribution of the sunflower farmers revealed that majority 75.0% of the respondents in the study area were male, and 25.0% of the respondents were female. The result shows that sunflower productions are practised and dominated mainly by male farmers compared to female, this is agreed with Ruhangawebare (2010) observed that men are the ones involved in daily management of farming activities and thus they have more power upon making the decision on agricultural output. The age distribution of the respondents showed that the majority of the sunflower farmers in Mkalama district were in age group of 31 – 45 years which represented 34.2%. This implies that most of the sunflower farmers were in their economically active and productive ages. The study agrees with Anwasia (2015), whose findings revealed that 69% of sunflower farmers felt within the productive age range. The educational status of the respondents showed that a large proportion of respondents (80.8%) had acquired primary school level of education. This implies that a large proportion of households' heads were primary education leavers.

The results generally concurred with the findings of agricultural marketing information study which reported that a large number of people in the country that are involved in agricultural production and marketing are primary education leavers (URT, 2021). The farming experience of the respondents, majority showed that had experience of 60.0% for more than 10 years. This implies that sunflower farmers in the study areas had more experience and hence improving managerial capabilities for higher productivity is needed. Furthermore, the farmers with more years of experience likely had a better understanding and know how to appropriately manage the farming system of sunflower under tough climatic and economic conditions than less experienced farmers.

Table 1: Socio-economic Characteristics of the Farmer

Variable	Variable category	Frequency	Percentage
Sex			
	Male	90	75.0
	Female	30	25.0
Age of Respondent			
	18-30 yrs	24	20.0
	31-45 yrs	41	34.2
	46-60 yrs	39	32.5
	60+ yrs	16	13.3
Educational Level			
	Informal education	0	0.0
	Primary school	97	80.8
	Secondary school	23	19.2
Farming experience of respondent			
	Less than 1 Yr	0	0.0
	2-10 Yrs	48	40.0
	More than 10 Yrs	72	60.0

Source: Field data (2023)

Descriptive Statistical of Sunflower Production

In this study economic analysis of sunflower production was carried out by considering the costs of various inputs. The results obtained from the economic analysis are presented in Table 2, the average costs and sum of inputs per season of the sunflower production were considered. Accordingly, the total cost value per household in the season was calculated as input costs had a sum of Tshs. 264,585.53, the highest average and maximum cost per season is Tshs 121,052.63 for buying ploughs while pesticides had a minimum cost of Tshs 3,539.47 per season. There were different inputs which enabled households to purchase for farming such as fertilizers, ploughs, pesticides, land hired per acre, labour hired, hoes, improved seed (50kg) and local seeds. It is, therefore, logical to assess the costs affecting agricultural production and associated activities of off-farm participation of farm operation in the study areas. The results implying that the application of capital inputs in the sunflower production is considered a value-added goods and products.

Table 2: Inputs Cost in Sunflower Production

Costs for the capital inputs in TSHS per season in household at Mkalama district				
Type of input	Min	Max	Average	Sum
Fertilizer	5,000.00	240,000.00	27,236.84	2,070,000.00
Plough	45,000.00	450,000.00	121,052.63	9,200,000.00
Pesticide	10,000.00	50,000.00	3,539.47	269,000.00
Land hired per acre	30,000.00	280,000.00	14,605.26	1,110,000.00
Labour hired	6,000.00	210,000.00	38,822.37	2,950,000.00
Hoes	2,000.00	50,000.00	17,789.47	1,352,000.00
Improved seed(50kg)	6,000.00	300,000.00	16,500.00	1,254,000.00
Local seed (50kg)	5,000.00	80,000.00	25,046.05	1,903,500.00
TOTAL			**264,592.09**	**20,108,500.00**
COST PER HOUSEHOLD			**3,481.47**	**264,585.53**

Source: Field data (2023)

Income Earned

The findings in Table 3 indicates that the sunflower agricultural activity was performed in Mkalama District in season 2020/2021 and 2021/2022 had the mean income per annual of Tshs 857,763.16 and 794,440.00, respectively with mean income of household farmer. This indicates that sunflower production stands a better chance of improving community livelihoods at Mkalama district.

The study found that the total revenue of sunflower seed sold in Mkalama district was Tshs 65,190,000.00 per bag of 70 kg in production season. Mkalama district whereby the research was conducted in Tumuli, Iguguno, Nduguti and Nkalankala wards had the highest prices of sunflower since the refining industry is built at Singida town close to Mkalama as the sunflower market, processors, procurement of seeds at high prices through making arrangement with farmers and middlemen in advance.

Currently, many farmers have pressing machine in different centres in Mkalama district operated manually or by using electric power. The pressing machines in the sunflower chain act as market place for all forms of sunflower products. Privately owned processing machines are buying places for sunflower seeds and selling points from farmers, for sunflower oil pressed. In addition farmers and traders who pressed their seed into sunflower oil also sell their oil in these premises especially when there was a ready buyer. Seed cakes which are retained by the processor are sold to, traders dealing with livestock food tuff, livestock farms and individual households who keep livestock. Apart from the above-mentioned buyers, there are also some traders who bought sunflower seed cakes and sell them to industries that make animal feeds in other parts of the country and outside, particularly Dar es Salaam, Arusha, Kilimanjaro, Tanga and Kenya.

Table 3: *Revenue from Sunflower Value in Mkalama District*

District	Season	N	Min (Tshs)	Max (Tshs)	Average Revenue (Tshs)	Total Revenue (Tshs)
Mkalama District	2021	120	70,000.00	4,500,000.00	857,763.16	65,190,000.00
	2022	120	35,000.00	5,200,000.00	794,440.00	59,583,000.00

Source: Field data (2023)

Econometric Model Analysis of Input Costs

To analysis the input costs of sunflower production, Cobb-Douglas type of model was considered appropriate. The results of economic model estimation of sunflower production are show in Table 4. For the data used in this study presence of autocorrelation in the residuals from the regression analysis was tested using the Durbin–Watson statistical test (Hatirli et al., 2006; Rafiee et al.,2010). The test result revealed that Durbin–Watson value was as 1.75 for Eq. (4); indicating that there was no autocorrelation at the 5% significance level in the estimated model. The R^2 (coefficient of determination) was as 0.88 for this linear regression model.

This implies that all the explanatory variables included in the regression equation had contributed to the total production of sunflower by 88%.

The estimated regression coefficients for the model (Eq. (4) are presented in the standardized coefficients of Table 4. The results revealed that, fertilizers, ploughs, pesticides, land hired per acre, hoes and improved seed (50kg) were the most important inputs, significantly contributed to total production; while, the use of labour hired and local seed was indicating that coefficient for sunflower production had negative sign indicating that the relationship has negative influence. The value of coefficient of labour hired for cultivation was - 0.085. The coefficient was significant at one per cent. The coefficient indicates that by one per cent increase in labour hired of sunflower farm cultivation beyond recommended costs, the yield of sunflowers decreases by 0.085 Tshs per acre. The coefficient for local seed prices is negative and is - 0.127. It is significant at a one per cent level. This means that pest attack negatively affects the yield of sunflowers as significant portion of the yield per acre of the sunflower. The coefficient shows local seed cost decreases the yield of sunflowers by 0.127%. Therefore, yield loss due to poor seeds is one of the major problems in the production of sunflowers. Also, all of the statistically significant inputs showed positive relationships with output. Moreover, chemical fertilizer input cost had the highest coefficient on output (0.535). The second and third important input costs were pesticides and ploughs with the coefficient values of 0.502 and 0.302, respectively. Based on the obtained results, increasing 1% in the input costs from chemical fertilizer, pesticides and ploughs would have led to 0.535%, 0.502% and 0.302%, increases in sunflower seed total production, respectively. Mobtaker et al. (2010) developed an econometric model for inputs costs of production. the results imply that prices of fertilizers, ploughs, pesticides, land hired per acre, hoes and improved seed (50kg) were the important expenditures significantly contributed to the total production of sunflower; while the impacts of labour hired and local seeds costs were inconsistent with output.

Table 4: Econometric Model Estimation of Input Costs for Sunflower Production

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
$\ln Y_i = \alpha_0 + \alpha_1 \ln x_1 + \alpha_2 \ln x_2 + \alpha_3 \ln x_3 + \alpha_4 \ln x_4 + \alpha_5 \ln x_5 + \alpha_6 \ln x_6 + \alpha_7 \ln x_7 + \alpha_8 \ln x_8$						
1	(Constant)	.392	6.620		.059	.953
	Price per bag of fertilizer	-1.149	.000	.535	-.350	.727
	Price per plough	7.055	.000	.302	3.094	.003
	Price per pesticide	.001	.000	.502	5.112	.000
	Price per acre of land hired	.000	.000	.197	1.939	.057
	Price per labour hired	.000	.000	-.085	-.756	.452
	Price per hoe	.001	.001	.082	.815	.418
	Price per KG of improved seed	5.554	.000	.214	1.967	.053
	Price per KG of local seed	-9.712	.000	-.127	-1.043	.301
DurbinWatson		1.75				
R^2		0.88				

Coefficients[a]

a. Dependent Variable: Number of bags of sunflower produced
b. Significant at P = 0.05

Source: Field data (2023)

Therefore, R-value (.88) for input costs for sunflower production suggested that there was a strong relationship influence number of bags of sunflower produced per season. It can also be observed that the coefficient of determination, the R-square (R^2) value is 0.88, which represents 88.0% of the true relationship. While 12.0% variation of performance of sunflower production as a result of input costs for sunflower production.

CONCLUSIONS AND POLICY IMPLICATIONS

In this paper, considering the results and findings and in relation to the objective of the study, that is to analyse the input costs of production by smallholder sunflower farmers. According to results of this study, there were significant developments on the yield from unit area within the period of production for improving the production by smallholder sunflower farmers in Mkalama District. The descriptive statistical analysis of costs input sunflower production in Mkalama district of Tanzania was analysed and an econometric model between input costs and the total production of sunflower was developed using the CobbDouglass production function. For this purpose, data were collected from 120 randomly selected smallholder farmers in the wards. The results showed that total cost value per household in season were calculated as input costs had sum of Tshs. 264,585.53 and the econometric analysis of chemical fertilizer input cost had the highest coefficient on output (0.535). The second and third important input costs were pesticides and ploughs with the coefficient values of 0.502 and 0.302, respectively. Moreover, the results of econometric model development revealed that, prices of fertilizers, ploughs, pesticides, land hired per acre, hoes and improved seed (50kg) were the important expenditure significantly contributed to total production of sunflower and showed the positive relationships with output. While, inputs showed negative sign indicates that additional units of these inputs cost are contributing negatively to production, i.e. less production with more input.

The positive sign in the model can be the association of weakened and low capacity widened to reach majority into sunflower production, it could play a very crucial role in bridging the gap of information asymmetry exist especially on access to loans and type loan offered by banks and cost of borrowing which could help farmers to improve technologies and production facilities. Government of Tanzania should enhance the productivity of the agricultural sector through the subsidies provision of the required inputs, which would minimize the total cost of production and speed up the productivity process. In response to the challenge of strengthening the capability of farmers' will bridge the gap of inputs costs (prices) information exist between farmers and buyers by facilitating the development of an integrated marketing system for sunflower sub-sector with other stakeholders.

Policy implications of this paper, results of the present study have several policy implications. The first policy implication with regard to the seeds price is that, policy makers can use the own price of improved seeds as a tool to adjust quantity demand of the improved seeds because the actual profitability analysis has shown a relative highly responsiveness to change in own price of improved seeds. The policy makers should be creating awareness on the use of improved seed, results show most of the farmers are not aware of the importance of improved sunflower seeds of the quantity demanded of the improved seeds, therefore, for policy makers, the entry point of intervention should be provision of improved seeds. However, before implementation of any seeds, price adjustment schemes are required. It is important that an assessment of actual cost of the seeds production is considered along its whole value chain; this will enable the policy and decision makers to make decisions that consider the interests of both seed producers and consumers (farmers).

The second policy implication is that results show significantly address effect of input costs among the sunflower seed smallholder farmers. On this basis, policies that can stimulate and enhance agricultural commercialization such as NAP (2013) and Agricultural Sector Development Strategy policy (ASPS) (2015/16 – 2024/25) are provided a framework for implementation of the agricultural sustainability. The mentioned policies are aimed at operationalizing transformation of the agricultural sector into modern, commercial, highly productive, resilient, and competitive in the national and international market which leads to achieving poverty reduction.

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Challenges Facing Small-Scale Furniture Industries in Dar es Salaam Region, Tanzania

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Abstract
The study evaluated the challenges Tanzania's small-scale furniture industry faced. The resource-based view and resource dependency theory were used as the study's guiding concepts. From the nation's commercial centre of Dar es Salaam, 154 furniture carpenters were chosen at random. The information was gathered via the questionnaire. The collected data was examined using a descriptive analysis. According to the findings, carpenters faced several difficulties, including a shortage of modern machine tools, inadequate working capital, low labour skills, a lack of formal workspaces, and fierce competition from imported furniture. The lack of modern machine tools prevented small and medium enterprises from producing goods of the kind needed to enter growing markets. To boost productivity, furniture production must make use of current machinery. Insufficient availability of suitable financial services had led to insufficient operating capital for investments in furniture manufacturing. The study concludes that the furniture business has a significant role in generating income and jobs. The study recommends that Governments should promote a business-friendly environment in addition to creating financial and non-financial services as well as supportive institutional infrastructure.

Keywords: *Furniture, Carpenters, Small and Medium Industries, small scale furniture industries*

INTRODUCTION

There is broad agreement around the world on the important role that small and medium-sized businesses (SMEs) play. Globally, small firms offer a multitude of advantages, such as employment generation, increased firm competitiveness and innovation, and assistance in the development of financial inclusion plans and industrialization programs (Juma, 2022). They are thought to have played a significant role in helping developing nations eradicate poverty (Mashenene and Kumburu, 2020). Due to this awareness, policy discussions both internationally and in Africa particularly have focused heavily on the central question of how to foster economic growth through the expansion of SMEs (Morris et al, 2020).

SMEs meet the demands of the local community by offering basic goods and services, such furniture, at a lower cost than those offered by large-scale companies (Kumburu et al,2019). The SME sector in Tanzania has not yet reached its full potential because of a variety of obstacles that prevent the industry's growth. The United Republic of Tanzania (URT); 2012, Anderson 2017; Juma & Said 2019; Nkwabi& Mboya, 2019; Kumburu et al, 2019). These include a lack of technological knowledge and skills, a lack of access to credit, a lack of market access, high competition from imported furniture, unstable electricity, complicated registration and licensing requirements, and inadequate business skills.

The government has continued to create and carry out a variety of policies and programs that encourage the growth of the SME sector in recognition of its significance. The government created and carried out programs and policies that aided the sector's growth. The National Development Vision 2025 was implemented in order to achieve that goal. The vision places a strong emphasis on moving the country from an agrarian economy with low productivity to one that is semi-industrialized. The sustainable Industrial Development policy (SIDP) was created between 1996 and 2020, it prioritizes the development of SMEs businesses through the support of both new and established promotion organizations.streamlining of SMEs' license, registration and taxation.

In order to assist the SME sector, the government also formed organizations like the Small Industries Development Organization (SIDO). According to Mutambala (2011), the creation of these institutions has aided in the creation of initiatives like financial and material support services, as well as extension services, which help the SMEs sector's efforts to increase productivity and competitiveness. A further move targeted at enhancing the performance of SMEs was the commissioning of the National SMEs Baseline Survey in 2010–2012 (United Republic of Tanzania [URT], 2012). Despite these initiatives, small furniture manufacturing businesses have not been able to compete with imported furniture (Isaga, 2019). According to URT (2012), there were 31.4% of SMEs closed in Dar es Salaam City, 24.9% in other centers, 13.6% in rural areas, 55.5% in Zanzibar, and an average of 18.1% across the entire country. Research has indicated that access to loans and business training can facilitate the expansion of SMEs (Nkwabi & Mboya, 2019; Isaga, 2019).

The aforementioned justifications indicate that this study adds to the body of literature in a number of ways. First of all, there aren't many studies done in developing nations—specifically, Tanzania—that evaluate the difficulties that small and medium-sized furniture businesses in the Dar es Salaam region face. For instance, Isaga's (2019) study on the motivations for and difficulties faced by female entrepreneurs in Tanzania focused solely on women, ignoring the presence of male entrepreneurs. Anderson (2017) concentrated on Tanzanian SMEs' establishment and expansion. The factors influencing the competitive advantage of the small-scale furniture companies sponsored by SIDO in the regions of Dar es Salaam and Arusha were the focus of Kumburu et al.'s (2019) study. None of these studies concentrated on the particular difficulties that small-scale furniture manufacturers face, from acquiring inputs to producing and marketing of furniture. Consequently, there is a knowledge gap in this area. This study aims to evaluate the difficulties that Tanzania's Dar es Salaam region's small-scale furniture companies face.

Theoretical Foundation

This study evaluates the difficulties Tanzania's small-scale furniture companies face using the resource-based approach and resource dependency theories. A firm's competitive advantage is evaluated in light of its internal resources and skills using the resource-based view (RBV) hypothesis (Barney, 2001). RBV can provide insight into how the skills and resources derived from carpenters' resources impact their business, particularly in the context of small-scale furniture enterprises (Bag et al., 2021).

RBV states that a resource needs to be valuable, rare, unique, and non-substitutable (VRIN) for entrepreneurs to have a long-term competitive edge (Celtekligil, 2020). RBV offers an approach that emphasizes on internal resources and competencies to boost output (McDougall et al., 2022). Companies will be better positioned to maintain a competitive edge and increase productivity if they can identify, leverage, and apply their unique resources and abilities to their operations (Kwon et al., 2014). The idea that RBV should be limited to internal resources is a significant critique of the model. Entrepreneurs can get a competitive advantage and improve their performance by leveraging networks' greater resource endowments, (Juma,2022).

Support for this viewpoint comes from the Resource Dependency Theory (RDT), a theory in organizational studies and management that looks at how organizations depend on external resources and how these dependencies affect their behavior and strategy (Celtekligil, 2020). This concept highlights the importance of external resources such as; capital, expertise, technology, or credibility.

A framework for understanding how entrepreneurs depend on external resources, such as; information, technology, supplier relationships, market access, and credit, is provided by the idea of resource dependency (Juma, 2022). Entrepreneurs who proactively manage their relationships and resources and recognize these dependencies can increase the efficacy of their firm and their potential for innovation.

METHODS

Study Design and Sampling Procedures

This research was conducted in Tanzania's Dar es Salaam. A cross-sectional survey methodology was employed in the study to help collect data once at a given time (Creswell, 2014). Owners and managers of small carpentry businesses made up the study population. Furthermore, only small enterprises that have been in operation for five years straight after their formation were included in the study. The Small Industry Development Organization (SIDO) helped identify the centers that dealt with the furniture industry.

The aforementioned centers were visited and determined which streets had the highest and lowest concentrations. One business out of every three that were discovered in the highly concentrated streets were chosen. The researcher chose one out of every two businesses that they encountered for the streets with low concentration. Remarkably, 154 carpenters in all were chosen at random for this investigation. Data was gathered through questionnaire.

Data Analysis

Descriptive statistics were used to analyze the data, and this required utilizing the computer program Statistical Package for Social Sciences (SPSS) version 20 to calculate frequencies and percentages.

RESULTS AND DISCUSSION

Demographic Characteristics

In this study, 154 entrepreneurs served as the sample. There were 154 responses, of which 97.4% (n = 150) were men and 2.6% (n = 4). In terms of age, 39.7% of the owner-managers were under 30, while 60.1% were between the ages of 31 and 46. This result is in line with earlier research findings that indicate Tanzanian entrepreneurs are typically between the ages of 25 and 39 (Isaga, 2019).

In terms of educational background, 90.3% of the respondents had finished elementary school, and 9.7% had earned a degree or an advanced secondary education. According to the research, most persons with higher levels of education have more options when it comes to formal employment. According to Makorere (2014), individuals with limited education in Tanzania encounter challenges in obtaining well-paying employment, leading them to choose self-employment as their sole source of income. Table 1 shows that, of the respondents, only 22.1% had completed carpentry training, and 77.3% had not participated in any of the various Tanzanian colleges' vocational programs.

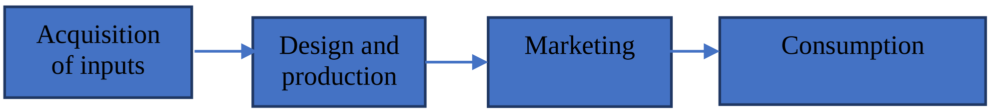
Table 1: Age and Education Levels of the Respondents

Indicator			**Indicator**		
Sex	**N**	**%**	**Age (Years)**	**N**	**%**
Male	150	97.4	Between 20-30 years	58	39.7
Female	4	2.6	Above 30 years	96	60.3
Total	154	100	Total	154	100
Education Level			Vocational training		
Primary school	139	90.3	Attended	119	77.3
Secondary and above	15	9.7	Not attended	35	22.7
Total	**154**	**100**	**Total**	**154**	**100**

Source: Field data (20230

Initial Mapping of the Small-scale Furniture Industries

The first step in analyzing the difficulties facing the furniture industry is to map the organizational structure of small-scale furniture manufacturers using the roles that they play. Acquisition of input, design and manufacture, marketing, and furniture product consumption are among the tasks carried out. The sections that follow provide more information on these features.



Acquisition of inputs

Concerning the procurement of inputs, 88.8% of the participants stated that they obtained inputs from retailers, whereas 2.2% and 9.0% bought inputs from wholesalers and own businesses, respectively. According to the data, all of these inputs are obtained locally, which reduces the transaction costs associated with acquiring inputs. Table 2 showed that 84.4% of carpenters paid cash for their inputs. This may be due to the fact that carpenters have a high need for working capital.

This suggests that the raw material suppliers were the direct players in this stage. Retailers and wholesalers were the indirect actors, and they were crucial in supplying various inputs for the furniture manufacturing industry. A number of wholesalers and retailers offer a variety of solid wood products, including imported and domestic lumber. Pine trees, mkongo, pine, and other native trees make up the majority of the woodlands in the area. The majority of the imported timber comes from Zambia and Malawi.

This indicates that the strength, size, and cost of the locally produced timbers were competitive. Conversely, the imported woods were more competitive in terms of appearance and smoothness of substance. For external and finishing applications, strong woods and elegantly designed imported timbers were highly preferred. The primary issues preventing carpenters' firms from expanding were reportedly a lack of supply, growing input costs, deteriorating wood quality, and rising workshop rental rates.

Table 2: Source of Inputs and Mode of Acquisition Among Carpenters

Source of inputs	N	%	**Mode of input acquisition**	N	%
Wholesalers	7	4.5	Cash	130	84.4
Retailers	145	94.2	Credit	15	9.7
Own shops	2	1.3	Both cash and credit	9	8.4
Total	**154**	**100**	**Total**	**154**	**100**

Source: Field data (2023)

Production

Production is the term used to describe the entire process of making wood furniture. Among the respondents, 81.2% used indigenous machinery while 18.8% used contemporary machinery to produce furniture. This suggests that a lot of labor goes into making furniture. Antiquated equipment and implements are frequently found in the messy and disorderly workshops of small businesses, potentially contributing to low output.

One probable explanation is that they rely on labor-intensive, low-cost work instead of investing in sophisticated technology since they cannot afford to hire it. They are unable to achieve economies of scale through large-scale production due to the low degree of technology employed in the furniture industry. This is consistent with research by Kumburu et al. (2020), which found out that issues such a consistently low level of technology impede the growth of small-scale businesses. According to the resource-based view, a company's ability to add value to its products through the adoption of new technologies gives it a competitive advantage.

Table 3: Type of Machine Used in Furniture Production

Type of machine used	Frequency	Percent
Labour intensive (manual)	125	81.2
Machine intensive	29	18.8
Total	**154**	**100**

Source: Field Data (2023)

Labor is needed to produce furniture, and Table 4 reveals that 64.8% of respondents used hired labor, 24.6% used both paid and family labor, and 10.5% used family labor in this process. Piece rates were used to compensate hired labor; 84.4% of respondents said they were paid per piece rate, which varied based on the task they were hired to complete. The precise amount paid, nevertheless, was kept a secret, carpenters frequently use hired labor, when there is a heavy workload.

Table 4: Type of Labour and Payment in Furniture Production

Types of labour	Frequency	Percent	Labour payment	Frequency	Percent
Family Labour	16	10.5	Piece rate	130	84.4
Hired Labour	100	64.9	Daily rate	15	9.7
Both family and hired labour	38	24.6	Wage negotiated each time	9	5.9
Total	**154**	**100**	**Total**	**154**	**100**

Source: Field data (2023)

The study considered quantity produced monthly, the average cost of production, and the amount of furniture manufactured each month. Depending on the size, three standard bed kinds were produced each month. These measurements were 4 by 6, 5 by 6, and 6 by 6. Thirty beds were made per month on average. Tanzania Shillings 130,000 for a 4 by 6 foot bed, Tzs 180,000 for a 6 by 6 foot bed, and Tzs 190,000 for a 6 by 6 foot bed were the average costs per bed size. The quantity of manufactured beds and doors depends on the demand and customer's preferences but also working capital. On the other hand, the study revealed that carpenters produced an average of 40 doors per month (See Table 6).

Table 5: Average Unit Production Cost for Different Bed Size

Type of materials used	**Type of bed size**		
	4 by 6 ft	**5 by 6 ft**	**6 by 6ft**
Materials cost	60,000	70,000	70,000
Labour cost	50,000	60,000	60,000
Manufacturing costs	20,000	30,000	30,000
Administrative costs	10,000	20,000	30,000
Total cost	**130,000**	**180,000**	**190,000**

1USD=2300 Tshs
Source: Field data (2023)

Table 6: Average Unit Production Cost of Different Doors

Type of materials used	**Type of Standard Doors Made of Different Wood Types**		
	Single (mkongo)	**Single (Pinewood)**	**Single door (mninga)**
Materials cost	150,000	80,000	200,000
Labour cost	40,000	20,000	50,000
Manufacturing costs	20,000	10,000	20,000
Administrative costs	10,000	10,000	20,000
Total cost	**220,000**	**120,000**	**290,000**

1USD=2300 Tshs**Door size 200 centimetre (Highet) by 82 CM (Width)

Source: Field data (2023)

Marketing of Furniture Products

Carpenters promote their products in a variety of methods. Of them, 87.6% sell furniture directly to customers, 8.5% sell to retailers, and 3.9% sell to wholesalers. This suggests that the primary consumers of furniture products are households, schools, colleges, and hospitals. Carpenters typically sold 25 beds and 15 doors per month, regardless of the size of the bed. For beds and doors, carpenters made an average monthly profit of Tzs 1,500,000 and 1,575,000, respectively.

The variation in profits might be attributed to variations in selling prices among carpenters, which could be primarily caused by variations in the manufacturing costs that each carpenter incurred, reflecting variations in the spatial distribution of supply and demand centers.

Table 7 demonstrates how carpenters used sport market arrangements to sell their products; 68.3% of carpenters adopted this strategy. It is evident that carpenters choose to sell to clients on-site in order to reduce the expense of transportation, loading, and unloading. Other markets were not easily accessible to carpenters. This is most likely a result of the expensive transportation expenses associated with moving completed goods from one location to another. Juma & Said (2019) discovered that inadequate information and challenges with marketing lead to poor performance.

Small amounts of completed goods were stocked by retailers and wholesalers for sale to the general public. Retailers and wholesalers keep a careful eye on the needs and tastes of their customers. As a result, they are extremely important to the furniture industry because they have numerous intimate relationships with both customers and carpenters.

Table 7: Main Buyers and Means of Getting Customers of Furniture Products

Types of buyers	Frequency	Percent	Means of getting customers	Frequency	Percent
Wholesalers	6	3.9	From colleagues-(other carpenters)	29	18.8
Retailers	13	8.5	wholesalers	20	12.9
Consumers	135	87.6	Consumers come at work place	105	68.3
Total	**154**	**100**	**Total**	**154**	**100**

Source: Field data (2023)

Business Relationship Among Carpenters

In the small-scale furniture industry, 87.1% of carpenters had business contacts, while 12.9% had none at all (Table 8). The findings showed that in the small-scale furniture industries, business relationships were defined by both vertical and horizontal coordination. This suggested that small-scale furniture producers depended on outside resources, such as data, technology, relationships with suppliers, access to markets, and affiliations.

One of the prerequisites to achieving better performance of SMEs is information sharing through networks (Juma, 2022). This is consistent with RDT that firms form network relationships to obtain access to technical or commercial resources. From dynamic capabilities perspective, firm networking is a source of competitive advantage. Networking, personal orrelation-base or strategic alliance, enables acquiring the requisite complementary resources and capabilities and thus lead to competitiveness of the firm**.**

Table 8: Business Relations Among Carpenters

Response	Frequency	Percent
Yes	134	87.1
No	20	12.9
Total	**154**	**100**

Source: Field data (2023)

Main Challenges Facing Small Scale Furniture Industries

It was discovered that small-scale furniture manufacturers producing locally created furniture faced a number of difficulties. The results in Table 9 demonstrated that the primary obstacle facing the furniture industry, according to 51.9% of respondents, was the absence of contemporary machinery for making high-quality furniture. Other challenges were a shortage of competent labor (19.5%), an absence of formal workspaces (12.9%), intense competition from imported furniture items (9.2%) and inadequate capital (6.5%).The results corroborated those of a study conducted in by Tafesse et al.,(2016) which indicated that 77% of the participants were using antiquated technology. Nichter and Goldmark (2005) discovered that Kenyan SMEs' access to technology was not productive enough to allow furniture makers to make a living with the resources at their disposal. According to URT (2012), just 6.1% of all small enterprises operated with machinery.

Table 9: Main challenges Facing Small Scale Furniture Industries

Major challenges	Frequency	Percent
Insufficient capital	10	6.5
Lack of formal working place	20	12.9
Limited labour skills	30	19.5
Lack of modern machine tools	80	51.9
High competition	14	9.2
Total	**154**	**100**

Source: Field data (2023)

CONCLUSION AND RECOMMENDATION

This report gives Tanzanian policy-making bodies vital information regarding the difficulties affecting the country's small-scale furniture industry. Given the significance of SMEs in Tanzania, the government should now establish supportive institutional infrastructure, expand financial and non-financial services, and foster an atmosphere that is favorable to business. The SME policy should improve the institutions that will meet the unique opportunities and restrictions faced by furniture carpenters and maximize the utilization of those potential. The study concentrated on issues that Dar es Salaam's small furniture companies had to deal with. This can prevent the results from being broadly applied. Conducting a comparative analysis of the difficulties faced by SMEs in rural and urban regions should be the main goal of future research.

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Influence of Trust on Customer Loyalty in The Small and Medium Enterprises Sector in Tanzania

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Abstract
This paper examined the influence of trust on customer loyalty in SMEs in Tanzania. The study used trust-commitment theory, behaviourist theory, and cognitive theory to determine the influence of trust on customer loyalty in SMEs in Tanzania. Customers from bars, hair salons, and kiosks in Dodoma Urban City participated in the survey. Convenience sampling was used to obtain the sample size of 288 respondents. The study data was obtained from customers using questionnaires. The questionnaires were self-administered to customers of bars, hair salons, and kiosks to gather data. Descriptive statistics was used to summarize data and show meaningful patterns while inferential statistics which included correlation analysis and regression analysis was employed to test the study hypotheses. The findings showed that trust significantly influenced customer loyalty. The study therefore concludes that the application of trust improves customer loyalty in SMEs in Tanzania.

Keywords: *Customer loyalty, Customer Trust, Small and Medium Sized Enterprises, Behaviourist*

INTRODUCTION

Trust is a great way to develop customer loyalty because customers avoid visiting other business ventures around because customers have already had a positive experience with a specific business venture (Hejazian&Lotfizadeh, 2017). However, there is a growing body of literature concerning the impact of trust on customer loyalty in countries like; Pakistan, Vietnam, Ethiopia, Kuwait, Kenya, and Indonesia (Niko, Askarinia, Khalafi, &Joyami, 2015; Putit& Abdullah, 2019; Andayani&Rosdiyatma, 2023). In addition, various recent studies in these countries on the impact of trust on customer loyalty have been carried out in different business sectors such as; banking, telecommunication, and cosmetic sectors (Wende, 2019; Dimyati, Muhaimin, Firdaus&Permana, 2020; Gupta, 2022). Further, attention has to be given to the SME sector to be able to explain the link between trust and customer loyalty in SMEs and Tanzania.

Customer loyalty has been proven to play an important role in the long-term success of SMEs (Handriana, 2016; Hoque, Awang& Salam, 2017). Customer loyalty is important for maintaining the market share (Kyurova&Davidkova, 2020). In addition, loyalty is an important marketing tool that SMEs use to influence their customers (Kyurova&Davidkova, 2020). Furthermore, the task of SMEs is to make their customers loyal to achieve a sustainable competitive advantage (Kyurova&Davidkova, 2020). Thus, the adoption of relationship marketing strategies is essential for improving customer loyalty in the SME sector.

Hence, there is a need to determine the link between trust and customer loyalty in SMEs in Tanzania to be able to explain the link between trust and customer loyalty. Therefore, this study attempted to assess the influence of trust on customer loyalty in SMEs in Tanzania.
Thus, the objective of this research was to examine the influence of trust on customer loyalty in SMEs in Tanzania.

Customer loyalty
Customer loyalty is a deep commitment to buy back the product or service regularly in the future, which leads to the act of buying the same brand despite situational factors that may influence consumer behaviour (De Mooiji, 2019). Alrubaiee and Al-Nazer (2010) defined customer loyalty as a constant and positive attitude towards an object, brand, or business. According to Oliver (1999), customer loyalty is considered a component of cognitive, attitudinal, and behavioural. In other words, according to Oliver's perspective, loyal customers go through three stages: First cognitive loyalty, that is, the customer must confirm that his or her expectations about goods or services are met (Oliver, 1999). The second is attitudinal loyalty in which customers are satisfied with their purchasing decisions (Oliver, 1999). Finally, behavioural loyalty is where customers are committed deeply to buying (Oliver, 1999).

This study has adopted the definition by De Moooji (2019) as it is widely accepted by researchers such as Aldaihani and Ali (2019) and Zaid (2020).

Trust
Eilena (2011) defined trust as a willingness to rely on an exchange partner in whom one has confidence. Trust is also referred to as the aspect of a business relationship that establishes the level to which each party believes and they can rely on the honesty of the promise offered by the other (Callaghan, Mephail, & Yau,1995). However, this study has adopted the definition by Callaghan et al. (1995) as it is widely accepted by researchers such as Husnain and Akhtar, (2015), Andleeb (2017), and Zaid (2020).

Trust is the key element of the relationship marketing concept (Aldaihani& Ali, 2019). Every relationship based on success depends on the degree of trust between people (Zaid, 2020). Thus, the primary goal of relationship marketing is to satisfy the customer's needs, maintain and manage the relationship with the customer, and deliver promises (Zaid, 2020).

Trust and mistrust have an influence on the behaviour of customers, including the intention and development of future relationships (Aldaihani& Ali, 2019). If a customer experiences a negative perception of building trust, the level of cooperation and commitment will decrease (Andleeb, 2017). A decreasing level of trust is also reflected in opportunistic behaviour (Aldaihani& Ali, 2019). Initiating cooperation requires components that will result in development and an increase in trust (Andleeb, 2017). If one of the parties is generating trust accepting also the vulnerability, while the other party meets the obligation, they have already laid down the cornerstone of trust (Andleeb, 2017). It can be assumed that trust is a relevant component of a relationship between the parties (Andleeb, 2017).

Trust is based on the buyer's expectations that the seller will behave in a reliable, ethical, and socially appropriate manner, fulfilling the obligations of the buyer, despite the buyer's vulnerability and dependence (Olise&Omeje, 2022). Thus, consumer reliability considerations are likely to determine the final purchasing decision between the buyer and the seller (Zaid, 2020). Trust is also a key factor in building customer loyalty and developing strong and lasting relationships between buyers and sellers (Zaid, 2020).

Consumer confidence is built on experience, which takes time to develop (Olise&Omeje, 2022). It also has a key role in reducing tensions and conflicts, supporting the flow of information, being able to create greater coherence, and also contributing to the realization of future transactions (Andleeb, 2017). Consumer trust can also be interpreted as a kind of behavioural goal, as a skill to rely on a business partner (Olise&Omeje, 2022). Thus, the presence of one party's trust in the reliability and honesty of the other party can lead to positive expectations (Olise&Omeje, 2022). Trust generates a kind of effect among the existing or future partners, a kind of "hope" that the other party does not take advantage of the other party's vulnerability (Gupta, 2022). It is a long and strong relationship that helps to shape the vision of the parties (Andleeb, 2017). It contributes to overcoming uncertainty and reducing risks initiates balanced relationships, thus influences the success of firms (Gupta, 2022).

Theoretical Literature Review

The theories used in this study were the Trust-Commitment theory and customer loyalty theories. The Trust-Commitment theory was developed by Hunt and Morgan in the year 1994. They called it the trust-commitment theory of Trust-Commitment. According to this theory trust and commitment are important variables of any successful business relationship with customers (Morgan & Hunt, 1994). It is proposed that commitment and trust are key variables for successful relationships because these variables promote cooperative behaviours between relationship partners and encourage them to maintain long-term relationships (Morgan & Hunt, 1994). The theory suggests that relationships characterized by trust and commitment allow partners to be more accepting of high-risk situations because each party will be inclined to engage in activities that are in the long-term best interest of both partners (Morgan & Hunt, 1994).

In this study, the variable trust was taken into consideration because this variable is considered to be an important variable of Trust-commitment theory and is linked to customer loyalty (Olise&Omeje, 2022).

Customer loyalty theories used in this study were behaviourist theory and cognitive theory. The Behaviourist Theory was developed by John Watson in the year 1913. As the name of this theory suggests, loyalty, in this case, is identified from the observation of consumer behaviour (Gupta, 2022). However, this behaviour is only a recognition of a series of repeated purchases by a given consumer (Gupta, 2022). Consumer loyalty is a result of consumer research and its process for evaluating attributes about a business venture, leading to conviction and personal belief, which pushes consumers to show repeated buying behaviour (Gupta, 2022).

The Cognitive Theory was developed by Jean Piaget in the year 1930. This theory is considered better than the behaviourist theory; particularly by considering attitudes that have been introduced to enrich the measures that were limited in the behaviourist theory, as the consumer will not be loyal to a business venture until they develop a positive attitude towards that business (Gupta, 2022).The attitude that the consumer develops toward a business venture always triggers consumer behaviour that will result in repeated buying behaviour (Gupta, 2022).

Empirical Literature and Hypothesis Development

Husnain and Akhtar (2015) carried out research titled relationship marketing strategies impacting customer loyalty in the Pakistan banking sector. Trust-

Commitment Theory, Behaviourist Theory, and Cognitive Theory were used to guide this study. The study examined the Trust-Commitment strategies impacting customer loyalty in the Pakistan banking sector. One of the variables examined was trust. The sample size was 100 customers, and data was collected using a survey questionnaire. Data was analyzed using multiple regression analysis. The findings of this study revealed that there was a significant and positive correlation between trust and customer loyalty. The limitation of the study was that it was done with only 100 customers who might not be a true representation of all customers in Pakistan. The study was carried out in the Pakistan context and banking sector. Therefore, further studies in other countries and other sectors are needed to find the influence of trust on customer loyalty in SMEs and Tanzania in particular to understand the theoretical and empirical factors that can influence customer loyalty in different environmental settings.

Likewise, Andleeb (2017) carried out a study on the impact of relationship marketing in building customer loyalty in the banking sector in Pakistan. Trust-Commitment Theory, Behaviourist Theory, and Cognitive Theory were used to guide this study. The aim was to determine Trust-Commitment strategies impacting customer loyalty in the Pakistan banking sector. One of the variables examined was trust. The sample size was 122 customers, and data were collected using a survey questionnaire. Data was analyzed using multiple regression analysis. Results indicated that trust had a positive and significant impact on customer loyalty. The limitation of the study was that it was done with only 122 customers who might not be a true representation of all customers in Pakistan. The study was carried out in the Pakistan context and banking sector. Therefore, further studies in other countries and other sectors are needed to find the influence of trust on customer loyalty in SMEs and Tanzania in particular to understand the theoretical and empirical factors that can influence customer loyalty in different environmental settings.

Similarly, Aldaihani and Ali (2019) carried out a study on the impact of relationship marketing in building customer loyalty in Islamic banks in the state of Kuwait. Trust-Commitment Theory, Behaviourist Theory, and Cognitive Theory were used to guide this study. The aim was to determine Trust-Commitment strategies' impact on customer loyalty in Islamic banks in the state of Kuwait. One of the variables examined was trust. The sample size was 300 customers, and data were collected using a survey questionnaire. Data was analyzed using multiple regression analysis. Results indicated that trust had a positive and significant impact on customer loyalty. The limitation of the study was that it was carried out in Kuwait's context and banking sector. Therefore, further studies in other countries and other sectors are needed to find the influence of trust on customer loyalty in SMEs and Tanzania in particular to understand the theoretical and empirical factors that can influence customer loyalty in different environmental settings.

Furthermore, Zaid (2020) researched on the role of relationship marketing strategies' impact on customer loyalty in the Indonesia banking sector. Trust-Commitment Theory, Behaviourist Theory, and Cognitive Theory were used to guide this study. The study aimed to test the role of Trust-Commitment on customer loyalty in the Indonesian banking sector. One of the variables examined was trust. The sample size was 77 customers, and data was collected using a survey questionnaire. Data was analyzed using multiple regression analysis. The findings of this study revealed that there was a significant and positive correlation between trust and customer loyalty. The limitation of the study was that it was done with only 77 customers who might not be a true representation of all customers in Indonesia. The study was carried out in the Indonesian context and banking sector. Therefore, further studies in other countries and other sectors are needed to find the influence of trust on customer loyalty in SMEs and Tanzania in particular to understand the theoretical and empirical factors that can influence customer loyalty in different environmental settings.

In addition, Gupta (2022) carried out a study on customer loyalty in the telecommunication sector in the South Asian telecommunication industry. Trust-Commitment Theory, Behaviourist Theory and Cognitive Theory were used to guide this study. Thestudy aimed to determine Trust-Commitment strategies impacting customer loyalty in Islamic banks in the South Asian telecommunication industry. One of the variables examined was trust. The sample size was 50 customers, and data were collected using a survey questionnaire. Data was analyzed using multiple regression analysis. Results indicated that trust had a positive and significant impact on customer loyalty. The limitation of the study was that it was done with only 50 customers who might not be a true representation of all customers in South Asia. The study was carried out in the South Asia context and telecommunication sector. Therefore, further studies in other countries and other sectors are needed to find the influence of trust on customer loyalty in SMEs and Tanzania in particular to understand the theoretical and empirical factors that can influence customer loyalty in different environmental settings.

Olise and Omeje (2022) carried out a study on the mediating effect of customer satisfaction on relationship marketing and customer loyalty among commercial bank customers in Awka, Anambra state. The study appliedTrust-Commitment Theory, Behaviourist Theory, and Cognitive Theory. The purpose was to determine Trust-Commitment strategies' impact on customer loyalty by mediating the effect of satisfaction in the Awka metropolis. One of the variables examined was trust. The sample size was 691 customers, and data was collected using a survey questionnaire. Data was analyzed using multiple regression analysis. Results indicated that trust had a positive and significant effect on customer loyalty. The study was carried out in the Indonesian context and banking sector. Therefore, further studies in other countries and other sectors are needed to find the influence of trust on customer loyalty in SMEs and Tanzania in particular to understand the theoretical and empirical factors that can influence customer loyalty in different environmental settings.

Andayani and Rosdiyatma (2023) carried out a study on the influence of problem handling, commitment, trust, and communication on customer loyalty at Banda Raya Rural banks. The study appliedTrust-Commitment Theory, Behaviourist Theory, and Cognitive Theory. The purpose was to determine Trust-Commitment strategies influencing customer loyalty at Banda Raya Rural banks. One of the variables examined was trust. The sample size was 110 customers, and data was collected using a survey questionnaire. Data was analyzed using multiple regression analysis. Results indicated that trust had a positive and significant effect on customer loyalty. The study was carried out in Indonesia and the banking sector. Therefore, the following hypothesis was formulated:

H_1: Trust has a positive and significant influence on SME customers' loyalty.

MATERIALS AND METHODS

This study employed mainly explanatory research design where the objective was to deduce causal effect (Bhattacheree, 2012). The units of analysis were SME customers from bars, hair salons, and kiosks who were residents of the urban part of Dodoma city. The Convenience sampling method was used to select the customers who visited bars, hair salons, and kiosks. The sample size consisted of 300 customers' and was drawn from the population of 1240 customers that consisted of respondents who were customers of bars, kiosks, and hair salons in the Dodoma urban city who participated in the survey. The questionnaires were issued to 300 customers using a convenience sampling method among which 288 were collected. TheSample size was obtained using the formula provided by Yamane (1967), which was as follows:

$$n= N \div 1+N\,(e)^{2}$$

Where = required sample size, N = Population size of 1240, e = level of precision which is 0.05 for a confidence level of 95%. Thus, the total numbers of SMEs were 15. Then from each SME, the sample size of respondents should be as follows: Bars: 5/15x300= 100 respondents; Kiosks: 5/15x300= 100 respondents; Hair salon: 5/15x300= 100 respondents. Therefore, 100 respondents were selected from bars; another 100 from hair salons, and 100 respondents were selected from kiosks. Internal consistency was measured usingCronbach alpha. In determining the content validity of the study, the researcher discussed each questionnaire with the supervisors and the marketing experts and modified the questionnaire to ensure its reliability. Thus, the questionnaire had a certain degree of content validity. The construct validity was tested using the Exploratory Factor Analysis (EFA) and this was performed with the assistance of the Statistical Package for Social Science software (SPSS) version 26. The study instruments were assessed on theircriterion validity and found the value of the correlations with the outcomes of the study by ensuring that the study had used the relevant literature with the studied phenomenon. Thus, the questionnaire had a certain degree of criterion validity. Factor analysis was used to validate the preconceived variables while descriptive statisticssuch as frequency and percentage were used to describe the sampleand correlation analysis and multiple regression were used to test the hypotheses of this study.The following form of regression model was adopted;$Y = \alpha + B1K1 + \epsilon$, Whereby Y = Customer loyalty; α= constant; K1 represents the coefficient of the construct such as trust,B1 denotes the strength of the construct of trust, and ϵ represents the error term.

RESULTS AND DISCUSSION

Demographic Analysis

The sample was comprised of 288 customers who visited bars, hair salons, and kiosks. Table 1 presents the demographic structure of the sample.

Table 1: Demographic Profile of Respondents (N=288)

Particulars	Criteria	No of respondents	Percentage
Gender	Male	186	64.58
	Female	102	35.42
Age	18-29	44	15.28
	30-39	126	43.75
	40-49	104	36.11
	50 and above	14	4.86
Education	Secondary level	48	16.67
	Diploma	115	39.3
	Undergraduate	74	25.69
	Master’s degree	51	17.11

Source: Field Work (2023)

There were more male respondents in the sample (64.58%) than female respondents. The largest number of respondents (43.75%) belongs to the 30-39 age group, followed by number of respondents in the 40-49 age group (36.11%). The 18-29 age group accounts for the least number of respondents (15.28%). As to educational background, respondents with diplomas dominate the sample (39.3%), followed by respondents with undergraduate degrees (25.69%), and followed by respondents with secondary school qualifications (16.67%) and respondents with Master's degrees comprised 17.11%.

Reliability of the Items

In this study, Cronbach's alpha was computed to examine the internal consistency or reliability of the instrument. It measures how well a set of variables or items measures a single, one-dimensional latent aspect of individuals. Cronbach's alpha was carried out in SPSS statistics version 26 using a reliability analysis procedure. The Cronbach's alpha values range from 0 to 1 and the values above 0.7 represent an acceptable level of internal reliability (Kothari & Garg, 2014). The Cronbach's alpha value for trust was 0.772. This indicated that there was a high level of internal consistency for the scale.

Sample Adequacy

In testing the adequacy of the sample, Kaiser Mayer Olkin (KMO) and Bartlett's Test results were used in the statistical analysis. Kaiser Mayer Olkin (KMO) Test is a test for assessing how data are enough and suitable for Factor analysis. It measures the adequacy of the sample by looking at each variable in the model. KMO ranges from 0 and 1. A KMO value should be close to 0.5 and above for satisfactory analysis to continue. Barlett's test of sphericity tests the correlation of items. Hence, it is argued that values should be below 0.05 of the significant level, to indicate that Factor Analysis is suitable for the data. The KMO measure was 0.517. This was above the cut-off value of 0.5 and met the criteria. This value indicated that enough items are predicated by each factor. In addition, Barlett's test is significant was significant at the 0.01 level, meaning that was correlated highly enough to provide a reasonable basis for factor analysis. Thus, the collected data was adequate for performing factor analysis and for determining the factor structure of the marketing relationship construct.

Descriptive Analysis

The basic characteristic of the studied construct was described using descriptive statistics indicators. The average score for trust is shown in Table 2.

Table 2: Mean and Standard Deviation for Trust

Questionnaire Statement	Frequency	Mean	Standard Deviation
The Service provided by the SME is consistent	288	2.83	1.35
The Salesperson shows respect to customers	288	3.31	1.38
I have confidence in SME service	288	3.50	1.07
SME promise is reliable	288	3.43	1.09
Average	**288**	**3.41**	**0.80**

Source: Field Work (2023)

Table 2 shows trust was obtained from four items. The average mean score of trust was 3.41 with a standard deviation of 0.8. It was observed that trust was highly contributed by customers having confidence in the SME service with a mean score of 3.50 and with standard deviation of 1.07. The lowest contribution of trust was from the item service provided by the SME was consistent with a mean score of 2.83 and with a standard deviation of 1.35. Most of the observed items are positively perceived by the respondents and have an average score higher than 3, resulting in a high overall average score, suggesting that the respondents consider trust as an important factor.

Correlation Analysis

The Pearson correlation presents the direction and strength of correlations among the variables and helps identify any multicollinearity problem.

Table 3: Correlation between Trust and Customer Loyalty

Variables	N=288	Customer Loyalty	Trust
Customer Loyalty	Pearson Correlation	1	0.29
	Sig. (2-tailed)		
Trust	Pearson Correlation	0.29	1
	Sig. (2-tailed)		

Source: Field Work (2023)

Table 3 shows that a correlation coefficient of 0.29 (r=0.29) was observed between trust and customer loyalty. The results suggest that the relationship between trust and customer loyalty is significant. This is consistent with existing studies such as Husnain and Akhtar (2015), Andleeb (2017), Aldaihani and Ali (2019), Zaid (2020), Gupta (2020), Olise and Omeje (2022), Adayani and Rosdiyatma (2023).

Factor Analysis

Factor analysis in this study was carried out using SPSS version 26 to see the value of the loading factor resulting from any indicators of the variables. All indicators were above the threshold value of 0.7 as shown in Table 4.

Table 4: Factor Analysis

Construct	Indicators	Loadings
Trust	Service provided by the SME is consistent	0.800
	Salesperson shows respect to customers	0.829
	I have confidence in SME service	0.841
	SME promise is reliable	0.857
	I consider this SME as the first choice among other businesses in the area	0.779
Customer loyalty		
	This SME comes first to my mind when making a purchase decision	0.834
	I'm likely to continue visiting this SME only	0.844
	I will recommend this SME to my friends and family	0.866
	I intend not to switch to other SMEs	0.814

Source: Field Work (2023)

Multiple Regression Analysis

Multiple regression analysis was used to examine the relationship between trust and customer loyalty. Table 5 and Table 6 show the result of the regression analysis. To predict the goodness of fit of the regression equation, the multiple correlation coefficient (R), coefficient of determination (R^2), and F ratio were examined.

Table 5: Regression Results of Customer Loyalty Based on Trust Model Summary

R	R^2	Adjusted R^2	Standard Error	F ratio	Significance
0.632	0.399	0.390	0.516	40.575	0.000

Source: Field Work (2023)

The regression model achieved a satisfactory level of goodness of fit in predicting the variance of the level of customer loyalty in relation to trust. From the findings it is evident that trust was important in explaining customer loyalty.

Table 6: Regression Analysis

Variable	Unadjusted Estimates		Adjusted Estimates	
	Coefficient (95%CL)	T (p-value)	Coefficient (95%CL)	T (p-value)
Trust	0.382 (0.236, 0.527)	5.17 (<.0001)	0.203(0.057,0.348)	2.75(0.0064)

Source: Field Work (2023)

Table 4 shows that trust had a significant positive association with customers' loyalty (β=0.382, p<0.0001) which means every unit increase in trust resulted in an average increase of 0.382 for customers' loyalty. However, for adjusted analysis trust remained a positive explanatory, the variable coefficient slightly decreased, and it was statistically significant ($\beta=0.203$, $p<0.0064$) which means every unit increase in trust resulted in an average increase of 0.203 for customers' loyalty. The results support hypothesis 1 of the study, that is, SMEs that have customer confidence in their service, promise are reliable, salesperson show respect to customers, and service provided by the SME is consistent according to the results of this study are better placed to retain loyal customers. The results of the regression analysis contributed significantly to customer loyalty and showed a significant direct relationship between trust and customer loyalty. Therefore, the hypothesis was accepted. The findings were in accordance with that of Husnain and Akhtar (2015) who found that trust positively and significantly predicted loyalty of customers. The findings also further corresponded with that of Andleeb (2017) who found that trust positively and significantly impacted customer loyalty. The findings agreed with that of Aldaihani and Ali (2019) who found that trust had a positive and significant influence customer loyalty. The findings were in accordance with that of Zaid (2020) who found that trust positively and significantly predicted loyalty of customers. The findings also further corresponded with that of Gupta (2022) who found that trust positively and significantly impacted customer loyalty. The findings agreed with that of Olise and Omeje (2022) who found that trust had positive and significant influence on customer loyalty. The findings were in accordance with that of Andayani and Rosdiyamta (2023) who found that trust positively and significantly predicted loyalty of customers. The findings conform to relationship marketing theory, behaviourist theory and cognitive theory, which insist that trust had an influence on customer loyalty. This has strengthened the relationship marketing theory by relating trust to customer loyalty. Therefore, SMEs are required to be trustworthy to enhance customer loyalty.

Thus, theoretically, the outcome of this research provided empirical evidence for the influence on customer loyalty by relationship marketing variable, that is, trust. This study adds value to the literature by empirically linking trust to customer loyalty. The study has also widened the scope of applicability of relationship marketing strategies. Most of the past studies concentrated mostly on common service sectors like; the banking sector, telecommunication sector, and cosmetic sector. This study has provided evidence that the relationship marketing variable, that is, trust also works in sectors like SMEs. The positive sign of the variable showed that the greater the extent of trust the higher the customer loyalty. The research hypothesis was firmly supported.

CONCLUSION AND RECOMMENDATION

The results of the correlation analysis indicated that there was a moderate positive association between trust and loyalty. The results supported hypothesis 1 of the study, that is, SMEs that had customer confidence in their service, the promise was reliable, the salesperson showed respect to customers, and the service provided by the SME is consistent according to the results of this study were better placed to retain loyal customers. The results of the regression analysis contributed significantly to customer loyalty and showed a significant direct relationship between trust and customer loyalty. Similarly, other scholars such as; Husnain and Akhtar (2015), Andleeb (2017), Aldaihani and Ali (2019), Zaid (2020), Gupta (2020), Olise and Omeje (2022), Adayani and Rosdiyatma (2023) stressed that trust had influenced customer loyalty. The findings conformed to relationship marketing theory, which insisted that trust had an influence on customer loyalty. Therefore, it is fair to conclude that SME customers tend to be loyal if SMEs are trust worthy.

Regarding trust, the SME owners need to ensure that the service provided by the SME is consistent. In addition, salesperson should show respect to customers. Furthermore, SMEs should build customer confidence in SME service, and lastly, SMEs should make reliable promises.

The current study recommends several areas where future research can be conducted. Other scholars may research these relationship marketing strategies in other sectors such as the retail sector and wholesale sector. Future research is needed to examine the relationship- building processes of SMEs operating in different service sectors other than the ones studied. Furthermore, it would be useful to examine the constructs proposed in the research model from a longitudinal perspective to determine their influence on customer loyalty at different points in time. This would lead to further insights into the way SMEs in the service sector in Tanzania build and enhance customer relationships.

There are a few limitations of this research. The study was limited to only SMEs operating in three SMEs, that is, bars, hair salons, and kiosks, Therefore, the results from the study may not be easily generalized to SMEs in other SMEs. So any attempt to apply them to SMEs other than the ones studied should be done with caution. In addition, only five hair salons, five Kiosks, and five bars were studied. Thus, care should be taken when generalizing the results on other bars, hair salons, and kiosks operating in Tanzania.

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Assessment of the Factors Affecting the Intention to Adopt Mobile Marketing Among the Aging Population in Zanzibar

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Abstract
The popularity of mobile phones has led to the explosion of mobile service provision in different sectors such as; marketing, health, and sports. Studies evidenced that the use of the mobile service is generally associated with the younger generation while ignoring the aging population. The purpose of this paper was to investigate factors affecting the intention to adopt mobile marketing among the aging population in Zanzibar. This study was guided by an extension of the Technology Acceptance Model. The study utilized the quantitative method whereby 382 questionnaires were distributed to pensioners using a stratified sampling design. Structural equation modeling was employed to analyze the collected data. The analysis was aided by SEM-AMOS version 25. The study found out that perceived ease of use and technology anxiety strongly influenced the consumers' intention to adopt mobile marketing. Furthermore, it was also revealed that attitude had partial mediation on the relationship between consumers' perception and behavioral intention. This finding implied that mobile business vendors should design mobile marketing apps withuser-friendly interfaces with a clear view of products and services for aging consumers. The finding of this study is vital to aging consumers because will improve the standard of living in the current mobile phone era.

Keywords: *Aging population, mobile marketing adoption, Zanzibar*

INTRODUCTION

The emergence of mobile phone communication from landlines made communication to be more ubiquitous throughout the globe. Many studies upheld the enforcement of the mobile marketing communication adoption resulting from the communication revolution of traditional landlines to mobile phones. The mobile channel become the ideal medium for business owing to the recognition of incremental value from adopting it (Bauer *et al*., 2005). The term mobile marketing has been gainingattention in the literature of information communication technology. Studies in mobile marketing evolved recently and have examined the perception of mobile marketing, attitude, acceptance, and continuous usage, and continues to be a vital issue.

A major reason for gaining momentum has been the increasing evidence that the mobile marketing channel involves personalized interaction between consumers and vendors contrary to traditional marketing as depicted by Hall, (2018). Thus, continued to growt remendously in recent years as reported to reach 327 billion US $ globally in 2022andis expected to reach400billion US $ by 2024 (Statista Research Group 2023). It is generally expected that the perception and attitude of consumers toward mobile marketing need to be well understood for the successful development of sites, promotion, and continuous adoption and usage of mobile marketing (Sham *et al.*, 2014, Carrol *et al.*,2009).

Although many studies have been conducted to identify consumers' perceptions of mobile marketing and attitudes toward mobile marketing adoption, just a few have assessed aging consumers' perceptions of mobile marketing. However, aging consumers seem to be less in using mobile app services, as reported in Statista (2023a) that aging consumers (65+) were only 1% to 2% of different mobile app category users. Since this segment is increasingly growing tremendously than youth in many countries, the situation increasing the importance to academician and mobile marketing practitioners to understand their needs and perceptions. Aging consumers must perceive mobile marketing in generally positive terms to sustain the growth of mobile marketing. In this context, the relationship between aging consumers' perception and intention to adopt mobile marketing needs to be understood, yet the area is not well investigated.

The lack of such knowledge limits the current research on understanding the aging consumers' perception of mobile marketing. Most of the research in mobile marketing was conducted on youth (Maseke, 2020; Abraham, 2018), these studies investigated the antecedents of attitude toward acceptance and usage specifically to students and other groups of youth (Agbasimelo, 2023; Donga &Kadyamatimba, 2020; Bakare, 2017; Donga *et al.*, 2018) and less participation of aging consumers (Maisara *et al.*, 2022; Maduku, 2015, Chille *et al.*, 2021). According to Unal, *et al.*, (2011), the behavior in technology adoption varied significantly between the youth and adult generation. Because of the diversity of attitudes based on education, age, gender, anxiety, social, economic, and cultural uptake. This shows that since attitude differs among consumers therefore more studies are needed to verify factors influencing the adoption of mobile marketing.

In studying technology adoption TAM theory is declared to be the best technique used to elaborate on the rationality of users' acceptance and use of technology within different contexts (Chille *et al.*, 2021; Chen *et al.*,2017; Charness and Boot, 2016). It helps users understand why innovative technology might be acceptable or unacceptable while taking suitable measures besides providing predictions (Lai, 2017). Since the theory assumed if the system is recognized to make the task easier to perform, this increases the probability of acceptance as being useful (Ajibade, 2018). However, this theory appeared to have some limitations in explaining adoption in other consumers such as aging population. As the theory lacks some important theoretical constructs such as psychological constructs like anxiety or physical influences. Venkatesh and Bala, (2008) and Putra, (2018) recommended the extension of the model to increase its predictive power in technology adoption which alone could not be able to provide a wide-range antecedent to mobile technology use.

This study opts an extended TAM model by including technology anxiety. Anxiety was scarcely studied in aging consumers' intention to adopt technology such as mobile marketing in Tanzania. This new construct has been included because it has been used to determine adoption in other forms of technologies such as cardiac warming system (Tsai, Lin, Chang & Lee, 2020), technophobia for digital living (Giacomo *et al.*, 2019), healthcare system (Riboni *et al*., 2020), and little is known concerning factors affecting mobile marketing among aging population. Surprisingly, Lee (2010) came up with the finding that youth are more anxious than aging population when it comes to technology adoption. Therefore, inconclusive findings have motivated researcher to undertake this study.

This study is important because mobile technology adoption is still immature in most of African countries (Nyatsambo, 2021, Uwamariya, 2021, Chille *at al.*, 2021; Engotoit *et al.*,2016). Additionally, most of the aging population are pensioners and they are believed to have disposable income to purchase anything (Fitzgerald, 2023). On top of thataging population is an emerging market that is growing too fast. It is estimated that by 2030, 1 in 6 people in the world will be from 60 years and above, the number will increase to 2.1 billion in 2050 (WHO, 2022). Therefore, the assessment of the aging population in mobile technology becomes indispensable. Additionally, it is also reported that by 2050, two-thirds of the world's population over 60 years will live in low and middle-income countries (WHO, 2022). Thus, this poses the urgency for this study.

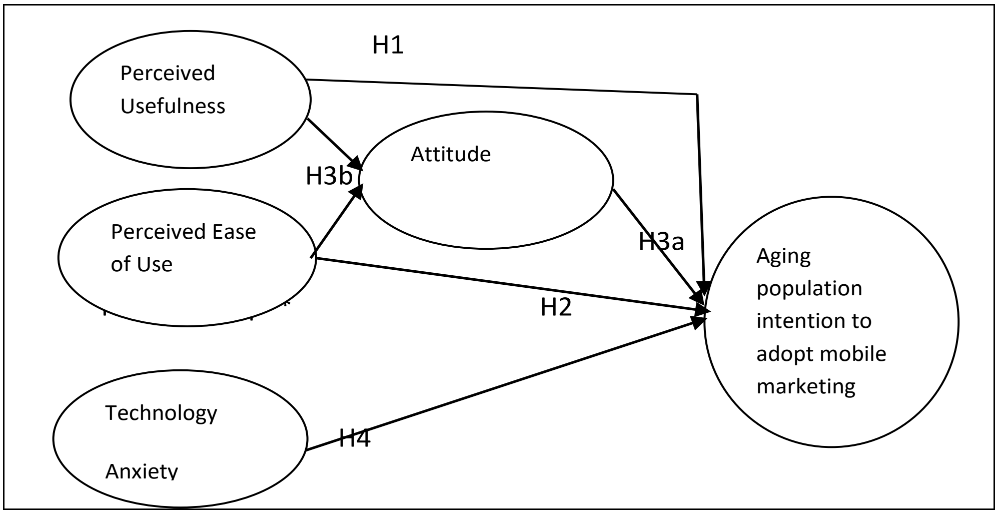

Figure 1: Conceptual Framework
Source:

METHODOLOGY

The questionnaire for this study was borrowed from previous studies of Chan *et al*., (2022), Plasse (2017), Haq and Ghouri (2018), and Tsai et al, (2020). However, the survey was adopted and tailored to the respondent's language so as to be well understood. A pilot study was conducted among 15 retirees who visited the Pension Fund office in Zanzibar. The exercise intended to check the appropriateness of wordings, structures, and suggestions for improving the questionnaire as recommended by Gyankovandar (2022). The actual data collection was done during the period of pensioners' verification season of July 2023 at three Pension Fund offices in Zanzibar. Respondents were conveniently approached at Zanzibar social security fund offices and asked to take part in the study. In this study, the aging population covered all retirees from the age of 60 years and above, and they benefit from ZSSF pension in Zanzibar.

From the pilot study, substantive changes were made to the pre-determined set of questions. All items were measured using 5 Likert-scale (1 strongly disagree to 5 strongly agree. The sample size was estimated based on the Yamane (1967) method in which the estimate was based on the size of the consumers of the study and level of accuracy which was set to be 0.05 for a confidence level of 95%. Hence based on 2022 statistics (Ministry of Finance, 2022), there were 1,203,683 aging population in Zanzibar.Therefore, the sample size for the study was 399. This sample size was appropriate for SEM as it was verified by (Hair *et al*., 2006).

FINDINGS AND DISCUSSION

Respondents Demographic Characteristics

Response rate was 96% of the distributed questionnaires, 48% were male and 52% were female. Theage of 60 years to 70 years were 58.2%, theage of 71 to 81 years were 25.9%. 13.1% were aged of 82 to 92 years, and only 2.9% were above the age of 93 years. Among these retired pensioners 17% were investors, 29% were employed on a contract basis and 54% were non-employed nor investors. Studies showed a correlation between experience levels and the mobile marketing technology for the experience of using similar technology, the study categorized the levels of experience of the respondents based on years, to facilitate answering the studied objectives. Among respondents,31% had experience of 1 year of using a mobile phone. 28% used mobile phones within one to four years, while 41% had experience of more than four years.

Table 1: Respondents Demographic Characteristics

Variable	**Frequency Percentage**
Age	
60-70	222 (58).
71-81	99 (26)
82-92	50 (13)
above of 93	11 (3)
Gender	
Male	161 (42)
Female	221 (58)
Occupation	
Investors	65 (17)
Employed	111 (29)
Non-employed nor investor	206 (54)
Experience on mobile phone usage	
Within 1 year	119 (31)
1-4 years	106 (28)
Above 4 years	157 (41)
Location	
Urban	308 (80)
South	42 (11)
North A	36 (9)

Source: Field Data (2023)

Exploratory Factor Analysis (EFA)

The study used exploratory factor analysis to explore and assess the usefulness of the items used in the pilot study since they were adapted from different authors and tailored a bit based on targeted sample. Therefore, EFA was carried out to identify data patterns and its relationships. The extraction method was Maximum likelihood which best suited for small number of variables in normal distribution of the data (Onyekachi and Olanrewaju, 2020) and rotation method used was Oblimin with Kaiser normalization. The items load from 0.55 to 0.97and there were no cross-loadings, thus achieved the acceptable value of 0.5 (Gaur & Gaur, 2006) as revealed in Table 2.

Table 2: Rotation Component Matrix

The Rotated Components Matrix of Aging Consumers intention to adopt mobile marketing technology					
Items	PU	PEOU	Anx	BI	ATT
Marketing messages received on my mobile phone help to reduce the time it takes me to search for products and services	0.924				
Marketing messages received on my mobile phone help to improve my shopping efficiency, especially when I am in a hurry or in a new city	0.907				
Marketing messages received on my mobile phone save me money.	0.897				
Shopping through mobile marketing contributes to a betterment of life	0.887				
With regard to mental effort, I believe receiving marketing ads through mobile phone is very effortless.		0.918			
The task of searching marketing messages via mobile phone is very simple		0.877			
The task of interacting with marketing messages via mobile phone is very simple		0.851			
It would be easy for me to become skillful in using mobile marketing		0.818			
I feel nervous about using mobile marketing			0.931		
I hesitate to use technology for fear of making mistakes I cannot correct			0.911		
I am worried about the rapid advances in information technology			0.756		
I avoid to use mobile marketing because it is unfamiliar to me			0.733		
Given the chance I intend to use mobile marketing				0.816	
I intend to buy products and services via my mobile phone				0.815	
I expect to continue with mobile marketing in the future				0.811	
I would respond to a coupon offer for a product or service on my mobile phone.				0.743	
Mobile marketing is so interesting, that you just want to learn more about it					0.846
If someone taught me how to use mobile marketing, I would continue to use it					0.826
I am looking forward to using mobile marketing more often					0.810
Other people should use mobile marketing					0.791

Extraction Method: Maximum Likelihood.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Source: Field Data (2023)

Then the sample adequacy tested through KMO and Bartlett's test of Sphericity respectively. Kaiser Mayer Olkin (KMO) test was 0.9 which denoted good according to Bagby, Parker and Taylor (1994). Bartlett's test conducted to check for the existence of adequate correlation among variables and values should be less than 0.05 of the significant level. From this data the correlation coefficient value of all constructs ranges from 0.209 to 0.566 which is much smaller than the cutoff threshold of 0.85 (Kline, 2005) and was highly significant ($p < .001$) as shown in Table 3. Therefore, there was evidence that there was sufficient correlation of the variables in a proposed model.

Table 3: Factor Correlation Matrix

Factor	AMM	PU	PEOU	TANX	ATT
AMM	1.000				
PU	.341	1.000			
PEOU	.228	.394	1.000		
TANX	.569	.407	.232	1.000	
ATT	.301	.388	.420	.303	1.000
Extraction Method: Maximum Likelihood					
Rotation Method: Promax with Kaiser Normalization.					

Source: Field Data (2023)

Finally, the reliability analysis was conducted to explore if the research tools measured the intended outcome (Saunders *et al.*, 2012). The reliability estimates showed Crobanch's Alpha values of all constructs exceeded the cut-off point of acceptable range of 0.7 (Nunnaly, 1978), thus there were equally reliable and there is internal consistency of the measured items.

Table 3: Pilot Study Cronbach Alpha Reliability Test Results

Construct	Items tested	Crobanch Alpha	Remarks
AMM	AMM1, AMM2, AMM3, AMM4	0.861	Adequate reliability
PU	PU1, PU2, PU3, PU4	0.928	Adequate reliability
PEOU	PEOU1, PEOU2, PEOU3, PEOU4	0.865	Adequate reliability
TANX	TANX1, TANX2, TANX3, TANX4	0.942	Adequate reliability
ATT	ATT1, ATT2, ATT3, ATT4	0.847	Adequate reliability

NOTE: AMM: Intention to adopt Mobile Marketing, PU: Perceived Usefulness, PEOU: Perceived Ease of Use, TANX: Technology Anxiety, ATT: Attitude toward adoption

Source:

Measurement Model

Confirmatory Factor Analysis (CFA)

CFA was employed to validate constructs for this study. Maximum Likelihood Estimator (MLE) algorithms was employed because it is accurate and efficient based on Baistaman *et al*., (2020). The measurement model should have met the construct validity, convergent validity and discriminant validity before continuing with structural model were then assessed as recommended by Hair *et al*., (2006). The construct validity was assessed through goodness of fit indices (GIF). The results from CFA revealed that the data fits well in the model as most of GIF were above the acceptable cut-off point as suggested by Hu and Bentlers (1999). The results were X^2 / df of 2.000, SRMR of 0.037 RMSEA of 0.051, TLI of 0.953, CFI of 0.958 and RMR of 0.026. Summary of the results are indicated in Table 4. The standardized regression weights are presented in Figure 2.

Table 4: CFA Model fit Indices

Fit indices	**Recommended** = Good Fit	**Obtained indices**
Relative $\chi 2$ ($\chi 2$/df)	< 3	2
RMSEA	0.03- 0.08	0.051
CFI	>0.90	0.958
TLI	>0.90	0.953
SRMR	≤0.08	0.037

Source: Field Data (2023)

Convergent and Composite Validity

The convergent validity and composite reliability assessed and average variance extracted (AVE). All five constructs of this study had achieved the convergent validity to the satisfactory level, where they reach the AVE value of > 0.5, as shown in Table 5, thus provided evidence that the variance explained by the construct was higher than the variance due to measurement error. The composite reliability (CR) value of 0.851 to 0.93 the values meet the acceptable ranges while the CR value of above 0.95 was not desirable based on Diamantopoulos *et al.*, (2012) and Parmaksiz, (2020). The CR value of each latent variable was also higher than AVE value of the same latent variable as shown diagonal of Table 5, rendering the assumptions of convergent validity of the measurement model.

Discriminant Validity

Discriminant validity was assessed via correlation coefficient values and hence found that the correlation coefficient between all five constructs ranges from 0.209 to 0.566 which did not exceed the cutoff threshold of 0.85 (Kline, 2005). Table 5, shows all correlation coefficients were less than 0.6 as seen in the double-pointed lines which connect the latent variables. This proves the discriminant validity since each measurement item correlated weakly with all other constructs except for the one with which theoretically associated (Ronkko and Cho, 2020).

Table 5: Reliability and Validity of the constructs

FACTOR	Crobanc alph	CR	AVE	AMM	PU	PEOU	TANX	ATT
AMM	0.816	0.851	0.588	**0.766**				
PU	0.944	0.935	0.708	0.209	**0.841**			
PEOU	0.907	0.908	0.624	0.323	0.386	**0.789**		
TANX	0.932	0.932	0.735	0.566	0.209	0.393	**0.857**	
ATT	0.843	0.858	0.548	0.281	0.398	0.373	0.279	**0.740**

Source: Field data (2023)

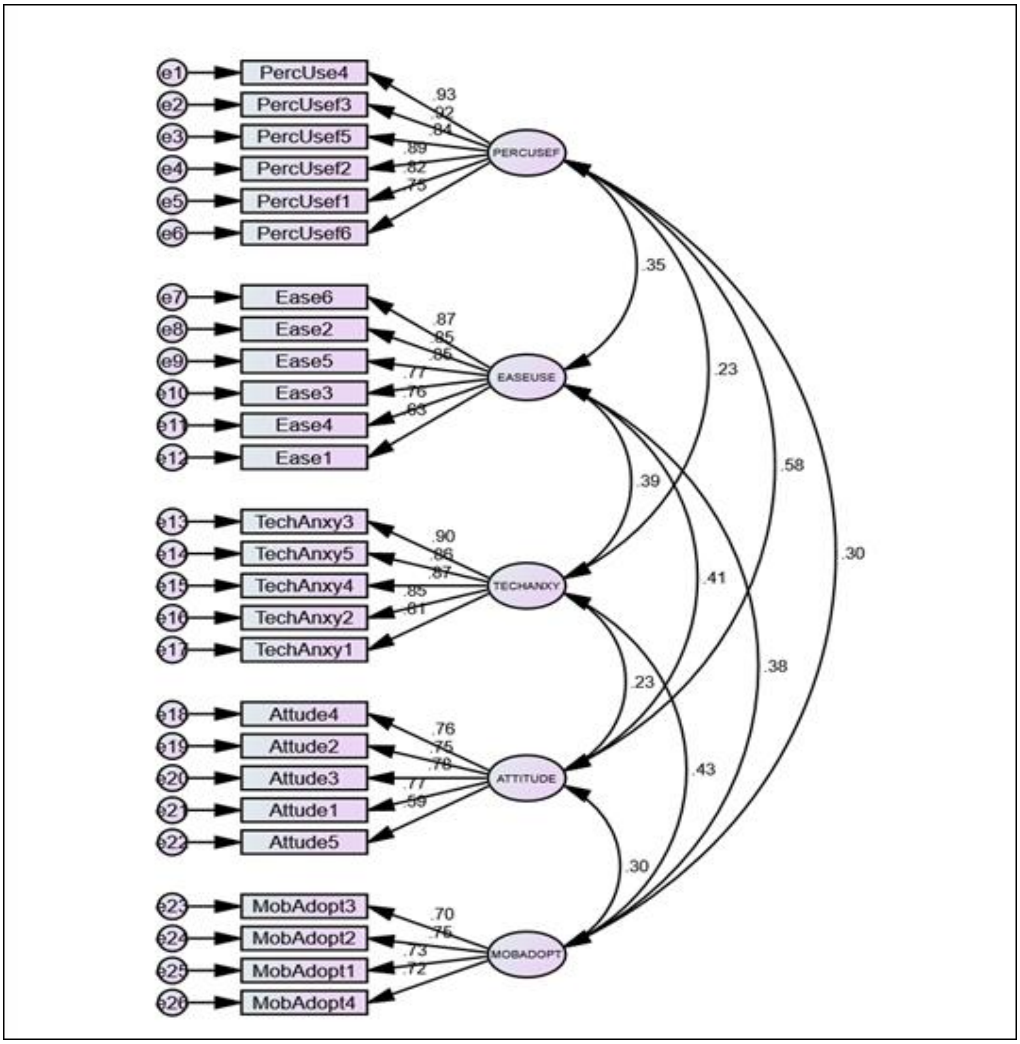

Figure 2: CFA Model.
Source: Field data (2023)

Assessment of the Normality

The normality assessed the skewness and kurtosis of the items distribution based on Baistaman et al., (2020; Civelec, 2018) approaches. The results revealed that the data followed normal distribution since the skewness and kurtosis were within the acceptable range of -1.5 to +1.5 (Baistaman *et al.*, 2020; Awang, 2015) therefore all items could be used for further analysis of the model as presented in Table 6.

Table 6: Data Normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
AMM4	1.000	5.000	**.303**	2.414	-.880	-3.513
AMM3	1.000	5.000	**.437**	3.484	-.440	-1.756
AMM2	1.000	5.000	**-.420**	-3.350	-.707	-2.820
AMM1	1.000	5.000	**.276**	2.199	-.803	-3.205
TANX5	1.000	5.000	**.791**	6.310	.428	1.706
TANX4	1.000	5.000	**.704**	5.621	.004	.017
TANX3	1.000	5.000	**.808**	6.449	.573	2.285
TANX2	1.000	5.000	**.704**	5.615	-.105	-.419
TANX1	1.000	5.000	**.831**	6.634	.175	.698
ATT5	1.000	5.000	**-.584**	-4.656	.491	1.957
ATT4	1.000	5.000	**-.866**	-6.906	1.839	7.338
ATT3	2.000	5.000	**-.707**	-5.642	2.484	9.909
ATT2	2.000	5.000	**-.679**	-5.416	.918	3.663
ATT1	2.000	5.000	**-.822**	-6.559	1.962	7.827
PU6	1.000	5.000	**-.878**	-7.004	2.132	8.504
PU5	1.000	5.000	**-.561**	-4.478	.837	3.341
PU4	1.000	5.000	**-.594**	-4.743	1.105	4.407
PU3	1.000	5.000	**-.595**	-4.749	.927	3.700
PU2	1.000	5.000	**-.700**	-5.585	1.285	5.128
PU1	2.000	5.000	**-.700**	-5.584	.961	3.832
Ease6	1.000	5.000	**-.107**	-.853	-.928	-3.704
Ease5	1.000	5.000	**-.083**	-.663	-.887	-3.539
Ease4	1.000	5.000	**-.285**	-2.275	-.688	-2.745
Ease3	1.000	5.000	**.298**	2.380	-.484	-1.932
Ease2	1.000	5.000	**.104**	.827	-.809	-3.229
Ease1	1.000	5.000	**.290**	2.316	-.406	-1.619
Multivariate					143.677	36.797

Source: Field data (2023)

Structural Model

The relationship of the hypothesized model was measured through SEM-AMOS version 25. The structural model found out that most of GIF indices were within the acceptable range as stipulated by Byrne (1998). The evaluation of GIF reports that the χ^2 was 577.942 degree of freedom was 289 thus χ^2 /df 2.3, SRMR = 0.032, RMSEA =0.059, NFI = 0.92 and CFI =0.958 Path hypothesis shows three of the hypothesized paths variables were significant and only one hypothesized path was not supported the remaining two were not significant. Table 7 summarizes the path coefficients of the hypothesized paths in the model.

Table 7: Structural Model Results

Hypothesis				**Path coefficient**	**T statistic (C.R.)**	**P value**	**Label**
H1	AMM	<---	PU	0.181	2.065	0.039	Supported
H2	AMM	<---	PEOU	0.163	3.361	***	Supported
H3	AMM	<---	ATT	0.110	1.144	0.253	Not supported
H4	AMM	<---	TANX	0.290	5.592	***	Supported

Source: Data Collection (2023)

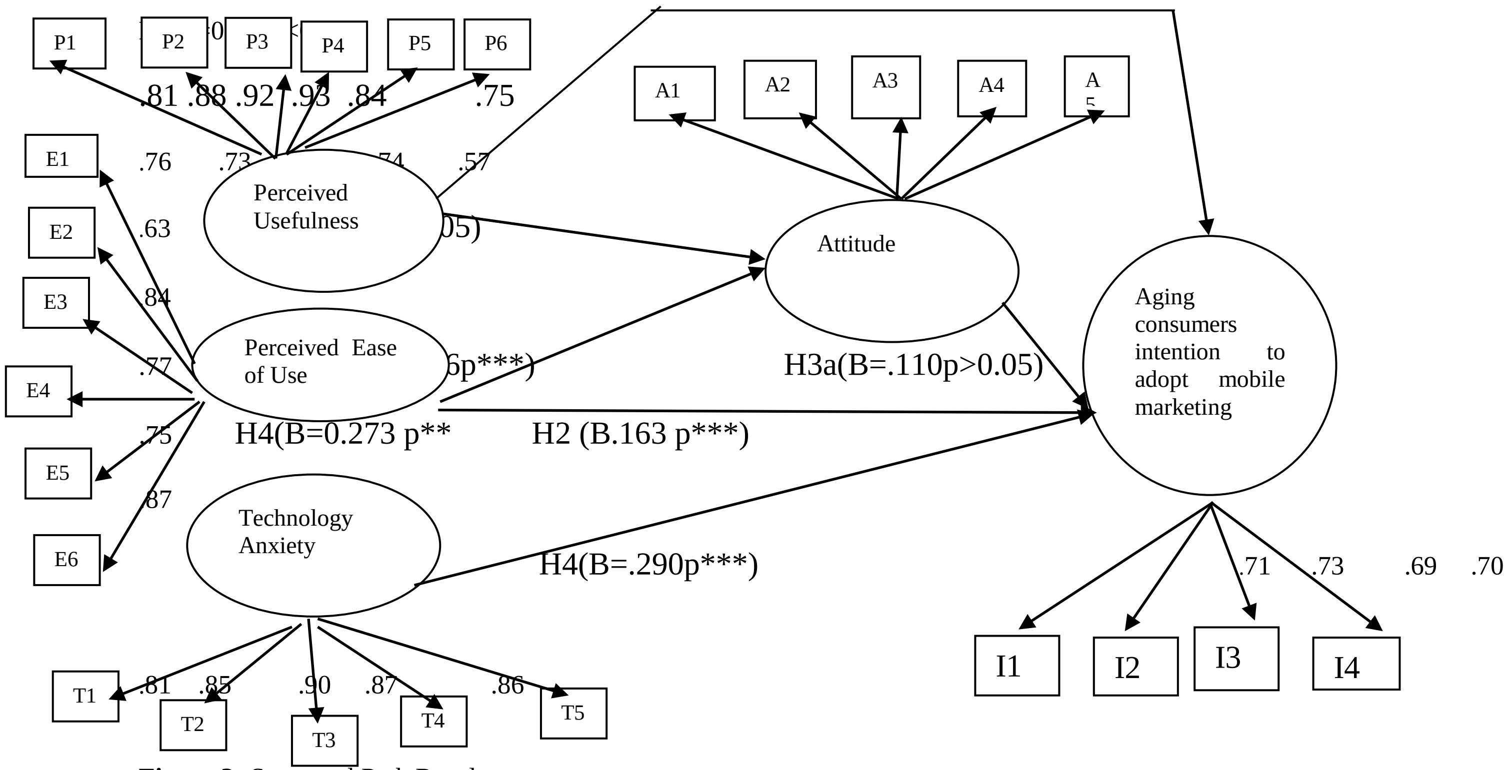

Figure 3: Structural Path Results
Source: Field Data (2023)

Mediation Testing

On analyzing the path hypothesis H3b i.e. assessing the mediation role of attitude on the relationship between PU, PEOU behavioral intention, the Hayes Process Macro with application of SPSS statistics was used. The significance effect of mediating role of attitude on the relationship between latent and observed variables was partially achieved as the total effect was significant at $p<0.01$, B=0.3469, R^2 = 9%, t (5.4873). The direct effects of Perceived Usefulness, on the presence of the Attitude mediator were also significant at $p<0.01$, B=0.254, R^2 = 28%, t (3.315). The indirect effect of PU to explain the mediator was significant the Bootstrapping intervals does not include zero (B= 0.1018, BootLLCI = 0.0264, BootULCI = 0.1841). besides the mediating effect of Attitude on the relationship between PEOU and behavioral intention revealed the total effect was significant at $p<0.01$, B=0.3469, R^2 = 9%, t (5.4873). The direct effects of PEOU, on the presence of the Attitude mediator were significant at $p<0.01$, B=0.3663, R^2 = 14%, t (7.1604). The indirect effect of PEOU to explain the mediator was also significant the intervals do not include zero (B= 0.0565, BootLLCI = 0.0155, BootULCI = 0.0981). However, the analysis results revealed the significant partial mediating effect of Attitude on both relationships, and thus providing evidence to support the path hypothesis H3b as depicted in Table 8.

Table 8: Mediation Testing Results

Relationship	**Total Effect**	**Direct Effect**	**Indirect Effect**	**Confidence Interval**		**T statistics**	**Conclusion**	**Label**
				Lower bound	Higher bound			
PU->ATT->AMM	0.3469 (0.000)	0.2451 (0.05)	0.1017	0.0264	0.1841	5.487	Partial Mediation	Supported
PEOU->ATT->AMM	0.3663 (0.000)	0.3098 (0.000)	0.0565	0.0155	0.0981	5.673	Partial Mediation	Supported

Source: Field Data (2023)

DISCUSSION

This study investigated the factors affecting the intention to adopt mobile marketing technology on aging consumers in Zanzibar, and secondly to investigate the role of attitude on mediating the relationship between the aging consumers' perception and their behavioral intention.

Through the model that was used, Path hypothesis 1 (i.e. Perceived Usefulness had a positive and significant influence on aging consumers' intention to adopt mobile marketing technology) and was supported with a t value of 2.065 ($p<0.05$) β= .181, hence hypothesis H1 was accepted. The main concern in the adoption of mobile marketing was the perception of usefulness which might be perceived when one explores new features such as ubiquitous, interactive, and compatibility of the medium which were found to be more beneficial to them (Hui, Haji and Zhang, 2018). In this manner, the results support other studies Chille *et al.*, (2021), Chan *et al.*, (2022), Haq and Ghouri (2018), and Nabot *et al.*, (2020). However, the result contends with Chimbarazo et al., (2021) and Oscar*et al.*, (2017) who vowed that the main driver of mobile technologies to consumers who have a lower level of experience and low confidence in mobile phone use was not utility or convenience at the adoption, but mostly the entertainment and fun experience on using mobile device.

Next Perceived Ease of Use was found to have a positive and significant influence on aging consumers' intention to adopt mobile marketing technology. Supported with a t value of 3.361 ($p<0.000$) $\beta= .163$, hence the hypothesis H2 was accepted. This is the second more influential variable, thus implying that aging consumers consider more on the complexity of the technology in emerging of new innovations. The result from the model supports other studies of Yap *et al.*, 2(022) Zhou *et al.*, (2019); Ali et al (2019); Jayaratne *et al.*, (2017); and Pan and Jordan (2010), concomitantly, suggested the products of mobile technology should not require a lot of mental effort to learn and to use, besides by offering support to consumers could reduce the perception of difficulties and complexities. Besides Liesa-Orus *et al*., (2023) also a strong influence of PEOU on aging consumers' intention to adopt other technology on the perception that the innovated technology is easy to use when they are competent to overcome barriers on the adoption of such technology. However, this result contends with Li *et al*., (2019) Chen and Chan (2014) Gurner and Acaturk (2018), and Li *et al*., (2019). Brawn (2013) said aging consumers perceived the technologies to be relatively difficult to use and understand, therefore the adoption of some technologies was not being positively encouraged.

Additionally, the effect of Attitude on aging consumers' intention to adopt mobile marketing technology was found insignificant at $t = 1.144$ $P>0.05$ and $\beta= .011$. Therefore, path hypothesis $H3_a$ was rejected. Attitude by itself was confirmed to be insignificant in influencing behavioral intention as depicted by Ventakesh *et al*., (2003); Putra, (2018), and Riantinia *et al.*, (2021). Thus, aging consumers might have no intention to use mobile marketing despite of having a favorable attitude towards mobile phone technology use. A further role of attitude on mediating the relationship between perception and behavioral intention was assessed and found to be partially mediation. The study results are steady with Kumar *et al*., (2020), Haq and Ghour (2018) and

Verma *et al*., (2017) who confirmed the mediating role of attitude towards behavioral intention to adopt technology, and emphasized the improvement of the positive attitude on the consumers' perception which could be attributed by making the mobile application simpler and benefited to consumers. The study findings were consistent with prior studies by George et al., (2022) and Teo (2009) concomitantly who vowed that the effect of attitude was not directly associated with the intention to use the technology. Also, Davis's (1989) notion in the development of TAM theory as attitude play a vital role in influencing technology adoption in individual basis. However, other studies contend with this study result. Ventakesh and Davis (2000); Chauhan (2015) and Tobbin (2014) vowed attitude has no role in mediating the consumers' perception with behavioral intention.

Finally, the effect of Technology Anxiety to influence the aging consumers' intention to adopt mobile marketing technology was also accepted with a t value of 5.592 ($p=0.000$) and $\beta= .290$. Therefore, the hypothesis H4 is accepted. Technology anxiety is the strongest predictor among the tested variables in the model. Anxiety was not an obstacle to adopting mobile marketing technology because of the mobile lifestyle currently experienced around the globe. This result was consistent with the studies of Adikoeweswanto *et al.*, (2022), and Kimiloglu *et al.*, (2017) who asserted that sometimes anxiety did not cause a negative influence that affected the intention to use the technology. Despite of the anxiety on services provided through mobile phones, there was an increase in the adoption of these services such as mobile money, mobile banking, mobile health, and mobile marketing.

CONCLUSION

Conclusively, the current study aimed to investigate the factors affecting the intention to adopt mobile marketing technology on aging consumers in Zanzibar. The proposed model explored TAM variables in extension with technology anxiety on the aging consumers' intention to adopt mobile marketing. In our model technology anxiety, perceived ease of use, and perceived usefulness were the main factors driving intention. The result emphasized the vitality of making mobile marketing apps simple to meet the requirements of aging consumers. Attitude did not directly influence intention, however partially mediated the behavioral intention through perceived usefulness and perceived ease of use.

On theoretical basis, the study contributes to the extension of the TAM model. Since TAM alone could not be efficient in explaining the aging consumers' intention to adopt technology as the model lacks specific attention related to aging consumers. Most of the existing works focused on actual mobile technology usage (Nunan and Domenico, 2020; Jingqi et al.,2016; Gunasighe and Nanayakkara, 2021; Sahin and Sahin, 2022; Kummer *et al.*, 2017). This study adopted an extended TAM Model by adding technology anxiety. To the best of our knowledge, the effect of technology anxiety among the aging population has been never reported in the context of mobile marketing. Therefore, this finding could be the roadmap for other researchers in the related field.

In the practical basis, mobile marketing vendors should engage more directly with anxiety- driven perceptions such as; trustworthiness, safety, ubiquity, and customer satisfaction to bear pleasing and motivating sensations during the early stages of mobile marketing technology introduction. Timely information related to the mobile service will help to increase intention to adopt mobile service despite the existence of anxiety about the use of mobile technology.

RECOMMENDATION

The current study used a cross sectional survey approach to investigate the factors affecting intention of aging population in adoption of mobile marketing specifically in Zanzibar. This limits the generalization of the study findings to other areas. Therefore, further studies recommended to extend the scope to other districts in Tanzania to increase the demographic representation of the consumers. Lastly, this study sample was more biased toward pensioners only, since respondents had diversity in demographic traits which could affect the validity of the sample taken. Therefore, further studies are recommended to test the conceptual model in another group of the aging population so as to identify factors affecting intention to adopt mobile marketing among other aging populations in other countries.

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Enhancing the Effectiveness of Public Sector Monitoring and Evaluation Systems in Zanzibar Through Stakeholders' Engagement

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Abstract
The Zanzibar public sector's monitoring and evaluation system engaged numerous stakeholders from diverse organizations. The paper assessed the effect of stakeholder Engagement on the effectiveness of the M&E system in the Zanzibar public sector. The study adopted a positivist philosophy and a quantitative approach. Data were collected through a questionnaire constructed with a points Likert scale from 170 implementers of the Zanzibar Strategy for Economic Growth and Poverty Reduction III (ZSSGRP III). Stratified and simple random samplings were used in sample selection. Both descriptive and inferential statistics were applied for data analysis. The results established that stakeholder engagement had a positive and significant effect on the effectiveness of the M&E system. The findings underscored the importance of engaging stakeholders in all stages of M&E including designing, implementation, and reporting. The study suggested the need for the Zanzibar M&E lead agency to enhance fully stakeholders' engagement throughout the monitoring and evaluation process to nurture their skill mix potential to improve the overall effectiveness of M&E systems in the Zanzibar public sector.

Keywords: *Monitoring and Evaluation System, Public sector, Stakeholders' engagement, public sector monitoring*

INTRODUCTION:

Effective monitoring and evaluation (M&E) systems play a critical role in assessing the progress and impact of service delivery in the public sector. It provides valuable insights into the efficiency, effectiveness, and sustainability of programs and policies. Stakeholder engagement refers to the active involvement and participation of relevant individuals and organizations throughout the M&E process. Stakeholder engagement is essential, as various stakeholders possess valuable insights and experiences that can enhance the design and implementation of M&E activities. In addition, it fosters a sense of ownership and accountability. Likewise, it promotes transparency and trust; and facilitates the utilization of evaluation findings.

For example, (Matsiliza, 2012) noted that, the engagement of stakeholders like Civil society influences the capacity building and learning process where the youth can accrue skills such as life skills, defined self-esteem, confidence, teamwork and decision making. The active involvement of stakeholders in monitoring and evaluation processes can facilitate effective communication to "early wins" to gain support and engage individuals who have not yet been involved. It also ensures that intended beneficiaries have access to the early products and services of initiatives. Likewise, enables the mobilization of additional resources to address any resource gaps that may arise and ensures that the lessons learned are effectively utilized in future decision-making processes (UNDP, 2009).

World Bank underscore the importance of stakeholder engagement through partnership. It emphasizes that, through partnership the M&E system benefits from improvement in communication among stakeholders, improved coordination, and help mobilization of resources towards one common goal (Gorgens & Kusek, 2009).

Extant studies depicted a mixture of results with regard to stakeholders' engagement and the effectiveness of the M&E system.For example Kioko (2017), Ngeru and Ngugi (2019), Mushori, Machira and Matu (2020). Olala (2020) established the positive and significant effect of stakeholder engagement and the effectiveness of M&E in projects. Contrarily, Claude and Didace (2020) found out that, stakeholders' engagement and feedback have no significant effect on the timely completion of the project. Likewise, Maturo (2021), observed the opposite effect of stakeholder participation on the effectiveness of monitoring and evaluation in Nongovernmental organizations within the Arumeru District.

The Zanzibar monitoring and evaluation (M&E) system heavily believes in stakeholders' engagement to enhance its effectiveness. It actively involves Private Sectors, Civil Society organizations, Development Partners, Academia and M&E professional organizations. Nevertheless, there is there is weak data utilization and linkage between data producers and users, which affects the demand, and supply sides of the system (RGoZ,2020). Likewise, there scant number of literatures in the Zanzibar context to ascertain the effect of stakeholder engagement on the effectiveness of the M&E system in the Zanzibar public sector. Consequently, this study holds significance worth studying.

THEORETICAL LITERATURE REVIEW

Effective Monitoring and Evaluation System

The effectiveness of the M&E system is the degree and ability of the M&E system to meet its intended or set objectives. The system can produce expected and relevant information to be used for policy development, evidence-based policy-making and budgeting, management performance and accountability(Mackay, 2010). For this study, the effectiveness of an M&E system is referred to the ability of an M&E system to provide the means for compiling and integrating all the necessary information into the policy cycle, and therefore providing the basis for enabling sound governance and accountability in the policy (RGoZ, 2022).

Stakeholders' Engagement

Stakeholders refers to "stakeholder engagement as the creation of relationships with internal and external individuals and groups — at the local, national and international levels — to ensure cooperation and alignment of interests among parties". According to UNDP (2020) and for the purpose of this study "stakeholder engagement as an ongoing process that may involve, to varying degrees; stakeholder analysis and planning, disclosure and dissemination of information, consultation and meaningful participation, dispute resolution and grievance redress, stakeholder involvement in monitoring and evaluation and ongoing reporting to affected communities and other stakeholders".

Utilization-Focused Evaluation Theory (UFE)

The theory was developed by Michael Quinn Patton in 2008 (Ramrez, Kora & Brodhead, 2017). The underlying principle of the theory is that, an evaluation should be judged on its usefulness to its intended users (Ssali, 2016). Evaluation should be planned and conducted in ways that enhance the likely utilization of both the findings and the process so the primary indented user should be engaged at the beginning of the evaluation. Patton (Ramrez, Kora & Brodhead, 2017) argues further that, research on evaluation demonstrates that: intended users are more likely to use evaluations if they understand and feel ownership of the evaluation process and findings.

In the same vein, Ramirez and Brodhead (2017) highlight that the engagement of key stakeholders leads to the desired outcomes of utilization of evaluation findings. The theory also emphasizes the utilization and actual use of evaluation findings as a result of constant consultation with the intended beneficiaries of the evaluation (Patton, 2008).

UTE is praised for its application in a variety of evaluative purposes i.e. Formative, summative and developmental, it is people-centered and insists on the use of evaluation findings for all stakeholders (Efeoglu et al., 2018) . Contrarily, UFE is accused because apparently that, different intended uses serve different purposes and typically different intended users on one hand. On the other hand, matching the evaluation purposes, resources and timeline to optimize use is another challenge (Patton, 2010).

Even though some scholars (Kioko, 2018; Gamba, 2016; Ssali, 2016) did apply UFE, they failed to link adequately the conceptual framework and the theory and consequently, it is weak in theoretical contribution. Besides the draw UFE has been utilized by a number of researchers. For example, McCullouch, (2022) used UFE to undertake a study on a Focused Evaluation of Second Chance Mississippi. Stakeholders managed to identify evaluation questions and finally the findings managed to answer those evaluation questions. Okul, and Nyonje (2021) adopted UFE in assessing organizational leadership style and the utilization of evaluation results. Evaluation utilization under consideration covered instrumental use, conceptualization use and persuasive use. Tshatsinde (2015) used UFE to assess the Utilization of Evaluation Findings in the Department of Rural Development and Land Reform in South Africa. Similarly, Tumusiime (2016) used UFE to examine how the utilization of evaluation findings contributes to the performance of the public sector agencies using the Uganda Bureau of Statistics. Kabuye and Basheka (2017) assessed institutional design and utilization of evaluation results in Uganda's public universities just to mention a few UFE highlights the importance of stakeholder involvement throughout the evaluation process and encourages evaluators to adapt their methods and deliverables to meet the specific needs of stakeholders. It can guide M&E practitioners including researchers in exploring how to make the M&E system more relevant, timely, and accessible to decision-makers and other users.

UFE led the author to set premises that: *engagement of key stakeholders leads to desired outcomes*
The essence of stakeholder engagement is Utilization-Focused Evaluation (UFE). UFE purports that, the primary indented user of the evaluation must clearly identify and be personally engaged at the beginning of the evaluation process to make sure that, their primary indented uses of evaluation are taken on board.

Empirical literature Review

Kioko (2017) through a descriptive study on the assessment of factors influencing effective monitoring and evaluation established that stakeholder participation positively and significantly affects the effectiveness of M&E of projects funded by the County Government of Machakos. It was ranked number three among the determinants. Similarly, Olala (2020) through desk review observed that, stakeholder involvement is among the critical factors that affect the implementation of monitoring and evaluation of a project. The study recommends enhancing stakeholders' involvement in the implementation of project monitoring and evaluation systems.

Kanyamuna, et al (2020) based on a qualitative study indicated that, even though the role of actors outside the government was recognized, in WoGMES), it was rather weak and fragmented. The system lacks formalized arrangements pertaining to how these actors needed to engage the government in strengthening the function of monitoring and evaluation across the public sector. The study recommends the importance of meaningful engagement of parliament, civil society and donors for increasing the pace of strengthening the country's system for monitoring and evaluation.

Ngeru and Ngugi (2019) conducted a mixed study on the determinants of effective implementation of monitoring and evaluation systems in County Governments in Kenya. Among other things, the study found out that, there was a significant and strong relationship between stakeholders' participation and implementation of M &E systems. The study recommended strengthening the governance structures, forming community-level project monitoring, and evaluation management committees, and the sensitization of beneficiary communities of projects and programmes to participate in the monitoring and evaluation of projects and programmes.

Solomon (2021) found out a positive and significant contribution of stakeholder participation on the effectiveness of M&E practice in TechnoServe Ethiopia, coffee initiative program. The study recommends the critical importance of the involvement of different stakeholders during various stages of monitoring and evaluation including the preparatory phase for securing mass support and ownership. Mushori, Machira and Matu (2020) established similar findings in the Government Funded Infrastructural Development Projects East constituency in Nakuru County. The study recommends the need to sensitise stakeholders to participate in the M&E process. In addition, appropriate strategies to involve stakeholders should be introduced to ensure that a bigger proportion of the stakeholders are involved

Claude and Didace (2020) conducted a study on project monitoring and evaluation of project success in local government in Rwanda. The study found out that, stakeholders' engagement and feedback had a positive and significant effect on the timely completion of the project. The study recommends for the management to increase stakeholders' participation in all stages of the project lifecycle. Likewise, Maturo (2021) through a descriptive study established that, stakeholder participation had positive effect on the effectiveness of monitoring and evaluation in Nongovernmental organizations within the Arumeru district.

Kanyamuna (2021) conducted a study to assess the functional status of the M&E system in Zambia's public sector. The study employed a descriptive research design with a mixed approach. Both the diagnostic checklist developed by Holvoet and Renard (2005) and the five-point LEAD scoring system. The study proposed a new model of Zambia's WoGM & ES where the engagement of stakeholders becomes imperative. The study suggests stakeholders to become instrumental in the establishment and maintenance of a country's M&E system. The proposed model identified that development partners (DPs), civil society organizations, research institutions, academia, and other relevant entities and individuals can offer valuable support through various mechanisms such as; financial assistance, capacity building, systemic improvements, and coordination efforts. Subsequently, the model suggests each stakeholder should be actively engaged, ensuring a holistic approach that spans all levels of government, including national, line ministry, provincial, and district structures.

Killo (2021) reveals that stakeholder involvement in the M&E processes team has a significant and positive effect on the performance of the tobacco contact farming project ($b= 0.226$, $t=3.604$, $p< 0.01$)in the tobacco contract forming project in the Katavi region. The study recommends that the M&E framework should consider an inclusion policy that will enhance effective stakeholder involvement. The findings are incongruent with Saguda (2021) established a positive and significant influence of stakeholder participation on the effectiveness of M&E on public reform initiative programs in Tanzania. He concludes that, stakeholder participation plays a crucial role in enhancing the performance of the M&E system in the context of public reform initiatives in Tanzania's public service management. Contrary to many studies under review Arbogast (2021) depicted that, the level of stakeholders' involvement in the M&E design phase was very low at the Tanzania Revenue Authority (TRA). This probably led to poor performance in M &E systems in

TRA. The study also disclosed more that, stakeholders were not involved in the M & E data collection process and feedback

The study conducted by Bonareri (2020) in Makueni country Kenya established that, stakeholders' participation has a positive and significant effect on an effective M&E system. The study recommends developing a system of identifying and managing stakeholders in the M&E process for effective control of stakeholders' participation. The study suggests that, stakeholder participation has a positive and significant effect on the effectiveness of the M&E system in the context of country development projects. However, the study focuses on the context of Makueni County and its specific country development projects. This is likely to limit the transferability of the findings to the Zanzibar public sector, as there are various differences in the organizational structure, and stakeholder dynamics, among many others. Similar findings were found by Roba and Odolla (2022), established a positive and significant effect of stakeholders' involvement on the performance of water projects in Marsabiti County in Kenya. The study recommends including all stakeholders in project monitoring and evaluations in all stages as they play an active role in project sustainability. However, despite the existing literature on stakeholders' engagement and its impact on the effectiveness of M&E systems in the region, there appears to be a research gap concerning the specific context of Zanzibar's public sector. Specifically, much of the reviewed literature is either project-specific, organization-specific, or regional in focus. Given that the existing literature is not specifically centered on the Zanzibar public sector, there may be variations in stakeholder dynamics, organizational structures, and contextual factors that could influence the effectiveness of stakeholder engagement in M&E. Therefore, conducting research that directly explores stakeholders' engagement in the Zanzibar public sector and its impact on M&E effectiveness would contribute to filling this gap. The findings of this research could inform policymakers, practitioners, and stakeholders in the Zanzibar public sector in developing targeted strategies, policies, and interventions to enhance stakeholder participation and improve the effectiveness of the M&E system specifically tailored to the unique context of Zanzibar.

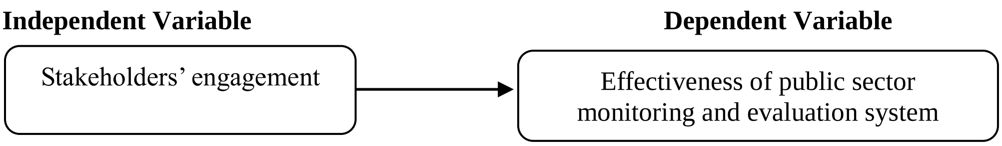

Figure 1: Conceptual Framework

METHODS

The study adopts a positivist research philosophy, which emphasizes empirical focus, objectivity, neutrality, generalizability, and rigour. It follows an explanatory causal research design and a quantitative approach. In addition, quantitative and deductive reasoning, which involves logically deriving conclusions from a set of premises, was applied as a research approach. The deductive approach was suitable for this study as it allows for precise measurement of variables and outcomes. By specifying hypotheses and accurately measuring variables, researchers can test their predictions with a high degree of precision. Additionally, the deductive approach facilitates replication of the study findings with new data to validate the results.

The study was conducted in the islands of Unguja and Pemba in Tanzania, focusing on institutions implementing and coordinating the monitoring and evaluation of ZSGRP III. The study population consisted of 297 officials from these institutions. Stratified and simple random sampling was used to select the sample, considering the different roles and responsibilities of the stakeholders in the ZSGRP III M&E system. The population was divided into three strata based on decision-making, coordination, and implementation levels. Yamane's formula was applied to determine the sample size as follows $n = \frac{N}{1+N(e)2}$, where the number of samples, N= population size and e is the level of precision (Israel

$n = \frac{N}{1+N(n)2}$, n = 297/1+297(0.05)^{2} = 170

Primary data was collected through a self-administered questionnaire using a 5-point Likert scale. Data analysis involved both descriptive and inferential statistics. Descriptive statistics were used to calculate measures such as mean, maximum, minimum, and standard deviation. Inferential statistics, including linear regression analysis, were employed to examine the effect between variables, hypotheses testing and conclusions.

Regression Model

$ME = \beta_0 + \beta_1 UTIME\alpha$

Where by β_0 = Y-intercept

B_1 are coefficients (constants)

ME = Monitoring and evaluation

UTIME = Utilization of M&E information

α represents the error term (the probabilistic nature of the model)

RESULTS AND DISCUSSION

Sample Description

Gender: The survey consisted of both male and female respondents. Among the participants, 89 (56.3%) of respondents were male, while 69 (43.7%) were female.

Age (years): The respondents' age distribution is divided into five age groups. The highest group consists of respondents aged 31-40, accounting for 68 (43.0%) of the total respondents. The next most represented age group was 41-50, comprising 50 (31.6%) of the respondents. Other age groups included 21-30, 14 (8.9%) respondents; 51-60 26 (16.5%) 26 of the respondents and 56-60, 12 (7.6%) of the respondents.

Marital Status: The majority of the respondents identified as married, comprising 146 (92.4% of the respondents. In contrast, a smaller proportion, 12 (7.6%) was identified as single.

Education Level: The respondents' educational backgrounds varied. The distribution shows that 4 (2.5%) of the respondents had a secondary level of education, 19 (12.0%) of the respondents held a diploma, 47 (29.7%) of the respondents obtained a degree, 75 (47.5%) of the respondents achieved a master's degree, and 13 (8.3%) possessed a PhD.

Types of Organization: The study included respondents from a variety of organizations implementing the public sector M&E system in Zanzibar. The majority of participants, 53 (33.5%) were from Ministries, Departments, and Agencies (MDA). Another significant group consisted of 23(14.6%) respondents who were associated with the Office of the Chief Government Statistician (OCGS). Local Government Authorities accounted for 17 (10.8%) respondents while Development Partners comprised 8 (5.1%) of the respondents, Private sector, higher learning institutions, and NGOs were represented by 5 respondents each (3.2%, 3.2%, and 3.2% respectively).

Position: The respondents held various positions within their respective organizations. The highest representation was found among Monitoring and Evaluation (M&E) Officers, with 35 (22.2%) of the respondents. Planning Officers accounted for 32 (20.3%), of the respondents, followed closely by Statistical Officers with 31(19.6%) of the respondents. Program/Project Managers comprised 17 (10.8%) of the respondents, while 8 (5.1%) respondents held positions as Permanent Secretaries (PS), Directors of Planning, Policy, and Research (DPPR), or Managers. Other positions such as Budget Officers, ICT Officers, and various other roles were represented by smaller numbers of individuals, with percentages ranging from 2.5% to 6.3% as depicted in Table 4.1.

Table 1: Sample Description

Gender	**Item**	**Frequency**	**%**
	male	89	56.3
	female	69	43.7
Age (years)	21-30	14	8.9
	31-40	68	43.0
	41-50	50	31.6
	51-60	26	16.5
	56-60	12	7.6
Marital status	married	146	92.4
	single	12	7.6
Education Level			
Types of organization			
Position			
Item		Frequency	Percentages
Level of education	secondary	4	2.5
	diploma	19	12.0
	degree	47	29.7
	masters	75	47.5
	PhD	13	8.3
Types of organization	MDA	53	33.5
	PRIVATE SECTOR	5	3.2
	LGA	17	10.8
	NGO	6	3.8
	DP	8	5.1
	higher learning institution	5	3.2
	OCGS	23	14.6
Position	PS	8	5.1
	DPPR	8	5.1
	Manager	4	2.5
	M&E Officer	35	22.2
	planning officer	32	20.3
	program/ project manager	17	10.8
	statistical officer	31	19.6
	Others	10	6.3
	ICT officer	4	2.5
	officer budget	9	5.7

Source: Field data 2022

Descriptive Statistics

The descriptive statistics provided insights into various aspects of stakeholder engagement in Monitoring and Evaluation (M&E) activities for the Zanzibar Strategy of Economic Growth and Poverty Reduction III (ZSGPR III).

M&E agencies are often involved in designing and implementing the ZSGPR III M&E System, which has a mean rating of 3.64 and a standard deviation of 1.096. This suggests that there is generally a positive level of involvement from M&E agencies, with some degree of variability in responses. In relation to the M&E lead agency frequently organizes training to cater for the M&E needs of ZSGPR III stakeholders, the mean rating is 3.2. standard deviation of 1.247. This indicates a moderate level of training provision, and some variability in stakeholders' perceptions. In the case of Local M&E consultants were given the opportunity for contract award for ZSGPR III M&E activities, which has a mean value of 2.89 and standard deviation of 1.198. This indicates the neutral stand of the respondents some variation in opinions regarding this opportunity.

With regards to external consultants these were frequently used to cater for the M&E services for ZSGPR III, which has a mean rate of 3.64 and a standard deviation of 1.124. This implies that external consultants play a significant role, and there was a moderate level of agreement among respondents. For M&E results and findings were communicated to stakeholders, and had a mean rating of 3.52 and a standard deviation of 1.075. This suggests that there was generally effective communication of M&E results, with a moderate level of agreement among stakeholders. ZAMEA provides M&E training for ZSGPR III to its members frequently, had a mean rating of 2.69 and a standard deviation of 0.970. This implied that respondents were indifferent if ZAMEA provided training to its members, although there was some variation in respondents' perceptions as indicated in Table 2.

Generally, the findings indicated a positive level of stakeholders' engagement in the effectiveness of the M&E system for ZSGPR III, even though there were areas with varying perceptions. For example, there was room for improvement in areas such as local consultant engagement and ZAMEA's training provision to ensure a more inclusive and comprehensive approach to stakeholder engagement in M&E activities.

Table 2: Descriptive Statistics Results

Item	Mean	Standard Deviation	Minimum	Maximum
M&E agencies are often involved in designing and implementing the ZSGPR III M&E System	3.64	1.096	1	5
The M&E lead agency frequently organizes training to cater for the M&E needs of ZSGPR III stakeholders	3.21	1.247	1	5
Local M&E consultants are given the opportunity for contract awards for ZSGPR III M&E activities	2.89	1.198	1	5
External consultants are frequently used to carter the M&E services for ZSGPR III	3.64	1.124	1	5
M&E results and findings are communicated to the stakeholders	3.52	1.075	1	5
ZAMEA provides M&E training for ZSGPR III to its members frequently	2.69	.970	1	5
ZAMEA's partnership with the M&E lead agency and other stakeholders is very promising for ZSGPR III M&E capacity building	2.70	1.160	1	5
ZAMEA's partnership with other national and international VOPE is very promising to support ZSGPR III M&E capacity building	2.70	1.045	1	5
Local higher learning institutions are engaged in training M&E needs for MKUZA	2.69	1.015	1	5

Source: Field data, 2022

Regression analysis was conducted between the predictor variable (Stakeholders engagement) and the response variable (M&E). The regression model derived accounts for 39.8% of the variance in the dependent variable (R^2 = 0.398) as depicted in Model summary Table 3. The model, as indicated by R, showed a moderate positive linear relationship between the independent and dependent variables.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.631[a]	.398	.394	.56649

a. Predictors: (Constant), STAKEH
STAKEH= Stakeholders' engagement
Source: Filed data, 2022

The overall model was also statistically significant, as indicated by the F-statistic (F (1, 156) = 103.261, p < 0.05) as depicted in ANOVA as depicted in Table 4.- The F-statistic tests the overall significance of the regression model. It is calculated by dividing the mean square of the regression by the mean square of the residuals. The higher the F-statistic, the more likely the model is significant. Here, the F-value was 103.261. the p-value was very low (close to zero), indicated by ".000b". This suggests that the regression model was statistically significant. Therefore, the regression model was statistically significant, as indicated by the very low p-value (0.000). The F-statistic of 103.261 suggests that the explanatory power of the model is substantial.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.137	1	33.137	103.261	.000[b]
	Residual	50.062	156	.321		
	Total	83.199	157			

a. Dependent Variable: ME
b. Predictors: (Constant), STAKEH
STAKEH= Stakeholders' engagement
Source: Filed data, 2022

The Regression analysis results also indicated a significant and positive relationship between stakeholder engagement (STAKEH) and the dependent variable ($\beta = 0.631$, $p < 0.05$) as depicted in coefficients depicted in Table 5 The result indicated an increase in stakeholder engagement was associated with a corresponding increase in the dependent variable.

Table 5: Regression Coefficients Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.016	.202		9.980	.000
	STAKEH	.552	.054	.631	10.162	.000

STAKEH= Stakeholders' engagement
Source: Filed data, 2022

These findings suggest that stakeholder engagement plays a significant role in influencing the dependent variable.

Testing regression assumptions

Normality

A histogram was used to test normality. Normal distribution typically exhibits symmetry, with frequencies balanced on both sides of the center resembling a bell-shaped structure as depicted in Figure 2

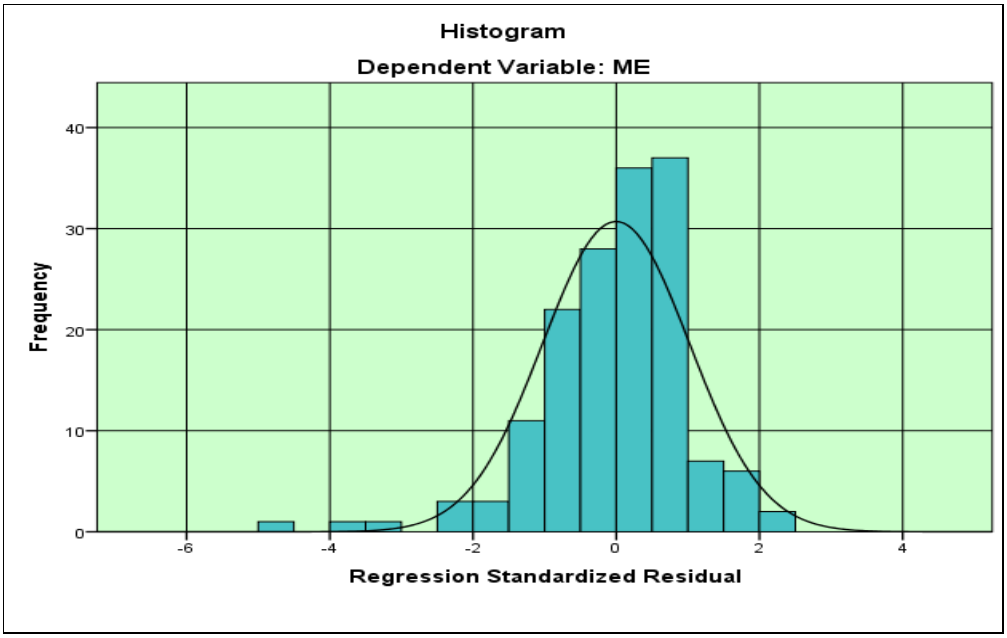

Figure 2: Histogram for normality test
Source: Field data (2022)

Linearity Test

Linearity assumption was tested by P-P plot. The pattern of the points on the P points looked closely follow a straight line, suggesting a linear relationship between the variables as indicated in Figure. 4.2

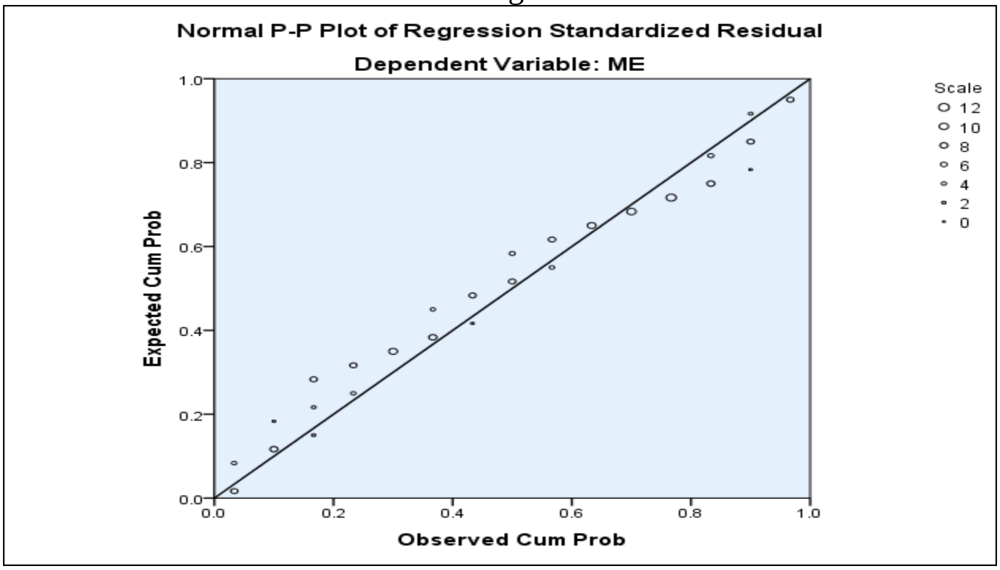

Figure 3: P-P Plot for Linearity Test
Source: Field data (2022)

DISCUSSION OF THE FINDINGS

The study findings indicated a significant and positive relationship between stakeholder engagement and the effectiveness of M&E indicating that an increase in stakeholder engagement was associated with a corresponding increase in enhancing effectiveness of public sector monitoring and evaluation systems. The findings are congruent with various existing studies. For example Kioko (2017) established that stakeholder participation positively and significantly affects the effectiveness of M&E of projects funded by the County Government of Machakos . Furthermore, the study concurs with Onsomu(2020), Bonareri and Kisimbii (2020),Abebe and Bekana (2022), Makau, Mackenzi, and Nicole, Killo (2021) among many others. The study findings and supporting literature suggest that involving stakeholders in the M&E process is beneficial and contributes to improved effectiveness in monitoring and evaluation efforts.

Theoretically, the study supports the premise set by UFE regarding stakeholders. UFE focus on stakeholder engagement in the context of monitoring and evaluation (M&E) processes. UFE places a strong emphasis on actively involving stakeholders throughout the evaluation process, which aligns with the objective of understanding the role of stakeholder engagement in the effectiveness of the M&E system recognizes that stakeholders have valuable insights, experiences, and perspectives that can greatly contribute to the evaluation process. By engaging stakeholders from the outset, UFE aims to increase their ownership and buy-in, making them more likely to utilize the evaluation findings and actively participate in decision-making processes.

Furthermore, UFE encourages a collaborative and participatory approach to evaluation, which fosters a sense of shared responsibility and accountability among stakeholders. This approach can help build trust, improve communication channels, and promote transparency between policymakers, evaluators, and stakeholders. By actively engaging stakeholders in the evaluation process, the study can promote a culture of open dialogue, mutual learning, and knowledge exchange, which can ultimately lead to more effective and sustainable M&E systems.

Therefore, the study findings aggregate knowledge of UFE to a wider perspective of monitoring and evaluation.

CONCLUSION AND POLICY IMPLICATION

Study findings indicate that policies promoting stakeholder engagement in M&E can enhance the effectiveness and quality of decision-making processes. By actively involving key stakeholders from state and non-state actors, can tap into their valuable insights and experiences, leading to decisions that are more informed, improved program outcomes, and increased transparency and accountability. The study also urges M&E to enhance and strengthen mechanisms and platforms for stakeholders to actively participate in decision-making processes, providing them with opportunities to contribute their insights and experiences. M&E lead agency in Zanzibar should consider the importance of fully engaging stakeholders throughout the evaluation process, from planning to reporting, to ensure that their perspectives and needs are considered.

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Interaction Effect Between Loan Officers' Characteristics and Loan Default Rate on Crowdfunding Approval

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Abstract
MicroFinance Institution (MFI) officers screen loans for a prosocial crowdfunding campaign in developing economies. However, loan officers' screening decision is influenced by loan officers' default rate, hence the loan officers are likely to focus on the better borrowers. However, crowdfunding emerged to provide finance to entrepreneurs who are less likely to meet the loan screening requirements. Thus, this study examined the interaction effect between loan officers' characteristics and loan defaults on crowdfunding approval. We usedordered logistic regression to primary data collected from loan officers in microfinance institutions that are registered by the largest prosocial crowdfunding platform Kiva asfield partners. The study found a significant interaction effect of loan officers' default rate and gender, experience and crowdfunding awareness. Thus, the results implied that, the demographic characteristics of the loan officers are interacted by the loan officers' default rate when deciding to approve a loan for a crowdfunding campaign. Therefore, the findings recommended imparting loan officers with techniques that will help them keep a low default rate and those loan officers with a low default rate should work on crowdfunding approval

Keywords: *Crowdfunding Approval, Microfinance institutions and Loan Officers, Loan Default Rate*

INTRODUCTION

Access to finance is integral in the development of entrepreneurial activities, but literature shows that, small businesses have been marginalized in accessing funding in banks(Cosh et al., 2009; Hoff & Stiglitz, 1990; Kortum & Lerner, 2001). Isaga (2018) highlights that, the main reason for entrepreneurs' failure to access funding in banks is due to their inability to meet bank's loan screening requirements such as collateral and financial information. This findingis supported by the FinScope (2023) survey which shows that only 16.7% of the economically active population in Tanzania have access to banks. Despite entrepreneur challenges in meeting the bank's loan screening requirements, Ihua (2009) show that small business are information-opaque, thus, making it even more difficult to producefinancial reports required by banks when applying for a loan. This suggests that challenges in accessing funding are mainly caused by entrepreneurs' lack of collateral and financial information.

Microfinance institutions (MFIs) arose to serve entrepreneurs who are marginalized by banks due to the failure to provide sufficient financial information or collateral by providing microloans (Morduch, 1999). MFIs emerged with the aim of serving businesses that were formed out of necessity by impoverished entrepreneurs who are unable to meet bank loan screening requirements. (Morduch, 1999; Randøy et al., 2015). With this objective MFIs have decentralized the loan approval process to loan officers so as to enhance entrepreneurs' access to loans (Armendáriz de Aghion & Morduch, 2010; Stein, 2002). Therefore, loan officers are able to interact with prospective borrowers and generate soft information to mitigate the financial information gap(Boot & Thakor, 2000; Canales & Greenberg, 2016). Consequently, MFIs are able to serve entrepreneurs who are not able to provide financial information or have insufficient collateral.

Despite, the MFI success studies underline that MFIs are capital constrained, because contrary to other financial institutions, MFIs low access to deposits or debt (Bogan, 2012; Dorfleitner et al., 2017). Thus, they rely on grants, donations, subsidies and owners' equity to provide loan to borrowers (Minton & Schrand, 1999; Tchuigoua, 2014). Grants and donation form the main part of MFIs since they are the inexpensive source of capital(Tchakoute-Tchuigoua, 2010). However, they are not easy to acquire, thus, studies such as Stiglitz and Weiss (1981) show MFIs are capital-constrained and often entrepreneurs' requirements exceed MFIs ability. Thus, Cull et al. (2007) and (Strøm et al., 2014) suggest that, MFIs' objective of targeting penurious borrowers may be impaired. Consequently, there is a need for MFIs to access capital that will enable them to focus on marginalized entrepreneur.

Crowdfunding provides an opportunity for MFIs in developing economies to access finance via the crowdfunding platforms such as Kiva(Dorfleitner et al., 2019). MFIs plays the third-party role in crowdfunding platform by endorsing borrower to the platforms. The platforms partners with MFIs (field partners) to help them collect information on the prospective borrowers. Therefore, the prospective borrowers apply for a crowdfunded loan through a field partner (MFIs). Then, the loan goes through the MFIs screening process, if approved the loan will be uploaded to the crowdfunding platform and if not the loan will be declined. Dorfleitner and Oswald (2016) show that loan officers in MFIs successful selects good loan since the repayment on the platform is better than the industry repayment. Furthermore, the screening process may also be helped by the training the platform official provide to loan officers (Flannery, 2009).

As loan officers approves a loan for a crowdfunding campaign an entrepreneur gets funded who would have been otherwise be rejected due to insufficient capital in MFIs(Dorfleitner et al., 2019). Therefore, crowdfunding enables MFIs to reach more clients that would have been impossible to fund. However, it is the same officers who fund the conventional loans that approve the crowdfunding, and little is known about the loan selection process for crowdfunding campaigns. This study examined the interaction effect between loan officers' characteristics and loan defaults on crowdfunding approval.

LITERATURE REVIEW

Theoretical Literature Review

The theoretical foundation of this study is based on the theory of screening, and signalling which establishes the theoretical link in conceptualising the relationship between crowdfunding approval and the loan screening process which are the major concepts of this study. Stiglitz (1975) defines screening as the identification of different qualities among loans, individuals, bonds, equities, and brands. Thus, for this study loan screening will be the identification of the qualities of the prospective borrowers. The outcome of the loan screening will be loan approval for qualified borrowers or a loan denied for borrowers who do not meet the loan requirement (Cole & Sokolyk, 2016; Han et al., 2009).

Identification of the qualities that fit loan approval or loan denial is the challenge that loan officers face on their daily activities. The screening theory is concerned with the identification of qualities that differentiate individuals (Arrow, 1973; Stiglitz, 1975). According to this theory, individuals with different characteristics will perform differently. For instance, Stiglitz (1975) individuals that are more skilled or more productive will be awarded higher wages compared to those that are less skilled or less productive. Furthermore, the theory shows that screening enables matching individual skills to where they can be more productive. In the context of this study the Loan officers are the screening devices as termed by Stiglitz, (1975) because, they sort the qualities of loan applications. Furthermore, with crowdfunding in play the loan officers have to choose to finance the approved loan via convectional loans or a crowdfunding campaign and thus, match borrowers' qualities to MFIs loan and crowdfunding loan.

The loan officer must pick the right signals from the borrowers' information to successfully match the loan application to normal loan or a crowdfunding loan,however, borrowers do not produce sufficient information (Stein, 2002). Furthermore, Information asymmetry is a challenge to funders on crowdfunding platforms; therefore, they depend on the decisions made by loan officers to make the funding decision (Courtney et al., 2017). Thus, loan officers' approval signals the funders on the platform that the loan is of good quality, that is the loan officers at all time pressured to pick the correct signals. According to Spence (1973), high-quality prospective borrowers distinguish themselves from low-quality prospects. Thus, signalling theory is essentially concerned with reducing information asymmetry amongst two parties (Spence, 2002). This theory fits the context of this study as the loan officers must be in a position to pick the right signals from MFIs and borrowers to be able to distinguish high-quality prospective borrowers from low-quality prospects.

The signalling theory and screening theory has been widely used in different contexts to explain how decision-makers under uncertainties rely on the signals of the information available to make investment decisions (Dobbs et al., 2008). In the context of crowdfunding signalling theory has been used to study the characteristics of MFI as signal to funding success in crowdfunding platforms (Anglin et al., 2019; Dorfleitner et al., 2019). This study used the theory to link Loan officers' characteristics and crowdfunding approval decisions.

EMPIRICAL LITERATURE REVIEW

During the screening process the loan officers do not use or perceive the same information in the same way or systematically(Bertrand & Burietz, 2023; Carr & Steele, 2010). These studies suggest that decisions may be influenced by individual characteristics, emotions, or threats (Bacha & Azouzi, 2019; Behr et al., 2020; Cole et al., 2015). Furthermore, literature suggests that loan officers behave differently as their default rate increases (Cao et al., 2016; Cole et al., 2015).When a loan defaults it indicates that the officer failed in the screening process thus as the default rate increases the loan officers will focus on better borrowers to reduce it (Cao et al., 2016). Literatures shows that among others one of the main reason for loan defaults in MFIs is the inability of the loan officers to identify a bad loan during the loan screen(Bertrand & Burietz, 2023; Brock & De Haas, 2023). Empirical studies measure loan default as percentage of the loan that defaulted to the total loans issued (Anglin et al. 2019). High default rate signals risk to the MFIs, thus, they work to minimise it.

Dorfleitner and Oswald (2016) compare MFIs' Kiva loans and other MFIs' loans and found out that the loans on the Kiva platform are less risky than the other loans on the MFIs' portfolio indicating that the loan officers are strategically selecting loans with lower default probability so that they lower the Kiva default rate and eventually Kiva risk rating. Dorfleitner and Oswald (2016) suggest that default rates are positively associated with future default, therefore borrowers of such MFIs are more likely to default. It is with this regard that Anglin et al. (2019) and Dorfleitner and Oswald (2016) findings indicate that MFIs' default rate is significant and negatively associated with funding on crowdfunding platform.

Default Rate and Loan Officers' Gender

Female loan officers perceive or use information differently compared to male. Bertrand and Burietz (2023) preconceived opinions significantly affect gender and that prejudice affect female officers more. That is concepts of loan defaults or staggering repayments affect the decision of female loan officers more as the do to male loan officer. Furthermore, Literature reveal that the gender of the loan officer is significantly influenced by default rate (Powell and Ansic, 1997; Croson and Gneezy,2009). Thus, Meyers-Levy and Loken (2015)show that female loan officers are more risk averse than their male counterpart. Consequently, studies show that when loan applicants characteristics are held constant female loan officers are more likely to reject a good loan (Brock and De Haas, 2020). Thus, when gender is interacted with default rate it may negatively influence the loan screening. The situation may worsen in crowdfunding since literature show that those who access funding via crowdfunding platforms are less likely to be approved for funding in conventional lending (Mollick, 2014; Mollick and Nanda 2016)

H_1: *Default rate negatively influence loan officers' gender on crowdfunding*

Default Rate and Loan Officers' Experience

Studies show that as the experience of loan officer increase the ability of the loan officer to identify good loans increase (Van Gool et al., 2012). That is, as they age in lending business their ability to screen loans improve, they can detect signals of a bad loan better as through the years screening loans they acquire skills of sensing loan signals. Because of the skills they acquire in experience, Cao et al, (2016) show evident that the experienced loan officer is less likely to be affected by negative penalties the are imposed by MFIs. Similarly Dittmar and Duchin (2016)show that experience have stronger effect on individual, meaning if a loan officer approved a risky loan in the past and it was filly repaid all similar loans in the future will be approved regardless of the default rate. In this regard experienced loan officers are less likely to be affected by the default rate. However, as loan officer default rate increases the loan approved by the loan officers are more likely to be denied by the supervisors and therefore experienced loan officers may focus on small loans and crowdfunding as default rate increases.

H_2: *Default rate positively influence loan officers experience on crowdfunding approval*

Default Rate and Loan Officers' Education

Financial literacy significantly affect individuals ability to make financial decisions (Amari & Jarboui, 2018). Furthermore, Mandell and Hanson (2009) show that financial education is highly associated with improved financial behaviour. Additionally, A person's educational level is indicative of their receptiveness to change and their inclination to recognize and assess innovative alternatives. Thus, these studies suggest that financial education and trainings improves loan officers screening ability. Indicating that, as default rate increase loan officers with high levels of education will be more risk averse (Sheila, 2011; Canales and Greenberg 2016). These findings can be linked to Iyer et al. (2016) that shows professionals are more likely to deny a loan that would have been successful on crowdfunding platform. similarly, Mollick and Nanda (2016) shows that, untrained individuals "crowdfunders" are as wise professionals in the loan screening. The difference in crowdfunders approval and professionals maybe induced by higher degree of risk in the crowdfunding projects. Thus, suggesting professionals are risk averse and therefore likely to reject any loan that signals risk despite of its potential.

H_3: *Default rate negatively influence loan officers' education on crowdfunding approval*

Default Rate and Loan Officers' Rank

Studies show that loan officers of lower ranks are more risk averse than those of higher raking. Similarly, decisions made by higher ranked loan officers are less likely to be affected by negative penalties (Brock and De has 2020; Cao et al 2016). Thus, as default rate increase the loans are more likely to be denied by lower ranked loan officers and hence loan that may fit crowdfunding setting may be completely dined or channelled through normal MFIs lend. Consequently, supervisors are more likely to approve loan for crowdfunding that were initially approved for a normal MFIs lending by a lower ranked loan officer.

H_4: *Default rate positively influence the rank of loan officers on crowdfunding approval*

Default Rate and Crowdfunding Awareness

De León and Mora (2017) shows that crowdfunding usage is positive and significantly associated with crowdfunding awareness. Similarly Vergara (2015) and Sırma et al. (2019) shows that crowdfunding is widely used when the the individuals are aware. However, MFIs literatuter shows that when individuals have high default rate they are less likely to approve risky loans(Cao et al., 2016). And crowd funding literature shows that the projects on the platforms are riskier and less likely to be funded on convectional lending.

H_5 *Default rate negatively influence crowdfunding awareness on crowdfunding approval*

METHODOLOGY

This study used a cross-sectional design with primary data being collected via a structured questionnaire. The decision to use a survey was based on several grounds. First, a survey is more appropriate to a piece of research in which the individual is studied as a unit of analysis; it is also a tool for measuring individual attitudes and characteristics (Creswell & Creswell, 2017); Second, a survey provides a quick, efficient and accurate means of assessing information about the population, and it is more appropriate where there is a lack of secondary data (Hair Jr et al., 2019). In this case, secondary data concerning the relationships between characteristics of loan officers and loan approval is not fully available. Thus, surveying to gain information about the aforementioned variables is essential.

The population for this study was the loan officers in the MFIs that were the Kiva field partners platform and thus the unit of analysis. For this study, the loan officers are the individuals who screen and approve loans, these are the loan officers and their supervisors (Brock & De Haas, 2020). The population of loan officers is 520, which is the total number of loan officers in the 13 MFIs that are engaged with Kiva.

The study employed a stratified random sampling procedure to select respondents for the survey, to ensure objectivity in selecting the sample. This sampling procedure was selected because the loan officer's population contains supervisors and ordinary loan officers, therefore if simple random sampling is used the probability of leaving out the supervisors is high. Thus, stratified sampling technique increases the chances of supervisors being selected for the study. We created two strata, the first stratum for loan officers and the second for supervisors. Then we requested the names of the loan officers from their respective human resources officers to create a sampling frame. Yamane (1967) formula en= N/1+N(e^2) where N is the population size and e is the margin of error was employed to arrive at a sample of 227 that was used for this study. Thereon, weighted average was used to determine who many loan officers each MFI contributed to the study. Since loan officer's supervisor formed 16% of the population the same rate was maintained in the sample, that is, the stratum of the loan officers gave remaining 84%. Thus, from the stratum of loan officers, 191 officers were randomly selected from 437 and the like was done for the stratum of supervisors. Henceforth, a sample of 227 was arrived

The design of the questionnaire adopted from Vergara (2015) and other questions were formulated from the literature reviewed. The questionnaire was divided into four parts. The first part consists of questions aimed at seeking information on the demographic characteristics of the loan officers in terms of age, educational level, and experience. The section also comprises questions aimed at uncovering the motives behind loan approvals. The second part consisted of questions that were to provide information about crowdfunding awareness. This was followed by part three, which covered information about the MFIs characteristics and the decisions of the loan officer. The questionnaire ends with part four, which provides additional information on loan screening and crowdfunding approval.

Variables

The dependent variable of this study was crowdfunding approval. Crowdfunding approval in this study meant that the loan had been endorsed for crowdfunding (Kiva 2021; Anglin 2019). Thus, it is a binary variable, however, due to the unavailability of the secondary data on crowdfunding approval, for this study crowdfunding approvals was measured on the loan officers' likelihood to approve the loan for crowdfunding. Therefore, the dependent variable for the study was discrete variable measured from strongly disagree to strongly agree

To study this interactive effect, the model included independent variables as the product of default rate and the following variables. The first was gender a binary variable measured on a scale 1 for female and 0 for male(Gafni et al., 2020). The second is experience was measured in the number of months served in the MFIs industry (Andersson, 2004). The third was education which was measured on the highest level of education completed by the loan officer. Furthermore, education specialization was measured on respondents major in college such as; finance, business or any other major (Mandell &

Hanson, 2009). In addition to education training was included in study to measure its effect on crowdfunding approval, training was measured by 0 to see if the loan officer had not received training and 1 otherwise. Job rank was the fifth variable where 0 was for officers and 1 for supervisors. The seventh variable was the crowdfunding awareness where 1 measured if the loan officer was aware of crowdfunding and 0 otherwise (Vergara, 2015).

The study adhered to ethical standards and the code of ethics. Furthermore, the study obtained permission to carry out the study from the relevant authority in the MFIs. The study-maintained confidentiality on the information gathered as the study collected information from competing MFIs.

Data analysis involved four main phases, namely: data preparation, descriptive analysis, regression analysis and hypothesis testing. Data preparation was carried after the field work and all 227 questionnaires were recorded. Thereafter, descriptive and ordered regression analysis was carried out in STATA 17.Ward (2013) suggests that, STATA is preferred to IBM SPSS statisticsfor econometric analysis while IBM SPSS statistics is good for data preparation, management and data cleaning.Thus, the study used IBM SPSS statistics 25 for data entry, management and data cleaning, then when the data was ready for and econometric analysis they were imported to STATA 17. Thirty-three (33) respondents who responded to the question "If you are reading this, please do not respond to this question" that aimed to test if the respondents were reading and understanding the question before they responded were left out of further analysis.

The dependent variable of the study "crowdfunding approvals" was a categorical variable, thus, ordered logistic regression analysis was used to study the relationship between the dependent variable and the independent variables. According to Wooldridge (2002) and Wooldridge (2015), it makes no sense to approximate a dependent variable that takes a small range of values as a continuous variable which suggested ordered logistic regression as a suitable regression analysis for this study because it uses maxim likelihood to estimate the model.

Ordered logistic regression is a parsimonious and sensible model in studying the relationship between the dependent and the independent variables in this study because it considered the ordering of the likelihood of crowdfunding approval from likely to unlikely (Cameron & Trivedi, 2005; Wooldridge, 2002). Therefore, the model of the study was;

$$y = \beta_1 X_1 \pm \beta_2 X_2 \pm \beta_3 X_3 \pm \beta_4 X_4 \pm \beta_5 X_5 \pm \beta_6 X_6 \pm \beta_7 X_7 \pm \varepsilon$$

Where; Y = Crowdfunding approval, X_1= Default rate * Gender, X_2= Default rate * Education, X_3= Default rate*Education specialization, X_4= Default rate * Rank, X_5 = Default rate * Experience, X_6 = Default rate * Training, X_7 = Default rate * Crowdfunding awareness.

Findings and Discussion

The findings section started the analysis by exploring the descriptive findings. Table 1 below shows the that the loan officers' population were well educated and the majority were female. Furthermore, it was found an average of two years of experience and 15.5% of the sample were supervisors. Moreover, it was found an average default rate among the respondents to be 1.4%. Interestingly, the findings showed that a just above average crowdfunding awareness. The study expected to find high percentage of crowdfunding awareness since Flannery, (2009) platforms train loan officer from time to time. This result may be contributed to the fact that an average experience is two years and the largest platform Kiva had paused most working of the MFIs in Tanzania at the time of data collection.

Table 1: Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
CF Approval	192	3.266	1.12	1	5
Gender	194	.639	.481	0	1
Edu level	194	3.521	.923	1	5
Edu spec	194	3.608	.864	2	5
Job rank	194	.155	.362	0	1
Exp	194	24.294	20.702	1	120
Training	194	.088	.283	0	1
LO rate	194	1.427	.95	0	5
CF Awe	194	.557	.498	0	1

Source: Field data (2023)

The aim of this objective was to examine the interactive effect of the default rate on the loan officers' characteristics in approving loans for a crowdfunding campaign. Findings showed that as the loan officer's default rate increase loan officer tend to avoid risky loans and focus on better borrowers. Therefore, crowdfunding approval is modelled as a function of the product of loan officer's default rate and loan officer's characteristics. Table 2 below shows the regression estimates of the model.

Table 2: Ordered Logistic Regression Analysis Output

					Number of obs	192
					LR chi^2 (7)	140.90
					Prob > chi^2	0.000
Log likelihood = -200.17026					Pseudo R^2	0.2603

CF_Approval	**Coef.**	**St.Err.**	**t-value**	**p-value**	**[95% Conf**	**Interval]**
gerat	-1.841836	.2422591	-7.60	0.000***	-2.316655	-1.367017
Edu_levelrat	-.1079026	.1025703	-1.05	0.293	-.3089367	.0931314
Edu_specrat	-.084152	.0978045	-0.86	0.390	-.2758453	.107414
Job_rankrat	-.0366256	.3174112	-0.12	0.908	-.6587401	.5854889
Exprat	.015911	.0079026	2.01	0.044**	.0004221	.0313998
TrainingRat	.5239701	.4798383	1.09	0.275	-.4164956	1.464436
CF_awerat	1.345543	.2593272	5.19	0.000***	.8372707	1.853815
cut1	-8.358894	1.106447			-10.52749	-6.190298
cut2	-2.205899	.3261517			-2.845145	-1.566654
cut3	-.5367416	.2728149			-1.071449	-.0020343
cut4	1.424781	.303968			.8307217	2.018839

*** *p<.01*, ** *p<.05*, *

Source: Field data (2023)

The parameter for the interaction of gender and default rate is negative and highly significant. The study found out that there was a strong effect of the interaction of gender and default rate on the probability of approving a loan for crowdfunding since the interaction parameter was strongly significant. Thus, suggesting that the default rate impact a male or female loan officers' decision to endorse a loan for a crowdfunding campaign. Since the interaction parameter was negative, it was found out that the interaction parameter negatively influenced crowdfund approval. Thus, the findings support the first hypothesis of the study. This meant that a loan was less likely to be approve if the loan officer was a female and had a high default rate. This may be so, because, crowdfunding literature showed that those who applied for loans in the platform were less likely to be funded in the conventional lending since they portray to be risky(Agrawal et al., 2015; Allison et al., 2015). This finding is also supported by MFIs literature that showed women to be more risk averse than their male counterpart(Brock & De Haas, 2020).

The parameter for default rate and experience was positively significant at 5%. The study found a significant association between the interaction parameter and the probability of approving a loan for a crowdfunding campaign. Furthermore, it was found out that the parameter was positive, thus, suggesting that the default rate had no impact on loan officers' experience in approving loans for crowdfunding campaign. Therefore, we found support for the second hypothesis of the study. Thus, crowdfunding campaign is more likely to be approved when the loan officer is experienced. This is supported by the MFIs literature that showed that experienced loan officers were not affected by negative incentives(Cao et al., 2016). However, the descriptive data showed a low experience among loan officer thus reducing the chances of crowdfunding approval.

With exception to training all interaction between default rate and education parameters were negative and insignificant. Thought the parameters were insignificant there was a negative association between the interaction of default rate and education parameters and the probability of approving a loan for a crowdfunding campaign. Thus, suggesting that, increase in default rate was associated with a crowdfunding loan being rejected by highly educated officer. However, the parameter for training interaction term was positive indicating that training loan officers on crowdfunding might help in getting more loans approved for crowdfunding since, the interaction was still positive. Contrary to other MFIs literature such as; Dittmar and Duchin (2016) and Mandell and Hanson (2009), this may be due to the fact that crowdfunding approval does not rely on professional knowledge as shown by Iyer et al. (2016), thus, giving us insight to why the training term was positive.

The interaction term between the default rate and job rank was negative but insignificant, suggestion that there was weak association between the interaction parameter and the likelihood of approving a loan for crowdfunding campaign. Despite the parameter being insignificant the negative sign informs us of an inverse relationship between the interaction term and crowdfunding approval. That is, supervisors were less likely to approve a loan for crowdfunding as default rate increase. This finding might be insignificant due to the small number of supervisors who took part in the study.

The interaction term between default rate and awareness was positive and significant which was contrary to the hypothesis expected. This means that crowdfunding awareness was not negatively affected by the loan officers' default rate. That is regardless of the loan officers default rate a crowdfunding campaign was likely to be approved by the officer who was aware of crowdfunding. This funding support De León and Mora (2017)who showed that crowdfunding usage was a mainly influenced by crowdfunding awareness.

CONCLUSION AND RECOMMENDATION

Crowdfunding plays an important role in improving access to finance entrepreneurs by MFIs ability to fund more loans. This scenario is only applicable if loan officers approve more loans to crowdfunding platforms. Thus, the study investigated the effect of the interaction between the loan officers' characteristics and loan default rate on crowdfunding approval. Though, prudence is essential in approving loans for crowdfunding Kiva data showed repayment rate on the platform is 96% and the platform did not require the MFIs to pay for the loans that defaulted. Thus, MFIs through loan officers can keep approving loan while controlling for its own default rate since it is important for entrepreneurs that are affiliated with the MFI to successfully be funded on the platform. Therefore, loan officers need not to worry about their default rate as they approve a loan for crowdfunding. However, the findings of this study showed that, female loan officers worried about their default rate and were more likely not to approve a loan for crowdfunding. Thus, more crowdfunding training is required for this situation to change since findings showed awareness was not affected by the loan officers' default rate.

On the same regard, the interaction of experience and default rate did not have a negative effect on crowdfunding approval. Thus, experience was not affected by default rate and the more experienced loan officer the more likely he was to approve a loan for crowdfunding. However, studies showed that, there was high turnover in MFIs, thus reducing the probability of encountering a highly experienced loan officer consequently reducing the chances of crowdfunding approval. Therefore, to improve crowdfunding approval MFIs need to figure a way of retaining their loan officer.

Awareness like the experience interaction term is not affected by the default rate. Thus, it is concluded that as the loan officer is aware of crowdfunding his/her default rate does not matter in approving loans for crowdfunding. Therefore, it is concluded that crowdfunding in Tanzania had a chance regardless of the loan officers default rate. Hence, it was important for the Government and the MFIs to create strategy that would ensure crowdfunding awareness amongst its loan officers. This would improve the chances of an entrepreneur to be approved for a crowdfunding campaign.

This study only looked at the indirect model where MFIs were the field partners but there was a direct model in the platforms like Zidisha working in Tanzania, thus future studies might look into factors affecting funding in that platform and compare the direct and indirect model.

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Empowerment Setbacks and Coping Strategies in the COVID-19 Crisis of Female Food Vendors in Tanzania

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Abstract
The Government of Tanzania has established a conducive environment for gender equity, as reflected in the Millennium Development Goals(MDGs). Female food vendors operating in Tanzania's urban settings face multifaceted socio-economic and cultural challenges, with these factors significantly influencing how they are perceived and treated within their communities. This, in turn, can impact their ability to negotiate and make decisions in business settings, particularly during epidemics. However, the Covid-19 pandemic exacerbated the challenges. This study delved into the effects of COVID-19 on food vending businesses and coping mechanisms amidst its raging consequences. The study sequentially employed qualitative and quantitative approaches to gather data from female food vendors using in-depth interviews and questionnaires. Of all the collected questionnaires, 304 were sufficient for descriptive and paired t-test analyses. Thematic analysis was applied to qualitative data. The findings underscore the significant adverse impact of the COVID-19 pandemic on the business performance of female food vendors. Indicators such as the number of employees, average daily sales, average daily profit, and daily working capital exhibited statistically significant declines during the pandemic compared to pre-pandemic levels. Coping strategies employed by female food vendors included strict adherence to COVID-19 protocols, workforce reductions, trimming daily allowances for assistants, cutting down on working capital, streamlining food items on the menu, and avoiding expensive menu options. The study highlights the negative impact of the pandemic on business performance, emphasizing the need for government intervention through subsidies, especially during pandemics. Additionally, the study recommends business formalisation to access subsidies and micro-credits better. Following the analysis, the study offered detailed policy recommendations to address specific issues identified during the research. Additionally, suggestions for further studies are presented, indicating potential avenues for future research to deepen the understanding of the subject matter.

Keywords: *Women Empowerment, Covid-19, Female Food Vendors*

INTRODUCTION

In Tanzania, as in many other societies, females play a crucial role in contributing to family livelihoods. Many Tanzanian women engage in entrepreneurial activities, and according to Nziku (2012), these endeavors contribute not only to the family income but also to the local and national economies. The researcher opines that to make businesswomen more aware of their outstanding contribution to economic development, they must stimulate, support and sustain their entrepreneurial dreams and efforts. Female entrepreneurs in developing countries have become a key focus of development policy and empowerment programs because of their importance in fueling economic growth and reducing poverty (Langevang et al., 2018). Interestingly, while men and women play substantial roles in Tanzania's economy, women are more active than men in the informal sector, specifically in food vending, constituting around 50.6% of the active working population (Hansen et al., 2018). The extant literature reveals that despite women's importance to any country's economy, they are usually facing a plethora of gender-related barriers to sustaining and growing their businesses emanating from business environment hurdles (Kessy, 2014; Mboma et al., 2012; Rutashobya et al., 2009). In an attempt to mitigate gender-based challenges, the Government of Tanzania has been at the forefront of creating a favorable legal framework and conducive political context for gender equity and equality as reflected in the Millennium Development Goals (MDGs), especially MDG3 which is related to women, empowerment (WorldBank, 2017). It is also highlighted that in the 2016 World Economic Forum Global Gender Gap Report Tanzania was ranked number one globally, out of 115 countries, in terms of women’s economic participation (WorldBank, 2017).

Despite Government efforts, the COVID-19 pandemic worsened the situation of female entrepreneurs operating in the food vending business, leading to a drastic economic downturn (UNDP, 2020). Notable shocks in Tanzania resulting from the pandemic were experienced in hospitality, manufacturing, agricultural goods, logistics and transport, financial services, and other services. Female food vendors (FFVs) were equally affected since their operations depended on the performance of other businesses in the country (Mboma *et al.*, 2012). Tanzania was one of the few countries in East Africa that still needed to institute lockdown strategies. Nevertheless, there are mitigation strategies undertaken by the government and private sector that directly or indirectly affect the food vendors in Tanzania. Such measures included closing schools, colleges, universities, workshops, and conferences and banning all entertainment activities, whereas some private firms have adopted working-from-home strategies. The government also encouraged the application of personal hygiene, social distancing, and wearing protective facial masks where appropriate. All these measures affected food vendors' customers. To the extent that this is true, some firm managers, at times, managed to navigate through such business hurdles (Hansen *et al*., 2018; Langevang *et al*., 2018). At this juncture, the extent of the Covid-19 effects and their coping strategies in this pandemic remains unclear.

Several organizational theorists have tried to illuminate the phenomenon to respond to this question. On the one hand, advocates for Institutional theory argue that the business environment influences the behavior of firm managers and the firm's characteristics, scale, and outcomes (Welter & Smallbone, 2011). In the context of institutional theory, the study of women in the informal sector involved the synthesis of the cognitive, normative, and regulatory barriers that imbue stability and significance into social behavior (Scott, 2001). This study specifically aims to understand the complex effects of the COVID-19 pandemic on women's roles and status within the informal sector. Drawing on institutional theory, this study explores the COVID-19 pandemic impacts on female food vendors (FFVs) and their coping strategies in the same crisis. Little is known, as most of the studies (Dickens et al., 2019; He & Harris, 2020; Pediatr et al., 2020; Tull *et al*., 2020) on the phenomenon have not paid a particular focus on Tanzania and specifically on female food vendors (FFVs). He and Harris (2020) investigated the impact of the COVID-19 pandemic on corporate social responsibility and marketing philosophy. In addition, those focused on Tanzania have paid attention to macro perspectives rather than at the firm level. For instance, UNDP (2020) focused on the sectors in Tanzania that have been adversely affected. These sectors include tourism, transport and logistics, and financial services. Mduma (2020) examined the Bankers' perceptions of the COVID-19 pandemic. Even the existing studies (Mboma *et al*., 2012; Milanzi, 2011) on the sub-sector have primarily focused on general challenges facing female food vendors. There is, therefore, a research gap on how COVID-19 impacted the performance of female food vendors' businesses and what coping strategies were adopted. Undertaking this study will bridge this gap and add to the body of knowledge of existing literature. Specifically, the study focused on the following: (i) *To explore the COVID-19 impacts on female food vendors* (FFVs) *business performance and welfare and (ii) To explore the coping strategies of* FFVs *during the COVID-19 pandemic.*

METHODS

This exploratory study involved highly focused in-depth interviews and a survey. In-depth interviews with 27 and 19 female food vendors in Dar es

Salaam and Dodoma were conducted between March and June 2021 respectively. The qualitative sample size was reached after achieving theoretical saturation. Researchers targeted female food vendors with at least five years of business experience to ensure a transparent and reproducible in-depth interview sampling strategy. Most of the interviews conducted lasted for a period between 50-80 minutes on average. To ensure validity, results were validated by sending the transcripts back to the management of the food parlors visited. The researchers ensured the credibility of the findings by conducting interviews with the respondents. Researchers built rapport and familiarization with the interviewees to ease access to credible information, as advocated by Robson (2002). This was conducted through clear communication of the study's purpose, obtaining informed consent, and active listening. Expressing gratitude for participants' contributions helped to enhance trust and foster fruitful collaborations.

After preliminary data analysis from in-depth interviews, a survey questionnaire was developed. The questionnaire was pre-tested, and refined for clarity and relevance to a sample of 20 respondents in Dar es Salaam Region. Feedback from the pilot study helped to enhance clarity and remove vagueness of the questions. Thereafter, the questionnaire was administered to 350 female food vendors in Dar es Salaam, Mbeya, Arusha, Dodoma, and Mwanza Regions. A sample size of 350 participants was determined using Krejcie and Morgan's formula (Bukhari, 2021). Quantitative research requires a large sample to produce statistically precise quantitative estimates (Gentles *et al.*, 2015). The survey was conducted between November 2021- April 2022. A sampling frame constituted a complete list of eligible enterprises from different food vendor associations. Five years in business was used as a criterion to be shortlisted as it ensured that all surveyed food vendors had experience in the business before, during, and after the COVID-19 pandemic. Descriptive analysis and Paired Sample T-Tests were used to analyse quantitative data.

FINDINGS

Socio-Demographic Profile of the Surveyed Female Food Vendors (FFVs)

Respondents were asked to indicate their socio-demographic characteristics. Specifically, the characteristics were age, marital status, and education level, as indicated in Table 1. The findings revealed that most (36.5%) of female food vendors (FFVs) were married, 29.6% were single, 15.1% were separated from their spouses, and 8.6% were widows. The findings further signify that more than three-quarters (79.9%) of the respondents were in the 20-40 age bracket, followed by 11.2% aged between 41-50 years. Meanwhile, only 3.6% of the respondents were below 20 years old. In other words, many female food vendors (FFVs) were comprised of young adults and middle-aged females.

Table 1: Socio-Demographic Profile of the Surveyed Female Food Vendors (FFVs)

		Frequency(n=304)	Percent (%)
Marital Status	Single	90	29.6
	Married	111	36.5
	Separated	46	15.1
	Widow	26	8.6
	Cohabiting	31	10.2
Age	Below 20 years	11	3.6
	20-30 years	135	44.4
	31-40 years	108	35.5
	41-50 years	34	11.2
	51-60 years	10	3.3
	Above 60 years	6	2.0
Education	Not educated	18	5.9
	Primary education	53	17.4
	Vocational training	42	13.8
	Ordinary level	142	46.7
	Advanced level	15	4.9
	Diploma	21	6.9
	Bachelor degree	11	3.6
	Master (MA)	2	0.7

Source: Field data (2021)

Profile of a Food Vending Business (FVB)

To understand the characteristics of the food vending businesses, female food vendors (FFVs) were asked about their business age, source of startup capital, business status, and types of meals served. Their responses are presented in Table 2. The findings indicated that most food vending businesses (46.1%) began operations between 2 and 5 years. Slightly under a third of the businesses began 5-10 years earlier, while 5.3% started over 10 years ago, and 18.1% started below two years. The primary source of startup capital was personal savings, followed by accessing loans from SACCOS (28.6%). Food vending businesses (FVB) are characterized by informality as most businesses are not registered, and only 13.2% stated they were registered. It is also worth noting that 16.4% of the surveyed businesses did not indicate their business status. It is safe to presume that they were also not registered. According to De Soto (1989), most informal businesses do not formalize owing to high costs such as taxes, fees and other payments. This informal nature of the female food vending businesses made it hard to facilitate government intervention during the pandemic. The survey was also conducted in five cities in the country. A third (33.2%) of the food vending businesses were surveyed in Dar es Salaam, while the rest were almost evenly distributed in Mwanza (16.4%), Dodoma (16.4), Mbeya (16.8%) and Arusha (17.1%).

Table 2: Profile of a Food Vending Business

		Frequency(n=304)	Percent (%)
Business Age	Below 2 years	55	18.1
	2-5 years	140	46.1
	5-10 years	93	30.6
	Above 10 years	16	5.3
Source Startup Capital	Personal Finance	109	35.9
	Family inheritance	13	4.3
	Loans from relatives	37	12.2
	Loan from MFIs	28	9.2
	Loans from commercial banks	10	3.3
	Sponsor	20	6.6
	Loan from SACCOS	87	28.6
Business Status	Registered	40	13.2
	Not registered	214	70.4
Missing	90	50	16.4
Types of Meals	Breakfast	32	10.5
	Lunch	230	75.7
	Dinner	42	13.8
Business Location	Arusha	52	17.1
	Dar es Salaam	101	33.2
	Dodoma	50	16.4
	Mbeya	51	16.8
	Mwanza	50	16.4

Source: Field data (2021)

General Effects of COVID-19 on Female Food Vending Businesses

Female vendors were asked to express their agreement or disagreement on the effects that COVID-19 had on their business. The study revealed that respondents strongly agreed that a reduction in the number of customers (98.0%), increased running costs (92.4%), and increased costs of foodstuffs (86.5%) were the top three effects. While Tanzania imposed less strict COVID-19 containment measures, it still closed schools, colleges and universities, recreational facilities, transportation facilities, and shopping centres (Cities Alliance, 2020; WFP, 2020), albeit just for a while. While the Government lifted the ban after a couple of months, customers' apprehension towards accessing meals served by female food vendors (FFVs) in inherently congested areas and marketplaces continued unabated. The female food vendors also noted increased running costs as they were forced to boil hand-washing water and buy washing soaps, sanitizers, and masks to comply with the COVID-19 era protocols. The FFVs also noted that the reduction in the customers was attributed to customers fearing contracting Coronavirus from the vendors (67.4%) and fear of infections amongst customers (78.3%). These findings are corroborated by the findings of (Mburu, 2020), who found out that the risk of infection is high among people who live in congested areas, shared amenities, and are practically unable to practice social distancing. Respondents' responses regarding the effects of COVID-19 on family relationships were evenly poised at 39.5% for those who strongly agreed and 38.2% for those who strongly disagreed.

Table 3: Effects of COVID-19 on Female Food Vending Businesses

No.	Negative effects	A	NAND	D	Mean	SD
i.	Reducing the number of customers	98%	2%	0%	1.02	0.139
ii.	Stigma from customers	67.4%	23.4%	9.2%	1.42	0.655
iii.	Fear of infection from customers	77.0%	16.4%	6.6%	1.30	0.584
iv.	Fear among customers	78.3%	15.5%	6.3%	1.28	0.572
v.	Difficulties in loan repayment	73.7%	14.8%	11.5%	1.38	0.683
vi.	Customers' Inability to pay	57.2%	24.3%	18.4%	1.61	0.780
vii.	Increased running costs	92.4%	6.3%	1.3%	1.09	0.328
viii.	Family discords	39.5%	22.4%	38.2%	1.99	0.882
ix.	Increased costs of foodstuffs	86.5%	7.9%	5.6%	1.19	0.517
x	Lack of socialization between neighbors	77.0%	11.5%	11.5%	1.35	0.677

Source: Field data (2021)

Specific Effects of COVID-19 on Female Food Vendors' Business Performance

The study's first objective was to assess the impact of Covid 19 on female food vendors' business performance. Four indicators of business performance, which are the number of employees, average sales per day, average profit per day, and daily working capital, were considered for the analysis. In this case, a paired sample t-test was used to analyse. Table 4 shows descriptive statistics for the four indicators. As indicated in Table 1, it was established that there was a decrease in the number of employees from before (M = 3.55; SD = 3.534) to (M = 2.38; SD = 2.706) during Covid-19.

On the other hand, the daily average sales of the business (in Tanzania Shillings) before (M = 119539.74, SD = 179664.143) to during (M = 87283.11, SD = 125599.465). Concerning average profit per day before and during COVID-19, there was an average of 60984.44, a standard deviation of 73006.752, an average of 43048.68, and a standard deviation of 53570.98, respectively. The findings on daily working capital before and after COVID-19 showed that there was a decrease in the working capital before (M = 186103.33, SD = 218683.548) to (M = 133681, SD = 170384.607) after. The overall results indicated a change in the assessed indicators of business performance. In this case, there is a decrease in all these variables during COVID-19.

Table 4: Paired Samples Statistics

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Number of employees before Corona	3.55	304	3.534	0.203
	Number of employees during Corona	2.38	304	2.706	0.155
Pair 2	Daily average sales before Corona	119539.74	302	179664.143	10338.51
	Daily average sales during Corona	87283.11	302	125599.465	7227.437
Pair 3	Average profit per day before Corona	60984.44	302	73006.752	4201.066
	Average profit per day during Corona	43048.68	302	53570.98	3082.663
Pair 4	Daily working capital before Corona	186103.33	300	218683.548	12625.701
	Daily working capital during Corona	133681	300	170384.607	9837.16

Source: Field data (2021)

The testing results presented in Table 5 indicate that all indicators assessed were significant at a 5% significance level. The results on the number of employees showed that the p-value is 0.000, which is less than the 0.05 cut-off point. The mean decrease in the number of employees was 1.174 with a 95% confidence interval. These results are statistically significant, and it can be concluded that there was a significant difference in the number of employees before and during the COVID-19 pandemic. Because the mean value during the COVID-19 pandemic is less than the mean value before the COVID-19 pandemic, it is clear that the COVID-19 pandemic had reduced the number of employees among female food vendors. The results on daily average sales before and during the COVID-19 pandemic were also significant, with P = 0.000, which is less than 0.05(two-tailed). The mean decrease in the daily average sales was 32256.623, with a 95% confidence interval ranging from 22055.044 to 42458.201. In this case, the mean value during the COVID-19 pandemic was less than the mean value before the COVID-19 pandemic; it is clear that there was a decline in daily average sales due to the COVID-19 pandemic.

Furthermore, the average profit per day was assessed, and the results showed that there was a mean decrease in the average profit per day, which was Tanzanian shillings 17935.762 with a 95% confidence interval ranging from 14589.978 to 21281.545. These results are significant, with P = 0.000, less than 0.05(two-tailed). The last item examined was the daily working capital. As indicated in Table 5, the results on working capital per day show that the p-value is 0.000, less than the 0.05 cut-off point. The mean decrease in the working capital was 52422.333 with a 95% confidence interval. These results are statistically significant, and it can be concluded that there is a significant difference of 52422.333 before and during the COVID-19 pandemic.

Table 5: Paired Sample t-Test

		Paired Differences					t	df	Sig.
		Mean	Std. Dev.	Std. Error Mean	95% CI of the Difference Lower	95% CI of the Difference Upper			
Pair 1	Number of employees before CORONA Number of employees during CORONA	1.174	1.548	0.089	1	1.349	13.23	303	.000
Pair 2	Daily average sales before Corona Daily average sales during the Corona	32256.62	90089.255	5184.054	22055.044	42458.201	6.222	301	.000
Pair 3	Average profit per day before Corona Average profit per day during Corona	17935.76	29546.323	1700.2	14589.978	21281.545	10.549	301	.000
Pair 4	Daily working capital before Corona Daily working capital during Corona	52422.33	114753.32	6625.286	39384.236	65460.43	7.912	299	.000

Source: Field data (2023)

Further assessment of the impact of COVID-19 on female food vendors' business performance was done by assessing whether they closed their businesses. Results, as indicated in Table 6, indicated that 66.1% of the respondents closed their businesses during COVID-19, while 33.9% did not close their businesses. The percentage of female food vendors who closed their businesses indicates that the pandemic hurted the overall performance of female food vendors.

Table 6: Impact on Closing Businesses During CORONA

Responses	Frequency	Per cent
Yes	201	66.1
No	103	33.9
Total	**304**	**100.0**

Source: Field data (2021)

Food Vendors Coping Strategies During Covid-19 Epidemic

Generally, the findings showed that the surveyed and interviewed respondents agreed that at least they adopted some coping strategies during COVID-19. These strategies differed from one respondent to another. However, most (90.1%) of the respondents agreed to COVID-19 protocols. In line with this finding, it was also revealed during the interviews that local government authorities emphasized that food vendors comply with COVID-19 guidelines during COVID-19. This was observed when visiting three Buguruni, Magomeni, and Dodoma food parlors stand.

> *"…I remember we were told that for us to continue operating the business we are supposed to wear masks, wash hands with soap and maintain environment sanitation. …" (A FFV at Buguruni, Ilala, Dar es Salaam)*

The results also indicated that 78% of the respondents had reduced the working capital or funds in circulation. The interviewees disclosed that they were not sure of the future of the business; hence, there was no likelihood of continuing to invest in the business.
She said,

> *"…it is much better you spend your savings on your family rather than continuing to invest in the business because it is not predictable you invest TZS 34,000 at the end of the end, you get 21,000 while there is food left and you have not paid the wages for the workers…."*

Other strategies included reducing the daily allowances to laborers and reducing their number. During the interviews, the number of laborers was reduced from three to one, whereas some were reduced from two, leaving the owner operating alone. Other respondents (68.8%) indicated that they reduced some food items on their menu list. The interviews showed that they reduced expensive items like chicken or fish and remained with basic foodstuffs like rice, beans, and beef. Others indicated that they could only focus on selling tea and could not sell lunch as there were no customers.

Furthermore, the findings revealed that 64.1% closed the business, and 65.5% adopted a proactive selling strategy. Instead of waiting for the customers to come to their premises, they delivered meals to customers' offices and working places. Because customers were very few during the pandemic due to restrictions of movements and crowding at eating places, strategic food vendors had to walk around the workplaces to generate orders and deliver. During the interview, some participants stated;

> *'…….. we are two attendants and customers are nowhere to be seen, and some are avoiding crowds …. Remember, at the end of the day, we are supposed to pay allowances. What do you do... Just follow where they are in their workplace….''* (FFV at Dodoma Stand, Dodoma Municipal, May 2021).

On the welfare side, there were very few coping strategies, specifically regarding reducing food items at home. Only 39.1% of the surveyed respondents indicated that they reduced food items at home during the COVID-19 pandemic. During the interview, the participants indicated that home was given priority number one; therefore, if food remained unconsumed during business hours, it was taken at home for family consumption. Others indicated that it was better for them to close the business rather than for their families' missing meals.

Table 6: Food Vendors Coping Strategies during the Covid-19 Epidemic

No.	Coping Strategy	A	NAND	D	Mean	SD
i	Borrowing from financial institutions	63.2%	12.9%	23.8%	1.60	0.847
ii	Credit purchase of foodstuffs	33.6%	35.9%	30.6%	1.97	0.802
iii	Reduction in assistants' daily allowances	73.4%	12.2%	14.5%	1.41	0.730
iv	Reduction in the number of assistants	73.4%	9.9%	16.8%	1.43	0.764
v	Reduction of the working capital	78.0%	13.2%	8.9%	1.31	0.627
vi	Closure of the food vending business (FVB)	64.1%	17.8%	18.1%	1.54	0.782
vii	Start other businesses to supplement incomes	48.0%	18.1%	33.9%	1.86	0.895
viii	Reducing food items sold	68.8%	21.7%	9.5%	1.41	0.659
ix	Reducing some food items at home	39.1%	26.3%	34.5%	1.95	0.859
x	Direct delivery of meals to customers	`65.5%`	20.4%	14.1%	1.49	0.731
xi	Adhere to all COVID protocols	90.1%	7.9%	2.0%	1.12	0.380

Source: Field data (2021)

DISCUSSION

This study was conducted to provide empirical evidence about empowerment setbacks and coping strategies in the COVID-19 crisis of female food vendors in Tanzania. The pandemic exacerbated empowerment challenges for women who are in historically disadvantaged positions, particularly in developing countries like Tanzania. Women, who already faced systemic disadvantages, experienced further setbacks in their efforts to make ends meet. The additional hurdles imposed by the pandemic deepened existing inequalities, highlighting the urgent need for targeted interventions and policy measures.

The findings concluded that the female food vendors' businesses faced declining average sales, profits, and working capital. These findings are similar to findings by Apedo-Amah et al (2020) and Al-Awadhi et al. (2020) who also found widespread and negative impact of the covid-19 on sales revenues. Furthermore, the FFV terminated contracts with some of their assistants owing to declining customers and increased running costs. This situation was equally reported by Beland et al. (2020) who found out that COVID-19 increased the unemployment rate and resulted into employers reduction in working hours owing to declining businesses. The increase in running costs was due to rising prices of foodstuffs and the implementation of COVID-19 protocols to make their workplaces safe. These measures included buying toilet soaps, sanitizers, face masks, and boiling hand-washing water. It is invariably known that reducing costs increases business profits when prices and ultimate sales remain constant.

As mentioned in other sources, Mbunge et al. (2020) emphasized the importance of social distancing and self-isolation in mitigating the spread of COVID-19 in Africa. Making appropriate social distancing arrangements for customers visiting the female food vendors' businesses had an intention of attracting customers. However, self-imposed lockdowns affected business because some customers were not interested in visiting crowded markets anymore as they feared contracting the virus. To make sure that they can put meals on the table, female food vendors had to devise various strategies.

This study found the top five coping strategies during the COVID-19 epidemic to circumnavigate their challenges. While these strategies came with unintended consequences of increased costs, FFVs had no options but to adopt them. First, there were deliberate efforts to adhere to most Covid-19 protocols. As per the findings of Zeb and colleagues (2021), street food vendors must diligently adhere to appropriate sanitization practices to instill trust and confidence in their customers. Widespread news of the deaths reported across the globe necessitated or forced vendors to spare nothing to protect their customers if they were to survive amidst the scathing financial challenges that they faced. The second strategy was a reduction of the working capital. The strategy was so adopted because of declining daily sales and a reduction in the number of food items they could and were willing to sell to the customers. The working capital was reduced to offset what Munishi, Kirumirah, and Lwoga (2021) noted as a significant loss resulting from the rotting of perishable goods. To that end, they reduced the amount of stock they purchased. The third strategy was the reduction in the number of assistants that they were helping in delivering services to customers. In some instances, it was noted that the assistants were willing to continue to work despite the declining business and accepted fewer daily subsistence allowances (DSAs).

Examining the three main components of institutional theory—regulative, normative, and cognitive—in the context of female food vendors operating in Tanzania during the COVID-19 pandemic reveals significant challenges and opportunities. The first two aspects of the theory were deemed more relevant in discussing the findings. According to the institutional theory, female food vendors in Tanzania faced challenges due to enforcing lockdowns and social distancing measures as regulatory responses to the pandemic. These measures limited their ability to conduct business as usual, impacting their income and livelihoods. Compliance with these regulations became a crucial aspect of their operations, posing constraints and opportunities for adaptation. Likewise, Female food vendors operated within normative structures that traditionally defined gender roles in Tanzania. The pandemic disrupted these norms as women faced increased responsibilities as breadwinners and caregivers in the context of economic and social uncertainties. Norms around the role of women in business and society underwent shifts, challenging existing expectations.

Policy implications

The study suggests several policy implications that could address the identified challenges. The line ministry handling women's welfare could enact policies on support programs developed for female food vendors, acknowledging specific difficulties they face during such calamities. This might include financial assistance, access to healthcare resources, and training programs to enhance their resilience and basic understanding of psychologically preparing for such eventualities. In addition to targeted incentive packages, policymakers should implement policies addressing mental health challenges stemming from the pandemic. This can involve establishing and promoting mental health support initiatives, including counselling services, to assist individuals in coping with the unexpected consequences of the prolonged pandemic.

RECOMMENDATIONS

The findings revealed that female food vendors were resilient and adopted varied strategies to cope with their business and health challenges during COVID-19 to make ends meet. Women have demonstrated during the pandemic that they are a force to reckon with. After a review of the literature, drawing from the findings of this study, researchers are making a couple of recommendations.

During pandemics or other similar occurrences like COVID-19 that disrupt female food vending businesses, it is highly recommended that the government, through the Prime Minister's Office – Labor, Youth, Employment and Persons with Disabilities. should collaborate with other stakeholders such as the National Economic Empowerment Council and commercial banks and extend social and economic stimulus packages to the most affected members of society. This is important because owing to female food vendors' informality nature, they are often not paid adequate attention despite being the unsung breadwinners of most households in urban areas. However, any government intervention to support female food vendors must be de-linked from registration requirements, as very few vendors are registered. The suggestion is made as Tanzania is one of the fourteen African countries that have not introduced social safety measures (IGC, 2020). Instead, the government implemented several fiscal and monetary policy measures that prevented the economy from plunging into recession during the 2020 and 2021 pandemic periods (World Bank, 2021). This study found that over 52% of these females were either single mothers, separated from their spouses, or widowed.

While the study has found out that the FFVs adhered to most of the COVID-19 protocols, researchers opine that the adherence was at extra costs to the vendors who were already affected socially, economically, and psychologically. Lockdowns and implementation of social distancing intensified isolation, altering family dynamics and causing anxiety for working members—families mourning loved ones faced further challenges without usual support. Widespread job loss and income insecurity created financial strain, leading to unspoken discord among spouses where husbands spent most of their time at home while wives worked to earn a living. The surge in stress, anxiety, and grief, along with disruptions to children's education, has exacerbated a mental health crisis. These challenges highlight the necessity for a comprehensive support measures for families enduring the pandemic's impacts. Thus, researchers recommend that the local government authorities, in collaboration with other health stakeholders, ensure affordable access to Personal Protective Equipment (PPE) to the vendors. This recommendation is made against the backdrop that COVID-19 protocols should help informal food traders instead of persecuting them (Resnick, 2020).

Fear of contracting the Coronavirus and having no reliable and affordable access to health services was quite traumatizing to the female food vendors. Thus, the researchers recommend that the government enact a universal health insurance scheme regulation as a matter of urgency. Munishi *et al*. (2021) note that most street vendors lack access to health insurance. The enactment will ensure that the once-excluded groups from health insurance schemes are adequately covered and receive the pertinent coverage. A combination of these recommendations to the government and, ultimately, the female food vendors (FFVs) themselves must be well integrated to address pandemic issues positively.

SUGGESTIONS FOR FURTHER STUDIES

Researchers recommend further exploration of the perceived long-term effects of COVID-19 beyond the end of the pandemic. Specifically, extending the study to include insights from male food vendors and stay-at-home male spouses would provide valuable observations, enhancing our understanding of their unique challenges.

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College Managerial Practices for Promoting English Language Teaching and Learning in Tanzania: A Case Study of Grade 'A' Public Teachers' Training Colleges

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Abstract
This study examined the college management practices for promoting English language teaching and learning in public teachers' colleges using a case of Grade 'A' central zone training institutions. The objective of the study was to identify college management practices for promoting English language teaching and learning. The qualitative study employed a case study design, and interviews and focus group discussions to generate data from 20 conveniently and purposively sampled respondents comprising English language teachers, academic deans, principals and students. The study found out that teachers' training colleges used performance rewards, close monitoring and evaluation of teachers, debating and other English clubs, staff professional development, and providing supportive teaching and learning environment to enhance English language teaching and learning. Additionally, the teachers' college management need regular monitoring to ensure that English language promotion plans it was are properly executed instead of remaining only good on paper.

Keywords: *Teachers' colleges, management practices, English language teaching, promoting teaching and learning, Grade 'A' Public Teachers'*

INTRODUCTION

Management practices are a central to the success of any academic institution. Anjomsoa and Sadigh (2015) contend that properly led and organised schools and colleges become effective and successful partly because their heads and senior staff have learned management systematically. After all, their acquired management practices determine how such institutions plan, organise, and control resources (Keenja, Mwonge, & Naho, 2021). In fact, the more the college management engages in best practices, the higher the likelihood of the college's success. Such practices can also let people own the vision and mission of their respective school, lead by example and offer opportunities for both informal and formal professional development, motivate staff, create a collaborative collegial culture, and create stability while focusing less on supervisory activities.

Similarly, effective teaching of the English language in Tanzania, remains a source of grave concern in basic primary and secondary education (Elibariki, 2017) requires such a supportive environment. In Tanzania, English is the medium of instruction from secondary education to higher education levels and is concurrently used with Kiswahili as the official language, with learners required learn the language effectively (Byabato & Onyango, 2022). Failure to develop a good command of the English language among learners in primary education could derail their effective participation in democratic activities such as education higher levels and business. However, improving English language teaching in primary and secondary education require teacher-trainees to have English proficiency themselves since they cannot go on and teacher the language for which they lack ample aptitude. As such, teacher training colleges (TCCs) have the onus of executing relevant college management practices aimed to boost English language teaching and learning in their respective colleges to produce competent teachers for pre-primary, primary and secondary schools.

In this regard, the theories of language learning teach us that, students learn better when they receive appropriate support from their teachers (Keenja, Mwonge, & Naho, 2021). Impliedly, when teacher-students develop a good command of the English language from their respective teacher training colleges (TTCs), they can support their students to develop English language skills. Arguably, one cannot overlook the potential of college management practice to foster English teaching and learning in TTCs. For better outcomes, the nature of college management practice must align with curriculum objectives and intention coupled with proper translation of course of study into syllabuses, schemes of work and lessons. Byabato and Onyango (2022) further underscore the value of school principals in contributing significantly to the success of their respective institutions.

Realising the importance of English language, the Tanzania Government has since instituted several initiatives aimed to promote its performance in teachers' training colleges (Vuzo, 2019). In 2012, the Tanzania Government through the then Ministry of Education and Vocational Training, now the Ministry of Education, Science and Technology, in collaboration with the British Council, launched a four-year Education Development and Quality Improvement Project for English Language Teacher Training in Tanzania (EQUIP T-ELT) intervention aimed to address the problem of English language in teachers' training colleges, secondary and primary schools. Moreover, the project aimed to provide a framework for college management teams to support the tutors' professional development and their role to support trainee-teachers. Specifically, the project sought to enhance capacity in teacher training colleges to deliver quality teaching and, finally, having increased awareness of policy and practice on teaching through the medium of English (Byabato & Onyango, 2022).

The Government initiatives aimed to promote English language performance in teachers' colleges in Tanzania notwithstanding, trainee-teachers have been performing poorly in the English language for about three consecutive years compared to other subjects (URT, 2020). The National Examination Council of Tanzania (NECTA) reported poor performance for the majority of trainee-teachers in their English final examinations for three consecutive years—2019, 2020 and 2021 (URT,2022). Yet, little is known about the role of college management in solving this seemingly intractable problem. This situation may hamper any efforts to improve the performance of trainee-teachers in the English language, which eventually could limit the improvement of English language learning in Tanzania's primary schools where these trainee-teachers would end up teaching. As a result, the current study intended to examine college management practices for promoting English language teaching and learning in TTCs to inform future practices and policies on the best practices capable of promoting English language teaching and learning in teachers' training colleges.

LITERATURE REVIEW ON MANAGEMENT PRACTICES

Management practices usually refer to the working methods and innovations that managers deploy to improve the effectiveness of work systems. Common management practices include; empowering staff, training staff, introducing schemes for improving quality, and introducing various forms of new technology. In the context of this study, management practices refer to mean all the strategies and initiatives a college management applies to foster English language teaching and learning.

On the other hand, teaching refers to the interaction between teacher and students. They participate in this interaction for mutual benefits. Both camps have their own objective and target driving them to participate in this transaction. Such interaction is also dependent on the applicable general principles, pedagogy and management strategies for classroom instruction. In this regard, the choice of teaching method relies on what fits the teacher, educational philosophy, classroom demographic, subject areas and mission statement by the education institution.

In similar vein, learning has to do with educational psychologists in different ways and meanings. This quantitative increase in knowledge also entails memorizing of facts, acquisition of skills, and application methods retained as necessary. Moreover, such learning entails abstracting meaning, relating parts of the subject matter to each other and to the real world, interpreting and understanding reality and comprehending the world by reinterpreting knowledge (Driscoll, 2000). In short, learning is a process of acquiring new understanding of English.

Theoretical Framework: The Instructional Leadership (IL) Theory

The instructional leadership (IL) theory developed by Hallinger and Murphy (1985) informed the study. Initially known as Instructional Management (IM), the term 'management' became superseded by 'leadership' to reinforce the sense of democratic management in school since the term management collocates more with a sense of authority, hence the emergence of IL (Hallinger & Wang, 2015). Townsend (2019) define such instructional leadership as principals' behaviours aimed to promote and improve the teaching and learning process in education settings involving teachers, students, parents, school planning, school management, school facilities and resources. Based on this model there are three dimensions in instructional leadership activities, namely determining school missions, managing instructional programmes and creating an amenable school learning environment. Furthermore, the IL theory assumes that the success of teaching and learning in any academic institution depends on what the principals and their assistants do to motivate tutors and creating good environment for both teaching and learning (Scott, 2017). In addition, the management team ought to formulate relevant strategies aimed to improve the teaching and learning process. Based on the tenet of this theory, one can question the managerial practices in a context where English language teaching and learning outcomes are dissatisfactory. Consequently, the present study examined the college management practices for promoting English language teaching and learning in teachers' colleges.

The practice of instructional leadership by principals is necessary to influence teachers` behaviour in improving the quality of teaching and learning in addition to implementing effective academic management for the teachers to teach effectively (Alimuddin, 2010). In this regard, the instructional leadership theory applies when the principles checking the teachers' records to monitor their progress and the staff's participation in college extra-curricular activities, checking of teachers' lesson notes to assist in improvement and checking of staff attendance to ensure regular instructional delivery even when teachers disagreed with the principals' application of some supervision practices (Hayat, 2015). Going on in the classroom facilitates instructional leadership and aids the development of staff capacity by bolstering their strengths while minimizing their limitations finally, it ensures critical execution of instruction policies is critical and makes the most of existing resources are helpful Horng & Loeb, 2010). Despite the apparent strength of the theory, Scott (2017) notes some shortcomings since instructional leaders have a lot of work to do coupled with a scarcity of educational resources and insufficient time to execute instructional tasks. Moreover, the operation of instructional activities is inconsistent, and the instructional leader may lack the guts and commitment to undertake instructional tasks, and teaching resources might be too insufficient to make a difference. Still, the theory suffices in explicating the practice of instructional leadership by principals in the context of Tanzania's TTCs' and the teaching and learning of the English language.

College Management Practices

On the other hand, even though college management is not popular terminology in literature, it remains crucial is fostering the performance and efficiency of such institutions. Its lack of popularity can be accounted for by two main reasons: first, there is a tendency to avoid the term management because it leaned towards an authoritative leadership style (Hallinger & Wang, 2015; Townsend, 2019); and, second, the educational and school leaderships have served as general terms for managing academic institutions (Sindhu, 2012). As such, college management refers to educational management at this institutional level. On the other hand, managerial practices refer to all the things that educational managers undertake in various educational levels aimed to execute their duties to achieve educational goals (Hallinger & Wang, 2015; Townsend, 2019).

Managerial Practices Contributory to Effective Teaching and Learning

Studies show that managerial practices vary in their contribution to the quality of teaching and learning depending on the managerial style. Allensworth and Hart (2018) have found out that planning and allocation of duties worked effectively in schools whose principals supported teachers after the allocation of duties and those who monitored the implementation of school planning. Likewise, Akyeampong et al. (2013) report that principals of TTCs in Senegal, Ghana, Kenya, and Tanzania monitored teaching without updating tutors on the changes in the elementary curriculum that trainee-teachers would, subsequently, implement. As a result, the trainee teachers courted and flirted with incompetence. Such findings re-affirm the significance of determining whether principals implemented particular practices to promote teaching or not.

The degree of relevance of managerial practices to teaching and learning is another way of promoting teaching and learning. Bellibas (2015) found out that controlling absenteeism in Turkey's middle schools was the most influential teaching and learning practice. Meanwhile, the class visit emerged as the least influential to teaching and learning because teachers perceived the practice as an intrusion into their privacy. Similarly, Yunas et al. (2021) found out that, despite the principals' efforts to supervise teachers' duties in Pakistani secondary schools, their efforts hardly promoted teaching and learning because they focused only on the teachers' duties rather than on the students' duties. However, the study had focused on Pakistani secondary schools whose operational context differs significantly from the one obtained in Tanzania's TTCs.

In the Tanzanian context, studies on the teaching and learning of the English language are not unusual. However, based on the literature reviewed, no single study had focused on the college management practices for English language teaching and learning in teacher training colleges. Studies focusing on the teaching and learning English language in the context of Tanzania tended to concentrate on secondary and primary schools (Wilson &Komba, 2012; Makewa et al., 2013; Komba& John, 2015; Elibariki, 2017; Anatory, 2018; Byabato & Onyango, 2022). Only Akyeampong et al. (2013) and Ndege (2018) focused on general English language teaching and learning in TTCs. Even then, these limited studies did not specifically investigate English language teaching and learning under college management practices. To fill this gap, the current study examined the college managerial practices for promoting English language teaching and learning in teacher training colleges.

METHODS

This qualitative study employed a case study design. The qualitative research focused on individuals' experiences from various practices in their actual settings to examine college management practices for promoting English language teaching in Tanzania's Government teachers' colleges. Also, the case study design concentrated on the selected study area to generate in-depth data on the role of college principals and tutors in promoting English language teaching and learning in teachers' training colleges (Wiebe, Durepos, & Mills, 2010).

The study was conducted in public teachers' training colleges located in central Tanzania. The prioritisation of these colleges was based on their being among Tanzania's TTCs whose national examination results in the English subject have been abysmal for three consecutive years (NECTA, 2019, 2020, 2021). Thus, examining the college management practices could illuminate on the factors behind such dissatisfactory performance of their students in the NECTA English subject examinations. The sample of 20 respondents comprised of two college principals, two academic deans, four English Language teachers and 12 trainee teachers. The study used purposive sampling to draw college principles and academic deans by virtue of their strategic placement within the college system and convenience sampling trainee-teachers based on their ready availability.

The study administered semi-structured interviews with college principals and academic deans whereas trainee-teachers participated in Focus Group Discussions (FGD). Each FGD lasted for about 75 minutes before reaching a data saturation point. These discussions were recorded using digital recorders undertaken with the participants' prior consent. Also, notes were also taken during FGDs for back-up purposes. Interviews were more convenient to college principals and academic deans because of their constrained time schedules and need to dig deep through value-adding discussions. Finally, the data generated were subjected to thematic analysis with the findings presented in narrative form supposed by verbatim evidential accounts extracted based on respective research questions.

RESULTS AND DISCUSSION

In response to the research question, what were the most prevalent CMPs for promoting English language teaching and learning in TCs? The study was able to establish the extent to which college management had strived to improve their English language performance. The responses to the research question can be clustered under five themes—performance rewards, Teachers' close monitoring and evaluation, debating and English clubs, Staff professional development, and Supportive teaching and learning environment—delineated as follows:

Performance Rewards

Interviews held with two (2) college principals and four (4) tutors and FGDs with 12 trainee-teachers revealed positive and strong learning motivation to be essential in achieving proficiency in English as a second and official language in Tanzania. All the participants shared similar views about the college management being in front line to ensure that teacher-trainees and their tutors were motivated enough to achieve better results in the English subject. In this regard, a college principal said:

> *I normally motivate my tutors who perform well in the English subject by eliminating the 'F' grade in the national examinations. I have provided some gifts to my tutors of which I think will be a starting point to boost their efforts aimed to perform much better in next national examinations* (Interview with principal, College A: 18th August, 2022).

These findings are supported by one English tutor who said that rewards to teachers had the desired effect of boosting morale for college tutors to work hard in helping their students. In this regard, a tutor, who is also an English language teacher, said during an interview:

> *"I think of rewards as something motivating as someone to increasing more efforts expecting that his or her efforts will lead to recognition. The management has established rewards to improve English language performance as the situation is worse"* (Interview with tutor, College B: 12th August, 2022).

Additionally, the results showed that the trainee-teachers also needed such motivation for them to acquire competence in English. In consequence, the college management had initiated steps aimed to reward trainee-teachers who perform better in the English subject, especially in the annual and inter-collegiate examinations. Such initiatives prompted the trainee-teachers to struggle day and night to acquire the required competence in English and reap the rewards on offer, whether monetary or non-monetary. As one college academic dean explained:

> *Learners need to be motivated since they learn English as a second language. Yes, they have prior knowledge but the management has some initiatives aimed to reward outstanding performers in the English subject in the internal and external examinations. As a part of management, we agreed that those who score an 'A' and 'B'' will be rewarded in front of their colleagues. We believe rewards can boost competition, thus leading to better performances in the English subject* (Interview with academic dean, College A: 18th August, 2022).

The overall findings suggest that motivation for both tutors and trainee-teachers played substantial roles in the teaching and learning English language in TTCs under review because motivation positively triggers human behaviours. These findings are supported by Gleason (2000) who found that employee performance depended on factors such as pay for performance and employee recognition. After all, a motivated employee tends to be responsive to the definite set goals and objectives; thus, they direct their efforts in that direction. In other words, good performances in the English subject translates into teachers' rewards as agreed upon by the college management.

Teachers' Close Monitoring and Evaluation

The results from interviews held with two (2) college principals and four (4) tutors revealed that effective tutors' daily monitoring and evaluation improves the quality of teaching and learning of the English language. Through interviews, it emerged that college management ensured that tutors' documents such as; lesson preparations, schemes of work, log books, and teaching aids were at the disposal of tutors whenever they entered the class:

> *As a college principal, I do monitor and evaluate the tutors' preparations before entering the classes. They should have signed schemes of work, lesson notes, lesson plans and log books. These documents tell us that a teacher is well-prepared to deliver what is supposed to deliver in the classroom* (Interview with principal, College A: 18th August, 2022*).*

This college principal's views collaborate with one of the tutors' views who concurred that the college management has been making regular follow-ups on the teachers' preparations by ensuring that the required teaching and learning documents are well-prepared. These responsibilities are delegated to academic deans, as the following tutor illustrates:

> *Our college academic dean is assigned the role of ensuring that we have all necessary documents required for effective teaching and learning. As an English language tutor, I am always required to submit my lesson plan every Friday to the academic dean's office so that it can be checked and signed. This keeps me prepared all the time* (Interview with English Tutor, College B: 2th August, 2022).

Furthermore, the results indicated that to ensure that trainee-teachers perform in the English language subject; timely completion of syllabus becomes a critical concern. The completion of the teaching syllabus for English subject in each academic year serves as a foundation for better performance. A backlog of content not taught could affect the performance of the trainee-teachers. In other words, the incompletion of the syllabus in a given year could lead to the poor academic performance of the trainee-teachers in their final examination. In this regard, a college principal said:

> *"The overall function of management is to ensure that syllabus coverage as per the college calendar. We insist on this aspect and we are serious on this. We need to give a room for trainee-teachers to make more practices and, thus, be in a position to perform well in their final examinations"* (Interview with Principal, College B: 26th August, 2022).

Similarly, the college academic dean contended that there had been timely provision of the required resources such books, teachers' manuals, teaching aids among others so as to enhance syllabus coverage on time:

> *We have come into agreement with tutors that, all required teaching and learning resources to facilitate early coverage of syllabus are available on time. No complaints raised by the tutors with regard to inadequate of resources. We are playing our role so that English language syllabus is covered on time* (Interview with academic dean, College A: 18th August, 2022).

Implicitly, monitoring and evaluation of the tutors during an hour lesson is one of the most important works of the college principals. The college management by making monitoring and evaluation, they can recognise areas of strength and weaknesses that need improvements. To support these findings, the study complies with those of Day (2013) who found that monitoring and evaluation coupled with institutional educational goals fostered the acceptance of group goals and monitoring the implementation for academic achievement in educational institutions. In the current study, monitoring of teaching and learning role the college principals and academic deans performed aimed to check and sign the lesson plans, scheme of work, and observe classrooms teaching and learning activities to boost English language performance in teachers' training colleges. In this regard, Olaleye (2011) contends that effective monitoring by college principals in education institutions can translate into improved subject academic performance. Therefore, it should be part of the daily routine of college management to undertake regular monitoring and evaluation of teachers' works for necessary improvements to be made.

Debating and English clubs

Interview held with two (2) college principals and four (4) English tutors as well as FGDs conducted with six (6) students revealed that the English subject tutors used debates to assign trainee-teachers to affirmative, opposing and judging teams to help them to master the fundamental expressions pertaining to starting, intervening, and closing conversations or discussions. In this regard, one of the college tutors, who also happens to be English language tutor, said:

> *As one of extracurricular activities, trainee-teachers in our college are required to conduct debate twice per week. I prefer to create affirmative teams because they hep the trainee-teachers to improve their ability to question and respond, which helps to improve critical rebuttal solving skills. It also improves the logical speaking organisation of thoughts and coherence of ideas on starting, intervening and closing conversation or discussion to improve English language performance* (Interview with English tutor, College B: 26th August 2022).

Additionally, one of the college principals interviewed had similar views that debate was being encouraged to improve their language skills:

> *When debating is used in EFL classes, all four skills of English language [listening, speaking, reading, and writing] are practised. Moreover, debaters need to master pronunciation of words, stress, vocabulary, brainstorming, script writing, logic building, argumentation and refutation. So, practising debate in English requires many skills, which ultimately lead them to learn English. As a college we have selected two day in a month to be English debate days out of four* (Interview with Principal, College A: 18th August, 2022).

During FGDs with twelve (12) students, they responded that by engaging in debate and other English clubs prepared by English department teachers, they were in a position to cope with the use of English as a medium of instruction:

> *We normally engage in debate and other English clubs prepared by English language teachers in order to increase knowledge and understanding of the English concepts used in various context. However, some of us are very shy to use English as afraid to make mistakes* (FGDs with students, College B: 28th August, 2022).

Generally, the findings suggest that debating in English and English clubs can help to develop a wide range of language dimensions; it can help expand the trainee-teachers' vocabulary and foster fluency as it trains learners to speak in public, listen and understand the positions of other teams, as well as reformulating their own position-. Furthermore, debates can play an important role in enhancing language competence; in particular debate can be used to enhance a wide range of language skills. Debaters can develop writing skills since students have to take notes on what they are planning to say, organise the different parts, as well as focus on coherence, consistency and persuasion. They learned to write argumentative paragraphs and essays and make them controversial enough for arguments and counter-arguments. The college management practices can lead to big changes in teachers' training colleges.

In this regard, Dalton (2013) argued that debate serve as a teaching and learning strategy, with trainee-teachers reflect the use of academic language, particularly the vocabulary and language structures relevant to expressing the specific cognitive discourse functions linked to the debate topic. In fact, the lesson behind a debate in a foreign language may aim to develop a wide range of communicative functions relevant for reaching agreement in a team, connecting phrases, and sentences through logical connectors, supporting a point-of-view with evidence, expressing agreement or disagreeing, or showing interest and appreciation of a speech.

Staff Professional Development

This theme involved interviews with one (1) college principal and one (1) academic dean. The guiding question for this aspect was: What college management practices promote the English language teaching and learning? It emerged that, policy-makers or people with higher authorities in ministries or individual colleges provide their tutors with opportunities to participate in activities that could assist them to enhance their professional practice. Moreover, some tutors reported that they opted to advance their careers by undertaking various courses relating to their specialisation areas. In this regard, the management role aims to support them by giving them guidance on various courses to develop their careers. One college principal interviewed said:

> *Staff professional development is an integral part of worker's life. As a college principal, I do encourage my tutors to go for further studies in their area of specialization since things are daily changing which call upon the need for adaption of new knowledge. Sometimes, our tutors secure scholarships via our Ministry of Education. It is through these scholarships our language teachers get opportunity to develop their careers* (Interview with Principal, College B: 26thAugust, 2022).

Likewise, the results indicate that English language tutors have to attend at least one short course per year carried out by Ministry of Education. These courses aimed to build capacity-building among language tutors in language proficiency. Moreover, world tutors need to be innovative and adaptive. The tutors need the knowledge and skills to be flexible and reflective professionals capable of responding to the needs of 21st century trainee-teachers:

> *The college in collaboration with the Ministry of Education support teachers to conduct short training courses aiming at building capacity among tutors. English tutors cannot be exempted from these short courses. There will be a short course for all language tutors on pedagogical skills that will be held at*

> *Morogoro TC this year. All the language tutors are expected to attend* (Interview with academic dean, College B: 26thAugust, 2022).

Therefore, tutors' professional development programmes have been implemented by teachers' colleges as among of college management practices to improve English language performance. Such programs include capacity building short courses organised by college management in collaboration with the Ministry of Education, Science and Technology and in-service training programs where tutors opt to go for further studies in their specialisation areas supported by college management. These findings are supported by Allen et al. (2018) who believed that teachers' continuous professional development is highly relevant for both improving educational performance. Further professional development of English teachers required teachers to have knowledge and skills on implement curriculum-related learning materials and assessments. Cirocki and Farrel (2019) support the study findings on the importance of professional development. Their findings provided a composite picture of continued professional progress in the context under investigation. The study demonstrates that some professional development activities have a greater impact.

Along the same line, Cirocki and Farrel (2019) found out that English as a Foreign Language (EFL) teachers perceive professional development in five ways: School-based learning, an academic endeavour, a professional pursuit outside the school setting, a government plan, and self-directed learning. The study also found out that, even though teachers stated that they had adequate opportunities for professional development, not everyone uses them. The findings are supported also by Postholm (2012) who argued that courses and lectures, or 'times for telling', and teachers' development of a metacognitive attitude are decisive factors for teachers' learning within a constructivist frame of reference.

Supportive Teaching and Learning Environment

Two (2) college principals and two (2) English tutors were involved in an interview. On the other hand, six (6) students were involved in FGDs to generate information pertaining to this theme. The guiding question was: What are the college management practices for promoting English language teaching and learning? The results indicate that CM ensures that teaching and learning environment are supportive of the English language learners. All the students can learn in the presence of the appropriate supports. In this connection, a college principal said:

> *Realising the role of conducive teaching and learning environment for language learning, as a college principal I am to ensure that all required instructional resources such as text books and story books are available to facilitate teaching and learning. Though I cannot satisfy everything but I do the best. Some years back, the college had a language laboratory which in some circumstances was one of the instructional resources in facilitating English language lessons and mostly motivates learners in learning and like the subject* (Interview with Principal, College A: 18th August, 2022).

One of the trainee teachers said that during FGDs, the college did not previously have enough instructional resources to facilitate the teaching and learning of the English language which was the major cause of its poor performance. Currently, many English textbooks, reference books and storybooks were available to almost every learner:

> *We thank the college management for creating conducive teaching and learning environment by ensuring access of enough teaching and learning resources. We have enough English reference books in our library and e-library. I believe that in the next national exams, we will have good performance in English language subjects* (FGDs with students from College A: 18th August 2022).

Furthermore, the results indicated that, several efforts have been put forward to ensure that classes were conducive enough to support English language learning. The college principal ensured that there were enough classes equipped with enough desks and chairs so that learners can learn comfortably. In this regard, the college principal said:

> *We have enough classes to accommodate the number enrolled students. No overcrowded classrooms since we want learners to learn all subjects including English in a favourable environment. Our classrooms are well designed with enough space to formation of groups for discussion since learning English requires several practices* (Interview with Principal, College B: 26th August, 2022).

In a similar dimension, the English language tutors said that the learning process needs to occur in an environment allowing trainee-teachers can interact with each other especially during group discussions:

> *Teaching and learning need to take place in classes that will allow learners to interact with each other. The management has done a lot to locate students in classes that makes interaction during teaching and learning becomes easy. We have no overcrowded classes and we expect this situation to enhance academic performance in all subjects including English* (Interview with English College tutor: College A: 18th August, 2022).

Overall, the classroom environment seems to be an important motivating factor that facilitates teaching and learning process. Notably, the curriculum or college syllabus was being implemented mainly within the four walls of the classroom through professional tutors who happen to be the curriculum implementers. The findings implied that, the college management ensured that classrooms were available enough and well-ventilated to support the teaching and learning of English language through interaction and formation of groups. These findings are in align with Adesua (2014) who argued that academic excellence is the desire of every school owner (manager). The quality of teaching and learning that takes place in any establishment determines the level of academic excellence.

For effective teaching and learning process to occur within the school environment, there must be a provision for required learning aids such as conducive school physical environment, well painted classroom, adequate chairs, moderate distance from an industrial area to prevent unwanted noise and a well-experienced teacher to create a conducive learning environment (Adesua, 2014; Hindman & Stronge, 2013). Cayubit's (2022) study found out that the learning environment positively correlated with college students' academic motivation, the choice of learning strategies, and the level of student engagement.

CONCLUSION

Overall, poor performance in the English language subject among trainee teachers prompted several initiatives aimed to rescue the situation. To have good command of English language teaching and learning, the management closely monitored and evaluated tutors, and engaged trainee-teachers in debates and other English clubs in addition to introducing performance rewards and motivation for the tutors and trainee-teachers. Indeed, there were supporting staff professional development, creating conducive teaching and learning environments and ensuring timely access to teaching and learning materials. All these initiatives helped to create a conducive learning environment for the teaching and learning of English subjects to boost its performance. From recommendations, teachers' colleges need to exert many efforts aimed to train English language teachers in the teaching of English.

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