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EMPOWERING LIVELIHOODS THROUGH DIGITAL LITERACY: AN ASSESSMENT OF ANGEL OF HOPE FOUNDATION/ZIMBABWE OPEN UNIVERSITY BASIC COMPUTER LITERACY COURSE IN ZVISHAVANE, GOKWE SOUTH, AND GOKWE NORTH DISTRICTS IN THE MIDLANDS PROVINCE, ZIMBABWE.

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ABSTRACT

In this theoretical paper we carried out a study on empowering livelihoods through digital literacy through an assessment of Angel of Hope Foundation/Zimbabwe Open University Basic Computer Literacy Course in Zvishavane, Gokwe South, and Gokwe North districts in the Midlands Province, Zimbabwe. Angel of Hope Foundation has implemented a basic computer literacy course, but the effectiveness and impact of this intervention on the livelihoods of the participants remain to be comprehensively evaluated. In this paper we evaluated the extent to which Angel of Hope Foundation's basic computer literacy course had improved the digital literacy skills of the participants in Zvishavane, Gokwe South, and Gokwe North districts. The lack of digital literacy skills among the communities in the three districts has significantly hindered their ability to access information, engage in economic activities, and improve their overall quality of life. The paper is couched in the Digital Inclusion Framework and the Sustainable Livelihoods Approach. The study adopted a mixed method approach where in-depth interviews and questionnaires were administered to forty-five (45) people, thus fifteen (15) from each district. The study responded to the following three questions; to what extent has the Angel of Hope Foundation's basic computer literacy course improved the digital literacy skills of the participants, what were the challenges faced by the Angel of Hope Foundation's basic computer literacy course participants and how the challenges be mitigated to enable digital skills transfer to participants. The findings pointed out significant improvements in participants' digital capabilities that included teleconferencing, video conferencing on social media platforms, leading to increased job placements and establishment of small entrepreneurial businesses. The study emphasizes the importance of digital literacy and recommends the enhancement of ICT resources, development of training modules, and partnerships with businesses to create job opportunities for graduates and promote economic development in communities.

KEYWORDS: Computer, digital literacy, empowerment, assessment, livelihoods.

INTRODUCTION AND BACKGROUND

Various studies have been conducted on performance of Non-Governmental Organizations (NGOs), particularly regarding their effectiveness in addressing social issues and contributing to development. Putnam (2000) indicated that NGOs play a crucial role in delivering services, advocating for policy changes, and mobilizing communities among others. (Edwards & Hulme (1996) argued that if NGOs has the ability to operate flexibly and responsively allows, they address local needs effectively, often leading to innovative solutions tailored to specific contexts. The information age on which the world is now at requires people with digital literacy skills. Digital literacy refers to the ability to effectively utilize digital technologies for a variety of purposes, it has become a critical skill in the 21st century (Eshet-Alkalai, 2004). In a world increasingly driven by digital information and communication, the mastery of digital skills can open up new opportunities for economic and social empowerment, particularly for marginalized communities and as such governments need to be supported by NGOs (Khlaisang & Likhitdamrongkiat, 2015). Similarly, the International Telecommunication Union (ITU) defined digital literacy as the ability to use ICTs in ways that help individuals to achieve beneficial, high quality outcomes in everyday life for themselves and others that reduce potential harm associated with more negative aspects of digital engagement (ITU, 2018: 23).

In the United States digital literacy is mixed, with significant disparities across different demographic groups (Pew Research Center, 2021). As reported by Pew Research Center (2021), in 2021, around 93% of American adults used the internet, indicating a high overall digital adoption rate. However, the same study found that certain segments of the population, such as older adults, individuals with lower incomes and education levels, and those living in rural areas, were significantly less likely to have the necessary digital skills to effectively navigate the internet and use technology. A study by the National Telecommunications and Information Administration (NTIA, 2020), further revealed that the digital divide in the US was more pronounced along racial and socioeconomic lines, with Black and Hispanic households, as well as those with lower household incomes, being less likely to have access to home broadband or own a computer. To address these disparities, the US government has implemented initiatives like the Digital Equity Act and the Affordable Connectivity Program, aiming to improve digital access and skills development, but more work is needed to ensure digital literacy is truly universal across the country.

A study by Adedoyin and Soykan (2020) in Nigeria found that only about 35% of Nigerians had basic digital skills, such as the ability to use a computer, access the internet, and perform simple online tasks. The duo attributed this to factors like limited access to digital devices, poor internet infrastructure, and insufficient digital skills training, especially in rural and low-income areas. Additionally, a report by the National Bureau of Statistics (2019) revealed that the digital divide in Nigeria is more pronounced across socioeconomic lines, with higher-income and educated individuals demonstrating higher levels of digital literacy. To address these challenges, the Nigerian government has launched initiatives like the National Digital Economy Policy and Strategy to promote digital inclusion and skills development, but more investment and targeted interventions are still needed to improve digital literacy nationwide.

In the South African context, digital literacy is relatively low, with significant disparities across different socioeconomic and demographic groups. According to a study by the South African Institute of Race Relations (SAIRR, 2019), only about 54% of South African households had access to the internet in 2019, and many individuals lacked the necessary digital skills to effectively use online services and resources. A report by Statistics South Africa (2021) found that digital literacy was particularly low among the elderly, those living in rural areas, and individuals from lower-income households. To address these challenges, the South African government has implemented initiatives such as the National e-Skills Plan and the Digital Opportunity Programme, aimed at improving digital access and skills development. However, Botha *et al.* (2018) highlighted that there is need for a more comprehensive and targeted interventions to bridge the digital divide and ensure that all South Africans can fully participate in the digital economy.

In the Republic of Zimbabwe, access to digital technologies and formal computer education remains uneven, with rural and peri-urban areas often facing significant challenges in this regard (Musarurwa, 2011). As noted by

Mushunje (2020), the Zimbabwe government opened 146 Community Information Centres (CICs) as a way of trying to address the digital divide within the country. This was published in The Sunday Mail dated 5 January 2020 where Honourable Mr Jenfan Muswere, the Minister of Information and Communication Technology, Postal and Courier Services, was quoted saying ‘Knowledge in the use of ICTs is now a basic need and an essential skill for productivity’ (Sunday mail, 2020). The Midlands Province, which includes the districts of Zvishavane, Gokwe South, and Gokwe North, is one such region where digital literacy levels are relatively low compared to urban centers (Mpofu *et al.*, 2013). The Angel of Hope Foundation, a non-governmental organization in partnership with the Zimbabwe Open University’s Midlands Regional Campus operating in the Midlands Province, has recognized the importance of digital literacy and has offered a basic computer literacy course to community members in these three districts since 2020 (Angel of Hope Foundation, 2020). This course aims to equip participants with fundamental computing skills, such as basic software use, internet navigation, and digital communication, with the goal of enhancing their livelihood opportunities and overall well-being. The facilitators for the basic computer literacy course from ZOU Midlands Regional campus travelled to the three districts to offer training to participants on varied dates. Since basic computer literacy course requires practical aspect, the facilitators were moving around with set of computers to the districts where they were no such gadgets. As was noted by Angel of Hope Foundation report, the basic computer literacy course is a practical course aimed to empower local communities by providing them with the essential hands-on digital skills required to access information, enhance their economic activities, and improve their overall quality of life (Angel of Hope Foundation, 2021).

As elucidated by van Deursen & van Dijk (2010), digital literacy has been linked to numerous positive outcomes, including improved employment prospects, increased entrepreneurial activities, and enhanced access to information and services. However, the specific impact of the Angel of Hope Foundation's basic computer literacy course on the livelihoods of participants in the Midlands Province three districts remains largely unexplored. This study, therefore, seeks to assess the effectiveness of the Angel of Hope Foundation's basic computer literacy course in empowering the livelihoods of participants in the Zvishavane, Gokwe South, and Gokwe North districts. By examining the course's impact on participants' digital skills, employment opportunities, entrepreneurial activities, and overall well-being, the study aims to contribute to the understanding of the role of digital literacy in livelihood development within the Zimbabwean context.

In the modern digital age, digital literacy has become a critical skill necessary for active participation in economic, social, and civic life. However, many communities in developing countries like the Republic of Zimbabwe continue to face significant barriers in accessing digital technologies and acquiring the necessary skills to leverage them effectively (Chikonzo & Bothma, 2016). This digital divide not only limits economic opportunities but also hinders access to essential services, information, and means of communication (Mnkandla & Mpofu, 2016). The Midlands Province of the Republic of Zimbabwe, particularly the districts of Zvishavane, Gokwe South, and Gokwe North, are no exception to this challenge. These predominantly rural areas are characterized by high poverty levels, limited infrastructure, and low levels of digital literacy among the population (Republic of Zimbabwe National Statistics Agency, 2019). This lack of digital skills can severely constrain the livelihoods and economic prospects of individuals and communities in these districts.

According to the United Nations (2015), the importance of free basic computer competency training course initiative cannot be overstated, as it aligns with the Sustainable Development Goals (SDGs) set forth by the United Nations, particularly SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth)). By improving digital literacy, the Angel of Hope Foundation's program in partnership with ZOU Midlands Regional Campus has the potential to unlock new opportunities for socioeconomic development and contribute to the broader objectives of poverty alleviation and inclusive growth in Zvishavane, Gokwe South, and Gokwe North districts of Midlands province in the Republic of Zimbabwe.

While the above studies have made contribution to the performance on NGOs in improving the livelihoods on communities in other countries, none of the study has focused on empowering livelihoods through digital literacy, thus basic computer literacy training course in Zimbabwe. This study is unique in the sense that it argues for empowerment through digital literacy. In light of this, the aim of the study is to make an assessment to evaluate the

effectiveness of Angel of Hope Foundation's Basic Computer Literacy Course in enhancing digital skills and empowering livelihoods among participants in the three districts of Midlands Province,

STATEMENT

The Angel of Hope Foundation has implemented a basic computer literacy course, but the effectiveness and impact of this intervention on the livelihoods of the participants remain to be comprehensively evaluated. The lack of digital literacy skills among the residents of the Midlands Province districts of Zvishavane, Gokwe South, and Gokwe North in the Republic of Zimbabwe has significantly hindered their ability to access information, engage in economic activities, and improve their overall quality of life. This digital divide not only perpetuates the cycle of poverty but also limits the potential for socioeconomic development in these regions (Chikonzo & Bothma, 2016; Mnkandla & Mpofo, 2016).

RESEARCH QUESTIONS

1. To what extent had the Angel of Hope Foundation's basic computer literacy course improved the digital literacy skills of the participants?
2. What were the challenges faced by the Angel of Hope Foundation's basic computer literacy course participants?
3. Examine the strategies to mitigate the challenges to enable digital skills transfer to the Angel of Hope Foundation's basic computer literacy course participants?

THEORETICAL FRAMING.

The paper adopted the Digital Inclusion Framework (DIF) and the Sustainable Livelihoods Approach (SLA).

Digital Inclusion Framework.

The Digital Inclusion Framework, as described by Warschauer (2003) and further developed by van Dijk (2020), provides a comprehensive understanding of the factors that influence digital literacy and access. This framework considers not only the individual's digital skills and knowledge but also the broader social, economic, and institutional contexts that shape their ability to effectively utilize digital technologies. By incorporating this framework, the study will examine how the Angel of Hope Foundation's digital literacy course addresses the multifaceted barriers to digital inclusion, such as infrastructure, affordability, and digital literacy, and how these factors interact to impact the participants' livelihoods.

Physical access refers to the availability and affordability of digital devices and infrastructure, such as computers, smartphones, and internet connectivity. Digital skills encompass the technical, informational, and strategic competencies required to use digital technologies effectively. Usage involves the actual engagement with digital technologies for various purposes, such as education, employment, and social interaction. Social support includes the availability of institutional, community, and interpersonal resources that facilitate and encourage the use of digital technologies (Warschauer, 2003).

Sustainable Livelihoods Approach (SLA).

Alongside the Digital Inclusion Framework, the study will also be informed by the SLA, as proposed by Chambers and Conway (1992) and further developed by Scoones *et al.*, 2019). The SLA emphasizes the importance of understanding the complex web of assets, capabilities, and strategies that individuals and households employ to secure their livelihoods. By applying this framework, the study will analyze how the digital skills acquired through the Angel of Hope Foundation's course have influenced the participants' access to various forms of capital (human, social, financial, physical, and natural), their ability to cope with shocks and stresses, and their overall resilience and sustainability of their livelihoods.

The SLA framework identifies five key types of capital that contribute to sustainable livelihoods: human capital

(e.g., skills, knowledge, and health), social capital (e.g., social networks, trust, and reciprocity), financial capital (e.g., savings, credit, and income), physical capital (e.g., infrastructure, tools, and technology), and natural capital (e.g., land, water, and biodiversity) (Serrat, 2017). The framework also considers the context-specific vulnerabilities, policies, and institutions that shape the livelihood strategies and outcomes of individuals and households (Benson *et al.* 2019). By applying the Sustainable Livelihoods Approach, the study will analyze how the digital skills acquired through the Angel of Hope Foundation's course have influenced the participants' access to various forms of capital, their ability to cope with shocks and stresses, and their overall resilience and sustainability of their livelihoods.

These two theories are relevant for this study since they collectively address the main problem of empowering livelihoods through digital literacy by providing a holistic perspective on how technology access and skill development can enhance the capabilities of marginalized populations. The DIF emphasizes the necessity of equitable access to digital technologies and the importance of digital literacy skills, which are crucial for participation in the modern economy. By integrating this framework with the SLA, which focuses on understanding and enhancing the various assets and capabilities that individuals use to secure their livelihoods, the assessment of Angel of Hope Foundation's Basic Computer Literacy Course can identify how improved digital skills lead to increased economic opportunities, social empowerment, and resilience. Together, these frameworks contribute to the proposed solution by ensuring that the training not only equips participants with technical skills but also addresses broader systemic barriers, ultimately fostering sustainable development and improved livelihoods in the Midlands Province of Zimbabwe.

LITERATURE REVIEW

The extent to which the basic computer literacy course had improved the digital literacy skills of the participants.

The extent to which a basic computer literacy training course has improved the digital literacy skills of community participants can be assessed through various lenses, including skill acquisition, behavioural change, confidence levels, and overall impact on livelihood opportunities (Scherer *et al.*, 2019). More so, Bennett, Maton & Kervin (2017) noted that numerous studies have highlighted the transformative potential of such training programs, particularly in underserved communities. A study by Van Dijk (2005) emphasizes that computer literacy training can significantly enhance individuals' abilities to navigate digital environments, which is increasingly vital in today's job market. This foundational skill set not only empowers participants but also promotes greater engagement with digital platforms that are essential for both personal and professional development.

One critical aspect of evaluating the effectiveness of a basic computer literacy course is measuring the specific skills acquired by participants. Research conducted by Hargis *et al.* (2014) illustrates that structured training programs enable learners to develop competencies in areas such as word processing, internet usage, and online communication. In the context of the Angel of Hope Foundation's Basic Computer Literacy Course, participants likely experienced similar gains in their ability to use essential software applications and access online resources. Surveys or pre- and post-assessment tests could be employed to quantify these improvements, providing empirical evidence of skill enhancement among community members.

Moreover, behavioural changes resulting from digital literacy training can significantly influence how participants interact with technology and their willingness to engage in digital activities. According to the findings of Warschauer (2004), individuals who have undergone computer literacy training often exhibit increased confidence when using digital tools, which can lead to more frequent engagement with technology. This is particularly relevant for marginalized populations, who may have previously felt intimidated by technology. The training provided by Angel of Hope could empower participants to utilize digital resources more effectively, fostering a culture of learning and adaptation within the community.

Additionally, the impact of improved digital literacy skills extends beyond individual competencies to encompass broader socio-economic benefits. Studies have shown that enhanced digital skills can lead to better employment prospects and increased economic participation (Bennett *et al.*, 2017). For instance, community members who successfully complete the course may find new job opportunities that require basic computer skills or may be better positioned to start their own businesses using digital tools. By equipping participants with these essential skills, the Angel of Hope program contributes to breaking the cycle of poverty and promoting economic sustainability within the community.

Similarly, a study focusing on low-income older adults demonstrated that a digital literacy training program, embedded within a community-engaged learning framework, resulted in significant improvements in participants' digital skills and confidence. The training involved hands-on sessions where older adults learned to navigate technology with the assistance of undergraduate students. Post-training assessments indicated that participants not only improved their technical skills but also developed a more positive attitude towards aging and technology (Miller *et al.*, 2024) This intergenerational approach not only benefited the older adults but also fostered a sense of community and understanding between different age groups.

Finally, ongoing evaluation of the training program is crucial for assessing its long-term impact on digital literacy and community development. A longitudinal study approach, as suggested by Scherer *et al.* (2019), can provide insights into how participants continue to apply their skills over time and whether they experience sustained benefits in their personal and professional lives. By examining the experiences of participants at multiple intervals post-training, researchers can gain a clearer understanding of the lasting effects of the basic computer literacy course and identify areas for further improvement and support

The challenges faced by basic computer literacy training course participants.

Participants of basic computer literacy training course faced a number of challenges. These challenges stem from socio-economic, cultural, and infrastructural factors that disproportionately affect marginalized communities. Understanding these barriers is critical for designing more effective training programs that can better meet the needs of participants. One of the most significant barriers to successful participation in computer literacy training is socio-economic status. According to the Digital Divide theory posited by Van Dijk (2005), individuals from lower socio-economic backgrounds often lack access to essential resources such as computers, reliable internet connections, and supportive learning environments. This lack of access can create a significant disadvantage for participants, making it difficult for them to engage fully in training programs. For example, a study by Hargis *et al.* (2014) found that participants from lower-income households reported difficulties in practicing their newly learned skills outside of training sessions due to a lack of home technology, which limited their ability to reinforce learning.

Cultural factors also play a crucial role in shaping participants' experiences in computer literacy training courses. Research by Warschauer (2004) highlights that cultural attitudes toward technology and education can influence individuals' willingness to engage with digital tools. In some communities, there may be a perception that technology is not relevant to their daily lives or that it is associated with negative outcomes. This cultural resistance can manifest as low enrolment rates in training programs or disengagement during sessions. For instance, if community members prioritize traditional skills over digital competencies, they may be less motivated to participate in courses, thereby perpetuating the cycle of digital exclusion.

Another challenge faced by participants in basic computer literacy courses is the variability in teaching quality and instructional methods. As noted by Scherer *et al.* (2019), the effectiveness of training programs can be significantly influenced by the instructors' expertise and the pedagogical approaches employed. Inadequate training for facilitators can lead to ineffective teaching practices that do not cater to the diverse learning styles of participants.

For example, if a course relies heavily on lecture-based instruction without hands-on practice, participants may struggle to grasp concepts fully, resulting in frustration and disengagement. Ensuring that instructors are well-trained and that courses are structured to include interactive, practical components is vital for overcoming this barrier.

Additionally, the psychological barriers related to self-efficacy and confidence also significantly impact participants' learning experiences. Research by Bandura (1997) on self-efficacy suggests that individuals who doubt their abilities are less likely to engage fully in learning opportunities. Many participants in computer literacy courses may come from backgrounds where they have had limited exposure to technology, leading to feelings of anxiety and intimidation when faced with learning new digital skills. A study by Coyle and Thumim (2019) found that participants who expressed self-doubt about their technological abilities often required additional support and encouragement to engage meaningfully in training. Building a supportive learning environment that fosters confidence is essential for addressing these psychological barriers.

Finally, infrastructural issues such as limited access to training facilities and inadequate technological resources can pose significant challenges for computer literacy course participants. A study by Dutton *et al.* (2011) highlighted that many community training centers lack the necessary equipment and reliable internet access, which can severely limit the effectiveness of training programs. In rural or underserved areas, the absence of adequate infrastructure can deter participation and hinder skill development. For training programs to be effective, they must be supported by sufficient resources, including access to well-maintained computers and reliable internet connectivity. Addressing these infrastructural challenges is crucial for ensuring that all participants have the opportunity to acquire essential digital skill.

Strategies to enhance digital skills transfer to basic computer literacy training course participants

A literature review on strategies to enhance digital skills transfer among participants in basic computer literacy training courses reveals a variety of effective approaches that can facilitate the acquisition and retention of digital competencies. These strategies as noted by An (2013) and Tsokota, Mhloza, Chipfumbu-Kangara (2022) focus on learner-centered instructional methods, the integration of real-world applications, ongoing support and reinforcement, fostering a collaborative learning environment, and the use of technology-enhanced learning tools. Each of these strategies can significantly contribute to the effectiveness of training programs and empower participants to apply their newly acquired skills in practical contexts.

In their study, Tsokota, Mhloza, Chipfumbu-Kangara (2022) highlighted the effective project-based strategy for enhancing digital skills transfer is the use of learner-centered instructional methods that actively engage participants in the learning process. A study by Hargis *et al.* (2014) elucidated that incorporating hands-on activities, group discussions, and problem-based learning can significantly enhance skill acquisition and retention. For instance, in a computer literacy course, instructors can design activities that require participants to collaboratively complete projects using digital tools, thereby promoting active engagement and deeper understanding. As noted by Alharbi (2023), this approach not only aids in the transfer of skills but also fosters critical thinking and problem-solving abilities that are essential for navigating the digital landscape.

Another important strategy involves integrating real-world applications into the training curriculum. Research by Warschauer (2004) emphasizes that when participants can relate their learning to practical scenarios, they are more likely to retain and apply their skills. Similarly, Katiyo (2024), in his research found out that the heritage-based philosophy emphasizes that when learners can relate their education to practical scenarios, they are more likely to retain and apply their skills effectively. Instructors can enhance the relevance of training by designing assignments that mirror tasks participants may encounter in their personal or professional lives, such as creating a resume,

searching for job opportunities online, or managing a budget using spreadsheet software. Through contextualizing the learning experience, participants become more motivated and confident in their ability to use digital skills in real-life situations.

Ongoing support and reinforcement are also critical for ensuring that digital skills are effectively transferred and maintained over time. A study by Scherer et al. (2019) highlights the importance of providing participants with access to resources and support networks after the completion of training programs. In addition to that, another study by Thompson, Rongen, Cowburn and Till (2022) pointed out the use of follow-up workshops, access to online forums, or mentorship opportunities where participants can seek guidance as they begin to apply their skills independently. The presence of these support system, enable participants to grow their digital competencies and address challenges they encounter in their communities and future lives.

Fostering a collaborative learning environment is another effective strategy for enhancing digital skills transfer. According to Coyle and Thumim (2019), collaborative learning encourages participants to share knowledge, resources, and experiences, which can deepen their understanding of digital skills. Furthermore, de Nooijer, Schneider, Verstegen (2021) noted group activities, peer teaching, and collaborative projects as activities that can help participants learn from one another and build a sense of community within the training program. The trio further revealed that this social aspect of learning not only boosts motivation but also reinforces the practical application of digital skills, as participants work together to solve problems and complete tasks.

Finally, the incorporation of technology-enhanced learning tools can further support the transfer of digital skills among participants. Dutton et al. (2011) suggest that using interactive software, online simulations, and multimedia resources can cater to various learning styles and enhance engagement. In support of that, Zarfsanaiey et al., (2024), highlighted that employing online platforms that allow participants to practice their skills in a safe and supportive environment this can facilitate immediate feedback and self-assessment. Therefore, the inclusion of technology in the learning process, trainers can create dynamic and interactive experiences that enhance participants' ability to transfer skills effectively and confidently into their daily lives.

METHODOLOGY

The study utilised the constructivist paradigm, which emphasizes the importance of learners actively constructing their own understanding and knowledge through experiences. More so, the study explored how participants engage with technology and develop digital skills within their specific social and cultural contexts. Furthermore, a participatory approach was integrated, involving community members in the evaluation process to ensure that the findings reflect their needs and perspectives. The study adopted a mixed method approach where interviews and questionnaires were administered to forty-five (45) people, thus fifteen (15) from each district. Stratified random sampling method was used to select the participants for this study. Stratified random sampling allows for the selection of participants from different subgroups within the population, ensuring that various demographics, such as age, gender, and educational background, are represented (Mangena and Mwalemba, 2023). More so, the research captured a more comprehensive understanding of how different groups benefit from the course, thereby enhancing the validity of the findings. This method aligns with best practices in educational research, as it helps to mitigate biases and ensures that the results are generalizable to the broader community.

The survey was conducted to gather quantitative data from the participants of the Angel of Hope's digital literacy course. The survey was designed to capture information on the participants' demographic characteristics, prior digital skills, perceived impact of the course on their livelihoods, and any barriers or challenges encountered during the training. In-depth interviews were conducted with a selected sample of course participants to gain a deeper understanding of their experiences and the nuances of the digital literacy program's impact on their livelihoods. The interview protocol was developed based on the findings from the survey and explored topics such as the

participants' motivations for joining the course, the specific ways in which the digital skills had influenced their economic activities, and any contextual factors that had shaped their experiences. The qualitative data collection followed the guidelines proposed by Creswell and Poth (2018) to ensure the reliability and validity of the findings. Finally, the data collected through the survey and interviews was analyzed using a combination of statistical and thematic analysis techniques. The quantitative data was analyzed using descriptive and inferential statistics to identify patterns and trends. The qualitative data was coded and analyzed to identify emerging themes and narratives that can provide a deeper understanding of the program's impact and the participants' lived experiences. The findings from the mixed-methods analysis was integrated to provide a holistic assessment of the Angel of Hope's digital literacy course and its contribution to empowering livelihoods in the Midlands Province of Zimbabwe.

FINDINGS AND DISCUSSIONS

Demographic data

The figures on Table 1 below depict that the 33.3% of the respondents were male and 67.7% were female. The age range below on Table 2 shows that most of the respondents were between the age of 18-35 years and followed by those aged between 36-60 years.

Gender	Frequency	Percentage
Male	15	33.3%
Female	30	66.7%
Total	45	100%

Table 1: Gender distribution

Age	Frequency	Percentage
18-35	35	77.8%
36-60	10	22.2%
Total	45	100%

Table 2: Age distribution

The data from Table 1 reveals a notable gender disparity among respondents, with a predominance of females (67.7%) compared to males (33.3%), while Table 2 indicates that the majority of respondents fall within the younger age group of 18-35 years, suggesting that the findings may be reflective of perspectives and experiences predominantly shaped by younger, female individuals.

The figures on Table 3 below depict that the 40% of the respondents were not having any qualification, 31.1% have O' level, 31.1% 13.3% have diplomas, 8.9% had advanced level whilst 6.7% have degrees.

Qualifications	Frequency	Percentage
Degreed	3	6.7%
Diploma	6	13.3%
A' level	4	8.9%
O' level	14	31.1%
Other	18	40%
Total	45	100%

Table 2: Academic Qualification

The data presented in Table 3 indicates a significant portion of respondents (40%) lack any formal qualifications, suggesting potential barriers to educational attainment, digital skills knowledge and opportunities within their communities, which may have implications for their socio-economic status in the digital world and future prospects.

The extent to which the basic computer literacy course had improved the digital literacy skills of the participants.

The first research objective sought to examine the extent to which the basic computer literacy course had improved the digital literacy skills of the participants and the question was a rating scale of participants' computer literacy before training and after training. Data which was gathered from questionnaires and interviews were used to answer these questions. The following two pie chart shows the results.

Participants indicated a number of improvements of digital literacy skills acquired through basic computer literacy course training and the major ones are as follows:

Nompilo (Pseudo name) said *"...I gained a comprehensive understanding of how to set up and manage email accounts, including composing messages, attaching files, and adhering to proper email etiquette. Additionally, I developed proficiency in creating and delivering presentations using tools such as Microsoft PowerPoint and Google Slides. Furthermore, I achieved competence in utilizing word processing software, such as Microsoft Word, Microsoft Excel, Microsoft PowerPoint and Google Docs, for creating, editing, and formatting documents."*

The comments the participants highlights her accomplishments in digital literacy, showcasing a well-rounded skill set in essential software applications. Her ability to manage email communication, deliver engaging presentations, and utilize word processing tools demonstrates both practical knowledge and versatility. These competencies are crucial in today's digital landscape, enhancing capabilities to communicate effectively and collaborate with others in the communities.

Furthermore, another participant said *"...I am now understanding how to operate computers, including turning them on and off, navigating the desktop, and managing files and folders. Skills in using spreadsheet applications (e.g., Microsoft Excel, Google Sheets) to organize data, perform calculations, and create charts, Familiarity with tools for remote collaboration (e.g., Google Workspace, Zoom, Microsoft Teams) for effective teamwork. I operating a typing service and photocopying shop now"*.

The participant's insights highlight essential foundational skills in computer operation and data management, which are crucial for effective technology use in both educational and professional settings. According to the study by Munyoro & Mupinga (2021), digital literacy courses contribute to participants' confidence and competence in using digital tools, which is crucial in an increasingly technology-driven society. In support of the assertion above, Chikunda (2020) noted that computer training programs have been shown to bridge the digital divide by equipping participants with the necessary digital skills to access information, communicate effectively, be entrepreneurs and engage in online learning platforms. Overall, augmenting digital literacy through structured courses not only empowers individuals but also fosters socio-economic development within a country and beyond. The participant's insights reflect the Digital Inclusion Framework's emphasis on foundational digital skills for equitable access to technology and the Sustainable Livelihoods Approach's focus on enhancing digital competencies to improve livelihoods and economic opportunities through effective teamwork in a digital economy.

Challenges faced by the Angel of Hope Foundation's basic computer literacy course participants.

Participant indicated the challenges they faced during the basic computer literacy training course as quoted as below:

"...I have a strong rural background and I don't have a computer at home or skills to operate a computer. I don't even know how to move a mouse. I don't know computer terms and there is no network in the community where I am living. I think I will have challenges of learning this new computer course".

The diversity in participants' backgrounds and skill levels, coupled with technical issues and limited access to technology outside the classroom, presents significant challenges for effective instruction and can hinder the overall learning experience and skill development in computer literacy courses. According to a study by Wang et al. (2014) emphasizes that students' varying levels of prior knowledge can significantly affect their engagement and success in learning environments, leading to disparities in learning outcomes. This diversity necessitates differentiated instruction strategies to accommodate the individual needs of learners (Tomlinson, 2001). Many learners come from varying educational backgrounds, with some having had minimal exposure to technology due to socioeconomic factors. According to the Zimbabwe National Statistics Agency (2021), access to technology remains a pressing issue, especially in rural areas where internet connectivity is often unreliable or non-existent. For example, a study by Chikunda (2020) found that rural communities are faced significant barriers in accessing online resources for

learning, which limited their ability to practice and reinforce newly acquired computer skills. Additionally, technical issues, such as outdated hardware and software in educational institutions, can disrupt learning and hinder effective instruction. This is echoed in a report by the International Telecommunication Union (ITU, 2020), which highlights the digital divide in Zimbabwe, where many educational facilities lack the necessary infrastructure to support modern computer literacy education.

Another participant narrated her challenge as quoted below:

“ ... ndakagumira chikoro mudanho rechinomwe saka zvekudzidza zvinondinetsa izvi nokuti vamwe vandiri kuita kosi iyi navo vakafunda vanokurumidza kunzwisisa kunyange vakapiwa zvokuita zvakawanda. Ndinotoda kunzi baya apa haikona kuti ndingangobaya ndoga nokuti ndinozonyara ndaita zvisirizvo”.

English translation (I completed grade seven and doing the same computer basic course with more educated participants, my understanding level is different to grasp a lot of content within a short period of time. I feel not to operate the computer on my own without being instructed since I may end up making errors).

The variation in learning speeds among participants, combined with a fear of making mistakes and the risk of cognitive overload from the rapid presentation of information, can create an environment where some individuals feel either overwhelmed or under-challenged, ultimately hindering effective learning and retention of computer literacy skills. This is in sync with Bandura's (1997) Social Learning Theory, which says individuals with lower self-efficacy may experience anxiety when confronted with new technologies, leading to avoidance behaviors that inhibit their learning. More so, according to a study by Sweller (1988), this fear can be exacerbated in environments where rapid information is presented, as cognitive overload may occur, overwhelming learners and making it difficult for them to retain new skills. For example, learners may have had minimal exposure to technology, which can heighten their anxiety and create a pronounced learning gap when faced with intensive instruction. The challenges associated with varying learning speeds and cognitive overload are compounded by infrastructural issues and limited access to resources. A study by Chikunda (2020) highlights that overcrowded classrooms often lead to rushed teaching methods, leaving some students feeling under-challenged while others struggle to keep up. Additionally, the World Bank (2021) reports that many schools face significant technological barriers, including outdated equipment and inconsistent electricity, which further complicates the teaching of computer skills. The rapid presentation of information without sufficient opportunities for practice can lead to disengagement, as students may feel either overwhelmed by the pace or unchallenged by the material. According to Tomlinson (2001), the implementation of differentiated instruction strategies, can help instructors better to meet the diverse needs of students, fostering a more supportive learning environment that enhances retention of computer literacy skills.

On limited use of computers at home, one participant was quoted saying:

“...I have a computer at home that I use for typing only. There is no internet facilities at home and it's difficult for me to practise these internet enabled digital skills at home”.

The lack of prior computer experience among many participants can lead to anxiety and frustration when acquiring new skills, and when combined with limited access to computers or reliable internet outside of the classroom, it further restricts their opportunities for practice and mastery of essential digital competencies. As noted by Kessels et al. (2014) in his research study, individuals with minimal exposure to digital tools often experience heightened levels of stress and self-doubt when faced with new learning tasks, which can inhibit their ability to acquire new skills effectively. The above assertion dovetails with the findings by Chikunda (2020), the challenge is exacerbated by limited access to computers and unreliable internet connectivity outside the classroom, particularly in rural areas where resources are scarce. This combination of inexperience and resource limitations can create a cycle of disadvantage, making it difficult for learners to gain the confidence and skills necessary for successful engagement in an increasingly digital world.

The challenges faced by participants of the Angel of Hope Foundation's basic computer literacy course, such as limited prior experience with technology and inadequate access to digital resources, relate closely to the Digital Inclusion Framework's emphasis on equitable access to technology and the Sustainable Livelihoods Approach's focus on enhancing individuals' capabilities and resilience, as both frameworks highlight the necessity of addressing

barriers that hinder skill acquisition and economic empowerment in underserved communities.

Strategies to mitigate digital skills transfer challenges to participants.

Participants noted the various strategies that can be adopted to mitigate digital skills transfer and one participant said the following in Ndebele:

“...Ababalisi kumele basebenzise indlela zokufundisa ezihleliweyo ezilenjongo zokufunda ukuze abafundi benlise ukulandelela bebodwa. Abafundi kumele bancediswe kabanzi ukuze bazame ukufunda ngesikhathi befundiswa ukwenzela ukuthi bafunde bebona kumbe besenza. Ukusetshenziswa kwezincediswa eziyimifanekiso ebonakalayo, ifoni lemodlalo kungathuthukisa indlela zokufundisa. Abafundi kumele banikwe amathuba okulingisa abakufundileyo ngesikhathi sokufunda loba ngemva kwesikhathi sokufunda”

Translated to English language is as below:

“... the tutors should use structured curriculum with learning objectives so that participants can easily follow on their own. More hands on training sessions should be given to participants to practice skills in real time thereby reinforcing learning through direct application. Use of visual aids, like smart phone compatible videos, slides can be used to cater for various learning methods. Offer opportunities for practice during and after lessons”.

Developing a clear and structured curriculum that outlines specific learning objectives is essential for guiding participants through their digital skills training, ensuring they understand the progression of concepts and techniques. According to Merrill (2002), a well-structured curriculum with clearly defined learning objectives enhances learners' understanding and retention of material. More so, Clark and Mayer (2016) highlighted that the incorporation of hands-on training and diverse visual aids not only engages various learning styles but also facilitates deeper comprehension of complex concepts, leading to improved skill transfer and application. Furthermore, providing opportunities for practice is crucial, as it allows participants to reinforce their learning and build confidence in their technological abilities (Ericsson et al., 1993). The response by the respondents reflects the principles of the Digital Inclusion Framework and the Sustainable Livelihoods Approach as it advocated for structured and inclusive curriculum that incorporates hands-on training and diverse instructional methods, to enhancing participants' digital competencies and promoting sustainable skill development that can improve their economic opportunities in a rapidly evolving digital landscape.

“ ...I feel the tutors should present a classroom environment where participants should feel comfortable to ask questions. For example slow learners should be paired with fast learners’ o share experience. I need regular feedback sessions where I can share my experience and challenges with the tutor”.

Creating a safe and encouraging classroom atmosphere is essential for promoting a growth mindset, as it encourages participants to engage openly without fear of judgment (Dweck, 2006). Research indicates that when learners feel psychologically safe, they are more likely to ask questions, take risks, and learn from their mistakes, which are critical components of effective learning and skill development (Edmondson, 1999). This environment can be fostered through strategies such as establishing ground rules for respectful communication and celebrating both successes and failures as part of the learning process, ultimately leading to increased motivation and resilience among participants.

Pairing participants with mentors or establishing peer support systems further enhances the learning experience by facilitating knowledge sharing and collaborative problem-solving (Bandura, 1986). Such mentorship relationships not only provide guidance but also create opportunities for participants to reflect on their experiences and apply their skills in practical contexts, thus improving skill transfer (Schunk, 2003). Additionally, implementing regular feedback sessions allows participants to express their challenges and successes, enabling instructors to tailor their teaching methods to better align with learners' needs and preferences, which is integral for fostering an adaptive and responsive learning environment (Hattie & Timperley, 2007).

This statement aligns with the Digital Inclusion Framework and the Sustainable Livelihoods Approach by emphasizing the importance of creating supportive learning environments that facilitate peer learning and regular

feedback, which are essential for enhancing digital skills, fostering resilience, and ultimately improving participants' capacity to thrive in a digital economy.

Organize follow-up sessions or refresher courses to reinforce learning and provide ongoing support as participants continue to develop their digital skills. Include training on related soft skills, such as problem-solving, critical thinking, and communication, which are essential for effectively transferring and applying digital skills in various contexts.

Implementing targeted strategies to address digital skills transfer challenges is highly relevant to the Digital Inclusion Framework and the Sustainable Livelihoods Approach, as such strategies ensure equitable access to technology, foster practical skill application, and ultimately empower individuals to enhance their livelihoods and adapt to an increasingly digital economy. The establishment of a supportive classroom environment that promotes open dialogue, mentorship, and adaptive feedback is crucial in the context of the Digital Inclusion Framework and the Sustainable Livelihoods Approach, as it not only empowers participants to develop essential digital skills but also fosters resilience and social capital that are vital for achieving sustainable economic and social outcomes in marginalized communities.

RECOMMENDATIONS

The study recommended Angel of Hope Foundation should adopt a comprehensive curriculum that include modules that focus on practical applications of essential software, internet navigation, online communication, and cybersecurity awareness (Mayer, 2009). More so, the training programme should incorporate regular assessments and feedback mechanisms that would ensure participants have achieved a baseline level of digital proficiency as a way of enhancing their learning outcomes (Hattie & Timperley, 2007). Use of diverse teaching methods, such as group discussions and peer learning is the way to go, as it caters for different learning styles and promotes active engagement (Felder & Silverman, 1988).

In a bid to reinforce the skills learned in class, the study recommended participants to have access to community information centres and resources centres as a way to facilitate ongoing learning (Wagner et al., 2018). Further to that, Angel of Hope Foundation should continue to forge partnerships with local community centres, libraries, and businesses to enhance access to computers and internet services, in a bid to ensure participants' continued digital literacy skills development (Shah & Wadhwa, 2020). As noted by Hattie & Timperley (2007), regular follow-up workshops and refresher courses should be organised to help participants to stay updated with new technologies and applications relevant to their daily lives. Additionally, participants are recommended to creating informal study groups to foster a collaborative learning environment, to share knowledge and troubleshoot issues collectively, reinforcing their skills through peer support (Vygotsky, 1978).

FUTURE TRENDS.

As the digital economy continues to grow, training programs should place greater emphasis on skills pertinent to remote work and entrepreneurship, providing participants with the tools needed to navigate a shifting job market. This focus will help foster economic resilience within communities by preparing individuals to adapt to new opportunities and challenges.

More so, digital literacy education are expected to focus on incorporating artificial intelligence (AI) and adaptive learning technologies, facilitating personalized learning experiences tailored to each participant's needs and skill

levels. AI-driven platforms will provide real-time assessments of progress, allowing for curriculum adjustments that ensure learners receive the necessary support and resources for success.

Finally, there is the rising significance of digital citizenship and ethical technology use. As participants enhance their digital skills, educational programs must focus on responsible online behaviour, critical thinking, and understanding societal implications of technology, empowering individuals to become informed and responsible digital citizens capable of thriving in their personal and professional lives.

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