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Telecentre Users as Mediators of Empowerment of Rural Communities in Malawi

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Abstract: For over three decades telecentres have been promoted as a means of reducing digital exclusion. However, their relevance is inconclusive. In this paper we investigate how telecentre users empower rural communities in Malawi. We adopt a qualitative approach and report preliminary findings from users and indirect beneficiaries of one telecentre. The findings indicate that empowerment effects of telecentres go beyond users. Specifically, when users use the telecentres, they get empowered and, eventually, empower other community members by, for example, teaching ICT, sharing knowledge, and raising awareness of problems and providing solutions within communities, thus generating collective empowerment. The study further indicates that community empowerment is influenced by such factors as social connections, self-growth, and beneficiaries' willingness to receive help. However, empowerment was also beset with a series of constraints such as limited resources.

Keywords: digital exclusion; empowerment; telecentres; rural areas; Malawi.

1 Introduction

We are living in a society where access and use of Information and Communication Technologies (ICTs) such as mobile phones, Internet and computers are important in every aspect of life. For example, ICTs help in accessing information on health, agriculture and education [3]. Despite this, many people especially in developing countries do not have access to and hardly benefit from ICTs. This has created digital exclusion, defined as the exclusion of individuals from accessing, using, and benefitting from ICTs [15]. This is mostly rampant in developing countries though studies have also shown that digital exclusion is evident in developed countries too [20, 23]. As such, in the past three decades, many developing countries have been establishing telecentres which provide access to ICT services such as computer tutorials, printers and Internet to reduce digital exclusion [13].

However, the relevance and role of telecentres in curbing digital exclusion has remained inconclusive. Specifically, the proponents of telecentres claim that telecentres are effective in reducing digital exclusion because they provide socio-economic benefits to users such as getting a job, improving computer skills [2], and providing farmers with a variety of agricultural information [26]. However, the opponents' argument is that users of telecentres

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are predominantly from advantaged sections of the population in terms of gender, educational levels, and economic status [16, 17], thus widening social inequalities [5, 9].

Our stand is that these arguments are persistent because digital exclusion has not been viewed holistically. We posit that digital exclusion occurs in three stages: the access and usage patterns divide, which focuses on the type of people who may afford ICTs; the usability divide, which is concerned with the skills of using ICTs and how often people use ICTs; and, the empowerment divide, concerned with using the ICTs fully and meaningfully [1, 20, 24]. The debate only focuses on the first two stages of digital exclusion. Yet, the extent to which ICTs and, specifically, telecentres can empower communities to become self-sufficient and improve their working and living conditions has been ignored. We suggest that assessing how telecentres empower communities would make a meaningful contribution to the effectiveness of telecentres in reducing digital exclusion. We conceptualise empowerment as ability of doing things that we were unable to do before using the telecentres. A few studies have investigated how telecentres contribute to some aspects of individual empowerment such as increasing computer competence and self-esteem [21]. However, what is lacking is how telecentres contribute to collective empowerment. Furthermore, we do not know how telecentre users may act as mediators between telecentres and collective empowerment. Using the case of a telecentre in Malawi, we aim to study how individual users of telecentres contribute to empowerment at the community level. The objectives are:

- o To investigate the extent to which individual telecentre users contribute to community empowerment.
- o To examine the enabling and constraining factors for community empowerment.

Our main contribution is to demonstrate the link between individual empowerment and collective empowerment deriving from the use of telecentres within rural communities.

The paper is structured as follows: Section 2 provides the theoretical framework; Section 3 discusses the methodology; Section 4 provides case description; Section 5 presents results; Section 6 provides discussions and conclusions before providing benefits/implications of the study in Section 7.

2   Theoretical Framework

Our theoretical framing is based on the view that there is an inter-changing relationship between telecentre services, individual users and the wider community (Figure 1). Telecentres are expected to empower individuals both intrapersonally and interactionally. Intrapersonal empowerment is about how individuals view or evaluate themselves (such as self-esteem, competence, meaning and impact); and interactional empowerment is about individuals' understanding and relationship with their environment including skills such as leadership, decision making and critical awareness [22, 27]. The empowered users may eventually empower their communities including family, friends, and colleagues. Empowerment at community level could further occur at collective level and includes organisational, social, cultural, informational, and political empowerment.

We also propose that the link between empowered users and community empowerment is enabled or hindered by myriads of mechanisms. These include i) *sense of community*, which is a person's feeling of belonging to a larger community and the perception that needs can be met by working with other people [18]; ii) *community participation* in socio-political activities to achieve positive change [4, 18]; iii) *community organisation*, namely, peoples' ability to collectively identify problems and engage in important discussions to uplift their communities; and iv) *social cohesion,* which extends community participation by

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incorporating trust and connectedness [19, 22]. Figure 1 presents the proposed research framework.
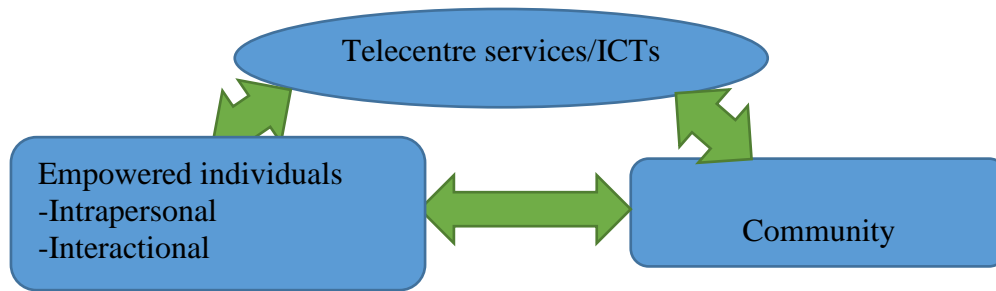

Figure 1: Proposed Research Framework

Overall, the framework helps to understand empowerment as a process by linking individual empowerment and collective empowerment.

3 Methodology

3.1 Data collection

The study adopts a qualitative research methodology. The first author used the framework presented in Figure 1 to guide her in the data collection and analysis while remaining open to emergent evidence from the field and data. She collected data from two telecentres in Malawi between March and August 2019. Currently, data analysis is still underway. The data presented here come from one telecentre: Telecentre A. A total of thirty-two participants, including eighteen users and fourteen indirect beneficiaries of the telecentre, took part in the research. Data were collected from two focus groups discussions (FGDs) with telecentre users, one with females and the other one with males, each group consisting of seven participants. FGDs lasted between 60 and 80 minutes and provided a collective overview of how telecentres were empowering communities. Thereafter, semi-structured interviews with twelve users, some of whom had participated in FGDs, and fourteen indirect beneficiaries were conducted, for a total of twenty-six interviews. Interviews with users lasted between 30 and 60 minutes; those with indirect beneficiaries lasted about 30 minutes. Finally, data were collected from non-participant observations of two users' day-to-day working activities. These users had also participated in the focus group and interviews. Table 1 gives a breakdown of number of participants.

Method(s)	Users	Indirect beneficiaries	Total participants
Focus groups only	6	-	6
Interviews only	4	14	18
Focus groups and interviews	6		6
Focus groups, interviews and observation	2		2
Total	18	14	32

Table 1. Number of participants classified by research method and relationship with the telecentre

A purposive sampling technique was used to choose participants who could provide information pertaining to the research objectives. In addition, snowball sampling was used, whereby users directed to other users and indirect beneficiaries who, in their opinion, were empowered thanks to the telecentre. Ethics was also considered. The first author had been in touch with the telecentre manager for over two years before data collection. Permission to

conduct the study was granted by the manager verbally. The manager as well as users were informed about the observation beforehand. Participants gave consent to take part in the study and having their interviews and FDGs recorded after being informed of the study objectives, that their participation was voluntary and confidential, and that they could withdraw at any stage. In the data analysis that follows, to preserve the anonymity of participants, we use prefix TUN (for Telecentre User Number) and prefix TIDBN (Telecentre Indirect Beneficiary Number) for indirect beneficiaries.

3.2 Data Analysis

The data analysis followed an inductive methodology. Guided by the theoretical framework in Figure 1, we remained open to key concepts and themes emerging from the data. Specifically, we adopted Gioia Methodology and used Nvivo 12 to code the data. First, we did a first-order analysis to identify concepts from participants' quotes, thereby treating participants as knowledgeable agents [7]. In the second-order analysis, we searched for relationships existing between and among first-order codes, thereby assembling them into themes [8]. Finally, we grouped second-order codes into aggregate dimensions. In particular, themes emerging from the data were linked to interactional/intrapersonal empowerment, community empowerment, and sense of community and social connectedness and cohesion as mechanisms that link individual and collective empowerment.

4 Case Description

Telecentres in Malawi are being established by the Malawi government with funding from international organisations such as International Telecommunications Union and World Bank. Currently, telecentres exist in different models such as entrepreneurship, those run by entrepreneurs; school managed telecentres; and community managed telecentres. The government is currently establishing more telecentres under a project called Connect, a Constituency Project with the aim of having telecentres in every constituency of the country.

Telecentre A is one of the three community managed telecentres in the country. It started operating in May 2010. In the first few years of operation, the telecentre was still getting financial support from the government for fixing equipment and salaries. Later it was weaned off to be self-sustaining using the money realised from the businesses. It is located in the Central Region of Malawi. It is about 25 kilometers from the town of the district in which it is located. The area is characterised by limited access to clean water and electricity being a perfect example of rural areas in the country. The telecentre serves people in the catchment area which are approximately 180,000 and others outside the catchment area. People in this area rely on farming as their main source of income. They are mainly tobacco farmers, though they also grow maize among others.

The telecentre is managed by a committee comprising members from the community. It also has staff from the community who are responsible for day to day activities of the telecentre [25]. The telecentre is multipurpose [10] since it provides library services and a wide variety of ICT services. The ICT services include computer tutorials in which people learn about how to operate computers and Microsoft packages; Internet services which enable people access information; printing and photocopying of documents; binding, scanning and laminations; and Airtel Money services (mobile money transfer). The telecentre is the only facility providing these services in the community with the exception of a cybercafé that was

opened by one of the telecentre users and only provides photocopying, printing and phone fixing services.

This telecentre was chosen because it is managed by the community and is one of the most widely used and successful telecentres in the country [14]. Therefore, not only is this telecentre relevant to understand the role of telecentres in empowering rural communities in Malawi, but it can also provide useful insights into the topic.

5 Results

5.1 Empowered Telecentre Users – characteristics

Data showed evidence of telecentre users being empowered and this occurred at both intrapersonal and interactional levels. At the intrapersonal level, users were empowered through increased ICT competence or skills, increased self-esteem, improved status symbol, good performance at school, meaningfulness, improved knowledge and impact: *"I have learned how to use computers. It is important [to be computer literate] because one easily does things when they are computer literate especially in the contemporary society"* (TAUN6).

At the interactional level, there was evidence of critical awareness and improved leadership roles in the community. For example, one user said: *"The telecentre has opened up our eyes and made us know how things are happening in the country. The telecentre is helping us live the lives we have always wanted because we know what is happening in the country. Like what is happening in other countries, knowing how sales are being done the whole world. We now know that this is how such and such items are being sold"* (TAUN16).

In what follows, we show how the empowered users exerted influence on other individuals and the community at large.

5.2 Individual empowerment

Most users said that they have been able to empower their communities by *teaching ICTs skills,* such as how to use computers, printing and Wi-Fi. Beneficiaries mainly included families, friends, fellow students and colleagues of the telecentre users. For example,

"There is a friend and colleague whom I have helped in relation to his work because he works in the reprographic section [of our library]. That is not my job but there was a time I was working in the library, so I taught him how to use the ICT equipment, such as printing" (TUN10).

Users in this study were also empowering communities by *raising awareness* of the benefits of telecentres and community issues. Just like in other studies on empowerment (such as 21), eventually, increased awareness of the benefits of the telecentre helped attract indirect beneficiaries to the telecentre. For example, one user said:

[I tell] people that there is a library in the telecentre where you can go to study. So, people do come to study here" (TUN11).

By increasing awareness of the telecentre, users thus hoped to help more and more people to become empowered as narrated by TUN10, who said:

"I told [my wife] that ok you are starting your studies, if you want to study go to the telecentre... So, she used to come here to study, and she succeeded in her studies".

These findings show that the telecentre users were an essential part in attracting others to the telecentre because, even when users were asked how they knew about the telecentre, they indicated that they had heard from either friends or families. The second form of raising

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awareness had to do with users helping to enlighten others on community issues such as the adoption of new engine-generator sets (or gensets) to create electricity:

"I enlightened people in my community about the coming of new gensets, the ones that you can hear making noise on that side. [I said] we should first of all investigate them before we start using them. All this is possible because we could search [advantages] and disadvantage of gensets on the Internet [in the telecentre]" (TUN16).

Some other forms of individual empowerment included: users sharing knowledge that they learned from educational information available in the telecentre, and users changing the collective mindsets about computers, which the community used to view as something bad.

We can conclude that individual empowerment occurred at both intrapersonal and interactional levels. The results show that users had an impact at intrapersonal level by increasing ICT competence through teaching ICT skills, motivation and attracting people to the telecentre; and at interactional level by improving the community members' way of interaction with their surrounding environment through raising awareness about community issues, such as the negative impact of the gensets, and changing their mindsets about computers.

5.3 Collective empowerment

As stated earlier, the empowerment effects of telecentres, with users as mediators, were also reflected at collective level. We view collective empowerment as a change that had occurred and had benefited not only an individual but many people at once.

Efficiency in administering exams was one of the collective empowerment effects of telecentres. During the observation, it was noticed that many schools in the area have no ICTs they can use to print out and photocopy exams. Therefore, one user who had opened up a cybercafé was able to deliver such services in the community. He explained:

"the other time I was coming here [using the telecentre] a lot of people could come for exams…right now a lot of people don't write exams on chalk board. […] even in primary schools starting from standard three up to eight nowadays, they write [exams] on paper. So, they used to come here [telecentre] to do that, but right now, schools come to me and ask for my help to write exams […]. So, I photocopy...I even [type] their exams" (TUN17).

Collective empowerment is also reflected in organisational empowerment, which is concerned with how things are done in a community [6]. Results show that after using the telecentre, users were able to voice out their views and make contributions towards some of the decisions made in the community. One of the users said:

"As youth, we are able to make contributions not just sticking to what the chiefs are saying. When the chief says something that is not good for the community, we are able to point it out [thanks] to the telecentre disseminating information. So, [before the telecentre], people were ignorant because they would just agree to what the chiefs/leaders had said. They did not know how things were done. So, the telecentre here is playing a role [thanks to the] information [it provides]" (TUN15).

5.4 Factors influencing community empowerment

Several enabling factors were identified that contributed to individual and collective empowerment. Such factors included *social connections* with friends, families, colleagues, or fellow students and *social cohesion* as shown by the following comment:

"The people that I help or empower are the people that I am friends with. The people that I usually help are the ones that are connected or friends with me" (TUN5).

The feeling that everyone should benefit from the telecentre was also an enabler of community empowerment. Some users empowered the community owing to the feeling that benefits should extend to many people and not just themselves. TUN17 claimed that:

"the thing that motivated me so much [to be helping others] [...] I started learning [computers] [at the telecentre], then I started making money [by opening a cybercafé after using the telecentre]. Then I said 'no this should not be for me only',[...]. So, I took it as very important...others should equally benefit."

Sense of community, which is the sense of belonging to a larger community and the feeling that community members' needs can be achieved only when people who are connected stay together [18], also enabled community empowerment:

"for the community to develop, it is important for the person to be knowledgeable. However, one person cannot develop a community. It is important that other community members are knowledgeable too so that we can help one another" (TUN6).

Beneficiaries' need and willingness to be helped also played a role in fostering community empowerment. Users were empowering people who had indicated interest by approaching them for help:

"I do help people who approach me. I cannot say everyone, but those who approach me," TAUN2.

Users also indicated that they were empowering others for *self-growth* because they thought that would also help them in improving knowledge, for example by teaching others about computers.

5.5 Factors inhibiting community empowerment

Many people in rural areas of Malawi are poor [14]. This was reflected in the low monthly income of most users and in *limited resources*, such as laptop, money and time, which inhibited community empowerment. For instance, TUN11 said:

"I myself don't have a laptop. So, I cannot go to some areas to teach the people. It is difficult".

Rural areas in Malawi are also characterised by *low literacy levels* [12]. This inhibited community empowerment since it was difficult to reach out to people with low educational levels:

"it is difficult for [those who have never gone to school] to grasp the contents when you are teaching them" (TUN11).

The low levels of education also made people appreciate the benefits of computers. Another barrier was *discouraging comments* addressed to users of the telecentre. Just as with lack of appreciation, such comments were linked to the ignorance of the benefits of telecentres. TUN5 complained:

"like castigating comments. Maybe because they do not know the role of the telecentre in the community, so they think we have nothing to do, which is why we come here, just to waste time. Some even say that we come here to look for men [laughter], see? That's how people talk."

Another inhibiting factor for community empowerment was unreliable power supply. This problem could be attributed to the fact that the telecentre only relies on power supplied by Electricity Supply Corporation of Malawi (ESCOM). The finding is in line with a number of previous studies such as [11, 13] which find that one of the main challenges in Malawian telecentre is epileptic power. Having a genset as an alternative could be useful.

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6 Discussion and Conclusions

The main aim of the paper is to demonstrate the link between individual empowerment and collective empowerment enabled by the use of telecentres in rural communities. The specific objectives of the study were to investigate how individuals empowered by the use of telecentres may contribute to community empowerment; and the factors that influence community empowerment.

Results reported in this paper indicate that empowerment effects of telecentres go beyond their users. Specifically, when users use telecentres, they get empowered and empower other community members by teaching ICTs, sharing knowledge, raising awareness, and improving social services in the community. The telecentre users act as mediators in extending the empowerment effects of telecentres to the communities. Perhaps the debate should not focus on whether telecentres are curbing digital exclusion but, rather, in order to understand the impact of telecentres on digital exclusion, one should consider the wider benefits telecentre users can bring to their communities.

Furthermore, this study makes a valuable contribution by providing insights on the factors that link ICT-mediated individual empowerment with collective empowerment. On one hand, some of the enabling factors that mediate individual and collective empowerment include sense of community, social connections, the feeling that everyone should benefit from the telecentre and beneficiaries' willingness to receive help. On the other hand, factors that hinder empowerment through telecentres include unreliable power supply, limited resources and lack of appreciation of telecentres within communities. For example, empowered telecentre users were able to empower people they were socially connected with. However, even if they were socially connected, when the users did not have resources, such as laptops, they failed to empower others. These findings show that, for empowered telecentre users to contribute towards community empowerment, there is need to find an alternative to power supplied by ESCOM by having a genset, for example. There is also a need to intensify civic education to teach community members to appreciate telecentres. These recommendations can help the Malawi Government and other stakeholders in the implementation and improvement of telecentres in order to achieve greater socio-economic impact.

Since the paper reports on data from one telecentre, the results are not generalizable. Nevertheless, the results provide insights on empowerment effects of telecentres in rural communities, which are mostly characterised by poor roads, poor infrastructure, limited access to clean water and electricity in many developing countries. Therefore, we still think that the results can be a reflection of many rural communities in Malawi as well as other developing countries.

7 Benefits/Implications of the Study

The study benefits a number of stakeholders. Firstly, it makes valuable contribution towards ICT4D literature. Particularly, on the effectiveness of telecentres in curbing digital exclusion as it provides insights on how the direct beneficiaries become the mediators in extending the empowerment effects of telecentres to the communities. This study makes a valuable contribution by providing insights on how telecentres generate collective empowerment takes place, something that the current literature lacks.

The study is also beneficial at country level as it will help the Malawi Government and other stakeholders in the implementation of telecentres. In particular, it shows what improvements are necessary for the telecentres to have more impact in the country. This is

timely because, as already stated, the government of Malawi is in the process of establishing more telecentres in the country.

The study is also beneficial to the telecentre operators on how they can be sustained in order to have more impact in the community. It may also be beneficial to the people who plan to establish cybercafés in rural communities like where this telecentre is located.

The study also provides insights on the sustainability of telecentres in rural communities. Telecentres are made sustainable thanks to the benefits they provide to users and members of the community. This results in more people wanting to join and use telecentres on a continuous basis. However, there are number of factors that may pose as a challenge to the sustainability of telecentres. For example, the telecentres in rural communities ought to have alternative source of power.

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