

The Effects of Mobile Phones in Mitigating Cultural Shock Amongst Refugees: Case of South Africa

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Abstract—The potential of mobile phones is evident in their ability to address isolation and loneliness, support the improvement of interpersonal relations, and contribute to the facilitation of assimilation processes. Mobile phones can play a role in facilitating the integration of refugees into a new environment. This study aims to evaluate the impact of mobile phone use on helping refugees navigate the challenges posed by cultural differences in the host country. Semi-structured interviews were employed to collect data for the study, involving a sample size of 27 participants. Participants in the study were refugees based in South Africa, and thematic analysis was the chosen method for data analysis. The research highlights the numerous challenges faced by refugees in their host nation, including a lack of local cultural skills, the separation of family and friends from their countries of origin, hurdles in acquiring legal documentation, and the complexities of assimilating into the unfamiliar community. The use of mobile phones by refugees comes with several advantages, such as the advancement of language and cultural understanding, seamless integration into the host country, streamlined communication, and the exploration of diverse opportunities. Concurrently, mobile phones allow refugees in South Africa to manage the impact of culture shock.

Keywords—Mobile phones, culture shock, refugees, South Africa.

I. INTRODUCTION

CULTURE shock is a common phenomenon when an individual exposes to a new culture for the first time. Culture shock refers to “the feeling of uncertainty, confusion or anxiety that people experience when visiting some new places, doing business in, or living in a society that is different from theirs” [1]. Such an experience could result in a phase of emotional turbulence and instability [2] during the process of attempting to understand and embrace the unfamiliar cultural environment [3], [4]. Considering that local languages are often unfamiliar to many refugees, assimilating and integrating with the new place proves to be a challenge for them [3]. Regardless, they are obligated to navigate through different aspects of culture shock in their host country [5]. Refugees may have easy accessibility to electronic communication devices like mobile phones which contribute to the process of acculturation [6]. The mobile phone, widely accessible, plays a pivotal role in enhancing culture shock for migrants and fostering a more profound societal integration [7], [8]. Maintaining contact with both relatives and members of the host community decreases the sense of loneliness for refugees and contributes to their feelings of security and comfort in a new location [3]. Moreover, mobile phones play a crucial role not only in fostering social integration but also hold significance from a

health viewpoint [9]. The paper aims to respond to the following research question:

- How do mobile phones help refugees to navigate the culture shock?

There is a persistent growth in the number of refugees and asylum seekers [9]. In 2017, the United Nations High Commissioner for Refugees (UNHCR) reported 25.4 million refugees and 3.1 million asylum seekers globally in its annual Global Trends report. The numbers reached 26.0 million refugees and 4.2 million asylum seekers IN 2019 [10]. The UNHCR's annual report for 2019 highlights that South Africa has 90,513 refugees and hosts 189,491 asylum seekers [10]. South Africa, recognised for its strong economy and advanced social development, ranks among the most developed nations in Africa [11]. Furthermore, the telecommunications sector in South Africa is one of the fastest-growing industries within the nation's economy. The network primarily relies on the increasing number of mobile phone users and the expanding availability of internet services, which are accessible to refugees as well.

Concerns are raised by the UNHCR over the ongoing abuse experienced by migrants, refugees included, in South Africa, a country marked as one of the highest rates of inequality [12], making a substantial impact on the country's underprivileged community [13]. Mistreatment of foreigners, including refugees from other African countries, is a regular occurrence perpetrated by the residents, with xenophobic attacks happening regularly [14], [15]. Migrants are open to working for a diminished salary without protesting, as they are apprehensive about being sent back to their home countries. They persist in experiencing harm and fatalities, all while being aware that they are disliked by the local community under the belief that they are taking away job opportunities. Xenophobic attacks contribute to the discomfort and isolation that refugees may experience [16]. Rebuilding their lives becomes challenging for refugees in the face of the prevailing xenophobic attitude and, it is crucial not to neglect the opportunity to be involved in and experience a sense of community in the host country.

This paper has adopted culture shock as a paradigm to clarify and depict these situations. There are five phases understood to constitute culture shock, namely: the honeymoon phase; the rejection phase; the regression phase reverse phase; and the recovery phase [17]. This paper explores these phases in the context of the challenges faced by refugees in South Africa.

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II. LITERATURE REVIEW

A. Refugees Overview in South Africa

South Africa is a peaceful country with a strong economy which encourages asylum seekers from all over Africa [18], [19]. Many refugees in the country are from African countries including Somalia, Zimbabwe, Malawi, the Democratic Republic of the Congo (DRC), Nigeria, Rwanda, Angola, and Burundi [19]. The reasons for refugees leaving these countries are different but most of them are experiencing war and/or have crimes at an elevated level [14]. Due to various crises in those countries, there have been several waves of refugees coming to South Africa.

Section 27 of the South African Refugees Act No. 130 of 1998 states that a refugee is permitted to search for employment and has the right to the same health services as citizens [20]. This is advantageous in the routine lives of refugees. However, they will undoubtedly encounter numerous obstacles including difficulties with local languages, familiarity with the cultures of the host country, and worries caused by ethnic differences [21]. The lack of local language skills is also a significant factor contributing to their victimisation, with miscommunication resulting in inadequate or even failed execution of service [21]. These issues may adversely impact life success. Language knowledge is employed not just as a means of communication but also for empowerment in general. The language barrier is one of the reasons why refugees face major psychosocial problems, particularly self-doubt and depression [21], [22]. Another obstacle experienced by refugees is the lack of "legal security," which compromises the essential principle of self-reliance or earning income through legal processes [6]. The term "legal security" describes the offering of legal permit documentation in the context of refugees [6]. Furthermore, when renewing legal documents, refugees experience long waiting periods, a failure to make appeals, administrative irregularities, and corruption [23].

B. Use of Mobile Phones among Refugees

The effect of mobile phones on human being progress demonstrates how they have developed into the primary means of communication [24]. A mobile phone may prove very beneficial, particularly for individuals who are in an emergency [13]. A mobile phone serves as both an incentive and a method of communication with people from all over the world [25]. In addition, mobile phones have important implications for increasing individual feelings of connectedness [26]. According to researchers, refugees have used communication technology to mitigate the impact of unpredictability on the well-being of relatives and close friends, as well as the general situation in their home country. [27]. For communication purposes, refugees rely on mobile phone 'affordances' to bridge the gap between themselves and the new society, and to gain interconnectivity [28]. Affordances refer to the links between a subject, and the characteristics of a given situation in which they find themselves [29]. Refugees use a number of platforms to connect with loved ones and relatives through both audio and visual interaction [28], [30]. Mobile phones are vital for

refugees for getting guidance and emotional assistance from other family members [5]. They offer refugees numerous opportunities for establishing relationships with cultural groups. In addition to taking part in different events like celebrations and support groups, mobile phones play a role in fostering better social integration among refugees [30].

In South African society, communication has become more and more dependent on the mobile phone, resulting in it being an important, if not dominant device [3]. South Africans have the ability to use Africa's most advanced electronic devices in addition to the current developments in fixed technology. Mobile phones provide better communication options in South Africa compared to fixed-line telephones [31], as an outcome, mobile phones are the most widely used ICTs across South Africa [32]. The use of electronic devices has decreased the cost of numerous services, including medical care, education, and transportation [33]. The rising prevalence of mobile phone usage is a significant contributor to South Africa's socio-economic and political activities [34].

Connectivity and integration via mobile phone use can be considered critical for well-being and, possibly also for building social cohesiveness. The exchange of information is a core component of social participation, while at the same time becoming an inevitable obstacle in community-based initiatives [35].

C. Culture Shock

Culture shock can be seen as a stress response to immigrating [36]. In 1960, anthropologist Kalev Oberg offered an uncommon presentation of the conditions of immigrants, addressing "culture shock" and the stages of adjustment that immigrants went through as they moved to a new country [36]. The term culture shock refers to the frustration caused by cultural transformation [36]. It was "an occupational disease of people who have been suddenly transplanted abroad" [36]. Certain individuals may joyfully accept a new culture and engage in cross-cultural relationships, while others may reject such connections and experience intensely painful feelings and distress [37]. Cultural settings include social rules, viewpoints, and thoughts [25]. Many individuals who interact with unfamiliar cultures, often in a foreign country might face feelings of loneliness and depression [38], [39]. Nonetheless, the majority eventually becomes comfortable with the host country culture. Culture shock includes a strong, transformative phase mostly at the personal and community levels as major cultural forces collide [12]. The transition may be presented in five phases, as illustrated in Fig. 1. Five phases of culture shock are summarised in Fig. 2.

D. Culture Shock for Refugees

In the host countries, refugees experienced disappointment, loneliness, depressed emotions, humiliation, and inferiority, as well as emotional separation and yearning [41]. Relocation causes culture shock, which is a stress reaction to a new challenge that occurs when previous types of behaviour are becoming less effective and fundamental signals for social interaction are absent [42]. Refugees describe a range of

feelings of belonging in their previous residences, notably positive feelings before the conflict, which become negative after the war, and both pleasant and unpleasant feelings of belonging in a novel place [41]. All these experiences contribute to a delay in the process of culture shock in the host country [43]. These issues have a major effect on the general well-being of refugees [43]. Whereas most refugees adjust to a new culture over time, culture shock can cause emotional trauma during the period of adjustment [44]. Therefore, culture shock, along with all its phases should continue to be acknowledged [43].

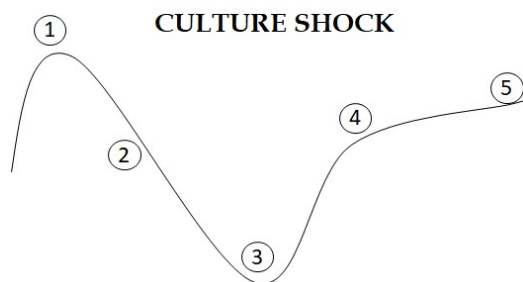


Fig. 1 Phases of culture shock [40]

	Phase	Descriptions
1	Honeymoon Phase	The culture is new and exciting: the dreams and expectations about the future seem to be coming true
2	Rejection Phase	The realities of life (housing, employment, and family) can become overwhelming. Many things do not go according to plan, and individuals may feel misunderstood.
3	Regression Phase	To deal with the stressful changes, individuals may feel misunderstood.
4	Recovery Phase	If a person can work through the regression phase, they may feel accepted by the host culture.
5	Reverse Culture Shock Phase	A person may experience culture shock if they return to their home country.

Fig. 2 Five phases of culture shock

Culture shock may arise when refugees are exposed to new environments each day [43]. Refugees begin to experience trauma as an outcome of ethnic, political, or religious discrimination [45]. Integration into a new host society, involving different cultural norms, traditions, and ways of communication, generally leads to culture shock for refugees [45]. Some might “happily embrace the new culture and engage in intercultural contacts, others may avoid such contacts and may experience strong feelings of distress and frustration” [37]. Culture shock scores were higher for asylum seekers, who, despite receiving legal aid, were denied temporary refugee status. Culture shock may be caused by increased discrimination and malnutrition [46].

III. RESEARCH METHODOLOGY

Qualitative research methods were employed in this study,

following a deductive approach (defined as a systematic procedure for analysing qualitative data guided by specific evaluation objectives) [47], adopting the culture shock theoretical framework. Culture shock theory is vital to understanding the relationship between mobile phones and the culture shock process. It is also necessary to understand all five phases of culture shock. This method was chosen for the study because it focuses on respondents’ unique experiences of culture shock while using a mobile phone.

Employing the semi-structured interview approach provided the researcher with the flexibility to ask open-ended questions [47], [48]. Considering that refugees typically fall into the vulnerable population category, through this approach, they conducted interviews without constraints, providing them the opportunity to elaborate on the challenges they experienced in using mobile phones and their effect on culture shock processes.

We tried to balance the sample regarding age, gender, location, and level of education. This was required since the researcher intended to comprehend the view of individuals who belong to different groups of refugees. The interviews were limited to refugees who used mobile phones, as selected by the researcher, and who were at least 18 years old. A total of 27 refugees participated in this study. All the refugees had either been granted official refugee status or were still awaiting it. Owing to their vulnerable status, asylum seekers who had chosen not to renew their permits were not part of the study.

The design of the interview enabled participants to give enough information for the research to acquire the right responses. The refugee population in South Africa is characterised by its diversity, with individuals from various countries bringing unique cultures and languages. The interview questionnaire was developed in both French and English, reflecting the usage of these languages within the majority of refugee communities. Data were collected using a mobile phone and a recording device. During the interview, written notes were taken by the researcher to capture thoughts and important points raised by participants. The interviews, once recorded, were transcribed into Microsoft Word documents. The participants used the English language and freely expressed their opinions without highlighting their names. The data were collected between November 2019 and February 2020.

To conduct the research, four ethical principles were applied: truthfulness, thoroughness, objectivity, and relevance [49]. The consent form provided was read and signed by the participants. Participants were made aware that they had the choice to participate in the study voluntarily, and that they were informed that they were allowed to withdraw from the study at any time they wanted to. Researchers also highlighted that all provided information would be treated with confidentiality and employed exclusively for research objectives. Thematic analysis was performed to analyse the data collected from participants. We analysed our data according to culture shock theory to determine whether interviewees went through the relevant phases of culture shock. The process of thematic analysis went through six phases [50], by using the qualitative data analysis

software NVIVO.

IV. FINDINGS AND DISCUSSIONS

A. Experiences of Refugees

The objective of the study was to examine how mobile phones are employed by refugees in South Africa to navigate culture shock. The experiences of refugees can be examined through the lens of the concept of culture shock. The phases' duration differed based on the length of time the respondents had been residents in the country. Refugees' emotions upon their initial arrival in the country differed from those expressed during the interviews. There were alterations in perceptions, and they had developed an understanding of various matters while confronting diverse challenges. This involves facing languages and cultures different from their own, experiencing exclusion, and difficulties related to legal documentation.

In the beginning, it is reported that most refugees go through what is described as a honeymoon period. At the time of the research, it was noted that a significant number of participants were in the rejection or regression phase. Refugees in the recovery phase were those who had been in South Africa for a long period. Hardly any, if at all, had reached the reverse culture shock phase, where they were fully accepting the new life in the host country. The absence of reverse culture shock was observed among the participants, as none of them revisited their country of origin, eliminating the need for re-adaptation. A few individuals found themselves comfortable and relatively content in the country they were residing in. In our view, the networks among refugees in the host country are sufficiently strong, reducing the chances of experiencing a reverse culture shock. Nonetheless, there is no way to confirm this, as none of the refugee participants had gone back to their home countries. The phases of culture shock identified in this study are summarised for ease of reference in Fig. 3.

Phase	Description
Honeymoon	The participants were initially happy, excited, and curious to come to the new place, with the hope that their lives were going to change for the better.
Rejection	The participants become dissatisfied with their experience in the host country. The reality and difficulties that they face quell their excitement. They experience tiredness and stress as a result of not understanding the local language, culture, and behavior.
Regression	Rather than regress entirely, the participants consolidate their ethnic or national base and start to address language barriers and other challenges.
Recovery	Participants who have developed sufficient knowledge of the local culture begin to be integrated into the host country. They are recovering, and come to accept their new conditions. Some of them begin to identify with the cultures of both South Africa and their culture of origin.

Fig. 3 The stages of cultural shock outlined in this study

B. The Benefit of Mobile Phone Usage

It was observed in the findings that refugees used mobile phones to enhance task efficiency, overcoming some of their daily challenges. The mobile phone is considered a vital requirement for refugees as they arrive in their host country, as it assists in obtaining general information about their countries of origin and facilitates communication with the host government by presenting the information in their language [19]. As per the findings, the following principal benefits of using mobile phones were recognized among refugees:

Mobile Phones to Get Directions

Mobile phones assisted refugees in familiarising themselves with the host country. It was indicated by the seven participants that they turned to a map or GPS app for guidance while driving, in the absence of support from the host communities. Due to an insecurity in their language abilities, they were unwilling to interact with South Africans. Most participants believed that the host community displayed a lack of respect toward refugees due to their lack of language knowledge. Refugees could drive confidently to any location they wanted to reach. With the help of the appropriate mobile app, refugees can move freely to any location without the fear of getting lost or offended.

"This GPS mobile app helps people like us, who are unfamiliar with the location, a lot. We can go to a new place without getting lost" [Participant 5].

The Capability of Mobile Phones in Financial Activities

Within the realm of financial actions, there is involvement in the buying and selling of goods and services, managing and retaining financial assets, in addition to the issue of securities. The organization of loans and additional financial strategies aimed at specific economic objectives. The use of mobile phones in running a business helps communicate with customers, order products, and carry out transactions, including payments. One participant reported being driven by a business that conducts operations on Facebook, engaging in the commerce of products through chat and text interactions. Many participants indicated proficiency in written English but acknowledged a struggle when it comes to verbal expression.

"You can also purchase goods online. There is a page on Facebook, namely Facebook Marketplace. You can negotiate over the prices with suppliers through messages and can get your needs without physical meetings." [Participant 10]

The research findings demonstrate that using a mobile phone for these purposes is a convenient approach for refugees who lack familiarity with the country and encounter difficulties with local languages. It affords them the ability to fulfil their needs without leaving their place of residence. As language barriers posed limitations on communication between refugees and citizens, a participant remarked that the mobile phone enabled them to avoid feeling judged by South Africans. This was accomplished by addressing their needs through remote interaction, eliminating the need for in-person meetings.

"It is easier to place an order or buy something by using

a mobile phone and you can get your needs without judgment of local people” [Participant 21].

Many immigrants, including refugees in South Africa, are drawn to services like food delivery and taxi driving due to the flexibility in working hours and relatively lenient background checks [46]. Three participants, working as drivers in a transport company, credited their daily income to the use of mobile phones. Their work involved using mobile applications provided by company, and clients could only contact them through their mobile phones. A smartphone was mandatory for starting the job, as the tasks could not be carried out without it. According to the results, refugees achieve economic growth with the aid of mobile phones.

“My employer requires me to have a smartphone. There is an application that helps us to be connected with customers who want a taxi, find their location with GPS, and guide us while driving.” [Participant 13]

Moreover, the participants who work as drivers underscore the support provided by mobile phones in handling situations. The availability of a dictionary and Google Translate on their mobile phones played a role in easing the difficulties linked to their lack of proficiency in the local language, especially English, while engaged in their work. Google Translate, for instance, helped them understand the meanings and pronunciations of local words. With a mobile phone, translating from one language to another becomes easy and rapid. In line with [2], the results demonstrate that refugees enhance their English communication through the use of mobile phones. The participants pointed out the crucial role played by a mobile translator application in resolving language challenges: “It helps me in translation because the local languages for me are the big issues, if I am stuck with a word, I can easily translate” [Participant 8].

The Benefit of Using Mobile Phones for Information Access

Refugees use mobile phones to exchange or seek information and promote the flow of information within the informal network. The rarity of face-to-face conversations is due to the refugees' extensive work hours in cities. Moreover, mobile phones simplify the process of obtaining information in their preferred languages [3]. Participants noted that the influence of mobile phones in easing access to information was noteworthy.

12 participants noted that they conducted research on various websites using their mobile phones. They pointed out the importance of having the capability to use a mobile phone to access information in their languages, eliminating the need for physical movement. For research assistance, the first platform that was used was the Google search engine. It helped them become familiar with the country and access valuable information related to the new area. Besides, mobile phones helped refugees to unwind and maintain their confidence. The interviewees also emphasised the role of the YouTube platform in searching for audio and video recordings of music and preaching from their home countries.

“I use my phone to do some research and to translate the information into my language. I like reading, but mostly listening, because it is what I like, and informs me of many

things regarding my faith in my language by listening to preachers on YouTube” [Participant 6].

The results indicate that mobile phones are beneficial for newly arrived refugees when they submit their asylum-seeker applications. Mobile phones can be used to search for information about the refugee reception office and the requirements for the application. Additionally, mobile phones assisted asylum seekers in gathering information about the application processes from fellow refugees.

Learning Local Languages

The findings of this study show that refugees make use of mobile phones to learn local languages, involved in the host culture, and stay connected with their own culture. These practices significantly contribute to their feeling of being acknowledged and integrated into the host country. Fig. 4 summarises the importance of the use of mobile phones in relation to lack of language issues.

Category	Themes
Language	Assistance of mobile phones in learning South African languages. One participant explained how spending time in a chat on social media with residents contributed to his awareness of linguistic skills and increased his writing capacity. The more they interacted, the more they gained skills. Interacting with local communities forced them to use the common language.
Becoming involved in local culture	Assistance of mobile phones in learning and getting involved in South African culture. Refugees used mobile phones to watch local dances and songs and to learn about the new culture.
Navigating situations	Assistance of mobile phones in managing situations. A majority of participants reported how mobile phones assisted them in resolving language challenges. For instance, they might call friends or family to ask the meaning of words when at a loss.

Fig. 4 Summaries of the crucial role of mobile phones in mitigating language-related problems

Maintaining Relationships with Family and Friends

All participants stated that mobile phones allowed them to remain connected with friends and relatives in their home country. Many of them stated that their families had stayed in their countries of origin. This circumstance had an undesirable effect on their lives, causing depression and loneliness in their new place. The availability of mobile phones allowed them to interact with their relatives and keep up with what was going on. These participants stated that family members in their countries of origin keep them up to date on what was happening back home regularly.:

“I use my phone, especially WhatsApp, to talk to my family and friends from my country of origin” [Participant 16].

According to the findings, mobile phones allow refugees to communicate with other refugees in the host country. As reported by [25], refugees use mobile phones to connect with relatives and look for job opportunities in their receiving country [4]. Mobile phones enable users to communicate through text messages on various platforms used for social networking. According to the participants, foreign forums are made up of individuals who share the same national origins; a notable number of these individuals have refugee status. These forums communicated via WhatsApp group chat. This allowed the refugees to engage with one another and share ideas. Several members of the chat might be able to resolve their issues by obtaining the assistance of old-timer refugees. One participant described that if there were any problems on the way to work, like transportation issues, fellow refugees would communicate through the social media group. This practice contributes to the refugees' interconnectedness and communal living.

"If something bad happens in a certain area, other refugees on our WhatsApp group can warn me. Maybe there is a manifestation of crime in a certain street so I can try to avoid it" [Participant 26].

C. The Use of Mobile Phones in Navigating Culture Shock

The study shows that mobile phones assist refugees in South Africa in navigating only three phases of culture shock, namely: honeymoon; regression; and recovery phases, and they played a significant role, as explained in Section B on the benefit of mobile phones for refugees. During the honeymoon period, 85% of refugees used social media platforms and mobile phone applications including WhatsApp, Facebook, and Instagram to connect with friends and loved ones in their countries of origin to share their feelings of excitement and to share the benefits of the host country. The WhatsApp video call was the most popular mode of communication between participants and their people back home. Furthermore, they engaged in communication with them using voice calls, chat, and SMS. Refugees had the freedom to reach out to their homes every day or whenever they preferred. This is consistent with [51], which noted that mobile phones enable refugees to make contact with relatives and close friends in the host country, their countries of origin, as well as global community.

Throughout the regression period, the variations in culture and other difficulties cause a lack of confidence, misunderstandings, and a feeling of rejection from the host community. Mobile phones help refugees with transformation methods contribute to developing the local language and become more familiar with the culture of their host country [51]. Based on the results, refugees use mobile phones to gain local language knowledge, connect to host cultures, and continue to maintain their cultural background. These practices have assisted them in becoming more recognised and assimilated in the host country. Many participants stated that mobile phones supported them in overcoming language barriers. Using a dictionary and Google Translate on their mobile devices was instrumental in dealing with the challenges associated with the limitation of local language skills, particularly in English. Individuals who exclusively spoke

French relied on mobile applications to translate from French to English. Google Translate played a crucial role in assisting them in understanding the meanings and pronunciations of local words. The results are in agreement with [2], these findings show that refugees employ mobile phones to bolster their capabilities in English communication. Communication did not present a significant challenge for those who have elevated their English proficiency, given that English is the primary professional language in the country. Through improved communication, participants in this study used mobile phones to establish connections with the new location and enhance their engagement with the host society [29]. The majority of students in the study highlighted that the Google translation app played a role in speeding up their learning process.

"When I got stuck with a word, for example, I immediately used a Google translator app to find out the meaning in my local language" [Participant 12].

For participants to develop the recovery phase, having accessibility to mobile phones was a fundamental need for all refugees in the host country. Through the use of these devices, they were able to transform certain aspects of their lives. Some refugees received assistance to recover from their hardship and acknowledge the unfamiliar circumstances of the host countries with the use of mobile phones. Participants were given opportunities to participate socially in host country services and could relate to local people's behaviour. They developed confidence in themselves in a variety of situations. A few of them started to become familiar with both South Africa and their original cultures. The greater the relationships refugees generate, and the stronger they are, as well as the more knowledge about the culture they have, the higher the probability it is that they will achieve a sense of integration and comfort in the host country. Participants might continue to celebrate in their languages, connect with other individuals (both refugees and the local community), and increase relationships amongst themselves. The findings illustrate the differences in real-life experience among refugees in culture shock phases, while also highlighting some similarities. Fig. 5 summarises the condition of refugees in the process of the culture shock.

V. CONCLUSION

The findings indicate that the availability, functionalities, and affordability of mobile phones play a crucial role in determining their usage. The cultural shock paradigm serves as our reference point, as we recognise its relevance to our work. This study reveals the instances of mobile phone usage among refugees. Culture shock occurs during the integration, relationship maintenance, and communication development processes. The study also found that using mobile phones allows refugees to learn about the culture of their hosts while staying connected with their loved ones from their home country. Their culture shock grows as they form more relationships and gain additional cultural skills. This provides refugees with an improved understanding of the guidelines that foster social life.

Phase 1	Phase 2	Phase 3,4
-Being happy - Feeling good and excited to move - Hope of the life -Feeling secure	-Developed a sense of loneliness -Experienced loss of trust -Were uninterested in participating in local societal activities -Experienced language and culture knowledge barriers -Experienced a lack of confidence -Were fearful of interacting with local communities -Felt unable to integrate into the host society -Struggled to use public websites or apps	-Were able to participate in local society activities -Developed the identity of heritage culture -Enhanced social assimilation -Were confident and comfortable in communication -Had an increased ability to use a local digital system -Improved local language knowledge -Increased social integration -Developed health and wellbeing

Fig. 5 Comparison of the culture shock phase outcomes for refugees

This study aimed to explore how refugees in South Africa use mobile phones to cope with culture shock. Considering the limitations of the current study, future research should focus on different types of migrants, specifically distinguishing between asylum seekers and refugees. This could improve the level quality of the research findings. A more detailed category might involve to analysis of distinctions in ICT use between asylum seekers waiting for refugee permits and those who have been denied. Asylum seekers could be classified based on whether they had an approved permit to engage in employment or were awaiting an outcome on their applications. Furthermore, due to this difference in refugee categories, the research could have gone deeper if it had concentrated on other significant differences among refugees (including those who reside in refugee camps compared to the ones who migrated individually and illegally into the country) and across countries.

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