

The Use of Mobile Phones by Refugees to Create Social Connectedness: A Literature Review

Sarah Vuningoma, Maria Rosa Lorini, Wallace Chigona

Abstract—Mobile phones are one of the main tools for promoting the wellbeing of people and supporting the integration of communities on the margins such as refugees. Information and Communication Technology has the potential to contribute towards reducing isolation, loneliness, and to assist in improving interpersonal relations and fostering acculturation processes. Therefore, the use of mobile phones by refugees might contribute to their social connectedness. This paper aims to demonstrate how existing literature has shown how the use of mobile phones by refugees should engender social connectedness amongst the refugees. Data for the study are drawn from existing literature; we searched a number of electronic databases for papers published between 2010 and 2019. The main findings of the study relate to the use of mobile phones by refugees to (i) create a sense of belonging, (ii) maintain relationships, and (iii) advance the acculturation process. The analysis highlighted a gap in the research over refugees and social connectedness. In particular, further studies should consider evaluating the differences between those who have a refugee permit, those who are waiting for the refugee permit, and those whose request was denied.

Keywords—Belonging, mobile phones, refugees, social connectedness.

I. INTRODUCTION

MOBILE phones are enhancingly ubiquitous, and are rapidly becoming the main tool of communication in modern societies [1], [24]. A number of studies have demonstrated how the use of mobile technology, through its many affordances, serves to empower marginalised communities [2]. Through a review of the literature, we analyse how refugees use mobile phones and how this facilitates social connectedness and grassroots innovativeness amongst them [3]. We demonstrate how the use of mobile phones by refugees offers social-connectedness benefits and basic transformation. Social connectedness explains the individual's capacity to collaborate [8]. Social connectedness is associated with wellbeing and describes social-life engagements as successful key roles [9].

Refugees are individuals who have escaped their country of origin due to unbearable living conditions such as persecution, war, or violence [4]. The term includes people who have sought asylum in other countries, and the internally displaced persons (IDPs). An IDP is a person who leaves their region of origin for the reason of disagreement or conflict, but remains

Sarah Vuningoma and Maria. R. Lorini (Dr.) are with the Information System Department, University of Cape Town, Rondebosch 7701, South Africa (e-mail: srhvun001@myuct.ac.za, maria.lorini@uct.ac.za).

Wallace Chigona (Prof.) is with the Information System Department, University of Cape Town, Private Bag X3, Rondebosch 7701, South Africa, (e-mail: Wallace.chigona@uct.ac.za).

inside their own country [5]. According to the United Nations High Commissioner for Refugees' (UNHCR) annual Global Trends report [6], by the end of 2016, host countries recorded 310,000 refugees and asylum seekers, mainly due to increased violence in the countries of origin. In 2017 there were 44,400 displacements and 3.1 million asylum seekers globally. The use of information and communication technologies (ICTs) has the potential to empower communities and make a positive impact on social change [11]. It allows individuals to access services at their convenience, thus saving time and affording equal information access. This may lead to the empowerment of people and the availability of services to everyone, including refugees.

Refugees use different devices to communicate. They may use digital devices in their lives, which have significantly reduced the cost of many services such as medical support, learning, transport, and Home Affairs service. Increasingly, they are using mobile phones to achieve their communication goals. Furthermore, refugees can get easy access to communication solutions and this can lead to social connectedness through ICTs, mobile phones in particular [4]. This has an implication on how they access services from different organisations [6] and on their integration in host communities [7]. Mobile phones may offer refugees efficient ways for social engagement and societal participation. The objective of this study was to analyse the literature that deals with the role of mobile phones for social connectedness among the refugees. The analysis was broken down into two parts: (i) Mobile phone use among refugees, and (ii) Social connectedness amongst the refugees' communities.

II. BACKGROUND

A. Refugees Overview

In most cases, an incredibly high number of refugees in the world are victims of war and political crisis [12]. Mostly, refugees escape their countries due to war, natural disasters, persecution for religion, and political views [13]. It is important to differentiate two inter-related concepts: refugee and asylum seeker. Even though they are often used interchangeably, these terms are different [14]. In general, a person entering a new country as a potential refugee applies for an asylum seeker permit. The asylum seeker permit is a temporary permit, which "request for a sanctuary has yet to be processed" [47].

Refugees face numerous challenges such as language barriers, lack of cultural knowledge of the new country, and ethnicity concerns. For these reasons, they struggle in their attempts to rebuild their lives and develop a sense of

belonging in the host countries. As a UNHCR [40] report has presented, the number of worldwide refugees continues to increase every year. This underlines the large degree to which families, friends, and loved ones are physically separated. In turn, this situation influences those who had fled their country for economic motives; this also dominates the refugees' actions [13]. Additionally, local communities face distinct challenges when accommodating large numbers of refugees and providing necessary support structures and protection interventions [14].

B. Social Connectedness

Social connectedness is described as “the subjective awareness of being in a close relationship with the social world” or as a measure of how two or more individuals come together and communicate [16], [38]. A person who fails to feel connected starts feeling isolated and disconnected from others [43], [45]. Interpersonal connectedness, such as networking with friends and family, provides a sense of belonging, and wellbeing [17]. Connectedness represents “valuing of relationships and sensitivity to the effects of one’s actions on others” [41]. Social connectedness may also be perceived as a strategy to increase social experiences and to reduce different hardships of multidimensional neediness in refugees’ society as well as their integration [18].

The literature suggests that, in social connectedness, the benefit of acculturation in the context of culture and language can promote emotional wellbeing and close relationship. Acculturation is the procedure of socialisation and perpetuation of the standards of the culture, qualities, and ideas [35]. Acculturation represents one of the aspects of social connectedness which helps to reduce some of the negative effects of the refugees and might support human development (The increasing sense of social connectedness can help communities to obtain emotional wellbeing, and reduce feelings of isolation) [36]. Cognitive and emotional reactions represent the interest of contextual value and inspiration that lead to positive behavior [39]. Less digitised communities face challenges of social connectedness in the light of constrained methods for data sharing [19]. Moreover, when an individual does not feel engaged in society, they become homesick and lonely [44].

C. Social Connectedness and Mobile Phones

Mobile phones are speedily becoming an important device in both developed and developing countries [20]. The use of mobile phones has had a positive impact in developing a sense of social connectedness [10]. The existence of connectedness provides a feeling of “a vague but intense and pervasive sense of security as [he/she] feels [themselves] to be human among humans” [21]. Foster et al. [22] understood that connectedness alludes to a feeling of belonging, getting provided for, and bolstered by family members, friends, and associations [22]. The number of close relationships, the satisfaction given by social contacts, and loneliness also measure social connectedness [21].

Social connectedness and integration can be deemed critical

from a health point of view and, arguably, also for building social cohesion. Information transmission is vital for social inclusion while, at the same time, is a potential stumbling block in community-based programmes [23]. Using mobile phones can play a significant role in the economic growths which improve a sense of integration among refugees into the host society [20]. Mobile phones assist persons to solve social connection challenges induced by physical separation, which make it easier to access different types of support and increase the chance of being successful in life [7]. Further, mobile phones offer an opportunity to share information and transfer assets between countries for those who are completely isolated [46], and have improved the standard of the services that the refugees may access [42].

III. METHODS

We searched a number of electronic databases. Our search included peer-reviewed academic papers, conference proceedings, and edited books. The review was limited to academic papers published in the English language. Our search was focused on “mobile phone usage for refugees” and “refugees’ social connectedness” for research papers published between 2010 and 2019. We felt the ten years gap was significant for understanding the factors influencing mobile phone usage in social connectedness of refugees.

The search yielded 20 papers: 14 papers met our criteria, and six papers were excluded due to duplicate publications (published more than one time). The search was done between March and June 2019.

The data were analysed based on the ideas and opinions of the reviewed literature. The main researcher read the papers, searched, and analysed them until she understood the multiple meanings in them. The general inductive approach for qualitative data analysis was adopted [25]. Additionally, the researchers discussed mobile phone usage among refugees and social connectedness among refugees as being the highest priority during the selection phase.

IV. RESULTS

This section of the paper synthesises the themes identified from the literature. Amongst the 14 papers selected, four were from Australia, two from Syria, one from Iran, two from Germany, one from Korea, one from Singapore, and three from South Africa. Table I summarises the analysis of papers in the corpus. Some papers focus on mobile phone usage specifically and a few of them focus on general technology.

A. Use of Mobile Phones amongst Refugees

Mobile phones are an important tool for promoting and integrating the wellbeing of refugees [11], [34]. Numerous factors influence the social participation of refugees in their new homes. Mobile phones have the potential to support refugees to maintain their connections with family and friends that can support integration solutions related to language learning, cultural participation, and bridging into new society [36]. However, the purpose of possession of mobile phones is mainly to link with other refugees which helps them to keep

on the hope of a good life, gain trust, happiness, and the ability to build their future [29].

TABLE I
 ANALYSIS OF PAPERS REVIEWED ABOUT MOBILE PHONE USAGE AND SOCIAL CONNECTEDNESS AMONG REFUGEES

Main focus	Authors	Target	Country	Result
Mobile Phones and refugees	[2]	Refugees and migrants in general	Singapore	Showed that mobile phones may open up life opportunities for refugees' and migrants' communities.
	[7]	Woman Refugees	Australia	Showed that the social well-being improvement assists to reduce isolation and loneliness for the woman refugees. Demonstrated how mobile phones contributed towards the positive wellbeing of refugees' communities.
	[20]	Refugees	South Africa	Pointed out that mobile phones could help break barriers to refugee integration.
	[26]	Refugees	South Africa	Described mobile phones as a source of social interaction and the main tool for refugees to communicate with their family back home.
	[27]	Minor refugees	Germany	Confirmed the benefits of social media among refugees' societies between their countries of origin and the receiving community.
	[28]	Intellectual refugees	Syria	Defined social media as a source of information for refugees.
	[29]	Refugees	Syria	Showed that refugees receive social and emotional support by communicating with their families and friends in their country of origin.
	[30]	Woman refugees/ social connectedness	Australia	Determined how the communication between the refugees and their family back home via mobile phones improve their social connectedness.
	[34]	Urban refugees	South Africa	Showed that there are critical views on mobile phone performance that relate to relevant socio-environmental aspects of the users.
	Social connectedness and refugees	[32]	Syrian refugees	Germany
[33]		Refugees	Korea	Showed the advantages of social connectedness for refugees such as their health wellbeing, economic development, as well as a personal sense of satisfaction.
[36]		Refugees	Australia	Described the role played by the family in the bonding connection among refugees. However, not all refugees had families, and not all families were supportive.
[37]		Refugees	Iran	Highlighted the importance of social connectedness for refugees. It helps them access different services and assists in emotional support.
[45]		Youth refugees	Australia	Showed how ICT supports the successful integration of youth refugees into society.

Abujarour et al. [33] identified the key dimensions of social inclusion for refugees such as asylum state, living conditions, employment status, and the level of ICT knowledge [32]. Furthermore, they stated that the relationship between the intensity of mobile phone use and refugees' social connectedness can be categorised into two groups: (1) family and (2) friends back home. The value of mobile phones for refugees is underlined in aspects such as cost efficiency in communication through social media [32]. Mobile phones afford refugees opportunities to build up the ties to their cultural associations and to be able to participate in activities offered to support them, such as gatherings and support groups [7]. Another study showed that when refugees feel lonely, they use their phones to relax [29]. A further contribution of the technological advancements has seen refugees becoming strong in their advocacy and gaining social connectedness [30].

B. Process of Acculturation

Refugees face numerous challenges and these include language, cultural knowledge, and ethnicity. These issues may hinder successful social connectedness. Furthermore, language is not only a means of communication; it also offers power for individual experiences, for example, as a means for negotiating pathways within set structures such as administration. Besides, refugees use technology to access geolocation services; learn languages, norms, and the culture of the host country [45]. The ability to connect with citizens of a new country reduces the chances of isolation of the refugees [34].

C. Sense of Belonging and to Maintain Relationship

The review showed that many times, mobile phones helped the refugees to stay in touch with their family and friends [26]. Using mobile phones subvert the closed boundaries of restrictive spaces, to allow communication across different societies, providing access to information [31]. Other studies observed how refugees used communication technology to reduce the impact of uncertainty about the wellbeing of loved ones and the general circumstances in their home country [34].

The literature demonstrated that the feeling of effectively participating in the community and creating a social network with members of the society helped the refugees to have limited chances of experiencing isolation [29]. This proved to be the measure of a sense of belonging and it improved the lifestyle of the refugees [37]. For communication purposes, refugees rely on mobile phones to connect with their families and friends. The result also confirmed that the refugees used social media services such as Facebook, WhatsApp, Viber, and Skype to bridge into the new society and to connect with their family members and friends back in their home of origin [27]. Further, if they have found employment, they can keep in close contact with employee [27].

D. Findings Summary

The majority of papers reviewed focused on mobile phones and the refugee, and the use of mobile phones in social connectedness among refugees. The literature found that refugees use mobile phones as the main instrument for communication with friends and family, the acculturation process, and social participation. Moreover, mobile phones

and the ability to interact with members of society grant refugees an ability to feel a sense of belonging in new societies. Table II summarises the findings.

TABLE II
SUMMARY OF CONCEPTS FROM LITERATURE

Concept	Findings
Mobile phone usage	Sense of belonging Access to resource Capital development The ability to build their future Linking with other refugees
Social connectedness	Acculturation Well being Feeling safe New relationship Social participation Bridging into a new society
	Family connectivity Emotional support Peace of mind The hope of a good life Gain trust and happiness

V. DISCUSSION AND CONCLUSION

The study analysed the use of mobile phones in social connectedness among refugees. The results reassessed the ability of refugees in creating a sense of belonging and acculturation by using mobile phones. This review study also confirms that the use of mobile phones makes it possible for the refugees to stay in touch with members of their culture as well as within the community and, in turn, progresses the development of social inclusion, social interaction, and social capital.

Among the papers analysed, we did not find a study that divided the use of mobile phones by the different categories of migrants, particularly for the asylum seekers and refugees. Due to the fact that often these terms are used interchangeably, it would be of interest to evaluate the different use of mobile phones for social connectedness among specific categories. For instance, further research could analyse the use by people that are in a new country for up to one year and migrants that moved to a new country and have lived there longer than a year. A further distinction could evaluate the differences in ICTs usage between asylum seekers who are still waiting for their refugee permits and those whose request had been denied. Concerning the asylum seekers, the evaluation could consider the fact that they had received a legal permit to work, compared to those who are still waiting in a migrants' centre.

The generalisation of the concept of 'refugee' may not generate appropriate results, because the refugees who are in a country for more than one year might have knowledge in culture, language, and laws. Thus, it would be easier for them to network with new people. Their social-connectedness level would differ from a newcomer's one. In fact, communication issues due to language differences, culture, and knowledge gaps count among the major challenges of social connectedness.

Future studies might analyse the differences that exist amongst refugees in different contexts (such as the ones living in refugees camps versus the ones who migrated individually and illegally entered a country) and countries. In the different

scenarios, different ICTs might be used and the research should also consider analysing these approaches and choices.

REFERENCES

- [1] N. D. Lane, E. Miluzz, H. Lu, D. Peebles, T. Choudhury and A.T. Campbell, A. T. (2010), "AD HOC and Sensor Network A Survey of Mobile Phone Sensing," 2010.
- [2] H. Nguyen Arul Chib and R. Mahalingam, "Mobile Phones and Gender Empowerment Mobile Phones and Gender Empowerment: Negotiating the Essentialist-Aspirational Dialectic," *Inf. Technol. Int. Dev.*, vol. 13, pp. 181-185., 2017.
- [3] J. Coley, M. Godin, J. Phillimore, and C. Tah, "Integrating refugees What works? What can work? What does not work? A summary of the evidence," 2019.
- [4] C. Kavuro, "Refugees and asylum seekers: Barriers to accessing South Africa's labour market," *Law, Democr. Dev.*, vol. 19, no. 1, pp. 232-260, 2015.
- [5] B. Mooney, and E., Jarrah, "Safe guarding IDP voting rights," *Forced Migr. Rev.*, vol. 23, p. 55, 2005.
- [6] N. Hamey, "Precarity, affect and problem solving with mobile phones by asylum seekers, refugees and migrants in Naples, Italy," *J. Refug. Stud.*, vol. 26, no. 4, pp. 541-557, Dec. 2013.
- [7] P. Liamputtong, L. Koh, D. Wollersheim, and R. Walker, "Peer support groups, mobile phones and refugee women in Melbourne," *Heal. Promot. Int.*, vol. 31, no. 3, pp. 715-724, 2016.
- [8] O. Stavrova, and M. Luhmann, "Social connectedness as a source and consequence of meaning in life," *J. Posit. Psychol.*, vol. 11, no. 5, pp. 470-479, 2016.
- [9] J. Beer, T. Mitzner, and R. Stuck, "Design considerations for technology interventions to support social and physical wellness for older adults with disability," *Int. J. Autom. Smart Technol.*, vol. 5, no. 4, pp. 249-264, 2015.
- [10] E. Oreglia, J. Srinivasan, "ICT, Intermediaries, and the transformation of gendered power structures," *MIS Q.*, vol. 40, no. 2, pp. 501-510, 2016.
- [11] N. Dahya, and S. Dryden-Peterson, "Tracing pathways to higher education for refugees: the role of virtual support networks and mobile phones for women in refugee camps," *Comp. Educ.*, vol. 47, no. 1, pp. 14-24, 2017.
- [12] I. Salehyan, and K. S. Gleditsch, "Refugees and the Spread of Civil War," *Int. Organ.*, vol. 60, no. 2, pp. 335-366, 2006.
- [13] M. Carballo, and A. Nerukar, "Migration, refugees, and health risks," *Emerg. Infect. Dis.*, vol. 7, no. 3, pp. 556-60, 2001.
- [14] J. Handmaker, and J. Parsley, "Migration, Refugees, and Racism in South Africa," *Canada's J. Refug.*, vol. 201, no. 1, pp. 40-51, 2010.
- [15] A. Helton, "Political Asylum Under the 1980 Refugee Act: An Unfulfilled Promise," *J. Law*, vol. 17, no. 2, pp. 243-255, 1983.
- [16] R. M. Lee and S. B. Robbins, "Measuring Belongingness: The Social Connectedness and the Social Assurance Scales," *J. Couns. Psychol.*, vol. 42, no. 2, pp. 232-241, Apr. 1995.
- [17] R. W. Skierkowski, R. M. Wood, "To text or not to text? The importance of text messaging among college-aged youth," *Comput. Human Behav.*, vol. 28, no. 2, pp. 744-756, 2012.
- [18] K. Samuel, and J. Bagwiza, "Social Connectedness and Poverty Eradication A South African Perspective," 2017.
- [19] V. Toepoel, "Ageing, Leisure, and Social Connectedness: How could Leisure Help Reduce Social Isolation of Older People?" *Soc. Indic. Res.*, vol. 113, no. 1, pp. 355-372, Aug. 2013.
- [20] K. Bacishoga, V. A. Hooper, and K. A. Johnston, "The role of mobile phones in the development of social capital among refugees in South Africa," *Electron. J. Inf. Syst. Dev. Ctries.*, vol. 72, no. 1, pp. 1-21, 2016.
- [21] E. Kahn, "Heinz Kohut and Carl Rogers. A Timely Comparison," *Am. Psychol.*, vol. 40, no. 8, pp. 893-904, Aug. 1985.
- [22] C. E. Foster, A. Horwitz, A. Thomas, K. Opperman, P. Gipson, A. Burnside, and C. A. King, "Connectedness to family, school, peers, and community in socially vulnerable adolescents," *Child. Youth Serv. Rev.*, vol. 81, no. 3, pp. 321-331, Oct. 2017.
- [23] D. Mahoney, and S. Siyambalapatiya, "Community-based interventions for building social inclusion of refugees and asylum seekers in Australia: A systematic review," *J. Soc. Incl.*, vol. 8, no. 2, pp. 66-88, 2017.
- [24] S. A. Asongu and J. C. Nwachukwu, "Mobile phone penetration, mobile phones banking and inclusive development in Africa," *African Financ.*

- J., vol. 18, no. 1, pp. 34–52, 2016.
- [25] D. R. Thomas, "A General Inductive Approach for Analyzing Qualitative Evaluation Data," *Am. J. Eval.*, vol. 27, no. 2, pp. 237–246, 2006.
- [26] K. A. Bacishoga, and K. L. Johnston, "Impact of mobile phones on integration: The case of refugees in South Africa," *academia.edu*, vol. 9, no. 4, pp. 1–12, 2013.
- [27] N. Kutscher, and L. M. Krefß, "The Ambivalent Potentials of Social Media Use by Unaccompanied Minor Refugees," *Soc. Media Soc.*, vol. 4, no. 1, p. 2056305118764438, 2018.
- [28] R. Dekker, G. Engbersen, J. Klaver, and H. Vonk, "Smart Refugees: How Syrian Asylum Migrants Use Social Media Information in Migration Decision-Making," *Social Media and Society*, Advance online publication. doi:2056305118764439., 2018.
- [29] A. Alencar, K. Kondova, and W. Ribbens, "The smartphone as a lifeline: an exploration of refugees' use of mobile communication technologies during their flight," *Media, Cult. Soc. p.0163443718813486*, 2018.
- [30] R. Walker, L. Koh, D. Wollersheim, and P. Liamputtong, "Social connectedness and mobile phone use among refugee women in Australia," *Heal. Soc. Care Community*, vol. 23, no. 3, pp. 325–336, 2015.
- [31] A. Chib, and R. G. Aricat, "Belonging and communicating in a bounded cosmopolitanism: the role of mobile phones in the integration of transnational migrants in Singapore," *Inf. Commun. Soc.*, vol. 20, no. 3, pp. 482–496, 2017.
- [32] S. S. AbuJarour, and H. Krasnova, "Understanding the role of ICTs in promoting social inclusion: The case of Syrian refugees in Germany," in *Twenty-Fifth European Conference on Information Systems (ECIS)*, Guimarães, Portugal, 2017.
- [33] E. Yoon, and R. M. Lee, "Importance of social connectedness as a moderator in Korean Immigrants' subjective well-being," *Asian Am. J. Psychol.*, vol. 1, no. 2, pp. 93–105, 2010.
- [34] K. Bacishoga, J. Kevin, and B. Irwin, "Mobile Phone Use for Empowerment in the Context of Social Exclusion: An Ethnographic Study of Urban Refugees in South Africa," University of Cape Town, 2017.
- [35] B. S. K. Kim, and S. G. Alamilla, "Acculturation and Enculturation: A Review of Theory and Research Student Perceptions of Hawaiian Values View project," Hawaii, 2019.
- [36] D. Mentor, "Supporting Students' Connectedness via Texting the Study," *Educ. Rev. online*, vol. 5, no. 2, p. 11, 2011.
- [37] A. B. Strang, and N. Quinn, "Integration or isolation?: Mapping social connections and well-being amongst refugees in Glasgow," 2013.
- [38] B. J. Bayer, W. S. Campbell, and R. Ling, "Connection Cues: Activating the Norms and Habits of Social Connectedness." *Communication Theory*, vol. 26, no. 2, pp. 128–49, 2016.
- [39] R. F. Baumeister, and M.R. Leary, "The need to belong: desire for interpersonal attachments as a fundamental human motivation," *Psychological bulletin*, vol. 117, no. 3, pp. 497-529, 1995.
- [40] UN Refugee Agency (UNHCR), "Global Trends: Forced Displacement in 2018," 2019.
- [41] S.S. Rude, and B. L. Burnham, "Connectedness and neediness: Factors of the DEQ and SAS dependency scales," *Cognitive Therapy and Research*, vol. 19, no. 3, pp. 323-340, 1995.
- [42] S. AbuJarour, C. Bergert, J. Gundlach, A. Köster, and H. Krasnova. "Your Home Screen Is Worth a Thousand Words": Investigating the Prevalence of Smartphone Apps among Refugees in Germany, 2019. Retrieved from https://aisel.aisnet.org/amcis2019/social_inclusion/social_inclusion/3/
- [43] S. Hausknecht, R. Schell, F. Zhang, and D. Kaufman. "Building Seniors' Social Connections and Reducing Loneliness Through a Digital Game. Canada." Proceedings of the ICT4Ageingwell, pp. 276-284, Lisbon, Portugal, 2015.
- [44] T. Wildschut, C. Sedikides, C. Routledge, J. Arndt, and F. Cordero. "Nostalgia as a Repository of Social Connectedness: The Role of Attachment-Related Avoidance," *Journal of Personality and Social Psychology*, vol. 98, no. 4. Pp. 573–86, 2010.
- [45] K. T. Thomas, "Bridging social boundaries and building social connectedness," *Equality, Diversity and Inclusion: An International Journal*, 2019.
- [46] J. Marlowe. "Social media and forced migration: The subversion and subjugation of political life," *Media and communication*.