



UNIVERSITY OF CAPE TOWN :: FACULTY OF COMMERCE
INFORMATION SYSTEMS



Can Mobile Phones Enhance Refugees' Integration? A South African Perspective

A **Thesis** presented to the
Department of Information Systems

University of Cape Town

In partial fulfillment of the requirements for the
Masters of Commerce in Information Systems

by

Kasky Bisimwa Bacishoga (BSMKAS001)

Supervisor: Prof. KA Johnston

23th August 2010

i. Plagiarism Declaration

1. I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

2. I have used the APA convention for citation and referencing. Each contribution to, and quotation in, this thesis from the work(s) of other people has been attributed, and has been cited and referenced.

3. This thesis is my own work.

4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

Signature:

Date: 23th August 2010

Full Name of Student: Kasky Bisimwa Bacishoga.

ii. Dedication

This thesis is dedicated to the Almighty Jehovah God who made it all possible. It is also dedicated to my wife Odile Hagenimana Kasky for the love and support that you have given to me, to my daughter Lola Kasky, a real gift from God, and finally to my family and friends for the encouragement you provided during these years of study. I love you.

iii. Acknowledgements

Many people have helped to focus and clarify my thinking and contributed either directly or indirectly to get this job done. I would like to express my deepest gratitude to my supervisor KA Johnston whose help, suggestions and encouragement helped me to complete this thesis.

I want to thank the University of Cape Town, especially the department of Information Systems and its members for making the facilities at the department unreservedly available.

I would like to recognize the help I received from my colleagues of Information Systems. I wish you all the best.

I am deeply grateful to all the refugees who participated in this study and generously shared the experiences as refugees in South Africa. I thank you all.

Lastly, I offer my regards and blessings to all of those who supported me in any respect during the completion of this thesis. Thank you all very much.

Kasky Bisimwa Bacishoga

Table of Contents

ABSTRACT	VIII
-----------------------	-------------

1. INTRODUCTION	1
2. LITERATURE REVIEW	3
2.1. STATUS OF REFUGEES IN SOUTH AFRICA	3
2.2. MOBILE PHONE USAGE	6
2.2.1. <i>Use of mobile phones in South Africa</i>	6
2.2.2. <i>Factors affecting adoption and use of mobile phones</i>	7
2.2.3. <i>The social impact of mobile phones</i>	8
2.3. SOCIAL CAPITAL.....	9
2.3.1. <i>Bridging Social Capital</i>	10
2.3.2. <i>Bonding Social Capital</i>	10
2.3.3. <i>Maintained Social Capital</i>	11
2.3.4. <i>The Link between Social Capital and Social Integration</i>	11
2.4. SOCIAL INTEGRATION	12
2.4.1. <i>Social and Cultural Participation</i>	13
2.4.2. <i>Economic Participation</i>	14
2.4.3. <i>Political Participation</i>	14
2.4.4. <i>Benefits and Disadvantages of Social Integration</i>	14
2.5. GAP IN LITERATURE AND CONTRIBUTION OF THE STUDY.....	15
3. THEORETICAL FRAMEWORK AND RESEARCH QUESTIONS	16
4. RESEARCH APPROACH	17
4.1. RESEARCH PERSPECTIVE	17
4.2. RESEARCH METHOD.....	18
4.3. DATA COLLECTION.....	19
4.4. SAMPLE.....	20

4.5.	DATA ANALYSIS	22
4.6.	SUMMARY OF RESEARCH METHOD.....	23
4.7.	LIMITATIONS AND DIFFICULTIES.....	24
5.	ANALYSIS OF FINDINGS.....	ERROR! BOOKMARK NOT DEFINED.
5.1.	MOBILE PHONE USE PATTERNS AMONG REFUGEES	24
5.3.	THE EFFECT OF MOBILE PHONE USAGE ON SOCIAL CAPITAL	26
5.3.1.	<i>Bonding Social Capital.....</i>	<i>26</i>
5.3.2.	<i>Bridging Social Capital.....</i>	<i>28</i>
5.3.3.	<i>Maintained Social Capital.....</i>	<i>31</i>
5.4.	THE CONTRIBUTION OF MOBILE PHONE USAGE TO SOCIAL INTEGRATION	34
5.4.1.	<i>Impact of Mobile Phones on Social and Cultural Participation.....</i>	<i>34</i>
5.4.2.	<i>Impact of Mobile Phones on Economic Participation.....</i>	<i>36</i>
5.4.3.	<i>Impact of Mobile Phones on Political Participation.....</i>	<i>39</i>
6.	IMPLICATIONS	40
7.	CONCLUSION	44
8.	KEY RECOMMENDATIONS.....	46
9.	BIBLIOGRAPHY	48
	APPENDIX A: Approximate cumulative numbers of asylum seekers and legally recognised refugees by year, 2001–2005	57
	APPENDIX B: Cumulative applications for asylum from major african countries to december 2005	58
	APPENDIX C: Interview questionnaire	59

LIST OF FIGURES

Figure 1: Mobile connections vs Users in South Africa 1994-2008 (World Wide Worx 2009).	6
Figure 2: Social Capital (adapted from Johnston, Tanner, Lalla &, Kawalsky, 2010). ...	9
Figure 3: Investigation of linkage between refugees, mobile phone usage, social capital, and social integration	16

LIST OF TABLES

Table 1: Information on respondents.....	21
Table 2: Phases of thematic analysis (Braun & Clarke, 2006, p. 87).....	23
Table 3: A summary of the research method proposed.....	23

ABSTRACT

The purpose of this study is to investigate the role of mobile phones in enhancing the integration of refugees into South Africa. Semi-structured interviews were conducted with 29 refugees in South Africa who spanned a range of selection criteria. Refugee populations in South Africa are a heterogeneous group that come from different countries and speak different languages with differences in culture, age, gender, and family status. This sample was selected to take account of this heterogeneity. As no instrument was available one was developed and tested.

The analysis of the data used Thematic Analysis and grouped the themes according to the concepts depicted in a model showing the interactions between social capital and social integration and mobile phone usage.

The study found that mobile phones play an important role in the development, maintenance and use of social capital, the impact of social capital on social integration and directly on social integration. Mobile phones, both through the social networks of social capital and directly, contribute to a number of the expected outcomes of social and economic participation but fewer of the expected outcomes of political participation. It is in the latter aspect, political participation, that the actions of authorities and agencies together with discrimination reduce the influence of mobile phones. It is shown that refugee integration is a process which requires mutual adjustment and participation. However, it is clear that the mobile phone can play a major part in the process.

Integration is a subjective process and the respondents presented their point of view. This may not be the overall experience of refugees in South Africa. Therefore, the findings of this study provide scope for further research. However, this study has been able to throw light on the role played by mobile phones in enhancing the integration of refugees into the mainstream community.

Keywords: Refugees in South Africa, Mobile phone, Social capital, Social integration

1. INTRODUCTION

The integration of refugees into a country has the potential to solve the difficulties of those who have been living in exile for long periods (Fielden, 2008). At the same time, integration results in a significant flow of resources and an important state building contribution to the host country (Karen, 2002). For those working with refugees, integration is and remains an important policy as well as a targeted outcome (Frattini, 2006; Scottish Executive, 2006).

The integration of refugees has become a much debated issue among researchers, practitioners and policy makers. There appears to be little consensus concerning refugee integration strategies and policies which are developed in different ways in different countries (Korac, 2003).

It has been suggested that Information and Communications Technology (ICT) has the potential to promote refugee integration (Cachia et al., 2007; Zinnbauer, 2007) by enabling access to information sources and therefore to markets (Dutta & Mia, 2008). However, it is argued that in developing countries the adoption of ICTs is made difficult by contributing factors such as high costs, lack of mobility, limited electricity, and inadequate skills (Chigona & Mbhele, 2008; Sinha, 2005). Mobile phones provide a solution to these challenges since these “are quickly becoming an affordable, germane and accessible tool to many poor communities” (Sinha, 2005, p. 1).

Mobile phones are capable of creating and strengthening social capital through improved networking (Kennan et al., 2008; Scott, Batchelor, Ridley & Jorgensen, 2004; Sinha, 2005). Social capital is defined as “the extent, nature, and quality of social ties that individuals or communities can mobilize in conducting their affairs” (Zinnbauer, 2007, p. 16). In turn, social capital has an impact on the social integration of refugees (Cachia et al., 2007; Zinnbauer, 2007). Social integration is the “maximum involvement and participation of each member of society in social activities” (United Nations, 2008, p. 2). Thus the mobile phone has a strong potential for a positive influence on refugee integration (Cachia et al., 2007).

The purpose of this study is to investigate the role of mobile phone usage in enhancing the integration of refugees into South Africa. To achieve this purpose, this research has the following objectives:

- To explore mobile phone usage patterns among refugees in South Africa
- To explore how mobile phone use can affect social capital amongst refugees in South Africa.
- To explore how the formation of social capital can enhance or constrain the social integration of refugees in South Africa.
- To examine the impact of mobile phones on the formation of social capital of refugees and how this can enhance or constrain their social integration in South Africa.
- To investigate whether the use of mobile phones has an impact on refugees in terms of social, economic, and political participation.

This study focuses on refugees in South Africa, a Southern African country considered to be the hub of the region (Landau & Bourgoignie, 2007; Grandes, Peter & Pinnaud, 2003); a country in which the mobile phone market has seen a rapid uptake with the penetration rate estimate of around 100% (Cellular News, 2009). South Africa is regarded as one of the largest recipients of refugees in the world (UNHCR, 2007). Nevertheless, in South Africa discriminatory practices and attitudes continue to be manifested against refugees who are denied rights to critical social services (Landau, 2006), and uniformly victimised in violent practices; the most disturbing has been the xenophobic attacks in 2008.

As there is confusion between the terms refugees and asylum seekers in South Africa (Palmary, 2002), the term 'refugee' will be used to refer to those who have formally been granted refugee status as well as those who are seeking refuge in South Africa. This study is focused on 'refugees' from the countries shown in Appendix B.

Using a social capital theoretical framework, this study will explore the potential of mobile phones to enhance the integration of refugees. The findings will serve to inform various stakeholders on the success and limitations of mobile phones as a tool for enhancing the integration of refugees into the host community (South Africa). This study is crucial since circumstances are adding to the numbers of refugees and South Africa is likely to attract

more and more of those refugees (Palmary, 2002). At the same time, refugees are the daily objects of discrimination with the destructive consequences to both nationals and non-nationals in South Africa (Landau, 2008).

2. LITERATURE REVIEW

The objective of this literature review is to provide an overview of existing knowledge in the field (Knopf, 2006). This literature review is divided into four major sections, namely the status of refugees in South Africa (2.1), mobile phones usage in South Africa (2.2), social capital (2.3), and social integration (2.4). The review will then identify gaps in the literature and outline the expected contributions of this study (2.5).

2.1. Status of Refugees in South Africa

During the apartheid era South Africa was the generator of refugees; South Africans were crossing the border seeking exile and refuge elsewhere, particularly in other African countries (Cejas, 2007). The post-apartheid era, however, is attracting an ever increasing number of migrants and asylum-seekers from throughout the continent and beyond (Cejas, 2007; Landau, 2006).

The United Nation High Commissioner for Refugees (UNHCR) claims that South Africa was the main destination for new asylum seekers worldwide in 2009 and has rapidly evolved into one of the largest recipients of asylum seekers in the world (UNHCR, 2009). This trend will become more pronounced (Grandes et al., 2003; Landau, 2007) as most African countries are experiencing ethno-religious conflicts, and socio-political and economic instability (Okpala & Jonsson, 2002). Another contributing factor is the striking disparity in living standards and economic development between South Africa and those countries (Adepoju, 2005; Naudé, 2008).

No one can provide exact figures of the number of refugees now living in South Africa (UNHCR, 2007). The approximate cumulative numbers of asylum seekers and legally recognised refugees for the years 2001-2005 is shown in appendix A, and the cumulative numbers of applications for asylum from major African countries to December 2005 is shown in appendix B.

Following its first democratic elections in 1994, South Africa, in line with its constitutional commitments to human rights and dignity, acceded to and ratified several treaties relating to forced migration and refugee protection (Handmaker, 2001). In this context, South Africa acceded to the Organisation of African Unity's (OAU) 1969 Convention governing specific aspects of refugee problems in Africa and ratified the 1951 Refugee Convention and its 1967 Protocol relating to the rights of refugees (Palmary, 2002). In 1998 the Refugees Act 130, governing the admission of asylum seekers was passed, this became effective two years later in 2000 (Palmary, 2002). The 1996 South African Constitution (the Bill of Rights) guaranteed fundamental rights to all who are resident in the country, including refugees and asylum seekers (Crush, 2000; Landau, 2006).

It is important to note that South African law makes no provision for refugee camps and refugees are encouraged to disperse into urban areas (Landau, 2006). Many of them with skills and a willingness to work still find themselves excluded from formal and informal markets as well as from financial services (Landau & Kabwe-Segatti, 2009). Although the papers issued to refugees grant them employment rights, legitimacy of these papers remains unrecognised by most of the employers (Landau & Kabwe-Segatti, 2009). In addition, refugees face multiples obstacles in accessing social services in South Africa although entitled to them by law. In educational services, it has been found that "close to one third of school age refugees' children are not enrolled in schools" (Landau & Kabwe-Segatti, 2009, p. 41) while in health service refugees struggle to access emergency and basic health services due to the unwillingness or inability of some staff members (Belvedere, 2003). Although landlords and rental agencies hesitate to contract with refugees due to doubt over the legitimacy of their papers, 70% of urban refugees live in privately rented inner-city flats since they are not included in South African subsidised housing programmes for low-income groups (Landau & Kabwe-Segatti, 2009).

Despite this exclusion, refugees have been made "scapegoats for all kinds of social ills, subjected to harassment and abuses by various elements of South African society" (Landau, 2006, p. 316). Although refugees do not receive any kind of institutional assistance or financial support from the South African government (Cejas, 2007), they are considered a threat to the economic and social rights of South Africans (Crush, 2000), blamed for the domestic unemployment, heightened crime, and even for the HIV/AIDS spread by some (Adepoju, 2003; Dube, 2000).

Refugees are treated as outsiders by political parties and the media, excluded by society at large, marginalised and deprived of their dignity, in spite of guarantees by the South African law and Constitutional commitments (Cejas, 2007; CoRMSA, 2008; Landau, 2008). The findings of the study by Crush (2008) on the realities of xenophobia in South Africa confirm that, the number of South Africans who wanted a complete ban on immigration had increased from 16% in 1995 to 25% in 1997 and 1999 to 35% in 2006. This widespread anti-immigrant sentiment cuts across virtually every socioeconomic and demographic group (Nyamnjoh, 2006). It is expressed through verbal violence and manifested through the denial of basic human rights and physical abuse (Cejas, 2007). This situation led to xenophobic attacks against refugees in May 2008 (Landau, 2008; UNHCR, 2008). The xenophobic violence which spread nationwide resulted in the deaths of more than 60 people and the displacement of some 46,000 others (IOM, 2009; UNHCR, 2009). This large-scale attack marked the latest development in a long series of violent incidents victimising refugees in South Africa (Crush, 2008).

The South African refugee policy “reflects almost no state obligations for providing specialized assistance for refugees despite its intention to protect the welfare and dignity of those seeking refuge in its borders. Rather, its explicit obligations are limited to bureaucratic processes intended to facilitate access and integration” (Landau, 2006. p. 315). It is clear that there has been a lack of political will for institutional or legislative reforms that would protect the rights of refugees and asylum seekers (CoRMSA, 2008). Consequently, the rights of many refugees to critical social services are being denied (Landau, 2006).

Recently, however, refugee issues have begun to preoccupy the South African government, religious communities, as well as local and international Non Governmental Organizations (NGOs). In August 2006 UNHCR launched a workshop with the main objective of addressing barriers to refugee integration (UNHCR, 2009). The problem has attracted a number of scholars, journalists and activists (Matsinhe, 2009). This research is part of this trend and seeks to find solutions to the plight of the refugees. Mobile phones point to one solution and, thus, this review continues with a discussion of the usage of mobile phones in South Africa and as a social tool.

2.2. Mobile Phone Usage

Originally designed to enable communication and information access anytime and anywhere (Schmidt et al., 2006), mobile phones have increasingly been equipped with different applications. This evolution of the technology has enabled the use of mobile phones for business management, social connection and political purposes (Banjo, Hu & Sundar, 2008; Kaasinen, 2005). Mobile phones have emerged as social tools for coordinating plans and maintaining relationships, and also as resources for political information, openness, and discussion (Campbell & Kwak, 2009). Mobile phones have become a ubiquitous tool and daily companion for many people thanks to a number of facilitating factors such as an easy to deploy infrastructure and the decreasing costs of the handsets and their usage (Dutta & Mia, 2008; Schmidt et al., 2006).

2.2.1. Use of mobile phones in South Africa

As in the rest of Africa, the introduction and growth of mobile phone services have been spectacularly successful in South Africa. South Africa has a vibrant mobile phone market that is expected to increase substantially (Cellular News, 2009). It is clear that in South Africa there are as many active subscriptions as inhabitants (Statistics South Africa, 2008) as figure 1 shows (Cellular News, 2009). Mobile phones have become a ubiquitous feature due particularly to low-cost of mobile phones and to the immense popularity of pre-paid phones introduced in late-1990s (Research ICT Africa [RIA], 2009).

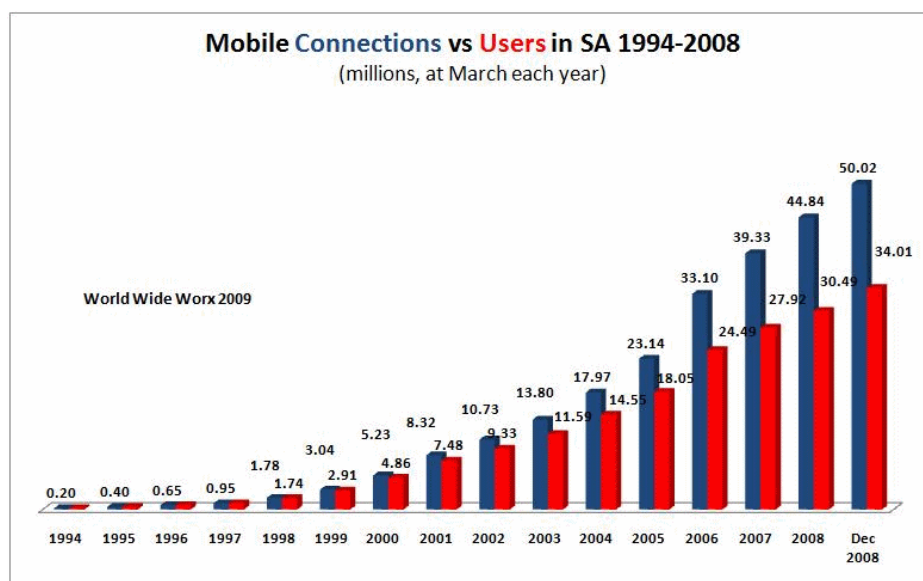


Figure 1: Mobile connections vs. Users in South Africa 1994-2008 (World Wide Worx 2009).

In South Africa, where mobile phones have become the most easily accessible and convenient way of offering services to customers (Cellular News, 2009), an understanding of mobile phones usage and trends is crucial. Apart from creating new sources of income and employment, mobile phones provide vital links between refugee populations and their families and provide a tool to enable them to become self-sustainable (Development Fund, 2009; Diminescu, Renault & Gangloff, 2009).

Mobile phones subscribers can access the mobile network either through a contract basis or a prepaid service (commonly refer to as Pay-as-you-go) (Chigona, Kankwenda & Manjoo, 2008). Prepaid service is a useful alternative to a contract subscription where the subscriber is required to have a good credit history and a regular income to qualify (Chigona et al., 2008; Hamilton, 2003). On 1st July 2009, the customer registration section of the Regulation of Interception of Communication and Provision of Communication-Related Information Act (RICA) was implemented. As a result, mobile communication operators are obliged to record the identity and residential details of new users as well as existing subscribers (Business Day, 2009). The intention of RICA is to help law enforcement agencies to track criminals using cell phones for illegal activities. Refugees in South Africa can purchase mobile phones via prepaid call plan although it is difficult to own mobile phones through a contract due to a lack of formal documents particularly the documentation issued by the Department of Home Affairs which does not have the requisite thirteen-digit identity number.

Prepaid service is the preferred system for target customer segments such as: low-credit customers, transient travellers, teenagers and young adults, occasional users who avoid contracts, certain ethnic groups and immigrants (Katz, Riddleberger, Sarma & Yang, 2002). Among the reasons for prepaid airtime bundles preference are factors such as the mobility, ease of access (Hodge, 2005), and low-income (Chigona Valley, Beukes & Tanner, 2009).

2.2.2. Factors affecting adoption and use of mobile phones

The adoption and use of mobile phones are influenced by a number of factors. These factors have been researched from different perspectives including Rogers' innovation diffusion model, the domestication model and the technology acceptance model (TAM) (De Silva & Ratnadiwakara, 2009; van Biljon & Kotze, 2008). Van Biljon and Kotze (2008) draw on these perspectives to produce a model of mobile phone adoption and use that incorporates social influences such as culture. In their study, they found evidence for the impact of social

influences such as social pressure from other individuals and groups, and motivational needs such as nervousness and enthusiasm. Other relevant factors in their model include socio-economic factors such as job status, occupation and income, facilitating conditions such as cost, security and connectivity, and perceived usefulness (the extent to which the users believe using the mobile phone will be benefit them) (Van Biljon & Kotze, 2008). These influences have relevance in explaining the adoption and use of mobile phones by refugees.

2.2.3. The social impact of mobile phones

Mobile telephony is becoming significantly embedded into the way people lead their lives (Mathew, Sarker & Varshney, 2004). Mobile phone usage has many impacts upon users; these range from economic to social impacts (Ling, 2008). Mobile phones provide an important communication channel in facilitating social connections (Humphreys, 2007). The key social impact of the use of mobile phones is the improvement of social links or network ties (improvement in relationship amongst users whether they are located nearby or some distance away) (Campbell & Russo, 2003; Ling, 2008). Mobile phones thus have the potential to create social capital through improved networking with friends and family (Scott et al., 2004).

Sinha (2005) argues that the use of mobile phones by individuals enables them to strengthen their social and cultural networks, create economic opportunities, and become more politically aware. The mobile phone is an invaluable enabler of entrepreneurship which, in addition to generating revenue, can produce benefits such as searching for employment and saving time (Bhavnani, Chiu, Janakiram & Silarszky, 2008). Mobile phone usage has introduced a range of new possibilities for economic development, political activism, and personal networking and communication (Kreutzer, 2009). Mobile phones are thus increasingly being regarded as an extremely potent tool, a solution for social and economic development in developing countries (Aoki & Downes, 2003; Heeks & Jagun, 2007; Waverman, Meschi & Fuss, 2005).

Mobile technology has emerged as the fastest growing communication technology ever, particularly in the developing countries (Castells, Linchuan-Qiu, Fernández-Ardèvol, & Sey, 2007; Hamilton, 2003). This increase has important implications for African countries, not only to the country as a whole but to individuals in terms of services and as a means to maintain social capital and the management of their economic affairs (Scott et al., 2004).

2.3. Social capital

Social capital is most commonly used to refer to the nature and impact of social networks (Nieminen et al., 2008). This nature and impact is derived from the social roles and ties that link individuals through the trust and norms of kinship, friendship, or close acquaintances such as parents, spouses, close friends or neighbours (Steinbach, 1992). Social networks provide social structure and influence interaction among people, facilitate the organisation of activities and support the attainment of collective and individual goals (Halpern, 2001).

Bourdieu and Wacquant (1992, p. 14) define social capital as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition". Zinnbauer (2007) suggests that "Social capital refers to the extent, nature, and quality of social ties that individuals or communities can mobilize in conducting their affairs" (p. 16). Coleman (1988), however simply defines social capital as the resources accumulated through the relationships among individuals.

For the purpose of this study, the following definitions have been derived from the above: Social capital refers to the nature, extent and quality of a social network of individuals who, through social ties, can provide *resources*, *social structure* and *support* to facilitate the conduct of their affairs. Social ties imply the *trust and norms* of kinship, friendship, mutual acquaintance and recognition. Social capital can be further described in three types (figure 1).

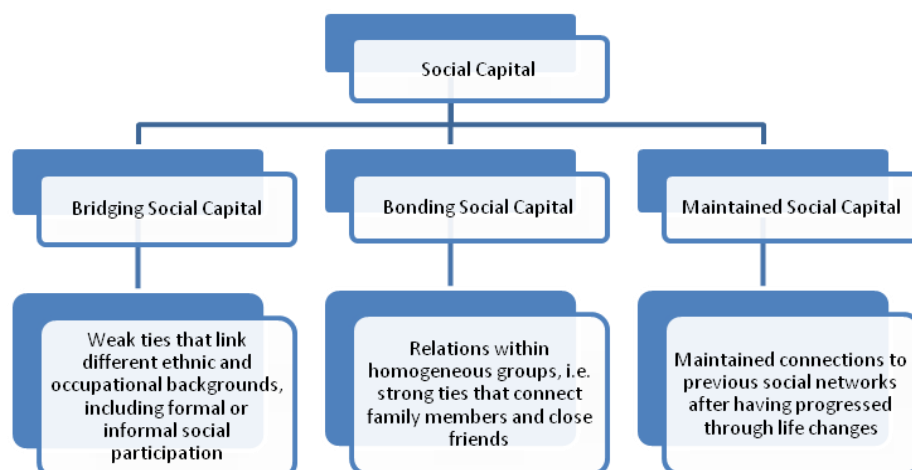


Figure 2: Social Capital (adapted from Johnston, Tanner, Lalla &, Kawalsky, 2010).

All three of the types in figure 2 are clearly present in refugee social networks. Bridging social capital describes the networks that provide *resources, social structure* and *support* from new relationships formed in South Africa. Bonding social capital describes the networks that provide *resources, social structure* and *support* from ties with family members and close friends in South Africa. Maintained social capital describes the networks that provide *resources, social structure* and *support* from family and friends that remain in the country from which the refugee comes.

2.3.1. Bridging Social Capital

Bridging social capital refers to “weak ties”, which are loose connections between individuals coming from different cultural, ethnic and occupational backgrounds (Islam et al., 2006; Putnam, 2000; Zinnbauer, 2007). The term bridging refers to building links among those individuals who did not know each other before (Daniel, Schwier & McCalla, 2003). Such networks link the members to a broader society by allowing access to people from outside the group.

Bridging social networks are thus heterogeneous and support formal and informal social interactions (Islam et al., 2006). This is an important form of social capital as it encourages integration and participation in society (Islam et al., 2006). A particular benefit is the ability to reach others to affect social change in a less formal way (Islam et al., 2006).

Bridging networks provide benefits such as access to useful non-redundant information, new perspectives, employment connections and communication with others from different social groups (Ellison, Steinfield & Lampe, 2007). These networks provide some emotional support but this can be limited (Atfield, Brahmhatt & O’Toole, 2007; Ellison et al., 2007).

Bridging social capital is characterised by the exchange of information rather than knowledge, customs or norms. Individuals in bridging networks enjoy sharing information and remaining updated on external issues (Daniel et al., 2003; Putnam, 2000).

2.3.2. Bonding Social Capital

Bonding social capital refers to tight, strong ties that connect family members and close friends (Islam et al. 2006; Sabatini, 2005; Zinnbauer, 2007). Such networks often occur among homogeneous populations with emotionally close relationships (Helliwell & Putnam, 2004). Bonding relationships can thus provide emotional support and generate mutual aid

(Islam et al., 2006). Because of this, those who are members of these networks often have high esteem and are satisfied with life (Ellison et al., 2007).

As the term implies, the bonding network will demonstrate strong internal cohesion and will fluidly share knowledge (Daniel et al. 2003). These networks are a primary means for transmitting behavioural norms and can exclude individuals from different backgrounds who have different norms (Daniel et al., 2003; Islam et al., 2006). With strong cohesion and shared norms the network will experience solidarity and a sense of security (Daniel et al., 2003).

2.3.3. Maintained Social Capital

Maintained social capital is cared for and nurtured by people maintaining connections to previous social networks after having progressed through life changes (Ellison et al. 2007; Oswald and Clark, 2003; Phulari et al., 2010). These life changes may occur when people move away from a social network for different reasons such as changes in employment, taking up studies or emmigration. The most significant changes in social networks occur when people move to new geographic locations and lose their previous connections.

People often consider their previous connections valuable as they may have difficulties in forming new ties (Ellison et al., 2007). This is one form of social capital that tends to rely heavily on ICTs such as instant messaging (sms), email and online groups such as Facebook (Ellison et al., 2007). One of the primary purposes of this form of network is emotional support (Ellison et al., 2007). However, due to the use of electronic communication and, often, a geographic distance the degree of emotional support received in these networks is likely to be limited.

2.3.4. The Link between Social Capital and Social Integration

Social capital can impact on social integration in different ways. This work takes the view that social capital is a social resource (providing social support, helpfulness, reciprocity, trust, information, etc.) and social integration is the product. This view is supported by both Sinha (2005) and Spencer (2003) who argue that social capital is a major factor in achieving social integration. Social capital is generally considered to have a positive effect created by the interactions of people in a social network (Helliwell & Putnam, 2004). It is mostly linked to positive social outcomes like efficient financial markets, lower crime rates, and better public

health (Adler & Kwon, 2002). Social capital can result in an increase in the ability to mobilise collective actions and community commitment (Ellison et al., 2007).

However, social networks can also be used for negative purposes and exclude others from a group (Sinha, 2005) and thus have a negative influence on the well-being of individuals and communities such as unemployment and crime (Daniel et al., 2003). Social capital can decline and result in increased social disorder in a community, potentially low participation in civic activities, and lack of trust among community members (Ellison et al., 2007). Bonding social capital is typified by thick ties that generate resources to help the group to 'get by' (Atfield et al., 2007) but this can also produce social isolation for the group (Commission on Integration and Cohesion, 2007; Putnam, 2007).

2.4. Social Integration

The concept of social integration is a complex and contested one and is often given widely different meanings (Ager & Strang, 2004; Atfield et al., 2007). Social integration is generally aimed at promoting societies that are safe, stable, tolerant, just, where diversity is respected and all people participate with equal opportunity (Stanley, 2005). The United Nations (2009) describe social integration as a dynamic process that enables "all people to participate in social, economic, cultural and political life on the basis of equality of rights and dignity" (p. 3). It is important to note that they describe social integration as a process. They add that the process should include all disadvantaged and vulnerable groups and persons (United Nations, 2009). It is this definition that will be applied in this study.

Social integration has various dimensions, the choice of which is based on the context of study (Ager & Strang, 2004; Cruz-Saco, 2008; Kaladjahi, 1997). Fielden (2008) suggests three dimensions for local integration namely the legal, social and cultural, and economic dimensions. Cruz-Saco (2008) emphasises that social integration goals are the creation of economic, social and political capabilities, highly desirable outcomes reflecting the existence of social cohesion. This study, in accordance with Fielden (2008) and the above United Nations definition, focuses on social integration with particular attention to economic, social and cultural, and political participation as discrete areas of integration in relation to particular communities of refugees.

A society where there is a lack of social integration can be characterised as displaying the conditions of fragmentation, exclusion and polarisation. These conditions can result in abuse and conflict, neglect and oppression and hostility and combative social relations (United Nations, 2007). As social integration takes place society displays the characteristics of cohesion, collaboration and coexistence (United Nations, 2007). These three characteristics can be applied in the psycho-cultural, socio-economic and socio-political domains respectively (United Nations, 2007). These three domains, psycho-cultural, socio-economic and socio-political reflect the three forms of participation discussed below.

2.4.1. Social and Cultural Participation

The key outcomes of social and cultural participation are feeling safe from threats by other people, toleration, welcome and friendliness, a sense of identity and belonging, feeling an active participant in the community, and having friends (Ager & Strang, 2004; Atfield et al., 2007).

Interventions in this 'psycho-cultural domain' include active listening and participatory dialogue (United Nations, 2007). Cohesion can be an important feature of this form of participation and is produced by providing the opportunity and safe space to uncover shared meaning and values and discover mutual accommodation and understanding (United Nations, 2007). Both bonding and maintained social networks can hinder progress in these interventions (Atfield et al., 2007).

From a practical perspective the reduction of social inequality "would mean ensuring balance in group access to health services, water and sanitation, safe and healthy housing, and consumer subsidies. Of particular importance is access to knowledge (school enrolment, quality of educational institutions, information and communication technologies)" (United Nations, 2007, p. 24). The importance of the provision of equal access to services was also stressed by Ager & Strang (2004).

Other outcomes of social and cultural participation that are stressed by refugees are the ability to speak the language of the country and adjusting to the different culture (Ager & Strang, 2004). Refugee communities stress a multicultural perspective in that they feel entitled to maintain aspects of their own culture but understand the need for awareness and recognition of the host culture (Ager & Strang, 2004).

2.4.2. Economic Participation

This dimension includes many aspects of the functional domain of Atfield et al. (2007). The outcomes of economic participation include equal opportunities for finding employment and work as entrepreneurs, developing business opportunities and participating in the economic welfare of the community (Atfield et al., 2007; United Nations, 2007). Other outcomes include the refugee group having equal access to benefits and equal pay (United Nations, 2007). This dimension is important for social integration as it enables refugees to achieve self-reliance (Atfield et al., 2007). A negative outcome of this dimension is the underuse of the abilities and skills of the refugees if they are socially excluded (United Nations, 2007).

Interventions in this 'socio-economic domain' include dialogue between stakeholders such as community meetings and focus groups (United Nations, 2007). Both bonding and bridging networks can provide assistance to these interventions. Bonding networks provide material resources in response to immediate needs and help refugees to 'get by' whilst bridging networks help refugees to 'get ahead' (Atfield et al., 2007).

2.4.3. Political Participation

This dimension includes many aspects of the legal and statutory domains of Atfield et al. (2007). The outcomes of political participation include attaining legal or citizenship status, entitlements to benefits such as welfare, education or health services or simply negotiating the legal system or the labour market (Atfield et al., 2007). Other outcomes are the taking of active and complementary roles in governmental and other bodies which can develop the support needed (Atfield et al., 2007; United Nations, 2007).

Interventions in this 'socio-political domain' include providing safe spaces to enable refugees to express diverse viewpoints and to seek consensus using civic or democratic dialogue (United Nations, 2007). The intention would be to enable all major groups to participate in political structures and interest groups (United Nations, 2007).

2.4.4. Benefits and Disadvantages of Social Integration

It appears that investing in social integration presents a number of benefits for both the refugees and the host communities (Fielden, 2008; Karen, 2002; United Nations, 2009). Social integration has a positive impact on the whole community and engaging in social roles

actively helps individuals to build a sense of commitment to the surrounding community, self-esteem, and even physical wellness (Cohen, Brissette, Skoner & Doyle, 2000; Ware et al., 2008). Integrated refugees make social and economic contributions to their host countries; importing new skills, expanding markets, rejuvenating communities and creating transnational linkages (Campbell & Russo, 2006).

Conversely, a lack of investment in social integration can lead to political instability, social conflict, and other risks such as underuse of skills and abilities, increased public expenditure due to lack of solidarity in private networks and poor international image opportunities (United Nations, 2008; United Nations, 2009).

An integrated society can yield the benefits of being more resilient to challenges and more likely to develop equitably and peacefully (Cruz-Saco, 2008; United Nations, 2007) since diversity is regarded as a key to healthy society, a foundation for capacities and skills that are crucial for individual and social development (United Nations, 2007).

2.5. *Gap in Literature and Contribution of the Study*

There have been a number of studies focusing on the determinants of mobile phones adoption, use and the interrelationships of mobile technologies with users. Others have focused on the ways the use of mobile phones interacts with the process of economic development (Donner, 2008). There have been calls for further research into the use of mobile phones in developing countries where there are social and economic needs (Chigona et al., 2009; Donner, 2008).

Research has been conducted into the role that mobile internet may play in alleviating social exclusion in a developing country (Chigona & Mbhele, 2008; Chigona et al., 2009), the role of mobile phones in sustainable poverty reduction (Bhavnani et al., 2008) and the role of mobile phones in social capital (Goodman, 2003). Goodman (2003) also reports research from as early as 1933 on the impact of fixed-line telephones on strengthening social ties.

However, no research has been found that investigates the linkage between refugees, mobile phones usage, social capital and social integration. This study aims to investigate that linkage. Therefore this study will make two contributions. Firstly, the contribution will be to the information technology field since in this field little has been done using a social capital approach to determine the impact of technology (mobile phones) on social integration.

Secondly, there will be a contribution to practice since the findings will serve to inform various stakeholders on the success and limitations of mobile phones as tool for enhancing the integration of refugees into a host community. These contributions respond to the call from the United Nations to encourage distributors of information communication technologies to contribute to the promotion of social integration particularly for disadvantaged and marginalised groups (United Nations, 2007, p. 123).

3. THEORETICAL FRAMEWORK AND RESEARCH QUESTIONS

This study will apply a social capital theoretical framework to analyse whether mobile phones usage has an impact on refugees' social integration in South Africa. The choice for using a social capital theoretical framework is inspired by the literature review as this study seeks to investigate whether there is a linkage between users (refugees), mobile phones, social capital and social integration. The theoretical framework for this study is therefore schematised by figure 3 as follows:

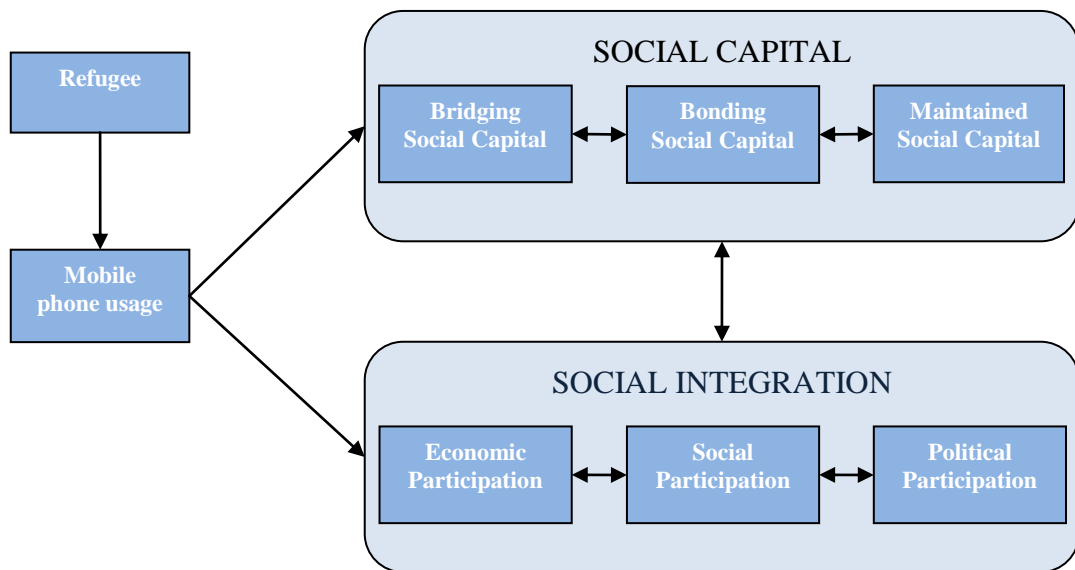


Figure 3: Investigation of linkage between refugees, mobile phone usage, social capital, and social integration

Based on this theoretical framework, this study will attempt to answer the following research questions:

The main research question is:

- What role does the use of mobile phones play in enhancing the integration of refugees into South Africa?

To investigate this main research question fully it has been broken down into the following secondary research questions which will guide the interview process:

1. What are the mobile phone usage patterns among refugees?
2. How does mobile phone usage affect social capital?
 - 2.1. How does mobile phone usage affect bonding social capital?
 - 2.2. How does mobile phone usage affect bridging social capital?
 - 2.3. How does mobile phone usage affect maintained social capital?
3. How does mobile phone usage affect social integration?
 - 3.1. How does mobile phone usage contribute to improving refugee economic participation?
 - 3.2. How does mobile phone usage contribute to improving refugee social participation?
 - 3.3. How does mobile phone usage contribute to improving refugee political participation?
4. How does mobile phone usage add to the understanding of the relationship between social capital and the social integration of refugees?

4. RESEARCH APPROACH

The purpose of this section is to discuss the epistemological perspective of this research and the research methodology adopted to address the above questions. The section then describes and justifies the data gathering and analysis techniques, the survey instrument, and the sample population.

4.1. Research perspective

All research is guided by an epistemology which is an assumption about knowledge and how it can be obtained (Myers, 2009). Three epistemological perspectives for qualitative research in the field of Information Systems (IS) research are positivist, interpretive, and critical (Howcroft & Trauth, 2004; Orlikowski and Baroudi, 1991).

1. Positivist research assumes that reality is objective and can be described by measurable properties which are unconnected to the researcher (Myers, 2009). Such research is

premised on the assumed existence of fixed relationships within phenomena (Orlikowski & Baroudi, 1991). Therefore such research relies on “evidence of formal propositions, quantifiable measurable of variables, hypothesis testing and the drawing on inferences about a phenomenon from the sample of a stated population” (Orlikowski & Baroudi, 1991, p.5).

2. Critical research aims to question the status quo of situations. The researcher assumes that “social reality is historically constituted and that it is produced and reproduced by people” (Myers, 2009, p. 42). Thus the main task is to critically evaluate and change the social reality being investigated (Orlikowski & Baroudi, 1991). In other words, the critical researcher wants to know “what is wrong with the world rather than what is right” (Walsham, 2005, p. 112).
3. Interpretive research assumes that social reality is socially constructed by people in their interactions with others (Orlikowski & Baroudi, 1991). Knowledge of reality is achieved through social constructions such as shared meanings and language (Myers, 2009; Walsham, 2006). This perspective assumes that “as people interact with the world around them, they create and associate their own meanings which are subjective and intersubjective” (Orlikowski & Baroudi, 1991, p. 5). Thus the researcher attempts to understand phenomena through accessing the meanings from the perspective of the respondents (Myers, 2009; Orlikowski & Baroudi, 1991). Interpretive research enables a better understanding of human thought and actions from both social and organisational perspectives (Klein & Myers, 1999).

This study will have an interpretive perspective since the research is seeking to understand the role of mobile phones in the interactions of refugees in the social context of the host country. Adopting an interpretive perspective will be useful in understanding the meanings shared through interactions on mobile phones and how these meanings are assigned to the constructed reality of the social capital and social integration

4.2. Research Method

Quantitative methods are used to study natural phenomena using instruments such as laboratory experiments, surveys and numerical methods (Myers, 2009). Although one of the strengths of quantitative methods is the ability to make predictions and to measure things

(Tewksbury, 2009), studying social sciences in a natural environment involves several uncontrolled variables whose incorrect measurement may result in misleading outcomes (Myers & Avison, 2002).

Qualitative methods are concerned with the “development of concepts which help to understand social phenomena in natural settings, giving emphasis to the meanings, experiences, and views of all the participants” (Pope & Mays, 1995, p. 43). Qualitative methods place more emphasis on interpretation and looks at the understanding of concepts, the environment and the context in which the research is set (Tewksbury, 2009). Qualitative methods are thus well suited to the objective of this study.

Qualitative research has various strategies of enquiry which include: action research, case study, and ethnography. Ethnographic research, now widely used in the IS field, offers the benefit of providing an in-depth understanding of people and their situation (Genzuk, 2003; Myers, 1999). It has the benefit of using a combination of various data collection techniques such as participative observation, interviews, documents, and informal social contact with participants. It is an in-depth research method (Genzuk, 2003; Myers, 1999) which helps to improve the understanding of human thought and action through interpretation of human action in context (Myers, 2009).

Although ethnographic research has the disadvantage of being time consuming as it takes more time to do fieldwork, to analyse material, and to write it up (Myers, 1999), it is, nevertheless a “very productive research method considering the amount and likely substance of the research findings” (Myers, 1999, p. 6). Consequently, this research use ethnographic data collection methods such as observation and interpretation. However, this research will not be conducted at the same depth of intensity of ethnographic research.

4.3. Data collection

Data was gathered through interviews and observation of behaviour and reactions. This data collection technique enabled the description and reporting of what was observed as well as an understanding of respondent perspectives and behaviours. The fact that the researcher is a refugee meant that there was a direct participation in the experience. The researcher tried “to be both insider and outsider, staying on the margins of the group socially and intellectually” (Genzuk, 2003, p. 3).

The primary data collection method was semi-structured interviews. Interviews were recorded with the consent of the respondent and were transcribed as soon as possible to avoid losing necessary details. Field notes were also taken to gather a variety of information from different perspectives (Genzuk, 2003).

None of the existing instruments for assessing social integration were found to be appropriate. Most of the existing measures were designed to be used in specific countries in the developed world and none concerned the use of mobile phones. For that reason, a research instrument was developed for this study. This instrument (Appendix C) was tested on a sample of six respondents in Cape Town. Based on their responses and comments, some of the questions were modified. The final interview questionnaire was approved by the UCT ethics committee.

4.4. Sample

The sample was selected using purposeful sampling. Purposeful sampling attempts to select research respondents that can provide rich information on issues that are important for the research purpose (Tuckett, 2005). This sampling technique involves strategically picking respondents to optimise the range of potential information on the dimensions of interest (Patton, 1990). The sample included refugees in South Africa who spanned a range of selection criteria such as their country of origin, age, family status, work experience, length of stay in the country and location in South Africa.

Determining an adequate sample in qualitative research is a matter of evaluating the quality of the data collected against the uses to which it will be put, the particular research method and the research product intended (Sandelowski, 1995). Therefore, the composition of the sample was monitored during the data collection process and the resultant information used to select further respondents. Efforts were made to avoid bias by trying to ensure that the sample was representative of the selection criteria. For example, the final sample has representatives from all the primary countries listed in Appendix B and three of the countries not listed.

The profiles of the respondents that were interviewed are set out in table 3 and show: respondents' country of origin, gender, age, family status, work experience, duration, and

location in South Africa. Only refugees who own or use mobile phones and who were willing to participate in the study were selected.

To ensure the anonymity and confidentiality of the respondents as was guaranteed to them before the interview, their names are changed. Respondents are nicknamed in the way that the attributed name's first two letters corresponds with the first two letters of the respondent's country of origin (table 1).

No	Name	Country of origin	Gender	Age	Family status	Work experience	Time in SA	Location in SA
1	Anguma	Angola	Male	20-29	Single	Craft seller	5-10	CT
2	Angaza	Angola	Male	30-39	Single	Student	1-5	JHB
3	Angela	Angola	Female	20-29	Single	Cooker	1-5	CT
4	Bangrase	Bangladesh	Male	30-39	Single	Seller	5-10	DBN
5	Buruma	Burundi	Male	20-29	Married	Mechanic	5-10	DBN
6	Burinyi	Burundi	Female	20-29	Single	Student	5-10	CT
7	Conzale	Congo Brazzaville	Male	40-49	Married	Pizza Deliver	5-10	JHB
8	Connelly	Congo Brazzaville	Female	20-29	Single	Waitress	1-5	CT
9	Zaidi	Dem Rep.Congo (Zaire)	Male	30-39	Single	Security guard	1-5	DBN
10	Zaikolo	Dem Rep.Congo (Zaire)	Male	20-29	Married	Sole trader	5-10	DBN
11	Zaikin	Dem Rep.Congo (Zaire)	Male	30-39	Father	Sole trader	5-10	JHB
12	Zaila	Dem Rep.Congo (Zaire)	Female	20-29	Mother	Hair Dresser	1-5	CT
13	Zaisha	Dem Rep.Congo (Zaire)	Female	30-39	Mother	NGO fonder	5-10	CT
14	Ethumba	Ethiopia	Male	50+	Father	Seller	5-10	JHB
15	Ethulia	Ethiopia	Female	20-29	Single	Street vendor	1-5	JHB
16	Nigel	Nigeria	Male	30-39	Father	Businessman	5-10	JHB
17	Pakioni	Pakistan	Male	30-39	Father	Retailer	5-10	DBN
18	Rwazi	Rwanda	Male	30-39	Single	Taxi driver	5-10	DBN
19	Somkia	Somalia	Male	30-39	Single	International public phone owner	1-5	JHB
20	Somel	Somalia	Male	40-49	Father	Retailer	5-10	JHB
21	Somia	Somalia	Female	20-29	Single	Seller	1-5	CT
22	Sudarta	Soudan	Male	30-39	Single	Barman	5-10	DBN
23	Tanami	Tanzania	Female	20-29	Mother	Internet cafe owner	5-10	JHB
24	Tanzam	Tanzania	Male	30-39	Father	Traditional doctor	5-10	CT
25	Ugama	Uganda	Male	30-39	Single	Waiter	1-5	DBN
26	Zimbala	Zimbabwe	Male	40-49	Father	Construction worker	10+	CT
27	Zimucho	Zimbabwe	Male	30-39	Single	Technician	5-10	JHB
28	Zimbiri	Zimbabwe	Female	20-29	Single	Casual worker	1-5	CT
29	Zimhare	Zimbabwe	Female	20-29	Mother	Casual worker	1-5	CT

Table 1: Information on respondents

Refugee populations in South Africa are a heterogeneous group that come from different countries and speak different languages with differences in culture, age, gender, and family status. This sample takes account of this heterogeneity.

An attempt was made to balance the numbers of male and female refugees but this was not possible; in the end there were 19 males and 10 females. This does reflect the gender balance of refugees in South Africa. However, there are sufficient females to identify any gender issues relating to the use of mobile phones by refugees.

Twenty five of the respondents are between 20 and 39 years of age. This reflects the refugee population profile as most refugees in South Africa are in this age group. However, the experiences of teenage refugees who are very used to mobile phone usage could have enriched the study. For convenience the sample was drawn from refugees in Cape Town, Durban, and Johannesburg. These three towns are the centres in which most of refugees in South Africa live.

The length of stay in South Africa is important as it impacts on the respondents' experience of integration into the host country. Integration is viewed as a process (United Nations, 2009) which changes over time as the refugees adapt themselves into the host society. Table 3 shows that all of the respondents have been in South Africa for more than one year and more than half of them for over five years.

Work experience reflects the ability of refugees to make use of available work opportunities as part of their integration. The different work categories show how effective the respondents have been to use factors such as education, adaptability, aspirations and needs (Atfield et al. 2007). The relevance and impact of the above elements are considered in the analysis and discussion of the findings.

4.5. Data Analysis

The analysis of the data commenced with careful reading and re-reading of the transcripts or notes. This used Thematic Analysis which searches for themes or patterns that are important to the description of the phenomenon under study (Braun & Clarke, 2006; Fereday & Eimear, 2006). The six phases of thematic analysis are presented in table 2. This study drew on these six phases for the data analysis. In this study, the coding was related to the theoretical framework developed in the literature review as the conceptual model (Burns,

2000). Themes were grouped according to the concepts depicted in the model: the three types of social capital and the three dimensions of social integration and mobile phone usage.

No	Phase	Description of the process
1.	Familiarising oneself with the data:	Transcribing data (if necessary), reading and rereading the data, noting down initial ideas.
2	Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3	Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4	Reviewing themes:	Checking if the themes work in relation to the coded extracts (level 1) and the entire data set (level 2), generating a thematic 'map' of the analysis.
5	Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6	Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Table 2: Phases of thematic analysis (Braun & Clarke, 2006, p. 87).

4.6. Summary of research method

Research summary	
Research context	Investigating the impact of mobile phones on refugees integration in South Africa
Research perspective	Interpretive
Research method	Qualitative
Research strategy	Based on Ethnography
Data gathering techniques	Qualitative Participant-observation Semi-structured interviews Documentation and field notes
Data analysis	Qualitative drawing on Thematic analysis
Time frame	Cross-sectional

Table 3: A summary of the research method proposed.

4.7. Limitations and difficulties

Although a qualitative methodology can be very useful for studying a particular group of people, it may be difficult to generalise its findings (Banyard & Miller, 1998). The target population of this study was a sample of twenty nine refugees in South Africa. As discussed, efforts were made to make the sample representative but the size and composition of the sample may limit the potential to generalise from this study.

The difficulties encountered were in term of finding respondents, creating appropriate condition for interviews and particularly language issues. During the interview every effort was made to ensure that the respondents felt free to talk. The respondents had the right to choose where and how they preferred to be interviewed; whether in private or in presence of others. Some respondents were met at work places, others in their home, and others outside public buildings. It was thus difficult at times to record the interview. Some requested their voices not to be recorded but agreed that notes could be made. There were considerable challenges in finding respondents as not everyone was able to sacrifice the time for an interview. All the interviews were conducted in English and as English is not the first language of many refugees in South Africa, gaining understanding of the questions and the responses was difficult. Many of the quotes have, however, been left unchanged.

5. ANALYSIS OF FINDINGS

This chapter is divided into the following sections: section 5.1 analyses and discusses: mobile phone use patterns among refugees (5.2). The following sections cover the effect of mobile phone usage on social capital (5.3) and the contribution of mobile phone usage to social integration (5.4).

5.1. Mobile Phone Use Patterns among Refugees

The respondents indicated that the mobile phone services they use include SMS, voice calls, call-back, and mobile internet. Voice calls and SMS are the most used services. The majority prefer voice calls, even though they are more expensive, as they are more personal and a better substitute for face-to-face communication. This pattern is not uncommon in Africa (Gough, 2003). “... *I know that making a voice call is more expensive than sending an SMS but I prefer voice calling ... we discuss like face-to-face*” (Bangrase).

Whilst illiteracy is a factor in the high use of voice calls in some African areas (Gough, 2003), this was not the case in this study. Although the respondents prefer voice calls, the use of SMS provides the advantage of being at a reasonable rate compared to voice calls. In addition, one SMS can be sent to a number of different persons: “... *I must keep in touch with my friends back home but I can't stand calling one after another ... I just write one SMS and send it to more than one at once*” (Angaza).

Only five of the respondents use mobile internet. All five respondents say that they access social networks, particularly Facebook, and email via their mobile phones. However, they say that accessing the internet on a computer whether at home or in the internet café is more convenient than on a mobile phone. They argue that mobile phones screens are too small, the options are limited and there are problems with printing. “...*the problem with the mobile internet is that you don't feel satisfy ... it takes time to write ... computer still the best even if you don't have it in hands like a mobile phone*” (Ugama). Only one of the five respondents has met face to face with one of his correspondents on Facebook; but this was because this person was a close friend of his friend.

Only two respondents say they use mobile instant messaging (MIM) particularly MXit. The main problem they face is that most of the people they would like to communicate with do not have mobile phones with MIM capability. “...*MXit is really very cheap ... the problem is that it is not like SMSs that you can send to everybody possessing a cell phone ...with MXit you can chat only with contacts who have been added to the contact list*” (Connelly).

These results confirm that factors such as cost, connectivity, and perceived usefulness (van Biljon & Kotze, 2008), all have an influence on mobile phone usage among refugees. Van Biljon and Kotze (2008) also suggest that there are cultural and emotional social influences on the use of mobile phones. This was confirmed in this study. The majority of the respondents give ‘staying in touch’ and convenience as their main reasons for using mobile phones. They also keep their mobile phones as a ‘security blanket’ and for use in emergencies.

5.3. The Effect of Mobile Phone usage on Social Capital

ICTs such as mobile phones have become essential for networking and have been found to be important to the development of social capital (Campbell & Russo, 2003; Development Fund, 2009; Diminescu et al., 2009; Humphreys, 2007; Kreutzer, 2009; Scott et al., 2004). It is clear that mobile phones are considered by the respondents to be a vital link between them and their families. Respondents frequently use their mobile phones to communicate with their family members and close friends.

This study investigates how the development of social capital is enabled by mobile phone usage in refugee communities. This will be examined under the headings of Bonding, Bridging and Maintained Social capital although there will be some overlap evident in the discussion particularly between Bridging and Bonding Social Capital.

5.3.1. Bonding Social Capital

Bonding social capital is characterised by strong ties that connect family members and close friends into emotionally close relationships (Helliwell & Putnam, 2004). The networks that support bonding social capital tend to be homogenous. This was confirmed by the respondents who submit that the main reasons for the strong ties are the sharing of common characteristics. These characteristics such as being refugees, coming from the same country, and sharing a common language serve to reinforce the bonds of trust between them. The elements of solidarity and trust (Daniel et al., 2003) were key features of the descriptions of the respondents.

“... there is always something to talk about with someone from my country, we speak same language and express easily our feelings, we trust and encourage one another in this life of refugees, we share information ... you know, what happen to him may happen to me” (Rwazi).

Bonding social networks can provide emotional support in difficult situations (Atfield et al., 2007). The respondents reveal that being in mobile contact with their family members, close friends and relatives, helps them overcome isolation and feel accepted, safe and confident. *“... it happen that sometimes you feel alone, you want to talk to somebody, I contact my friends as we are confident talking same language, there is a kind of solidarity*

between us ..." (Ethulia). Somkia further emphasises that his close friends substitute for his family which is far away at 'home'.

Respondents report that the greater part of the mobile phone communication between them and those in their bonding network is about life in general. They share information concerning immediate needs such as work or education opportunities, directions to places in the area and what transport is available, where to get furniture or food, health concerns, news and what is happening in their home country. They also talk about their rights and obligations in different situations, share life experience and advise one another.

"... I can't describe what we talk on phones with my friends...we talk about everything like we can talk face to face ... we advise one another, ask information, discuss about situations...our cell phones help us to show one's concern to the other" (Sudarta).

However, bonding social networks tend to limit the chances of the participants to extend their horizons. Consequently, they miss opportunities like job vacancies, study possibilities or the chance to learn English. *"...the problem is that because I have only friends coming from my country, we all don't improve our English skills which could allow us to get South African friends ... maybe if you have South African friends you can know too many important things..."* (Zaidi).

Respondents find it difficult to break away from bonding networks as they have difficulty in understanding the language and assessing and trusting in the reactions of outsiders. *"I feel safe and accepted by people from my country ... it is easy to make friends amongst us as we speak the same language and have same culture ... we know how we react in particular situation ... I hardly communicate with other people because I don't know how they behave, I don't trust them ..."*(Somia).

Whilst bonding networks can provide resources to assist members of the group to 'get by' (Atfield et al., 2007) the strength and cohesion of the group can also result in social isolation for the group (Commission on Integration and Cohesion, 2007; Putnam, 2007). This can result in missed opportunities and the risk of exclusion from the overall community.

Bonding social capital can provide emotional support and mutual aid (Islam et al., 2006). The use of mobile phones mediated strong ties with family and close friends and enabled both of these benefits. The need for support and comfort is understandable in refugees.

However, problems with language and especially trust hindered some from venturing into relationships outside the group.

The analysis shows that in case of immediate and functional needs such as how to open a bank account, where to get particular furniture, service, etc.; most of respondents use mobile phones to contact friends. Most of the respondents appeal to neighbours only when friends, even far away, cannot assist; in the case of emergencies; or when the mobile phone cannot be used. *"...among my neighbours, no one is from my country, if I need something, I take my phone and call a friend ... I remember one morning my car couldn't start ... I knocked to my neighbour's door asking for assistance, he came and used his car to help me starting mine"* (Nigel).

"In some issues, friends from the country can't help because of lack of experience ... when I bought a house that I had to renovate, without the advice of my South African friends I could be in trouble and spend more, ... I can contact them anytime, even those I never get into their house" (Zaisha).

5.3.2. Bridging Social Capital

Bridging social capital is characterised by weak links among individual members of a heterogeneous network. This form of social capital serves to link or bridge the members to the broader society (Ellison et al., 2007). There was some evidence of this among the respondents. The respondents report that they communicate through mobile phones with people that they have met and with whom they have not formed strong ties. Frequently these are people with whom they work or study or share accommodation; many of the respondents still share accommodation. Others are those who they have met informally such as during a journey or in a nightclub.

Many of the respondents report that when they arrived in South Africa they had no or few local relationships. Over time and through different circumstances they found themselves in relationships with many people from diverse backgrounds. Zaikolo graphically describes this as building a monument from scratch: *"... On my way coming to South Africa, I had in my head only one cell phone number of a guy living here. When I arrived at home affairs in Johannesburg he didn't pick up his phone anymore until I gave up... with no money, no valuable thing, I went to the Methodist church and started my life from scratch. Today my*

SIM card is full of contact numbers of people who helped me to build my life like a monument”.

There is evidence to support the contention of Goodman (2003) that access to social capital is becoming more individualised. Often the new associations formed by refugees are spontaneous rather than generated from an existing network. Respondents explain that they first randomly meet people who were unknown to them before, then exchange mobile phones numbers and stay in touch. Respondent Zaidi, a security guard, shares: *“I met this South African guy, Siphiwe, once my Boss (employer) calls me saying that I have to work double shift with Siphiwe... we spent the whole night chatting, we exchanged our phone numbers ... after four months we both lost our job as the company cut off some employees ... two months later Siphiwe call me and told me that his new employer need workers ... now we are working together and are good friends”.*

Another respondent, Zimhare, says she met with her South African friend Sandra at a clinic whilst taking her baby for vaccination. After a conversation they exchanged their mobile phone numbers. The following day Sandra called her saying that her neighbour needed someone to look after a baby; Zimhare took the job and is still in contact with Sandra.

Although most of the respondents did not establish their new relationships through mobile phone usage, it is clear that mobile phones helped them strengthen and improve their social networks.

The findings support the contention of Atfield et al. (2007) that sites and organisations such as faith groups and schools play an important role in generating social networks. The respondents mostly establish bridging relationships after meeting people with similar interests at work, school, sports facilities, churches and clinics: *“... at my church, we got a group of prayer, it is from there that I have met most of my South Africa friends that I communicate with, I had learnt a lots from them, you know life in here is not similar to the life in my country ...”* (Zaisha).

Respondents who have a family and particularly children are better able to develop networks: *“... it was one day taking my child to preschool, I met with another women who told me she came to meet me because her child obliged her to take my one to her place ... since then we have become like a family”* (Tanami). It was noted that among the respondents

there is more frequent mobile phone communication between those who live, work, or study together than between those who rarely meet.

Respondents tend to communicate with those in the bridging network with whom they share interests such as work, education, faith, sport or health. *“My friends are from my work, from the Gym, and others we just meet I don't remember how ... we don't communicate everyday but if there is something to talk we call each other ... maybe about job, or something interesting ...”* (Zimucho).

Individuals in bridging networks enjoy sharing information and remaining updated on external issues (Daniel et al., 2003; Putnam, 2000). The respondents report conversations that cover a range of topics: to discuss economic matters, to share news or just to keep in social contact. Respondents share concerns about work, education or accommodation or call for assistance in the case of emergencies. Finally, mobile calls are made to provide emotional support. *“... my wife is South African, because of her I have got others South African friends ... we communicate and share anything; information...if one have a problem, even if you don't give money you can just talk to him to support him...”* (Nigel).

“My mobile phone allows me to be accessible to those who have my number ... they can call me, I can call them ...we can talk about anything ... it may be about sharing a beer, about job, about everything ...” (Zimucho).

“...my cell phone allows me to communicate with many people ... they help me to solve my problems ... it can be about my health, or how to do things” (Sudarta).

“My cell phone makes me feel like I'm not alone, I feel safe, happy...Communicating with my friends helps me to face life, to be informed about things” (Somel).

Frequent communication is important to the retention of a bridging network. If the communication is not maintained the relationships tend to die out (Adler et al. 2002). The findings support this and confirm that connections between people of different ethnic and occupational backgrounds are vulnerable. However, some of the randomly created relationships have become close with frequent communication; many of these are with co-nationals. Others have become acquaintances with whom they rarely communicate.

5.3.3. Maintained Social Capital

Maintained social capital arises from the maintenance of connections to social networks from earlier phases of life (Ellison et al., 2007; Oswald & Clark, 2003; Phulari et al., 2010). Most of the respondents sought to maintain their old networks after moving to South Africa. Migration and changes in geographic location were seen to be strong threats to their networks.

People value their previous connections as they often find it difficult to form new ties and the old ties provide emotional support (Ellison et al., 2007). There was general consensus amongst the respondents that living in a foreign country with their families and close friends left far behind at home exposes them to an emotional struggle. *“When I spend long time without communicating with my old friends, I feel like I owe them ...I use my cell phone to contact them...it is like rising up our relationships”* (Angaza).

“... Sometimes I get homesick and feel like am I lost ... then I take my Cell phone and send them SMSs to show them that I didn't forget them” (Zimbiri).

“ ... I don't call people only when I need assistance, job ... sometimes I call relatives to show them my solidarity ... just like to say; we are together” (Anguma).

“... for example when someone SMS or calls me and say; I just wanted to say hi ...to me it is a good thing to ensure our relationship...” (Nigel).

The maintenance of old networks relies heavily on regular communication using technologies such as SMS, email and online social networks such as Facebook (Ellison et al., 2007; Oswald & Clark, 2003). The respondents consider the mobile phone as a crucial tool for maintaining vital links with those in home countries. *“...I have to keep in touch with my wife and my kids even if it is not for serious issues ...it can be just for fun to show them that I'm with them ... in such situation I use to send them SMS since calling is expensive”* (Zimbala).

The relationships in maintained networks can either be retained or abandoned as time passes (Ellison et al., 2007). Recently arrived respondents (duration of stay less than five years) report more frequent communication with people back home than those who have stayed in South Africa for more than five years. The main reasons offered are that they feel homesick, they have vivid memories of their home countries and they are not yet used to life

in the new country. After a period of time, the respondents report that they lose touch with many old contacts. *"I've got some contact numbers with names in my mobile phone but I no longer remember who is exactly the persons ... when I'm like calling to find out, sometime the person has forget me and ask who I am"*(Burinyi).

Family status also influences the frequency of communication between respondents and people in their home countries. Those living in the new country with their families (partner and children) communicate less frequently than those who have close families back home. All the married respondents, who have left their wives/husbands and children behind, use mobile phones more frequently than those who have their close family here in South Africa.

The frequency of communications by mobile phone is increased by unusual events in the respondents' home region or country such as war (DRC, Somalia), political crisis (Kenya, Zimbabwe), and famine (Tanzania). Other cited reasons for more frequent communication are personal events and concerns such as marriages or sickness.

Respondents mostly use SMSs when maintaining social contact with members of their previous community. When a voice call becomes a necessity, most of the respondents use international public phones instead of their mobile phones. Public phones are often used when there is a special event or problem about which there is much to discuss. The tariff was the reason offered for their preference for public phones. Respondents use their mobile phones when it is impossible to use international public phones for reasons such as distance from public phones, night time calls or emergencies.

"It's extremely expensive making a voice call to my country. I only use SMSs to contact them. When I need to hear their voice or when we have to discuss about something, I go to international public phone ..." (Zaidi).

Somkia, a retailer and an owner and supplier of international public phones confirms that the rates for mobile phones are between two and six times that of international public phones for a call to DRC. Of necessity refugees are very cost-conscious in term of the rate of mobile phone communication even when maintaining social connectedness with their families and close friends in their home countries. This may impact negatively on the maintenance of social networks. However they do use SMSs to maintain social contact in addition to their face-to-face conversations. Thus, even after long periods of separation, mobile phones enable

the respondents to stay in touch with their families, relatives and close friends. Mobile phones are thus crucial in maintained social networks especially when the network is at a distance (Campbell et al., 2003; Scott et al., 2004).

The few respondents who access mobile internet are better able to strengthen their social networks online although they no longer live in the same region. For instance they post comments on one another's page on Facebook. "*... sometimes it happen that I find online, a person that I know back home but we were not close one another ... when I comment on his pictures, he react and from that time we start getting close ...*" (Connelly). Zaisha reports developing old relationships online to the extent that they now communicate offline using SMSs or voice calls.

Mobile phones are also used by respondents to keep up with the general news in their countries. In particular male respondents confirm being interested in news, especially politics and sports. Two thirds of the respondents contact friends back home to discuss or get clarity on local news.

"...every day in my village things are happening that I don't expect SABC [The South African Broadcasting Corporation] to be aware of. I access to such information only by calling people in there ... I need to know what is going on there ..." (Somel).

Respondents use their mobile phones in maintained networks for emotional support (missing each other), following up on the family situation back home (education, health) or following up on goods transferred (furniture, money or pictures), reporting on how their life is evolving in their new countries, sharing about special events (marriages, Christmas) and staying in touch with general news (especially from their hometowns).

"... my friends call me and ask how life is in South Africa, ... I call home to know the situation of my family, children ... to encourage them" (Zaikin).

"... sometimes I send money, or I buy them gifts; I call to find if they have received in good condition" (Zimbiri).

5.4. The Contribution of Mobile Phone Usage to Social Integration

The United Nations (2009) describe social integration as a dynamic process. Whilst social networks are an important aspect of this process, there are other factors outside social networks that help and enable integration (Atfield et al., 2007). One of these factors is the mobile phone. Van Biljon and Kotze (2008) found evidence that a person's situation such as job status, occupation or income has an influence on mobile phone usage. It is clear that the mobile phone is an essential tool for the refugee. The following sections discuss the impact of mobile phones on the three forms of social integration discussed in the literature review.

5.4.1. Impact of Mobile Phones on Social and Cultural Participation

Ager and Strang (2004) report that refugees in the UK get advice from a number of sources such as Housing Office staff, schools, libraries, and volunteers at drop-in centres. The refugees in their study found that the advice they obtained was particularly important particularly on arrival. In South Africa newly arrived refugees receive little or any orientation to formal networks such as government or semi-government bodies, charities and faith groups from which they can learn about opportunities for housing, work or education. They therefore set up informal networks facilitated by their mobile phones, to share general information on the available opportunities. These informal networks rely on friendship ties often on an ad hoc basis (Atfield, et al. 2007).

"...I work in an organisation concerned with tertiary refugee students and have noticed that too many refugees are not aware of existing formal organisations such as CWD, ARESTA...these organisations deal with refugees issue..." (Burinyi).

In South Africa, there are organisations which serve either social aims such as CWD (Catholic Welfare and Development) in Cape Town or functional aims such as ARESTA (Agency for Refugee Education, Skills Training and Advocacy). These organisations, in addition to their social and functional aims, provide the participants with opportunities to meet and develop relationships.

Mobile phones have enabled respondents to get involved in group activities (informal or formal) or voluntary work. For example, the respondents refer to social interactions in both schools and church.

“ ... I first participated in parent-teacher association at my child's school when I received a call from the secretary ... if there is any issue I call them...my mobile phone helps me to follow-up on my child's education ” (Tanami).

“sometimes I voluntarily work at my church ... there is a person permanently there, I call him to know what need to be done, the day and time ... everybody respect me for that” (Zaisha).

All student respondents state that they use their mobile phones to interact with their colleagues and participate in study groups. Other interactions include language learning classes, keep-fit classes, pub teams and sports groups. *“...when we have group assignments, we use our mobile phone to communicate between us ... to arrange appointments, to exchange ideas or issues ... ” (Angaza).*

However, two thirds of the respondents mention that they have never participated in formal group activities or in any voluntary work. The main reason cited is that they are not aware of these groups, have not been invited to participate or have no time. *“...if someone invite me and if I have time, I can join ... but myself I don't know what is happening around since I work every day from 6 am to 6 pm” (Zaidi).* Because of this situation, the mobile phone becomes an important social tool.

“...having a cell phone means you are conscious that there are some people who may need your intervention anytime. It means you are in touch with some people” (Zaila).

“One can't just switch off his cell phone or not answering calls, people may wonder he is in trouble ... I think it's not easy to be without a cell phone, it's can be like you are isolated from others” (Pakioni).

Lack of trust and language issues are among the reasons respondents do not rely more on their neighbours. As a result, refugees tend to turn to co-nationals and form networks within them. About one third of respondents hesitate to engage in conversation with neighbours due to lack of confidence in their language which maybe either English (most of the time when the neighbour is white) or one of the other South African National languages such as Zulu or Xhosa. According to the majority of the respondents, it happens that when they talk to someone in English they reply in another language.

“Sometimes it happen that I need direction in an area that I’m not used to, most of the time if I ask someone he answer me in his language that I don’t know if it’s Zulu or what...this make me confused and uncomfortable... you understand why if I have a friend who may know the area I call him to lead me even if he is far?” (Somkia).

The majority of respondents believe that mobile phone communication creates trust between them and most of their recipients; trust which increases by the frequency of interaction. Some respondents argue that mobile phone numbers are only exchanged between self-chosen friends and acquaintances to the extent that they do not fear any call even if it comes from an unknown source since it must have been provided by someone known. *“I give my phone number only to my friends because I trust them. When I receive a call from an unknown number I don’t worry. I suggest he has got my number from my friends” (Somia).* However there is greater trust with those with whom they have formed bonded networks, especially co-nationals which whom they frequently interact.

Mobile phones are a valuable resource for social interaction and social development (Aoki & Downes, 2003; Bhavnani et al., 2008). However, although mobile phones are useful for interaction, bonding and maintained networks can hinder progress (Atfield et al., 2007). Mobile phones may also “amplify pre-existing differences in social integration rather than attenuating them” (Puro, 2002, p. 28). The ease of contact between refugee groups and their families in home countries can hamper integration. However, for refugees, possessing a mobile phone is crucial for social interaction as well as for care and security.

5.4.2. Impact of Mobile Phones on Economic Participation

The use of mobile phones by individuals enables them to create economic opportunities (Diminescu et al. 2009; Kreutzer, 2009; Sinha, 2005). The mobile phone is an important tool for generating income and searching for employment, it can also produce indirect benefits such as saving time and costs (Bhavnani, Chiu, Janakiram & Silarszky, 2008). Most of the respondents report using their mobile phones to help them to generate income or find employment. Others refer to cost and time saving. Many of the comments refer to the nature of refugee life with its relative lack of permanence in accommodation or work.

Most self-employed respondents agree that mobile phones help them earn income; for instance by allowing them to find and retain customers. *“It [mobile phone] helps me find customers who can call my number available on papers that are distributed by my employees*

in public places ... most of the time they recommend to me others customers” (Tanzam, a traditional doctor).

Others describe how mobile phones allow them to be permanently available to potential customers. Zaila, a hair dresser notes that with her mobile phone, she does not need to rent a house for a hairdressing salon. Customers call her to get their hair done at home. Buruma, a self employed mechanic, tells how drivers whose cars have a breakdown can phone him to get assistance. He also uses his mobile phone to shop around for car parts without moving out of his workshop. Rwazi, a taxi cab driver, uses his mobile phone to reduce waiting time since most of his passengers call him when they need transport. As Gough (2005) puts it: “A mobile provides you with a point of contact; it actually enables you to participate in the economic system” (p. 1).

Employees and casual workers find that mobile phones are important for being located for employment purposes. “...on my off-day my boss [employer] sometimes calls me if there is a place available ... in other circumstances he tells me that I have to work double shifts. This increases my salary at the end of the month” (Zaidi, security guard).

“... one day I went looking for a job in a restaurant ... the manager told me that there was no job vacancy but asked me to leave my CV he'll call me in case there was a need ... three weeks later he calls me and since then I'm working there” (Ugama).

Somel is a particularly interesting case. He supplies mobile airtime to casual customers. It is a common practice in much of Africa to receive and relay text messages or to provide cell or fixed line services to those without cell phones and those who cannot read or write (Gough, 2005).

Most respondents agree that mobile phones help find employment by enabling them to be contactable. One third of the respondents obtained employment from employers who contacted them on the mobile phones. However, they do not think that mobile phones assist them in searching for interviews. Some talk of walking from door to door looking for jobs. Only one used the mobile internet to search for employment, although he was unsuccessful. The majority argue that, although it is possible and convenient to apply online, they are not confident against the competition from South African citizens.

"...man! it's impossible even to collect your parcel at the post with a refugee paper...how do you think it can help to get an advertised job?... they'll ask you to bring a green ID" (Rwazi).

" ... I don't think one can get a job online while all these citizens are jobless" (Angela) and *"... they have already the persons they need ..."* (Zimbala)

Whilst there was interest in m-commerce, few could provide the necessary documents to purchase a suitable mobile phone. *"I know that with an appropriate mobile phone, like those advertised on the TV, one can manage his business and save money ...unfortunately great cell phones are only sold on contract ... refugees don't have recognised papers; no green ID, no bank accounts, ..."* (Conzale).

An interest in mobile banking was expressed by several of the refugees. *" ... I find it [mobile banking] interesting because I can do it at home ... and save my money for petrol and also my time ... I prefer stay watch my TV that standing on the queue at the bank"*. (Nigel).

However, some respondents point out that they are unable to use these banking services. *"You don't understand! ... from the day a bank clerk told me that refugees are not entitled to all bank services, I became reticent ... I believe all innovation in bank services is not for refugees"* (Ethumba). Whilst mobile banking provides convenient and efficient money management (Bhavnani et al. 2008) the benefits for refugees in South Africa are limited. Although some South African banks have begun extending services to refugees, they are excluded from a number of services such as saving accounts and loans (Landau & Kabwe-Segatti, 2009).

In South Africa most refugees live in urban areas and do not receive any material assistance from the government. Some receive inadequate documentation which is not recognised by certain authorities and employers (Landau, 2006). Consequently, self employment is the only chance for some to survive. *"...you know, with my refugee paper, I'm like a prisoner here, I can't travel abroad ... using my mobile phone I order pure honey from my home country ... it arrive to me and I make business..."* (Zaikin).

Mobile phones are stated to have a positive economic impact on refugee populations (Development fund, 2009). It is clear that this is the case. Mobile phones enable refugees to

earn income, find employment and save costs. However, the economic impact is faced with barriers such as documentation and exclusion (Landau, 2009).

5.4.3. Impact of Mobile Phones on Political Participation

Mobile phones are considered to enable political activity and mobilisation (Hermanns, 2008; Kreutzer, 2009). Campbell and Kwak (2009) believe that mobile phones have added a new dimension to civil society. However, the respondents found little to support these strong claims.

There was general consensus amongst the respondents that mobile phones, especially voice calls, are the best medium to interact with authoritative individuals. The main reason cited was that mobile phones enable a direct link with the person concerned, which is not the case with others media such as letters or emails that respondents do not believe reach the person concerned. *"... at least with the cell phone you talk to the person you needed, it's not like a letter which ends unread into a bin ..."* (Tanzam).

However, the majority of respondents have mentioned that they rarely interact with authoritative individuals. These respondents believe that their concerns are not taken into consideration. *"I think it is wasting time and airtime trying to raise any issue to the government people, they've got their political program that you can't change ..."* (Zimbala).

Although respondents recognise the role played by mobile phones in facilitating interaction with authoritative individuals, they do not believe that their concerns have any impact or can influence any government reaction since some have tried and received no response.

Most of the respondents use mobile phones to discuss issues concerning their refugee community with people from diverse backgrounds. They also talk about their rights and obligations in different situations. These issues include capacity building, fair treatment and life improvement. One respondent is member of a pressure group. *"Sometimes refugees experience trouble when registering or when applying for a course ...in such case they call us for assistance ... then we contact the concerned school to solve the issue ..."* (Burinyi).

Most of the respondents do not believe that mobile phone interaction can influence the reactions of public authorities. In certain issues, especially in emergency situations, they

report that they do not receive reliable service. They note that there is sometimes no response or delays in responses when they contact government agents, including police, health care workers and employers. Respondents maintain that the lack or delay in response occurs once they recognise their foreign accents. Consequently, in emergency situations refugees mostly use South African citizens to call on their behalf in order to receive reliable service.

"...my friend was stabbed, I called the emergency and the police for help ...they came about 40 minutes later, he was dead ...my friends condemned me saying I should ask a South African to call for me" (Somkia).

Although there is discrimination, mobile phones can assist in political participation but this is limited.

According to Entzinger (2007), economic, social, and political participation are the three major domains in which integration policies take place. The overall findings in this section show that, in enabling the development of networks, mobile phones impact on the formation of social capital which, in turn facilitates integration. Mobile phones also directly enable respondents to participate economically, socially and to a certain extent politically.

6. IMPLICATIONS

Social capital is a major factor in achieving social integration (Sinha, 2005; Spencer, 2003). Social capital plays an essential role in the integration of individuals into the mainstream community by creating economic opportunities (Adler & Kwon, 2002), facilitating political participation (Ellison et al., 2007) and social participation (Helliwell & Putnam, 2004). However, it is through communication that people acquire, retain, and expend social capital (Kennan et al., 2008). Therefore, by using their mobile phones to communicate, refugees strengthen their cultural and social participation, create economic opportunities, and stimulate their political participation.

In the following discussion of the implications, the role of the mobile phone in social capital, the relationship between social capital and social integration and directly in social integration will be investigated. These processes interact and overlap to a high degree (Atfield, 2007). Information communication technologies have become important for networking and can be an important element in the processes of development of social capital

and social integration (Campbell & Russo, 2003; Diminescu et al., 2009; Kreutzer, 2009; Scott et al., 2004).

The outcomes of social participation for refugees would include emotional aspects such as trust, feeling safe from threats by other people, toleration, welcome and friendliness, a sense of identity and belonging, feeling an active participant in the community, and having friends (Ager & Strang, 2004; Atfield et al., 2007; United Nations, 2007). More material social outcomes would include housing, education, health services, ability to acquire the language of the country, access to cultural knowledge and safety and stability (Ager & Strang, 2004; Atfield et al., 2007; United Nations, 2007). Refugee communities, however, stress that they feel entitled to maintain aspects of their own culture whilst understanding the need for awareness and recognition of the host country's culture (Ager & Strang, 2004). The question is to what extent does the mobile phone contribute to all of these?

Respondents report that being in mobile contact with members of their bonding networks help them overcome isolation and feel accepted, safe and confident. However, these feelings are not necessarily the result of integration. Bonding networks are characterised by strong ties and sharing of common characteristics. This means that these outcomes tend to come more from other members of their communities rather than the general population.

Bonding networks reinforce group solidarity and identity (Islam et al., 2006) and thus may have a negative influence (Daniel et al., 2003; Sabatini, 2007). The findings show that, excessive bonding social capital may reinforce the homogeneity of the group and impact negatively on social integration (Commission on Integration and Cohesion, 2007; Putnam, 2007). However, respondents find it difficult to break away from bonding networks due to difficulties with language and lack of trust of outsiders.

Bridging networks, by definition, refer to links with individuals who did not know each other previously (Daniel et al., 2003). Bridging relationships thus encourage integration and participation in the refugees' new society (Ellison et al., 2007; Islam et al., 2006). The respondents report that they do meet with people at a variety of places such as faith groups, work, schools (Atfield et al., 2007), or even informally. A key feature of the continuance of these ties is keeping in touch with them through mobile phones. They report that it takes time but eventually they form relationships with people from diverse backgrounds.

Bridging networks are more likely to foster social integration since they tend to bring together individuals from diverse social backgrounds, providing them with a broader range of information and access to opportunities. Respondents report meeting people, keeping in touch by mobile and subsequently finding employment. They also report that most of their bridging networks are formed with those with whom they live, work, or study or with whom they share interests such as work, education, faith, sport or health. This provides them with benefits of solidarity and identity and some emotional support over time (Atfield et al., 2007; Ellison et al., 2007).

The respondents report that living in a foreign country without the support of families and close friends exposes them to an emotional struggle. Mobile phones play a vital part in maintaining contact with family and friends in other countries. This fulfils one of the primary purposes of maintained networks which is emotional support (Ellison et al., 2007). However, due to this use of electronic communication and, often, a geographic distance the degree of emotional support received in these networks is reported to be limited at times. Over time, this support is lost in many cases.

The outcomes of economic participation for refugees include equal opportunities for finding employment and work as entrepreneurs, equal access to benefits and equal pay and the achievement of self reliance (Atfield et al., 2007; United Nations, 2007). More practical outcomes are obtaining material resources such as food and housing, either to 'get by' or to 'get ahead' (Atfield et al., 2007).

Respondents report sharing information with bonding networks by mobile about needs such as work or education opportunities, where to buy goods and health concerns. They also share life experience and advise one another. These are examples of the 'getting by' discussed by Atfield et al., (2007). However, bonding networks are often with members of the same community, i.e. refugees and this can result in lack of integration. Respondents report that bonding networks do cause them to miss opportunities to study, find employment, or learn English.

The effect of the use of mobile phones on economic participation was strong. Mobile phones were consistently stated by the respondents to be important for generating income and searching for employment (Gough, 2005). Self-employed respondents agree that mobile phones help them earn income by enabling them to find and retain customers. Employees and

casual workers state that mobile phones are important as they enable them to be contactable for employment purposes. However, mobiles were considered to be of little use in obtaining interviews and personal contact was found to be better. Many felt that going against locals in the open job market was impractical. Mobile phones thus enable refugees to earn income, find employment and save costs. However, these benefits were found to be hindered by barriers such inability to obtain the necessary documentation and exclusion due to language or even accents (Landau, 2009).

The outcomes of political participation for refugees include attaining legal or citizenship status, entitlements to benefits such as welfare, education or health services or simply finding their way around the legal system or the labour market (Atfield et al., 2007). Other outcomes seem a little beyond most refugees but can include the taking of active and complementary roles in governmental and other bodies which can develop the support needed (Atfield et al. 2007; United Nations, 2007).

It is a sobering comment on the plight of refugees in South Africa that few respondents had anything positive to say about the possibilities of achieving political participation. Most referred to informational needs rather than political needs. Bonding networks reinforced group solidarity and identity but this was a hindrance to achieving political benefits. Bridging networks have been shown to provide refugees with access to useful information (Atfield et al., 2007; Ellison et al. 2007) but the respondents indicate that this takes time and has little effect. Naturally, maintained networks had little impact.

Most of the respondents use mobile phones to place voice calls to authorities. This enables a direct link rather than letters or emails which they believe are ignored. There are strong feelings about how their concerns are not respected. Respondents do have contact with organisations that cater for refugees and use mobiles to talk to these and to individuals about issues concerning their refugee community such as fair treatment and life improvement.

Most of the respondents do not believe that mobile phone interaction can influence the reactions of public authorities and report that they do not receive reliable service. They receive delayed or no response when they contact government agents, including police and health care workers, or employers. They believe that this occurs because their accents are foreign. Many use South African citizens to call on their behalf especially in emergency

situations. Although there is discrimination mobile phones can assist in political participation but the potential of this participation is limited.

The benefits that can be derived from social networks change over time as refugees form new relationships and learn how to get ahead rather than get by (Atfield et al. 2007). Refugee integration is a two-way and non-linear process (Atfield et al., 2007). Firstly, it is not about assimilation but rather a process which requires mutual adjustment and participation from both the host community and the refugees (Atfield et al., 2007; Spencer, 2003). Secondly, it is a non-linear process in that both the host community and the refugees need to adapt to one another (Atfield et al., 2007).

It is clear that the mobile phone can play a major part in refugees achieving social integration. It is important to note that integration is a subjective process (Atfield et al. 2007) and the respondents are presenting their point of view. This may not be the overall experience of refugees in South Africa but it does present an interesting and, at times, a sobering view.

7. CONCLUSION

The aim of this study was to investigate the role of mobile phones in enhancing the integration of refugees into South Africa. In order to achieve this aim, semi-structured interviews were conducted with 29 refugees in South Africa who spanned a range of selection criteria. Refugee populations in South Africa are a heterogeneous group that come from different countries and speak different languages with differences in culture, age, gender, and family status. This sample was selected to take account of this heterogeneity. As no instrument was available one was developed and tested.

The analysis of the data used Thematic Analysis and grouped the themes according to the concepts depicted in a model developed from the literature survey. This model contained three groups of concepts: social capital and social integration and mobile phone usage. Broadly, this model reflects that social capital is an important element in the integration of refugees. The bonding, bridging and maintained networks create economic opportunities, and facilitate political participation and social participation. The model also reflects that it is through communication that people acquire, retain, and expend social capital. By using their mobile phones to communicate, refugees can strengthen their cultural and social participation, create economic opportunities, and stimulate their political participation.

The study found that mobile phones play an important role in the development, maintenance and use of social capital, the impact of social capital on social integration and in social integration directly. Mobile phones contributed to many of the expected outcomes of social participation. Being in mobile contact with members of their bonding networks helped refugees overcome isolation and feel accepted, safe and confident but this was not an outcome of integration. Respondents found it difficult to break away from bonding networks due to difficulties with language and lack of trust of outsiders.

Whilst mobile phones did not play a role in establishing new bridging network contacts, they did play an important role in continuing relationships with people met at a variety of places and in different circumstances. This is important as bridging networks are more likely to foster social integration.

The respondents reported that living in a foreign country without the support of families and close friends exposes them to an emotional struggle. Mobile phones play a vital part in maintaining contact with family and friends in other countries and, in turn provide emotional support. However maintained networks can lose their strength over time despite the use of electronic communication.

The effect of the use of mobile phones on economic participation was strong. Mobile phones were consistently stated by the respondents to be important for generating income and searching for employment. Self-employed respondents agreed that mobile phones enabled them to find and retain customers. However, these benefits were found to be hindered by barriers such inability to obtain the necessary documentation and exclusion due to language or even accents (Landau, 2009).

Few respondents had anything positive to say about the possibilities of achieving political participation. Most of the respondents use mobile phones to place voice calls to authorities as they believe that only voice contact is likely to receive any response. However, there was scepticism about the possibility of receiving support or understanding from public authorities for their concerns. They were unhappy about responses from government agents and employers. It is sobering to think that they believe that any indication that they are foreign such as their accents can result in poor service.

Although little is done to orient the refugees to organisations that cater for their needs, the respondents report using mobiles to talk to these organisations and individuals about issues concerning their refugee community such as fair treatment and life improvement. It is clear that there is discrimination but mobile phones can assist in political participation but the potential is limited.

The benefits that can be derived from social networks change over time as refugees form new relationships and learn how to get ahead rather than get by (Atfield et al. 2007). Refugee integration is a process which requires mutual adjustment and participation. However, it is clear that the mobile phone can play a major part in social integration.

Integration is a subjective process and the respondents presented their point of view. This may not be the overall experience of refugees in South Africa. The size and composition of the sample may limit the potential to generalise from this study. Therefore, the findings of this study provide scope for further research, perhaps with larger sample sizes or over time. In addition, research using quantitative method could be conducted, and then responses could be compared for validation of the findings of this study. Notwithstanding the drawbacks of qualitative method, this study has been able to throw light on the role played by mobile phones in enhancing the integration of refugees into the mainstream community.

8. KEY RECOMMENDATIONS

Based on the findings of this study, the following key recommendations can be suggested although is not meant to be exhaustive. These reflect the most important practical solutions for improving refugees' integration in South Africa.

There is a crucial need for collaboration and coordination between local government, refugees, and the host community since refugees' integration is a process which requires mutual adjustment and participation.

The government should improve the quality and scope of information provided to refugees; facilitate English language training and other education. This study found that apart from language issues, there was a significant lack of adequate information about organisations that cater for refugees' needs, employment, and study opportunities.

Consequently refugees rely heavily on their bonded networks and shy away from engaging with South African's.

Refugees should be involved in mainstream service delivery, local initiatives, and decision making processes at the local level as these could increase mutual trust and interactions between them and local community members. These also increase the uptake of more formal sources of support and legal advice. This study found that social networks occur in cases revolving around shared activities or interests.

The South African Department of Home Affairs needs to clarify the status of refugees and their issues, to diminish the inequalities that refugees experience such as in relation to labour market participation. This study found that the legitimacy of documentation issues to refugees is unrecognized by most government agents and employers, thus excluding refugees from certain critical human development areas.

Local communities should be aware of issues and rights of refugees through different media. For example mobile phones should be used as medium in the campaign of raising awareness of refugees' issues to the local communities since in South Africa mobile phones have become an important communication tool in everyday life.

9. BIBLIOGRAPHY

- ABS (Australian Bureau of Statistics). (2004). Measuring Social Capital. An Australian Framework and Indicators. Australian Bureau of Statistics. Information Paper [online document] Available at <http://www.abs.gov.au/websitedbs/c311215>
- Adepoju, A. (2003). Continuity and Changing Configurations of Migration to and from the Republic of South Africa, *International Migration*, 41(1), 3–28.
- Adepoju, A. (2005). Leading Issues in International Migration in Sub-Saharan Africa, Expanded Version of a Paper Presented at the African Migration Alliance Workshop, Pretoria.
- Adler, P., & Kwon, S. (2002). Social capital: Prospects for a New Concept. *Academy of Management Review*, 27(1), 17-40.
- Ager, A. & Strang, A. (2004). *The Experience of Integration: A Qualitative Study of Refugee Integration in the Local Communities of Pollokshaws and Islington*. London: Home Office RDS Online Report, <http://rds.homeoffice.gov.uk/rds/pdfs04/rdsolr5504.pdf>.
- Aguilera, M. (2002). The Impact of Social Capital on Labor Force Participation: Evidence from the 2000 Social Capital Benchmark Survey. *Social Science Quarterly*, 83(3), 854-874.
- Alexander, B. (2004). Going Nomadic: Mobile Learning in Higher Education. *Educause Review*, 39(5), 28-35.
- Aoki, K., & Downes, E. J. (2003). An Analysis of Young People's Use of and Attitudes toward Cell Phones. *Telematics and Informatics*, 20(4), 349-364.
- Atfield, G., Brahmhatt, K., & O'Toole, T. (2007). Refugees' Experiences of Integration, Refugee Council and University of Birmingham, September. <http://www.refugeecouncil.org.uk/Resources/Refugee%20Council/downloads/researchreports/Integrationresearchreport.pdf>.
- Banjo, O., Hu, Y., & Sundar, S. S. (2008). Cell Phone Usage and Social Interaction with Proximate Others: Ringing in a Theoretical Model. *The Open Communication Journal*, 2, 127-135.
- Banyard, V., & Miller, K. (1998). The Powerful Potential of Qualitative Research for Community Psychology. *American Journal of Community Psychology*, 26(4), 485-505.
- Belvedere, F. (2003). *National Refugee Baseline Survey: Final Report*. Johannesburg: Community Agency for Social Enquiry (CASE), Japan International Cooperation, and United Nations High Commissioner for Refugees.
- Bhavnani, A., Chiu, R.W.W., Janakiram, S., & Silarszky, P. (2008). *The Role of Mobile Phones in Sustainable Rural Poverty Reduction*. http://www.i-gov.org/images/articles/7576/The_Role_of_Mobile_Phones_in_Sustainable_Rural_Poverty_Reduction_June_2008.pdf Retrieved 30 November 2009
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Brissett, I., Cohen, S., & Seeman, T. E. (2000). Measuring Social Integration and Social Networks. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention* (p. 53). New York: Oxford University Press.
- Brown, B., Green, N., & Harper, R. (2002). *Wireless World: Social and Interactional Aspects of the Mobile Age*, London: Springer-Verlag. London: Springer-Verlag.

- Bourdieu, P., & Wacquant, L. (1992). *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Burns, G.W. (2000). When Watching a Sunset can Help a Relationship Dawn Anew: Nature Guided Therapy for Couples and Families. *Australian and New Zealand Journal of Family Therapy*, **21**: 184–190.
- Business Day, (2009). South Africa: Cellular Market Saturated – MTN. Available online: <http://allafrica.com/stories/200911160110.html>
- Cachia, R., Kluzer, S., Cabrera, M., Centeno, C., & Punie, Y. (2007). *ICT, Social Capital and Cultural Diversity*. Istanbul (Turkey): JRC Scientific and Technical Reports.
- Campbell, M. (2005). The Impact of the Mobile Phone on Young People's Social Life, paper presented at the Social Change in the 21st Century Conference, Queensland University of Technology, 28 October.
- Campbell, E. H. (2006). Urban Refugees in Nairobi: Problems of Protection, Mechanisms of Survival, and Possibilities for Integration. *Journal of Refugee Studies* 19(3)
- Campbell, S., & Russo, T. (2003). The Social Construction of Mobile Telephony: An Application of the Social Influence Model to Perceptions and Uses of Mobile Phones Within Personal Communication Networks, *Communication Monographs* 70(4), 317–34.
- Campbell, S., & Kwak, N., (2009). Political Involvement in “Mobilized” Society: The Interactive Relationships among Mobile Communication, Social Network Character. “Mobile 2.0: Beyond Voice?” Pre-conference workshop at the International Communication Association (ICA) Conference Chicago, Illinois, 20 – 21 May 2009
- Castells, M., Linchuan Qiu, J., Fernández-Ardèvol, M., & Sey A. (2007). *Mobile communication and society: A global perspective (information revolution and global politics)*. Cambridge, MA: MIT Press.
- Cejas, M. (2007). Racial Discrimination in Post-Apartheid South Africa: A New Irreducible “Other”. *Safundi: The Journal of South African and American Comparative Studies*. 8(4), 473-487
- Cellular News. (2009). *Third of South African Phone Owners Use More Than One SIM Card* . London: Telecoms online publisher. [Info @ cellular-news.com](http://info.cellular-news.com)
- Chigona, A., & Chigona, W. (2008). MXit up it up in the Media: Media Discourse Analysis on a Mobile Instant Messaging System, *Southern Africa Journal of Information and Communication*, 9, 42-57.
- Chigona, W., & Mbhele, F. (2008). The Role of the Internet in Alleviating Social Exclusion: Case of Western Province. *South African Computer Journal*. 41, 75-85
- Chigona, W., Kankwenda, G., & Manjoo, S. (2008). Uses and Gratifications of Mobile Internet among the South African Students. *South African Journal of Information Management*, 10, 3.
- Chigona, W., Vally, J., Beukes, D., & Tanner, M. (2009). Can Mobile Internet Help Alleviate Social Exclusion in Developing Countries? . *EJISDC (2009)* 36(7), 1-16.
- Cohen, S., Brissette, J., Skoner, D.P., Doyle, W.J. (2000). Social Integration and Health: The Case of the Common Cold. *Journal of Social Structure (EJournal)*, Sept 1–9
- Coleman, J. (1988). Social Capital in the Creation of Human Capital . *The American Journal of Sociology*, 94 , 95-120.
- Coleman, J. (1990). *Foundations of Social Theory*, Harvard University Press, Cambridge, MA,

- Commission on Integration and Cohesion. (2007). *Our Shared Future* <http://image.guardian.co.uk/sys-files/Education/documents/2007/06/14/oursharedfuture.pdf>
- CoRMSA. (2008). *Protecting Refugees, Asylum Seekers and Immigrants in South Africa*.
- Crush, J. (2000). The Dark Side of Democracy: Migration, Xenophobia and Human Rights in South Africa, *International Migration*, 38(6).
- Crush, J. (2008). *The Perfect Storm: Realities of Xenophobia in Contemporary South Africa*, Southern African Migration Project. Cape Town: Idasa.
- Cruz-Saco, M. A. (2008). Promoting Social Integration: Economic, Social and Political Dimensions with a Focus on Latin America. Helsinki, Finland, Paper prepared for the United Nations, Department of Economic and Social Affairs. http://www.un.org/esa/socdev/social/meetings/egm6_social_integration/documents/Promoting_Social_Integration.pdf.
- Daniel, B., Schwier, R., & McCalla, G. (2003). Social Capital in Virtual Learning Communities and Distributed Communities of Practice. *Canadian Journal of Learning and Technology*, 29(3), 113-139.
- Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology, *MIS Quarterly*, 13, 319–340.
- De Silva, H., & Ratnadiwakara, D. (2009). Social Influence in Mobile Phone Adoption: Evidence from the Bottom of Pyramid in Emerging Asia. Paper presented at Mobile 2.0: Beyond Voice. Pre-conference workshop at the International Communication Association (ICA) conference. Chicago, Illinois. 20-21 May 2009.
- Diminescu, D., Renault, M., & Gangloff, S. (2009). *ICT for Integration, Social Inclusion and Economic Participation of Immigrants and Ethnic Minorities: Case Studies from France*, Joint Research Centre, Institute for Prospective Technological Studies, European Commission.
- Donner, J. (2008). Research Approaches to Mobile Use in the Developing World: A Review of the Literature. *The Information Society*, 24(3), 140 - 159.
- Dube, P. (2000). Media Berated for Stocking Xenophobia. *The Sunday Independent*, February 27: 3.
- Dutta, S., & Mia, I. (2008). The Global Information Technology Report 2006-2007: *Connecting to the Networked Economy*. Basingstoke, U.K: Palgrave Macmillan.
- Ellison, N., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 1143-1168.
- Entzinger, H. (2007). *The Social Integration of Immigrants in the European Union*. Tokyo: JILPT International Symposium ‘Migration Policy and Society in Europe’ Social Integration for Migrant Workers.
- Ester, P. (2006). Bonding, Bridging, and Believing Social Capital of Dutch-American Reformed Communities , Fifth Triennial Conference of the International Society for the Study of Reformed Communities (ISSRC), Princeton, New Jersey, USA.
- Fereday, J., & Eimear, M. (2006). “Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development” . *In International Journal of Qualitative Methods* 5, issue 1.

- Fielden, A. (2008). *Local integration: an under-reported solution to protracted refugee situations*. UNHCR Evaluation report.
- Fratini, F. (2006). 'Funding Agreement to Further Develop a Comprehensive European Migration Policy.' <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/06/1813>
- <http://europa.eu/rapid/pressReleasesAction.do>.
- Genzuk, M. (2003). A Synthesis of Ethnographic Research, Occasional Papers Series. *Center for Multilingual, Multicultural Research (Eds). California.*
- Goodman, J. (2003). Linking Mobile Phone Ownership and Use to Social Capital in Rural South Africa and Tanzania. *The Vodafone Policy Paper Series*, (3), 53-65.
- Gough, N. (2003). Introduction to the Impact of Mobile Phones: Moving the Debate Forward. *The Vodafone Policy Paper Series*, (3), 1-2.
- Government Gazette, (2008). Regulation of Interception of Communications and Provision of Communication-related Information Act 70 of 2002. Republic of South Africa Vol. 451 Cape Town 22 Janvier 2003. No. 24286. Last modified: 19 August 2008. Available online: <http://www.info.gov.za/acts/2002/a70-02/>
- Grandes, M., Peter, M., & Pinnaud, N. (2003). "The Currency Premium and Local- Currency-Denominated Debt Costs in South Africa" (Cape Town: Development Policy Research Unit, University of Cape Town).
- Handmaker, J. (2001). No Easy Walk: Advancing Refugee Protection in South Africa, Africa Today, (in press). Human Rights Watch.
- Hamilton, J. (2003). Are main lines and mobile phones substitutes or complements? Evidence from Africa. *Telecommunications Policy* 27, 109-133.
- Halpern, D. (2001). Moral Values, Social Trust and Inequality: Can Values Explain Crime?' *British Journal of Criminology*.
- Heeks, R., & Jagun, A. (2007). *Mobile phones and development: The future in new hands?* Retrieved on January 6, 2008 from <http://www.id21.org/insights/insights69/art00.html>
- Hendricks, D. (2005). An Investigation Into The Consensus Surrounding Information Systems Project Success. Master of Business Science in Information Systems Thesis. *University of Cape Town, Department of Information Systems (Unpublished)*.
- Henn, M., Weinstein, M., & Hodgkinson, S. (2007). Social Capital and Political Participation: Understanding the Dynamics of Young People's Political Disengagement in Contemporary Britain. *Social Policy & Society* 6(4) , 467-479.
- Helliwell, J., & Putnam, R. (2004). The Social Context of Well-being. *Philosophical Transactions of the Royal Society*, 359 (1449), 1435-1446.
- Hermanns, H. (2008). Mobile democracy: Mobile phones as democratic tools. *Politics*, 28(2), 74-82.
- Hodge, J. (2005). Tariff Structures and Access Substitution of Mobile Cellular for Fixed Line in South Africa. *Telecommunications Policy*, 29(7), 493-505.
- Hoepfl, M. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, 9(1), 47-63.
- Howcroft, D., & Trauth, E. (2004). The Choice of Critical Information Systems Research. In Kaplan, B., Truex, D., Wood-Harper, T., & DeGross, J. (Eds.). *Information Systems Research - Relevant Theory and Informed Practice*, 195-211.

- Humphreys, L. (2007). Mobile social networks and social practice: A case study of Dodgeball. *Journal of Computer-Mediated Communication*, 13(1):341–360, October 2007.
- IOM. (2009). *Towards Tolerance, Law, and Dignity: Addressing Violence against Foreign Nationals in South Africa*. International Organization for Migration. http://www.irinnews.org/pdf/IOM_report.pdf
- Islam, M. K., Merlo, J., Kawachi, I., Lindström, M., & Gerdtham, U. (2006). Social Capital and Health: Does Egalitarianism Matter? A Literature Review. *International Journal for Equity in Health*, 5(3), 1-28.
- James, J., & Versteeg, M. (2007). Mobile phones in Africa: how much do we really know? *Social Indicators Research*, 84(1), 117-126.
- Jensen, R. (2007). The Digital Divide: Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector. 879-924: *Quarterly Journal of Economics*, 122, 3.
- Johnston, K., Tanner, M., Lalla, N., & Kawalsky, D. (2010). Social Capital: The Benefits of Facebook "Friends". *Submitted to Behaviour and Information Technology Journal in 2010*.
- Junger, C. (2001). Ethnic minorities, social integration and crime. *European Journal of Criminal Policy Res*, 9, 5–29.
- Kaasinen, E. (2005). User Acceptance of Mobile Services -Value, Ease of Use, Trust and Ease of Adoption. VTT Information Technology, Helsinki.
- Kaladjahi, H. (1997). *Iranians in Sweden: Economic, Cultural and Social Integration*, Stockholm: Almqvist & Wiksell International.
- Karen, J. (2002). Can Refugees Benefit the State? Refugee Resource and African Statebuilding. *The Journal of Modern African Studies*, 40, 577-596.
- Katz, R., Riddleberger, E., Sarma, B. & Yang, D. (2002). *Prepaid Wireless: the Next Frontier in the U.S. Wireless Industry*. Booz, Allen, Hamilton Publications.
- Kennan, W., Hazleton, V., Janoske, M., & Short, M. (2008). The Influence of New Communication Technologies on Undergraduate Preferences for Social Capital Formation, Maintenance, and Expenditure. *Public Relations Journal*, 2(2).
- Knopf, J. (2006). "Doing a Literature Review". *PS: Political Science and Politics*, 39(1), 127-132.
- Korac, M. (2003). The Lack of Integration Policy and Experiences of Settlement: A case study of Refugees in Rome. *Journal of Refugee Studies*, 16(4), 398-421.
- Klein, H., & Myers, M. (1999). A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. *MIS Quarterly*, 23(1), 67-94.
- Krahn, G. & Putnam, M. (2005). Qualitative methods in psychology research. In M. Roberts & S. Ilardi (Eds), *Handbook of research methods in clinical psychology*, Blackwell publishing.
- Kreutzer, T. (2009). 'Generation Mobile: Online and Digital Media Usage on Mobile Phones among Low-Income Urban Youth in South Africa'. Retrieved on March 30, 2009, from <http://tinokreutzer.org/mobile/MobileOnlineMedia-SurveyResults-2008.pdf>
- Lancee, B. (2008). *The Economic Returns of Immigrants' Bonding and Bridging Social Capital. A Case Study in the Netherlands*. Boston: Paper to be presented at the 103rd Annual Meeting American Sociological Association.
- Landau, L. (2006). Protection and Dignity in Johannesburg: Shortcomings of South Africa's Urban Refugee Policy. *Journal of Refugee Studies*, 19(30).

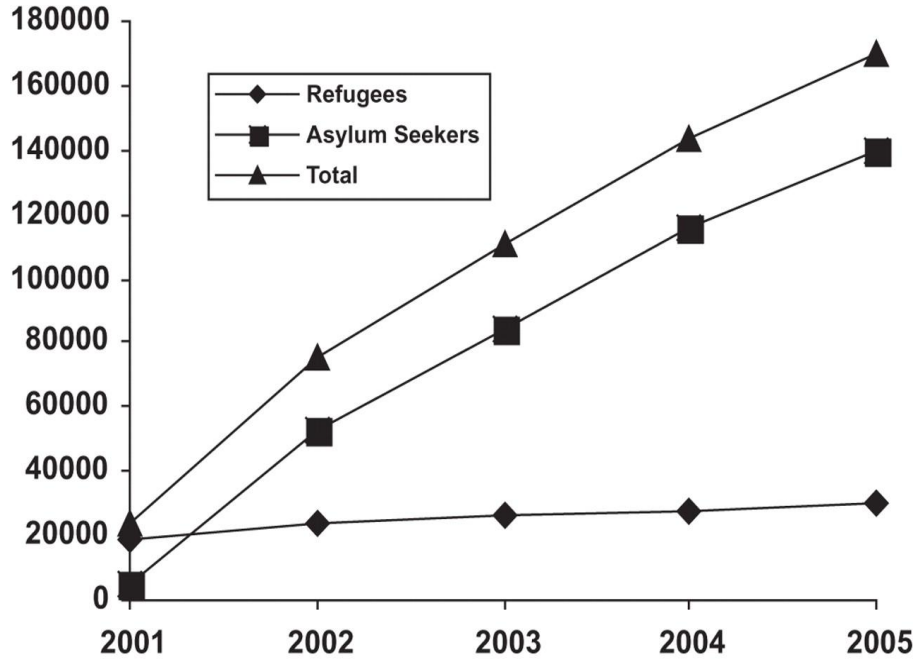
- Landau, L. (2008), *Decentralisation, migration and development in South Africa's primary cities*, ed. A. Wa Kabwe-Segatti (Paris: Agence Francaise de Development (AFD)).
- Landau, L., & Bourgooin, F. (2007). South African Trans-National Activities and Changing Forms of Belonging: New Perspectives on African Migration. *DIIS*.
- Landau, L., & Kabwe-Segatti, A. (2009). Human Development Impacts of Migration: South Africa Case Study. In: Human Development Report Office (HDRO), United Nations Development Programme (UNDP)/ Human Development Research Papers (HDRP). RePEC: hdr: papers: hdrp-2009-05.
- Leonard, M., (2004). Bonding and Bridging Social Capital: Reflections from Belfast, *Sociology*, 2004, 38, 927–944.
- Ling, R. (2008). *New Tech, New Ties: How Mobile Communication is Reshaping Social Cohesion*. Cambridge, MA: MIT Press
- Levin, K. (2006). Study design III: Cross-sectional studies. *Evidence-Based Dentistry*, 47-63.
- Mathew, J., Sarker, S., & Varshney, U. (2004). M-commerce services: Promises and challenges. *Communications of the AIS*.
- Matsinhe, D. (2009). Cleaning the Nation: Anti-African Patriotism and Xenophobia in South Africa. University of Alberta.
- Myers, M. (1997). Qualitative research in Information Systems. *MIS Quarterly Discovery*, 21(2), 241-242.
- Myers, M. (1999). Investigating information systems with Ethnographic research. *Communications of the Association for Information Systems*. 2(23).
- Myers, M. (2009). *Qualitative research in Business and Management*. London: SAGE.
- Myers, M., & Avison, D. (2002). Qualitative Interview in IS Research: Examining the Craft. *Information and Organization*. 17(1), 2-26.
- Naudé, W. (2008). Conflict, Disasters, and No Jobs, *UNU-Wider Research Paper No. 2008/85*.
- Nieminen T, Martelin T, Koskinen S, Simpura J, Alanen E, Härkänen T, Aromaa A (2008). Measurement and socio-demographic variation of social capital in a large population-based survey. *Soc Indic Res* 85:405–423
- Nocker, M. (2006). The Contested Object: On Projects as an Emergent Space. In D. Hodgson & S. Cicmil (pp. 155-170). *Management, work & organisations: Making projects critical*, New York: Palgrave Macmillan
- Nyamnjoh, F. (2006) *Insiders and Outsiders: Citizenship and Xenophobia in Contemporary Southern Africa*, CODESRIA and Zed Books: Dakar, London and New York.
- Okpala, A., & Jonsson, P. (2002). Social attributes and economic instability in Africa. *The Journal of Applied Business Research*, Vol. 18 No.2, pp.87-93.
- Orlikowski, W., & Baroudi, J. (1991). Studying Information Technology in Organisations: Research Approaches and Assumptions. *Information Systems Research* 2, 1, 1-28.
- Oswald, D., & Clark, E. (2003). Best Friends Forever?: High School Best Friendships and the Transition to College. *Personal Relationships* , 187-196.
- Palmay, I. (2002). *Refugees, Safety, and Xenophobia in South African Cities: The Role of Local Government*. Johannesburg: Centre for the Study of Violence and Reconciliation.

- Patton, M. (1990). *Qualitative evaluation and research methods*. SAGE Publications. Newbury Park London New Delhi.
- Parsons, Arthur S. (1978). Interpretive Sociology: The Theoretical Significance of Verstehen in the Constitution of Social Reality. *Human Studies*, 1, 111-137.
- Pfeil, U., Arjan, R., & Zaphiris, P. (2009). Age differences in online social networking – A study of user profiles and the social capital divide among teenagers and older users in MySpace. *Computers in Human Behavior*, 25, 643-654.
- Phulari, S., Khamitkar, S., Deshmukh, N., Bhalchandra, P., Lokhande, S., & Shinde, A. (2010). Understanding Formulation of Social Capital in Online Social Network Sites (SNS) *International Journal of Computer Science Issues*, 7(1-3).
- Pope, C., & Mays, N. (1995). Qualitative research: reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *BMJ*, 42-45.
- Puro, J. (2002). Finland: a mobile culture. In: Katz, J. E. & Aakhus, M. A. (eds.): *Perpetual Contact. Mobile Communication, Private Talk, Public Performance*. Cambridge University Press Cambridge, 19-29.
- Putnam, R. (2000). *Bowling Alone*. Simon & Schuster. New York.
- Putnam, R. (2007). 'E Pluribus Unum: Diversity and Community in the Twenty-first Century' in *Scandinavian Political Studies*, 30(2), 137-174.
- Research ICT Africa (RIA) (2009), 'RIA e-Access & Usage Household Survey (database)', SPSS statistics package made available to the author. Reports available on <http://www.ResearchICTAfrica.net>. Accessed May 10, 2010.
- Rizk, R., Marx, D., Schrepfer, M., Zimmermann, J., Günther, O. (2009). Media Coverage of Online Social Network Privacy Issues in Germany - A Thematic Analysis. *15th Americas Conference on Information Systems*, San Francisco
- Sabatini, F. (2005). "Social Capital as Social Networks. A New Framework for Measurement". University of Rome La Sapienza, Department of Public Economics: Working Paper No. 83.
- Sabatini F. (2007). The empirics of social capital and economic development: a critical perspective, in Osborne M., Sankey K. and Wilson B. (Eds) *Social Capital, Lifelong Learning Regions and the Management of Place: An International Perspective*, pp. 71–94. Routledge, London.
- Samuel, J., Shah, N., & Hadingham, W. (2005). Mobile Communications in South Africa, Tanzania and Egypt: Results from Community and Business Surveys. *Featured in Vodafone Policy. Paper Series, Number 2, March 2005*, p44-52.
- Sandelowski, M. (1995). Sample size in qualitative research . *Research in Nursing and Health*, 18, 179-183.
- Schmidt, A., Holleis, P., Hakkila, J., Rukzio, E., & Atterer, R. (2006). Mobile phones as toll to increase communication and location awareness of users. *Proceedings of the 3rd international conference on Mobile technology, application & systems, October 25-27*. Bangkok, Thailand.
- Scott, N., Batchelor, S., Ridley, J., & Jorgensen, B. (2004). The Impact of Mobile Phones in Africa. *Commission for Africa (Final draft)*.
- Scottish Executive. (2006). Scottish Refugee Integration Fund 2007/08. Edinburgh: Scottish Executive. Available at: <http://www.scotland.gov.uk/Topics/People/Equality/Refugees-asylum/refugeefund>.

- Shackleton, S. (2007). Rapid Assessment of Cell Phones for Development. Women's net <http://womensnet.org.za>
- Silverstone, R., & Haddon, L. (1996), "Design and the Domestication of Information and Communication Technologies: Technical Change and Everyday Life"; *Communication by Design: The Politics of Information and Communication Technologies*, R. Mansell & R Silverstone (eds.), Oxford University, Oxford, 44-74.
- Sinha, C. (2005). Effect of Mobile Telephony on Empowering Rural Communities in Developing Countries. *IRFD Conference Paper*, (3-14).
- Spencer, S. (2003). *The Politics of Migration: Managing Opportunity, Conflict and Change*, USA, Massachusetts: Blackwell Publishing.
- Stanley, D. (2005). The Three Faces of Culture: Why Culture is a Strategic Good Requiring Government Policy Attention in *Accounting for Culture: Thinking Through Cultural Citizenship*. Eds. C. Andrew, M. Gattinger, M.S. Jeannotte and W. Straw. Ottawa: University of Ottawa Press, 21-31.
- Statistics South Africa (2008). 'Community Survey, 2007 - Basic Results: Municipalities', Retrieved on January 17, 2009 from <http://www.statssa.gov.za/Publications/P03011/P030112007.pdf>.
- Steinbach, U. (1992). Social Networks, Institutionalization and Mortality among Elderly people in the United States. *Journal of Gerontology*, 47(4), S183-S190 STATSSA. (2007). 'Statistics South Africa: Mid-year population estimates 2007', Retrieved on May 16, 2008. From <http://www.statssa.gov.za/PublicationsHTML/P03022007/html/P03022007.html>
- Tewksbury, R. (2009). Qualitative versus Quantitative Methods: Understanding Why Qualitative Methods are Superior for Criminology and Criminal Justice. *Journal of Theoretical and Philosophical Criminology*, 1(1), 38-58.
- Tuckett, A. (2005). Truth-telling in aged care: A qualitative study. In: S. Quine, Perspectives on Residential Aged Care. *38th National Conference of the Australian Association of Gerontology, Gold Coast, (A18-A18)*, (9-11).
- United Nations High Commissioner for Refugees. (2009). *Concept Paper: High Commissioner's Dialogue on Protection Challenges, Challenges for persons of concern to UNHCR in urban settings*. Geneva, 9-10 December 2009.
- United Nations. (2005). "Building peaceful social relationship by, for and with people". <http://www.un.org/esa/socdev/sib/peacedialogue/background.htm>
- United Nations. (2007). *Participatory Dialogue: Towards a stable, Safe and Just Society for All*. http://www.un.org/esa/socdev/publications/prtcprtry_dlg%28full_version%29.pdf
- United Nations. (2008). *Economic and Social Council: Follow-up to the World Summit for Social Development and the twenty-fourth special session of the General Assembly: priority theme: social integration*. New York: United Nations.
- United Nations. (2009). E-Dialogue"Creating an Inclusive society: Practical Strategies to Promote Social integration", <http://www.un.org/esa/socdev/egms/docs/2009/Ghana/inclusive-society.pdf>
- UNHCR. (2007). *Global Appeal 2008-2009 - South Africa. Fundraising Reports*. UNHCR 1 December 2007.
- Van Biljon, J., & Kotzé, P. (2008). Cultural Factors in a Mobile Phone Adoption and Usage Model. *Journal of Universal Computer Science*, 14(16), 2650-2679

- Walsham, G. (2006). Doing Interpretive Research. *European Journal of Information Systems*, 15, 320-330.
- Walsham, G. (2005). Learning about being Critical. *Information Systems Journal*, 15(2), 111-117.
- Ware, N., Hopper, K., Tugenberg, T., Dickey, B., & Fisher, D. (2008). A theory of social integration as quality of life. *Psychiatric Services*, 59(1), 27-33.
- Wireless Federation. (2010). [South Africa's Mobile Market Profile](http://wirelessfederation.com/news/12091-south-africas-mobile-market-forecast-2008-2010). Available online: <http://wirelessfederation.com/news/12091-south-africas-mobile-market-forecast-2008-2010>
- Waverman, L., Meschi, M., & Fuss, M. (2005). 'Africa: The Impact of Mobile Phones'. The Vodafone Policy Paper Series, Number 3. Retrieved on May 12, 2008, from http://www.vodafone.com/etc/medialib/attachments/cr_downloads.Par.78351.File.dat/GPP_SIM_paper_3.pdf
- Zetter, R., Griffiths, D., Sigona, N. and Hauser, M. (2002). *Survey on Policy and Practice Related to Refugee Integration* (Oxford: European Refugee Fund Community Actions 2001/2002; School of Planning, Oxford Brookes University)
- Zheng, Y., & Walsham, G. (2008). Inequality of what? Social exclusion in the e-society as capability deprivation. 223, 225.
- Zinnbauer, D. (2007). *What can Social Capital and ICT do for Inclusion?* Luxembourg: JRC European Commission.

Appendix A: Approximate Cumulative Numbers of Asylum Seekers and Legally Recognised Refugees by Year, 2001-2005



Source: South African Department of Home Affairs (Landau, 2006. p. 313)

Appendix B: Cumulative Applications for Asylum from Major African Countries to December 2005

Source Country	Recognised refugees	Pending asylum claims
Angola	5,764	6,315
Burundi	2,183	3,754
Congo Brazzaville	1,160	3,865
Democratic Republic of Congo	10,609	19,098
Rwanda	1,276	725
Somalia	7,548	11,548
Sudan	173	121
Tanzania	135	4,981
Zimbabwe	114	15,978
Ethiopia	78	8,356
Uganda	55	3,106
Total	29,714(a)	140,095(b)

Source: South African Department of Home Affairs (Landau, 2006. p. 313)

(a) This total includes all other countries with numbers below 50 persons

(b) This total includes asylum seekers from the following countries that the DHA does not consider primary refugee producing countries. The number of outstanding cases is indicated in parentheses: Nigeria (9,700); Pakistan (9,800); Kenya (10,300), Bangladesh (6,200), India (6,200), Malawi (3,000).

Appendix C: Interview questionnaire

1. What, how and why do you use your mobile phone?
2. How do you use your mobile phone to communicate with your family, relatives, friends and neighbours (people you know well)?
3. How do you use your mobile phone to communicate with companies, government and people you don't know?
4. How do you use your mobile phone to communicate with your relatives, family and friends far away (home country) and other people you met a long time ago?
5. Does your mobile phone help you get involved in group activities or voluntary works? How?
6. Do you use your mobile phone for economic reasons? These could include expenses reduction, generate income (e.g. becoming an entrepreneur), accumulate funds and managing your money (e.g. mobile internet banking), increase your economic bargaining power, find a job and so on.
7. Does your mobile phone assist you to get informed or participate in local/national issues?
8. How do you think your mobile phone usage increases trust between you and the people you communicate with?
9. Do you think your mobile phone can help you receive a reliable and equal service from public offices and institutions?