Abstract
This article reports on the findings of a research project that investigated the use of mobile phones and the internet in remote Aboriginal and Torres Strait Islander communities in Australia. Indigenous Australians living in remote areas have previously had little access to and use of the internet (Rennie et al 2013) and are far less likely to access the internet within the home than non-Indigenous Australians (Rennie et al 2010). The proliferation of mobile phone ownership in Indigenous communities in Australian and internationally (Brady et al 2008) is resulting in increased access to the internet via mobile devices, as well as new communication, social and economic implications for phone owners. Using qualitative methodologies, including focus groups and semi-structured interviews in four remote communities, this article explores the ways that remote community members are using mobile phones; their access to online information and social media; and the problems they experience with service provision, bills and connectivity. It reinforces the need for more research into barriers to phone and internet usage by Aboriginal and Torres Strait people in remote areas, as well as the importance of informing remote community members of their telecommunications rights.

Introduction
The challenges faced by Indigenous Australians living in remote areas in accessing and using basic telecommunications services are well documented. These challenges include vast geographic distances, small and remote populations, the cost of deploying telecommunications infrastructure and harsh environmental conditions, coupled with the socioeconomic disadvantages faced by many people living in these communities (Australian Communications and Media Authority 2008: 5), Bandias and Vemuri (2005: 237) note that a range of Australian Government reports have cited inadequate infrastructure, lack of service provision, the high cost of access and ‘thin’ markets as key impediments to provision of telecommunications service in remote Australia. The digital divide, between those with reliable access to new forms of information technology and those without, is widest between remote Indigenous community members and other Australians (Gunkel 2003 [8]: 499), with the Central Land Council’s 2010 submission to the Reconnecting the Customer Inquiry noting that remote Aboriginal communities are least serviced by telecommunications providers (Central Land Council 2010 [7]).

At a basic level, access to mobile phone coverage has been extremely limited in many remote Indigenous communities. As of 2008, Telstra data showed 3G mobile coverage was available only to an estimated 26 per cent of remote Indigenous communities (Australian Communications and Media Association 2008: 6). Large geographic areas of Australia have consistently been unable to access reliable mobile phone services, with Rennie, Crouch, Wright and Thomas (2013 [8]: 589) noting that mobile phone (3G) coverage for Indigenous residents of central Australia was limited to about 7000 people in seven discrete locations, or only about 50% of the total population. For community members living in outstations or moving outside of community boundaries, there is generally no access at all to mobile phone coverage.

At the same time, use of mobile phones has emerged as a key communications medium for those remote Aboriginal and Torres Strait Islander community members who do live in areas where there is some form of coverage, particularly among young people (Papandrea 2010 [9]: 52). This is partly due to low levels of use of residential fixed-line services (Australian Communications and Media Authority 2008: 6), with few households in these communities having a fixed-line phone (Brady et al 2008 [10]: 390). It is also a result of the linkage between the use of mobile phone communications and traditional forms of community communication, with the aural and graphical characteristics of mobile technology aligning closely to strengths in Indigenous oral and graphical culture? (Brady et al 2006 [10]: 384).

Access to and use of the internet has been increasing dramatically in remote Aboriginal and Torres Strait Islander communities in recent years. As Brady, Dyson and Asela note, Indigenous people around the world are becoming more and more interested in ICT (Brady et al 2008 [10]: 384). This internet access has followed an interesting pattern in remote Indigenous communities in Australia, in effect ‘leap-frogging’ PCs and laptops, which have experienced low levels of use in these communities (Daly 2005 [11]: 3), and moving directly to online access via hand-held devices. Internet connection in households in these communities has, like fixed-line phone services, tended to be either financially or technically unattainable. In 2006, it was estimated that Indigenous Australians were almost 70 per cent less likely than non-Indigenous Australians to have an internet connection in their home (Australian Bureau of Statistics 2007 [12]). Much of the access to the internet by young Aboriginal and Torres Strait Islander people has been through computers at schools, with 2008 statistics showing that more than nine out of ten (91%) of Aboriginal and Torres Strait Islander children aged 5-14 years who used a computer had accessed it from a school (Australian Bureau of Statistics 2011 [13]). Internet access in remote communities has been even more problematic, with 2006 estimates showing 20% of Indigenous households in remote and very remote Australia had an internet-connection, compared with 60% of non-Indigenous households in the same statistical area (Rennie et al 2013 [8]: 583). This figure dropped as low as 2.2% for households in remote areas of central Australia.
From community to community, internet access can be highly variable in remote areas of Australia (McCallum & Papandrea 2009 [14: 1231], with communities experiencing difference in the ?types of access, bandwidth, reliability and cost? (Rennie et al 2010 [15: 52]). The issue of ICT skills and knowledge further impacts on the use of the internet in remote communities, with McCallum and Papandrea (2009 [14: 1245]) noting the lack of prerequisite knowledge and skills for more intensive internet use. Use of the internet via PCs, therefore, has been limited in many communities to very basic fulfilment of economic needs, such as checking a bank account balance (Papandrea 2010 [9: 54]).

Arguably, the increased use of mobile phones in communities (Brady et al 2008) could provide an opportunity for direct access to the internet without reliance on computers in homes or community hubs. However, as more and more remote community members begin to use mobile phones as both their key means of communication and their key medium for accessing the internet, it is clear that equitable access to mobile services is not simply related to reliable coverage. Remote community members living in areas with reliable, or somewhat reliable, coverage are still impacted on by financial constraints and lack of access to appropriate information and support in the area of consumer rights. A number of recent cases and research projects have highlighted examples of remote community members being sold mobile phone packages that were poorly matched to their needs and budgets (see Loban 2013 [16; Rennie et al 2010 [15]). While use of mobile phones in remote communities has opened up new opportunities in terms of education, health, banking and social networking, they have also facilitated access into remote Indigenous communities by unscrupulous businesses using high pressure sales tactics such as telemarketing? (Loban 2013 [16; 6]). A number of remote Indigenous communities have reported ?poor customer service, extreme instances of bill shock and astronomic complaint levels? (Central Land Council 2010 [7]).

There is clear recognition internationally that access to reliable communications and the internet are fundamentally important to the well-being of communities, families and individuals. As Bandias (2010 [17: 47] notes, ?improved access to telephones, the internet and ICT services has the potential to mitigate the negative effects of the geographic and social isolation experienced by the community?. This research project explores the ways remote community members are using their mobile phones and their access to online information and social media. It also explores problems community members experience with service provision, bills and connectivity, examining in detail community perspectives on barriers to phone and internet usage by Aboriginal and Torres Strait people in remote areas.

Research Methodology

The research consisted of a series of four focus groups and 14 semi-structured interviews with people living in remote Aboriginal and Torres Strait Islander communities (all of whom lived in communities with some mobile phone coverage). Each focus group comprised five to eight community members, based on recommendations from a local Indigenous research assistant as to which community members would be comfortable speaking in each other?s company. The 27 focus group members included predominantly users of mobile phones (23) and the internet (23), with all those with a mobile phone using it for both texting and calling. These focus groups were informal and semi-structured, allowing participants to generate questions and concepts, express opinions, and pursue their own priorities in their terms and using their words (Kitzinger & Barbour 1999 [18: 5]). By allowing focus groups to be flexible and fluid in nature, it was hoped that participants would be encouraged to express a wide range of attitudes, as well as developing shared values in a group setting (Waterton & Wynne 1995 [19: 141]). Group discussion was encouraged as part of the focus group process, allowing the development of collective notions shared and negotiated by members of the group (Gunter 2000 [20: 44]).

The location and number of participants in the focus groups is summarised in the table below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Number of participants</th>
<th>Gender</th>
<th>Age range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape York, QLD</td>
<td>6 March 2015</td>
<td>5</td>
<td>3 male, 2 female</td>
<td>17-48</td>
</tr>
<tr>
<td>Cape York, QLD</td>
<td>6 March 2015</td>
<td>7</td>
<td>4 male, 3 female</td>
<td>18-52</td>
</tr>
<tr>
<td>Kimberley, WA</td>
<td>9 March 2015</td>
<td>7</td>
<td>4 male, 3 female</td>
<td>17-38</td>
</tr>
<tr>
<td>Central Desert, NT</td>
<td>9 March 2015</td>
<td>8</td>
<td>3 male, 5 female</td>
<td>18-52</td>
</tr>
</tbody>
</table>

The focus groups were complemented by 14 semi-structured interviews with remote community members (six in Cape York, four in the Kimberley and four in the Northern Territory). Semi-structured interviews were used to ?to give the interviewees the space and the authority to examine their own experiences? (Brady et al 2008 [10: 389]). As Holubin and Gubrium (2002 [21: 120) note, this form of interviewing is an especially useful mode of inquiry as it can result in the production of meanings that address issues relating to particular research concepts. Interviewees were identified based on recommendations from a local Indigenous research assistant (Meadows et al 2007 [22] used and recommend the widespread use of local people as research assistants). Chance meeting? interviews were also used wherever possible, reflecting the informal community setting of the research and the successful use of this form of interview by previous researchers in remote Indigenous settings (Meadows 2002 [23]; Watson 2013 [24]).

As with the focus groups, the interviews were fluid in nature, allowing interviewees to freely express their views about key issues relating to their use of mobile phones and the internet. This type of semi-structured interviewing allows clarification of points, extension of responses, and the ability to remind respondents of points they might not have mentioned (Gillham 2000 [25: 14]). While the interviewer attempted to facilitate without overly directing the interviewee?s talk (Rapley 2004 [26: 20]), it was acknowledged that the interviewer might in some cases need to guide the interviews to ensure the key areas of the research project were addressed, recognising that ?all interview statements are actions arising from an interaction between interviewer and interviewee? (Jensen 2002 [27: 240).

All focus groups and interviews were analysed based on themes and application of codes to data Rapley 2004 [26: 27]. As Jensen (2002 [27: 247] notes, this use of thematic coding allows qualitative researchers to identify the occurrence of particular themes or frames in the context of communication.

Key findings:

High Levels of Use of Mobile Phones and the Internet

The outcomes of the focus groups and semi-structured interviews suggests that even in very remote communities, large numbers of Aboriginal and Torres Strait Islander people own, or have access to, a mobile phone. This was summarised by a community member in Cape York, who noted:

We all have these phones, the mobile ones. Most people now, especially the young ones. But most people now, yes, have them.
While pre-paid mobile phone services were more common, a significant proportion of those involved in the research had signed up to post-paid contracts. Reasons why so many people in remote communities feel they need a mobile phone are related to the geographic isolation of where they live, the need to be in contact when working in remote areas, and social reasons (especially among young people). A number of community members commented on the importance of having a mobile phone to stay in touch with outside of their community, such as to ?feel safe if I am driving and I get broke down? or ?stay in touch if I am out working in case I need something or something goes wrong?. A significant number of community members also indicated that having a mobile phone was seen as important as peers and family members already had them, with one community member in the Northern Territory noting that mobiles are something everyone has, so we want one too?. The importance of having a phone for social reasons was summarised by a young person in the Kimberley:

"All my friends like to stay in touch. So they text, or they are on Facebook or something, and I don?t want to miss out. Sometimes everyone?s just sitting there with their phones looking at them, so if you don?t have one, what do you do? (laughs)"

There is also evidence that the proportion of people using a mobile phone as a key (or primary) means of communication has increased significantly in the past two to three years, and continues to increase. A number of interviewees and focus group members commented on the changes that have happened in their community and networks of families and friends in terms of increased ownership and use of mobile phones, including one interviewee in the Kimberley who noted that ?a few years ago, not so many people had them, but now almost everyone does?.

Community members who were part of the research project who currently do not have a phone indicated they planned to get one soon, with a focus member in Cape York noting ?I will get one soon? I am looking right now at how to get one, and what I can afford.? There was also some evidence in the research of the sharing of mobile phones between friends and family members, as noted by a focus group member in the Northern Territory who observed ?sometimes I will give someone my phone to use, for a call or to send a message or to check something out, so I pass it to them, then they give it back to me later?.

One of the primary reasons cited by people in remote Aboriginal and Torres Strait Islander communities for wanting to have a mobile phone is a desire to stay connected to friends and family. For some community members, this was because mobile phones are now the easiest way to stay connected with people as they move around the community, as noted by an interviewee in Cape York:

"Before, you had to ask around. No one had a phone at home. No one had a mobile phone. You had to ask people: ?Is (name of person) at the Arts Centre, or has he gone up to the road?? Now you can just send a text or you can call them. So it makes things easier for people. It?s the same at work. Some people had walkie-talkies or whatever. But now it?s just your phone. They can call you any time."

For many community members, mobile phones are also providing an easy way to stay connected with family members and friends in nearby communities, regional or urban centres, or other parts of the country. A focus group member in the Kimberley observed that:

"People move around a lot. Or they have to go somewhere for work, or for medical stuff. The young ones might go off to school. So we can stay in touch. That might be Facebook, or just to call them. I have family in other places, so I can call them, or send them a message. You can take a photo to show them."

High Levels of Access to Online Content via Mobile Phones
Both focus groups and interviews revealed strong usage of mobile devices to access information, news and entertainment through the internet. While this use of the internet through mobile devices varies slightly from location to location (with more people in remote areas of Queensland regularly accessing content from the internet than in other locations), all focus groups resulted in evidence of widespread use of the internet. While a small number of community members reported using their mobile phones to access news and information, including weather updates and ?looking at ABC or other news sites?, a significant proportion of interviewees and focus group members indicated their primary use of the internet was for access to entertainment content and social media. A number of community members indicated they were using their phones regularly to ?check out what?s happening on Facebook? or ?look at something that someone has told me about, like a video or something funny?.

An interviewee in the Northern Territory noted:

"We all like to be on Facebook, but some of us just like to follow YouTube or watch something. Lots of people are downloading music, and some are watching TV shows and stuff. But mainly it?s that Facebook stuff, because that?s how some people say connected."

When speaking about social media, most focus group members and interviews referred clearly to using ?Facebook?. There were only two references to use of other forms of social media such as Instagram, and no references to Twitter use. Further investigation of this with an interviewee in Cape York elicited the following observation:

"For most of us, it?s just Facebook. Everyone is on there, so that?s what we do. But some people are starting to use Instagram. A few. I don?t know about Twitter. Maybe some people follow someone famous or something, but not so much. It?s not what they like to do."

While health and mental health information are not key areas of online searching for remote Aboriginal and Torres Strait Islander community members, some community members referred to using the internet to investigate health and mental health signs and symptoms, and to access information on support and treatment options. While use of the internet is currently strongly focused on social media and access to entertainment content, some interviewees reported they had used the internet to look up health or mental health information online, as noted by an interviewee in Cape York:

"I have tried to find a couple of things. Mainly for health, for my kids. I?ll look up and see if I can work out what is going on with them. Importantly, many community members involved in the research indicated they would be prepared to access this kind of information in the future if content was promoted to, and tailored to, them specifically. This was summarised by an interviewee in Cape York:

"I think that kind of information is important to us, yes. And it would be useful for us. But people won?t just go there to find it. They would, I think, if you had someone at the clinic tell them about it. Or a poster or something. But we don?t know to go and find it on the internet, so we don?t."

Problems with Reliability, Affordability and Service Provision
Despite increased access to mobile phones and the internet by remote Aboriginal and Torres Strait Islander community members, the research found that a large number of community members experience ongoing problems with unreliable access to phone networks and slow or intermittent access to the internet. These problems were most highly reported in the Northern Territory, but there is evidence in all locations of concerns about being able to access reliable phone and internet services. A focus group member in the Northern Territory observed:

"It?d getting worse, I reckon. At my house, sometimes you can?t get a signal. Or you want to go on Facebook, but it won?t go there. It takes a long time. It used to be better."

Receiving large and/or unexpected bills was a common concern among participants in focus groups and semi-structured interviews. A number of community members commented on the experience of receiving a large bill themselves, or provided examples of family members or friends who had struggled to pay their phone bills. A focus group member in the Northern Territory observed:
A couple of times I will get a phone bill, and it will seem like so much. Like much more than I thought it would be, and I am worried about paying it. If it arrives with another bill, I get really worried. I think that’s why a lot of people pay for it, they pre-pay. Because if you get a bill and you can’t pay, it’s a big problem.

Many interviewees and focus group members noted that they had been shocked by the cost of using their mobile phones, either by receiving large bills or by running out of credit very quickly. Community members were unsure of why their bills are high, and/or unsure of how they can potentially minimise their call costs and data usage. Many remote Aboriginal and Torres Strait Islander community members did not fully understand their rights when dealing with service providers. This included some observations by focus group members and interviewees indicating that they did not think it was possible to change their phone contracts and/or services once they were set in place, as a focus group member in Cape York observed:

I told my sister that she could change that contract. That she could ring them and tell them she wanted a better one, because she always running out of being able to get on the internet. But she said ?no, you can’t change it?. A lot of people think that way. You get your phone and you sign your name and that?is it. Finish.

Community members reported dealing with service providers who were unhelpful or ?forceful? when explaining contracts to them, or outlining how to use prepaid services. This was captured in a focus group exchange in the Kimberley:

They (the service provider) tell you it?is a good deal. It?is the best thing for you. They kind of force you to get a phone, and to get a certain type of calls or internet?

But yeah, if you ask what you are getting, they?re not helping you. They?re like: ?it?is what you need, so just get it?. Then you have to pay all the time, you pay too much.

There?is no one to tell you, in a way you?ll understand, what it?is all about. How much it will cost. If it will work. They just want you to buy it.

The outcomes of the focus groups and semi-structured interviews suggest a low level of awareness of support remote Indigenous community members can access to resolve problems with bills, contracts, pre-paid services or service provision in general. Some comments highlighted a cultural problem with complaining about services of any kind, with a focus group member in Cape York noting that ?people up this way just don’t like to complain, we won’t phone up someone and tell them something is not right?. An interviewee in Cape York explored this idea further:

You can’t just tell people that they can phone someone or go online if they have a problem. For a start, people aren’t used to calling up places to say ? help me with this?. They like to talk to someone they know, or someone local. Then also, they sort of don’t know what to ask about. So if you could say: ?are you paying too much for your phone, for your bills?? then they might say ?oh, yeah, I am?. Then you can tell them they can get some help with that. They need to know what to say, you know what I mean?

Other focus group members and interviewees focused on what they felt to be a lack of awareness of where community members could go if they wanted to resolve a problem with their phone or internet service. A focus group member in the Kimberley noted:

We don’t know who you talk to. If your phone is broke or whatever, or you got some problem, we don’t know who to talk to. We can’t go to the store and sort it out.

It is evident from this research that community members would like more support and information (including translated content in community languages) that will help them to understand their rights and obligations before signing up to contracts, as well as during the contract period. A community member in Cape York suggested some ?simple posters that let people know their rights, let them know who they can talk to about any problems?. A focus group member in the Northern Territory suggested:

You need some things in language, things people can listen to, because that?is important for people. They won’t read something, but if you can tell them, they understand. So yeah, tell them with a video or a CD or something, like radio there, tell them what questions they should ask, what they need to know.

Conclusions/Recommendations

While limited in scope in terms of the numbers of remote communities involved, feedback from community members indicates that in regions where there is some coverage, use of mobile phones is widespread and increasing. Findings in the remote communities involved in this research project align well with those of Brady et al (2008)[10]: 393), who point to a very high rate of mobile phone adoption and ownership in Indigenous Australia. This increased use of mobile phones for communication has been accompanied in the communities investigated by an increase in access to the internet via smartphones.

While previous studies have noted the use of mobile phones primarily for talking, texting and staying in touch with family and friends (see Brady et al 2008[10]), there is clear evidence in this research project that many community members are using mobile phones to access social media and download music and movies. There is also some evidence that access to online news, as well as health and mental health information, is increasing in these remote communities. However, the desire of community members to get online and communicate primarily via their mobile devices is resulting in significant issues in terms of costs and problems with service provision. Even in communities with high levels of mobile phone ownership, issues are experienced with reliability and quality of phone and internet services.

The high, and often unexpected costs, of phone and internet usage have the potential to create ongoing problems for many remote Aboriginal and Torres Strait Islander consumers. The costs of phone contracts, pre-paid services, phone calls and data download continue to be limiting factors affecting the ability of remote community members to access reliable communications that meet their needs and wants (see also Rennie et al 2013[8]; Papandrea 2010[9]; Brady et al 2008[10]). In communities where income levels are low and households are among the most disadvantaged economically in Australia, the cost of phone services can be a significant proportion of family and individual incomes. Rennie, Crouch, Wright and Thomas (2013[8]: 591) note a 2007 study of mobile phone use in remote Northern Territory communities found that participants on Centrelink benefits were spending on average 13.5% of their income on their mobile phone, and those on CDEP were spending 8.3% of their income on their mobile phone.
Added to concerns from remote community members about the high, and often unexpected, costs of phone and internet bills and lack of reliable coverage, this research project has noted ongoing issues faced by individuals when seeking to resolve these problems. Many remote Aboriginal and Torres Strait Islander community members were confused about their phone and internet contracts and their consumer rights, and there were low levels of awareness of mechanisms for complaining or sorting out problems. It is suggested that more information needs to be provided to remote Aboriginal and Torres Strait Islander communities, in formats that are easily understood and culturally relevant, to build awareness of consumer rights and complaints mechanisms (see also Loban 2013[16]).

Mobile phones are now playing an important and growing role in meeting the communications needs and wants of remote Indigenous community members. They provide a style of oral communication that suits more traditional forms of Indigenous communications (Brady et al 2008)[10]: 388, combining graphic and oral elements of communication that resonate strongly with cultural communication norms. They also have the potential to open up a range of new social and economic benefits for these communities and those who live there (McCallum & Papandrea 2009[14]: 1254) and help to overcome the digital divide that has existed in these communities for long periods (Rennie et al 2010[15]: 66). As Bandias (2010[17]: 47) notes, improved access to telephones and the internet has ‘the potential to mitigate the negative effects of the geographic and social isolation experienced by the community?.. Access to the internet and social media via mobile phones provides remote community members with new avenues for connection to like-minded people and communities national and globally, with Indigenous communities using new technologies in innovative and creative ways (Eardley et al 2009[28]: 18). As an essential service for Indigenous people living in remote communities, and as a catalyst for future social connections, creative outlets and access to important news, information and services, there is a need for ongoing improvements to levels of access to reliable and affordable mobile phone and internet services. This research project suggests that this increased access must be accompanied by affordable service provision, coupled with clear and culturally-relevant information on telecommunications consumer rights.

References


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