

Mobile Phone Use and Travel Behaviour of Adult Residents of Ile-Ife, Southwestern Nigeria

Ajani O. A.* Fakunle S. O.

Department of Sociology and Anthropology, Obafemi Awolowo University, Ile-Ife. Nigeria

Abstract

This study examined the influence of mobile phone use on the frequency of trips which Ile-Ife residents made on social activities. The study covered eleven electoral wards of the urban Ile-Ife. Purposive sampling method was used to select a sample size of 330 working adults who were mobile phones users and between aged 35 years and 50 years. Moreover, to obtain the qualitative data, purposive sampling method was adopted to obtain a total sample size of 22 for in-depth interviews. Contents analysis and descriptive statistics were used to analyze the qualitative data and the quantitative data respectively. This study found an increase in frequency of trips made on visitation to friend and relatives, business/work, religion purposes while mobile phone use did not influence the frequency of trips made on recreational purposes and ceremonies. This study concluded that mobile phone use influenced the frequency of some trips which the adults in Ile-Ife, Southwestern Nigeria made on social activities.

Keywords: mobile phone, travel behaviour, social activities.

1. Introduction

Before the introduction of mobile phone in Nigeria in 1999, interpersonal communications between people who were not living in the same location were through letters, landline phones and telegraph. Deregulation of telecommunication market in Nigeria in the year 2000 and the encouragement of Nigerian Communication Commission (NCC) to facilitate more entry of more mobile operators into the market in the year 2001 contributed to the growth of telecommunication system in Nigeria (Olayinka, 2006). Since then, there have been an astronomical growth in the cell phones usage by youths, adults and the aged in the country. The deregulation, according to Ogunbodede (2010) boosted the tele-density and caused it to rise nearly on daily basis. However, the introduction of GSM changed the whole communication terrain as over 33 million out of 160 million Nigerians own at least a mobile phone (mobility.com.ng, retrieved on 18th June, 2016). This improved access to mobile phone has continued to generate interest among scholars on its functionality for social connection and its effects on travel behavior (Muhammed and Tomonori, 2009; Ling, 2000)

One issue that has dominated academic discourse in recent years is the link between travel behaviour and mobile phone usage. While Ogunbodede (2010), Muhammed and Tomonori, (2009), Mckenna and Bargh (2000), Anna, Kari and Anssi (2006), Rapp and Skamedal (1996) reported that a reduction in physical movement and increased in social interaction as the interaction that could call for physical movement could have taken place on phone, others have indicated that mobile phone usage increased the number of trips people embarked on (e.g. Bakke, 2010; Akpore, 2008; Omotayo, Yifeng and Shyam, 2008; Ling, 2004). However, Ayodeji (2007) opined that the extent to which the use of telecommunications affects travel could be determined by the type and purpose of the interaction and socio-economic characteristics of the users. With a view to understanding the influence of mobile phone on social activities of Ile-Ife residents, the specific objective of the current study was to assess the influence of mobile phone use on the trips made on selected social activities.

2. Literature Review

A variety of reasons have been adduced for physical movement of people from one place to another by different scholars. For instance, Campbell and Park (2008) and Adams (2000) noted that people consider the desirability of a place based on its social, economic, or environmental situation. However, an individual's idea of place utility may or may not reflect the actual conditions of that location. Salomon and Schofar, (1998) opined that intervening opportunities are usually considered, so people tend to move to a location where such opportunity exists. There exist other several factors which social researchers have identified as potential cause of people's movement in a city. Some of these include: Trade, which is the exchange or movement of goods and services between people, is one of the oldest human activities in the world, has been identified as one of the economic factors that cause mobility of people (Bakke, 2010; Olatunji, 2005). Ceremonies are common in African societies more than in other parts of the world (Elujoba, 2012). Ceremony brings people living in different locations together and thereby calls for mobility, the visitation made to the relatives living in different places, religious activities and festivals that call for the convergence of people from different locations (Mokhtarian, 2009). The quest for knowledge has been identified by Zulkefly and Baharudin (2009) as one of the factors for physical movement. He explained that journeys made on like educational excursions and research trips are in this category. Provision of infrastructure facilities, like health centers, potable water, electricity, job, gentrification and implementation of law to banish people from or restrict people to or from a certain location are identified by

Ayodeji (2007) as among the political factors that are potential causes of physical movement of people. Among the negative factors cited by Badejo (2009), as potential causes of mobility are earthquake, eruption of volcanoes, flooding, war and other natural disasters. It can be concluded that inasmuch as all these aforementioned factors exist in human societies, the fact that there will be inducements for and hence increase in transportation so that people may carry on their daily activities cannot be denied.

Information and Communication Technology (ICT) changes almost every aspect of man's lives. However, Elujoba (2012) asserted that some societies welcome it as a panacea while others fear it as a curse; all would agree that it is quite capable of transforming society. Srivastava (2005) noted that before the advent of ICT, people depended solely on the use of locomotive machines to move from one location to another before people could communicate with others living in far places. Badejo (2009) found that mobile phone allows Nigerians to be accessed and engaged in social interaction without involving traveling from one place to another. This enhances social connection and coordination among people, and makes mobile phone more receptive in modern society (Manceron, 1997). One consequence of the availability of mobile phones in Nigeria, according to Olayinka (2006), is being reachable on the mobile phone when away from home, or being reachable more quickly by the voice mail facility on mobile phones, meant that people did not have to stay at home to wait for messages. He found that mobile phone has helped people in Nigeria to overcome constraints that previously attached to landline use, in particular, mobility. This translates to encourage Nigerians to be more mobile by eliminating tying them to the home like the use of land lines do.

3. Methodology

The current study adopted cross-sectional design and mixed method. Multi-stage sampling method was used to first divide the urban center of Ile-Ife into 11 sections according to the existing electoral wards. The targeted respondents, whose ages were between 35 and 50 years, were residents of the streets in each electoral ward who were all mobile phone owners. For reasons of convenience and gaining access to the targeted sample, purposive sampling technique was used in the selection of respondents in each of the streets in each electoral ward. For qualitative data, purposive sampling method was adopted to select a sample size of 2 adults (1 man and 1 woman to maintain gender balance), whose ages were between 35 and 50 years from each of the 11 electoral wards that cover the urban center of Ile-Ife, making total sample size of 22. For the quantitative data, purposive sampling method was used to select a sample size of 30 adults (15 men and 15 women) from each of the 11 electoral wards making a total sample size of 330. Communities in the study location are rich in social practices such as wedding ceremonies, family meetings, funerals, economic, religious and leisure activities. These social practices in most cases require meetings at a distance which leads to physical movement of people from one place to another; hence, this study examined influence of mobile phone use on frequency of trips on these social practices. The primary data needed was gathered using in-depth face-to-face interviews (IDIs) and questionnaire which consisted of both structured questions and unstructured questions on socio-economic characteristics of the respondents, their accessibility to mobile phone and influence of mobile phone use on trips which the respondents embarked on religious meetings, visitation made to friends and relatives, business and work, educational purpose, recreations, and social ceremonies such as marriage and funeral.

4. Findings and Discussion

4.1 Mobile phone Use and Locating New Places

Getting direction to a new location could be a daunting experience, in particular, in a place where the use of map is not popular. Unlike in developed world where people use devices such navigator and maps to get direction to their destinations especially in a new environment, many people in the developing world still rely on asking people for direction. Mobile phone use has been adopted by people in the study location to get direction to places they had not been before. Their responses by gender showed that about 65 per cent of male respondents and 67 per cent of females reported to have had found their ways in new locations with the aid of mobile phone. The data described that more female respondents used mobile phone for this purpose than their male counterparts. Moreover, majority of the respondents indicated that mobile phone use had helped them to locate new places in recent times. This study showed that mobile phone has assisted its users to locate new places about 65 per cent of the respondents had used mobile phone to locate unknown places. This is in line with Ogunbodede (2010), who found that majority of his respondents claimed to have used their phone to get directions or other information based on their current locations.

This study considered four possible categories of the influence which mobile phone use could have on the trips which respondents made on few selected social activities. These were Reduction influence, Increase influence, Ambiguous influence (being unsure to determine the actual or net influence), and No influence (Neutral influence).

4.2 Mobile Phone Use and Trips on Religious Activities

The findings showed that about 41 per cent of the respondents respectively claimed an increase in the trips made on religion activities, while almost 33 per cent of male and 39 per cent of female respondents that declared reduction in their trips. Moreover, 26 per cent and 20 per cent of male and female respondents respectively claimed that mobile phone neither increased nor decreased in the frequency of trips made on religious activities. The data revealed that mobile phone use had assisted female respondents to embark on religious activities trips more than their male counterparts. This further described that women had adopted mobile phone use to continue to compete with male domination of technology use and to promote gender equality in technological environment. The qualitative data on influence of mobile phone use on religious trips of the informants revealed that majority of the informants admitted that mobile phone had assisted them to access more information about their religious programmes and this had resulted in increased participation. In essence, their religious trips had increased in recent times. However, two (a male and a female) informants opined that their religious trips reduced because some of their religious activities took place on mobile phone.

Extract 1: IDI/Woman/45years/June, 2016

“Some of my religious trips were cancelled through mobile phone use. For instance, we were supposed to go for prayers on a mountain but I was told to wait because the programme did not hold. Also, there was a day my son was sick in the midnight, the Pastor, instead of coming, prayed for him and God did it”.

Extract 2: IDI/Male/78years/June, 2016

“I am old, and when you are getting old, there are many things you can’t be doing again, and even if you do it, it will be once in a while, many of my trips have now reduced however, mobile phone has helped me to be present but not in physical form, like trips made on visitation to a friend or relatives, no more business (I am old), on religious activities in most cases my pastor would pray for me on phone. I do talk with my children on phone nowadays”.

From the analyses of both qualitative and quantitative data above, purpose and nature of the religious activities and the condition of an individual such as age contribute in determining the influence which mobile phone use had on religious activities of the respondents.

4.3 Mobile Phone Use and Trips on Visitation to Friends/Relatives and Social Ceremonies

On mobile phone use and its influence on the trips made on visitation to friends/relatives, about 40 per cent and 36 per cent of female and male respondents respectively declared an increase in this kind of trip, while there was a reduction for 32 per cent of male and about 30 per cent of female respondents. This outcome is in line with Jin and Peña (2010), Pettigrew (2009) and Flinchy (1997) who found that text messaging enhanced connectedness within close interpersonal relationships among family members. Moreover, on the respondents’ perceived influence of mobile phone use on trips made on social ceremonies, majority of female (57.8 per cent) and male (58.4 per cent) declared that mobile phone use had no influence. From this, it can be concluded that mobile phone use neither increased nor decreased the number of trips they made on social ceremonies. However, about 38 per cent and 18.2 per cent of male and female respondents respectively claimed an increase in this type of trip while 24 per cent and 3.6 per cent of female and male respondents respectively claimed they could not categorically state the influence of mobile phone on the trips they made on social ceremonies. This might lend a credence to the popular opinion that Yoruba people value social ceremonies and attach symbols and meanings to people’s attendance. For instance, the higher the attendance of people, the more popular the celebrant and it is also believed that in no way can communication on phone replace physical attending the occasion. Moreover, many social ceremonies that take place in the study location involve the use of “Aso Ebi” (agreed uniform cloth for a social ceremony) which must be worn to attend and grace the occasion. This cannot be done on phone; hence, mobile phone may not have noticeable influence on the frequency of the trips made on social ceremonies. Moreover, the qualitative data on influence of mobile phone use on trips made on ceremonies revealed that majority of the informants claimed that mobile phone use had no influence, mainly because a ceremony cannot be conducted on mobile phone and physical presence of an individual is important.

Extract 3: IDI/Woman/45years/June, 2016

“If everybody makes contributions through phone, then who is going to be there? To me personally, no social ceremony can be sustained on mobile phone, one must embark on the trip unless it is not for one to attend the occasion”.

However, three of the (male) informants opined that mobile phone use had aided in reducing some of their trips made on social ceremonies. The reduction occurred because they were able to contribute financially through mobile phone.

Extract 4: IDI/Man/35years/June, 2016

“There was a time, instead of going for a ceremony, I used mobile phone to contact my people and I later sent money to them, so I did not go for the occasion but there were occasions like that which I must just be there physically not because of any other thing but the tradition which requires it”.

This study considered age-group of the respondents and influence of mobile phone use on the trips they made on visitation to friends and relatives. About 55 per cent of 40-49 year olds and almost 34 per cent of 30-39 years old respondents respectively indicated an increase in the number of trips. Moreover, almost 44 per cent of 50 years and above, 31 per cent of 30-39 years old and about 27 per cent of 40-49 years old respondents reported reduction. But about 33 per cent of the respondents that were 50 years old and above declared that mobile phone neither increased nor decreased the frequency of this type of trip. The data showed that middle age (30-49 years old) people tended to make more visitation to friends/relatives and this was facilitated by mobile phone use while the aged (50 years and above) reduced their trips on visiting their relatives and friends probably because of the conditions attached to the old-age people such as senility, frailty of their body joints among others. The data showed that about 44 per cent and 33 per cent of female and male respondents respectively had their trips on visitation purpose increased after introducing mobile phone use, while almost 41 per cent and 30 per cent of female and male respondents respectively declared that mobile phone use neither increased no decreased the frequency of their trips made on visitation.

4.4 Mobile Phone Use and Trips on Education Purpose

On trips made on education purposes, majority of the respondents who were senior school certificate holders had an increase frequency in their trip while 24 per cent of them claimed the frequency of their trips on this purpose neither increased nor decreased. For about 38 per cent of the respondents with post secondary education mobile phone use had no influence while about 32 per cent of them reported a reduction in the trip made on educational purpose such as making enquiries on admission, school programmes and excursions on studies, because the respondents reported that they were able to access information about these purposes through their mobile phone. On the trips made on recreation activities, majority of 50 years old respondents, 40-49 years old respondents and about 51 per cent of 30-39 years old respondents respectively opined that mobile phone had no influence on the number of trips made on this purpose. Therefore, the data showed that more respondents among the age group declared mobile phone had no influence on this trip.

4.5 Mobile Phone Use and influence on all Trips

On the perceived strongest influence of mobile phone use on all trips of respondents, about 50 percent and 42 per cent of male and female respondents respectively reported an increase on all trips, while almost 29 per cent of male and 27 per cent of female respondents claimed that their trips reduced. However, almost 22 per cent and about 16 per cent of male and female respondents respectively declared mobile had no influence on trips they made, while about 9 per cent and almost 6 per cent of female and male respondents claimed were not sure of the correct net influence of mobile phone on the frequency of all their trips. This result showed that most male and female respondents agreed that mobile phone use resulted in increased frequency of their trips. This study therefore suggested that much of the information which the respondents shared on mobile phone resulted in more trips. About 47 per cent, 37 per cent and 33 per cent of respondents that were Muslims, Christians and Traditional religion worshippers respectively claimed that the frequency of all their trips increased after they had started using mobile phone, while about 33 per cent, 20 per cent and 12 per cent of respondents that were traditional religion worshippers, Christians and Muslim respectively had a reduction. Moreover, almost 40 per cent, about 33 per cent and 31 per cent of respondents that were Christians, traditional religion worshippers and Muslims respectively reported no influence, while almost 10 per cent and about 3 per cent of respondents that were Muslims and Christians respectively declared they were not sure of the influence of mobile phone on all their trips.

The findings on the most perceived strongest influence of mobile phone use on all trips according to the employers of the respondents showed that almost 54 per cent, 45 per cent and 36 per cent of respondents that were in public sectors, self-employed and private sectors respectively claimed that their trips in general increased. About 33 per cent, almost 28 per cent and 24 per cent of respondents that were in private sectors, self-employed and in public sectors claimed reduction in all their trips, while about 26 per cent, almost 20 per cent and 13 per cent of respondents that were in private sector, self-employed and public sectors respectively claimed that mobile phone neither increased nor decreased the frequency of all their trips. Qualitative data on influence of mobile phone use on the informants' entire trips revealed that majority of the informants indicated an increase in the number of trips however; the influence depends on the purposes and types of trips including mobile phone user's interest. Most of the informants claimed receiving information on mobile phones in many cases about social activities which mandated embarking new trips, in particular unplanned trips. This described that without mobile phone, such trips would not take place. However, two informants claimed a reduction in the number of their entire trips as most of the information they reportedly received on mobile phone led to cancellation of many trips they could have embarked on.

Extract 5: IDI/Man/45years/June, 2016

"To tell the truth, my trips are reduced. If it were a trip to a nearby place we usually called so as to

save transport fare. But for a remote place like Edo, Kaduna, I must go if the purpose of the journey is important. However, mobile phone use has no influence on my trips on religion; work, including education while still in school. On recreation, recreation can't be done on phone you know you have to meet your people to catch some fun. But mobile phone use has increased my trips on social ceremonies because lots of arrangements are usually made through this information on phone".

Extract 6: IDI/Woman/56years/June, 2016

"Before mobile phone use, I travelled a lot to visit my relatives. But in many cases now, I just make calls to home to ask about their welfare, so this cancels many trips I should have embarked on but I still embark on trips on other purposes such as on religious activities, social ceremonies among others".

4.6 Correlation Analysis of Mobile Phone Use and Frequency of Trips

Correlation analysis was used to test these hypotheses. The current study found that mobile phone use among the respondents was positively correlated with frequency of the trips made on recreation ($r = 0.332$, $P < 0.001$), ceremonies/social engagements ($r = 0.139$, $P < 0.001$) and entire trips ($r = 0.235$, $P < 0.001$); hence, the null hypotheses of correlation of mobile phone use with these trips were accepted since the P value was less than 0.05 and 0.01 confidential levels respectively. The test of hypotheses indicated that the more the people used mobile phone, the higher the frequency of the trips made on recreation, ceremonies/social engagements and their entire trips. The result also indicated that most of the conversations made on phone prompted the respondents to embark on more journeys on recreation and ceremonies.

From all indications in this study, mobile phone usage had led to an increase in frequency of the respondents' trips in the study area. This outcome contradicts Manceron (1997)'s finding which stated that while mobile phone enhanced social interaction and allowed people to share information, it in most cases led to cancellation of trips. In the same vein, Badejo (2009) and Roos (1993) opined that mobile phone usage led to reduction in trips making as call on mobile phone had reduced social visits while official duties were enhanced through the calls rather than physical movement. However, this study corroborates Ogunbodede (2010) and Ling (2004) who claimed that mobile phone usage had increased inter-urban interaction. However, the outcome of this study is contrary to their claimed that mobile phone use led to reduction in physical movement of people and frequency of using automobiles which could have been otherwise without the use of mobile phone. This study corroborates Bakke (2010), Akpore (2008), Omotayo, *et al.* (2008) and Salomon and Schofer (1998) that telecommunications, including mobile phones, are potential to create a wider field of attention and awareness, and help in locating new places, people and product, while new and additional trips are made as a result of the frequent contacts on mobile phone.

5. Conclusion and Implications

The findings of this study indicated that mobile phone use played significant role on the trips which the respondents made on social activities in the study area. In the end, the study discovered a significant increase in the trips of the respondents as almost 46 per cent and 28 per cent claimed an increase and a reduction in the frequency of their trips respectively. Moreover, 19 per cent opined that mobile phone use neither increased nor decreased the number of their trips while 7 per cent declared they were not sure of the net influence of mobile phone use on the frequency of their trips. Therefore, as mobile phone encourages embarking on more trips in the study area, it can be deduced that the use of mobile phone enhances communication, social solidity and business efficiency; hence mobile phone use should be more encouraged in the study area. This study recommended that the network service providers in the study location should improve efficiency of their service delivery. Also, through Nigeria Communication Commission (NCC), government should ensure good service delivery and embark on a series of programmes to reduce the cost of telephone service. Moreover, there should be sensitization programmes to enlighten citizens more on various use of mobile phone while Non-Governmental Organizations (NGOs), such as cooperative societies, can make an arrangement for bulk purchase of mobile phones to reduce cost.

6. Prospects for Future Research

This research work covered only Ife community and focused on the adults in the community, therefore this study is comparatively narrow in scope and this creates several limitations. This study advocates a more detailed and nation-widespread research on the influence of mobile phone use on the trips made on social activities of all mobile phone users. Moreover, advance study can be carried out to examine other changes which mobile phone use influences on social activities of people apart from its impact on the trips which people make on those social activities. In conclusion, this study proposes a research work that considers age by concentrating more on the social impact which mobile phone use has on social activities of the aged and teenagers in Nigeria.

References

- Adams, J. (2000). *Hypermobility Prospect*, <http://www.prospectmagazine.co.uk/highlights/hypermobility/index.html> (Retrieved on 25th March, 2016).
- Adeoye, A. S. (2001). Young People and Mobile Phone: Mobile Communication, Understanding Users, Adoption and Design. *ICT Workshop*, Uni-port.
- Akpore, F. (2008). Transportation and Communications (Substitutes, Complements, or Neither). *Journal of ICT and Modern Society*, 50, 420–456
- Anna, L., Kari, T., and Anssi, A. (2006). Meta-analysis of Mobile Phone Use and Intracranial Tumors. *Scandinavian Journal of Work, Environment and Health*, 32, 171-177.
- Ayodeji T. (2007). Mobile Phone and Pattern of Travel Behaviour. *Journal of ICT Use*, 2, 77-93.
- Bakke, E. (2010). A Model and Measure of Mobile Communication Competence. *Human Communication Research*, 36, 348-371.
- Badejo M. O. (2009). The Impact of the Mobile Phone on Social Knowledge: Challenges *Journal of ICT and Modern Society*, 50, 224–300.
- Campbell, S. W. and Park, Y. J. (2008). Social Implications of Mobile Telephony: The Rise of Personal Communication Society. *Sociology Compass*, 2, 371-387.
- Elujoba, A. F. (2012). *The History of Ile-Ife (the Cradle of Yoruba) in Brief (first Ed.)* Ile-Ife. Oyelak Publishers.
- Flinchy, P. (1997). Perspectives for a Sociology of the Telephone. *The French Journal of Communication*, 5 (2), 149-160.
- Jin, B. and Peña, J. F. (2010). Mobile Communication in Romantic Relationships: Mobile Phone Use, Relational Uncertainty, Love, Commitment and Attachment Styles. *Communication Reports* 23 (1), 39-51.
- Ling, R. (2000). “We will be reached”: the Use of Mobile Telephony among Norwegian Youth. *Information Technology and People*, 13 (2), 102-120.
- Ling, R. (2004). *The Mobile Connection: The Cell Phone’s Impact on Society*. San Francisco: Morgan Kaufman.
- Manceron, V. (1997). Get Connected! *The French Journal of Communication*, 5(2), 229-241.
- Mckenna, H., and Bargh, O. (2000). Mobile Phone Ownership and Usage. *Telematics and Informatics*, 21, 359-373. mobility.com.ng (Retrieved on 18th June, 2016).
- Mobility.com.ng, (retrieved on 18th June, 2016).
- Mokhtarian, P. L. (2009). If Telecommunication is such a Good Substitute for Travel, why Does Congestion Continue to get Worse? *Transportation Letters*, 1, 1–17 (Retrieved on 25th March, 2016).
- Muhammed, R. and Tomonori, S. (2009). The Effect of accessing Real-time Bus arrival Information via Mobile Phone on the Travel Time Dispersion of Transit Passengers. *International Journal of Environment and Sustainable Development* 8 (3/4) 351-364
- Ogunbodede, E. F. (2010). Cell Phone Usage and Travel Behaviour in Ondo State, Nigeria. *Journal of Mobile Communications*. 4 (3), 68-74.
- Olatunji W. F., (2005). *Emerging Travel Patterns*. Ibadan, Nigeria. Chaoba Publisher.
- Olayinka, I. M., (2006). *Information Technology and Society: A Sociological Perspective*. Lagos, Nigeria. Sowunmi Publishers.
- Omotayo Banjo, Yifeng Hu and S. Shyam Sundar (2008) Cell Phone Usage and Social Interaction with Proximate Others: Ringing in a Theoretical Model. *The Open Communication Journal* 2, 127-135
- Pettigrew, J. (2009). Text Messaging and Connectedness within Close Interpersonal Relationships. *Marriage and Family Review*, 45, 697-716.
- Rapp, B., and Skåmedal, J. (1996). Implications of Telecommunication. KFB Rapport (English Version) *Journal of Communications* 1996:2. www.researchgate.net/publication (Retrieved on 25th March, 2016)
- Roos, J. P. (1993). Sociology of Cellular Telephone: The Nordic model. *Telecommunications*, 17, 446-456.
- Salam, J. F. (2008). Sociology of Cellular Telephone: The Nordic Model. Mobile Phones in Finland. *Telecommunications Policy*, 17, 61-102. (Retrieved on 25th March, 2016).
- Salomon, I. (1996). *Telecommunication, Cities and Technological Opportunism*. Annual of Regional Science, 30, 75-90.
- Salomon, I., and Schofar J. L. (1998) Forecasting Telecommunication Travel Interaction: Transportation Manager Perspective. *Transportation Research* 22, 219-229.
- Srivastava, L. (2005). Mobile Phones and the Evolution of Social Behaviour. *Behaviour and Information Technology*, 24, 111-129.
- Wei, R. and Lo, V. (2006). Staying Connected while on the Move: Cell Phone Use and Social Connectedness. *New Media Society*, 8, 53-72.
- Zulkefly, S. N. and Baharudin, R. (2009). Mobile Phone Use amongst Students in a University in Malaysia: Its Correlates and Relationship to Psychological Health. *Open Journal of Scientific Research*, 37(2), 206-218.

Appendix

Table 1:

Use of Mobile Phone to locate new or unknown Places					
Sex	Yes		No		Total
Male	107 (64.8%)		58 (35.2%)		165 (100.0%)
Female	110 (66.7%)		55 (33.3%)		165 (100.0%)
Total	217 (65.8%)		113 (34.2%)		330 (100.0%)
Number of times Mobile Phone Usage helped to locate unknown Places					
Time Frequency	1-5times	6-10 times	11-15 times	16-20 times	21 and above
Sex					
Male	36 (34.3%)	12 (11.4%)	0 (0.0%)	4 (3.8%)	53 (50.5%)
Female	57 (52.8%)	13 (12.0%)	3 (2.8%)	2 (1.9%)	33 (30.6%)
Total	93 (43.7%)	25 (11.7%)	3 (1.4%)	6 (2.8%)	86 (40.4%)
Social Activities that call for more Use of Mobile Phone					
Sex	Relatives/Friends	Business/work	Education	Total	
Male	39 (24.2%)	72 (43.6%)	40 (24.2%)	165 (100.0%)	
Female	53 (32.1%)	89 (55.3%)	33 (20.5%)	161 (100.0%)	
Total	92 (28.2%)	161 (49.4%)	73 (22.4%)	326 (100.0%)	
Purpose of Trips	Influence on Trips				
	Reduce	Increase	Ambiguous	No influence	Total
Religion	58 (17.6%)	135 (40.9%)	18 (5.5%)	119 (36.1%)	330 (100.0%)
purpose	102 (30.9%)	131 (39.7%)	24 (7.3%)	73 (22.1%)	330 (100.0%)
Visitation to rel.	34 (10.6%)	89 (27.6%)	44 (13.7%)	155(48.1%)	322 (100.0%)
Social ceremonies	59 (17.9%)	126 (38.2%)	29 (8.8%)	116 (35.2%)	330 (100.0%)
Education	36 (11.0%)	71 (21.6%)	35 (10.7%)	186 (56.7%)	328 (100.0%)
Recreation	91 (27.9%)	149 (45.7%)	24 (7.4%)	62 (19.0%)	326 (100.0%)
All Trips					

Source: Author's Field Survey (2016)

Table 2: Correlation Analysis of Mobile Phone Use and Frequency of Trips

	Religion Trips	Family/Friends Trips	Business/Work Trips	Education Trips	Recreation Trips	Ceremonies/Social engagement Trips
Pearson correlation	0.470	-0.124*	0.160	0.079	0.332*	0.139**
Sig. (1-tailed)	0.196	0.120	0.368	0.078	0.000	0.000
Sum of Squares	13.012	-37.034	5.753	29.871	115.583	60.000
Covariance	0.040	-0.113	0.018	0.920	0.356	0.183
N	330	330	324	326	326	328
Mobile Phone Use and Frequencies of Respondents' Entire Trips						
Pearson correlation					0.235**	
Sig. (1-tailed)					0.000	
Sum of Squares and Cross-products					42.123	
Covariance					0.130	
N					326	

*Correlation is significant at the 0.05 level (1-tailed).

**Correlation is significant at the 0.01 level (1-tailed).

Source: Author's Field Survey (2016)