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The Usage of Smartphone Technologies by American Expatriate Teachers as a Communication and Cultural Assimilation Tool

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THE USAGE OF SMARTPHONE TECHNOLOGIES BY AMERICAN EXPATRIATE TEACHERS AS A COMMUNICATION AND CULTURAL ASSIMILATION TOOL

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The number of American educators employed at international schools has grown significantly, however little research has examined their usage of various media such as the smartphone to maintain native culture communal ties and assimilate to their host culture. This study examines the perceived effectiveness of smartphones in relation to both functions. A Qualtrics survey was distributed to American expatriate educators currently employed at International School Services (ISS) affiliated international schools. The study showed that expatriate educators perceive their smartphone to be effective in the maintenance of native culture communal ties while living and working in a foreign country. This was especially true of females, who indicated a higher sense of agreement than males. A negative correlation was found between age and frequency of smartphone usage to stay in contact with friends and family back home. Respondents indicated their smartphone is slightly helpful to assimilate within a host culture. This study showed a relationship between an educator's sense of host culture assimilation and frequency of usage as an integration tool. The results indicate that expatriate educators, regardless of age or gender, believe their smartphone is more effective to maintain native culture communal ties than as a host cultural assimilation tool. Future research is necessary to investigate the impact of smartphone usage and how it may help to better understand expatriate assimilation, promote retention rates, and lower recruitment costs.

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TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

CHAPTER 1

PROBLEM STATEMENT

Introduction

This study intends to explore the use of smartphone technology by American expatriate K-12 educators living and teaching in another country. The objectives of the research were accomplished by conducting a survey with these educators for the purpose of discovering how they use smartphones to retain contact with the family, friends, and community they have left in the U.S. as well as how they use that same technology to explore the culture and language of the new country in which they now reside.

With the onset of globalization, the world has become a smaller place. Innovations in technology have eroded geographic distance and language differences as obstacles to communication. Ones inability to speak or read another language no longer inhibits communication in a foreign country. Desktop computers evolved to laptops and laptops evolved to tablets. The home phone evolved to the mobile phone, which evolved into the smartphone. Travelers abroad are able to translate text from street signs, restaurant menus and travel information with the click of a button on one of many popular devices. These new communication technologies not only impact foreign travelers but also emigrants. Expatriates, unlike travelers, have to adapt to day-to-day life in a foreign country on a permanent or semi-permanent basis.

Approximately 8 million American expatriates are scattered throughout over 100 countries. The evolution of communication technologies has changed the way these expatriates maintain contact with friends, family and the community they left behind in the United States.

Additionally, advances in technology have changed how these expatriates assimilate into the new culture and country where they have chosen to live.

Statement of the Problem

The field of international education faces unique challenges. Despite an abundance of employment opportunities, there is a higher rate of failure for expatriate teachers than their American-based colleagues (Richardson, et. al., 2006). Expatriate teachers may find it difficult to be assertive or volunteer for extracurricular activities or committees due to fear of resentment from co-workers. A difficulty in workplace culture assimilation, or outright refusal to assimilate, can lead to isolation from colleagues and hamper productivity (Thompson, 2012). Socially, expatriate educators face challenges as well. Expatriate educators located in countries where English is not the first language may be hesitant speak the native language for fear of ridicule. However, it is important that people living in foreign cultures engage in the local community to avoid loneliness and homesickness when living abroad (Hendrickson, 2009).

Smartphones may help to soften the language barrier and help communication with non-English speaking natives. Smartphone social media mobile apps, such as WhatsApp and Snapchat, may be used in tandem with language translation mobile apps to allow people to connect in cyberspace where they can acquire language skills in a less intimidating manner. The immediacy of interaction available on a smartphone can help to increase feelings of belonging and help increase social connections (Spiteri, 2013).

American expatriate educators may struggle with the adaptation to their new host country, language, or work culture. The affordability and versatility of the smartphone make it an invaluable tool to ease the transition process. Previous research has shown smartphones are useful as a way to maintain previously existing relationships with friends or family, socialize,

learn a language, or find entertainment (Wei & Lo, 2006; Nurullah, 2009). Though they are abroad, it is important for American expatriate educators to maintain contact with their native community. This maintained connection is essential as the educator assimilates to his or her new host culture and throughout the time abroad (Sherry, et. al., 2010).

Need for the Study

Though research exists regarding expatriates and assimilation, the majority of these articles originate solely from a human resources perspective. The usage of various types of media for expatriates has proven to be beneficial to both the employee and employer to increase cultural assimilation, retention, and company image (Kraimer & Wayne, 2005; Froese & Peltokorpi, 2013; Haslberger, 2013). However, there is little to no information focused on educators living abroad and their operation of smartphone technology as a communication tool. This study drew connections between the usage of smartphone technologies and Uses and Gratifications Theory to analyze how expatriate educators utilize the technology in their new host country. The first research area was an investigation of how American expatriate educators take advantage of smartphone technologies to maintain relationships with family, friends, and the community they left behind in the United States. The second area of study explored how expatriate educators employ smartphones to assimilate to their new culture. The aim of the current study is to understand how effective American expatriate educators believe their smartphone is in relation to the areas of study.

The results of this study have potential benefits to the schools that recruit and employ these educators. Recruiting for an international educational setting is high stakes and costly (Hardman, 2001). International educator contracts often are a large investment for an employer. Typical contracts may include salary, retirement, housing stipends, health insurance, host

country work visa application fees, airline tickets, and shipping costs of personal items. Standard international teacher contracts require a two-year commitment, which can become a costly endeavor for the school in the event of a bad hire (Hayden, 2006). In addition, there is a connection between teacher recruitment and retention. Like American domestic schools, employers seek to attract the most desired candidates for their vacancies. International schools with high teacher retention rates are more appealing to job candidates, and the school will be able to attract better qualified applicants (Woodward & Alam, 2010). The conclusions drawn in this study may be useful to these schools in understanding how cultural assimilation via a smartphone can aid in employee retention.

Furthermore, understanding the role of technological innovations in communication is a consistent challenge in the mass communication research community. Smartphones have become prominent throughout the world with an estimated 1.5 billion smartphone subscribers globally (Truss, 2015). The rapid ascent of the smartphone and its integration into the cultural fabric around the world has made it an area of increased importance in terms of research (Baran & Davis, 2011). Very little research has focused on how smartphone owners employ the device as a communication and assimilation device. There is a need to fill a gap in the literature for understanding the role of smartphones in communication, but also as an information-gathering device (Bergstrom & Wadbring, 2012). Smartphones provide interaction for their users in a convenient, entertaining, instant, and mobile fashion. The study provides insight into this emerging and understudied population and sought to inspire further research in the field

Smartphone technology and its use by American expatriate educators is the focus of this study. With nearly 300,000 American expatriate educators living abroad in 2015, and expected growth of nearly 100% by 2022, there is significant need to understand the cultural assimilation

process in an effort to promote teacher satisfaction and job retention (Brownell, 2013). In 2015, for the first time, a majority of Americans (68%) own a smartphone (Pew Research, 2015). Expat American educators may use their smartphone for a wide number of uses and gratifications. Smartphones allow users to communicate directly and instantly with family, share photos and/or videos, obtain news, meet new people, and learn a new language, amongst other functions (Scarpino & Alshif, 2013).

Purpose of the Study

The purpose of this study is to investigate by means of a survey the uses of smartphones as a communication and cultural assimilation tool by American expatriate educators currently employed by an American-accredited international school. Uses and Gratifications Theory (Katz & Blumler, 1974) served as the theoretical foundation for this research. The study focused on two aspects of American expatriate smartphone usage: as a device to maintain native culture communal ties in the United States and as an assimilation tool in relation to their host culture. The study aims to discover how often these educators use their smartphone for both of the research areas and their perceived effectiveness. The study aimed to determine which frequencies of communication are most common, how effective the educators believed them to be for each area of research, and the gratifications obtained. In addition, the research analyzed whether a negative relationship exists between how much time a person spends maintaining native culture communal ties and their sense of assimilation to their host culture. The study analyzed demographics of the survey respondents to discover relationships concerning smartphone usage within the areas of research.

Availability of wireless Internet and mobile data plans allow smartphone-based communication to cross borders, geographically and economically, instantaneously. This

international mobility is of interest in this study as the researcher attempts to understand how American expatriate educators use this technology to maintain native culture communal ties and assimilate into their host culture. The term, 'native cultural communal ties,' is used throughout this research project to refer to an American expatriate educator's connection to people and their community of origin within the United States. The term was developed by the researcher and is discussed further in the 'Definition of Terms' at the end of this chapter.

American expatriate educators have taken advantage of the functionality of smartphones while living in a foreign country to ease the transition to the international work and life experience. Despite being in a foreign country, American expatriate educators can combat homesickness by using their smartphone to maintain native culture communal ties (Hendrickson, 2009). As well, smartphones can help to add cultural understanding in a new country, in particularly those where the native language is not English. The usage of a smartphone can help to generate cultural context within the expatriate teacher's host culture and develop language skills (Nasser, 2012). The ability and perceived effectiveness of the smartphone to provide immediate access with people and information from both cultures simultaneously is of particular interest in this study.

Theoretical Perspective

Uses and Gratifications Theory (UGT) served as the framework to gain insight into how American educators abroad use smartphones to maintain native culture communal ties and assimilate into their host culture. UGT is an applicable theory due to the wide diversity of uses and gratifications smartphones may provide. UGT suggests that consumers of media are an active participant in seeking out media that best satisfies their needs and provides the greatest amount of gratification from their usage (Katz, et. al., 1974).

Similar to the previous research incorporating UGT, this study seeks to examine the uses and gratifications of American educators working abroad and their experiences through their use of smartphone technologies. Social gratification, entertainment, immediate access, escape/relaxation, information, and mobility were the primary research areas. These categories have been analyzed previously regarding smartphone usage (Park, et. al., 2009; Jacobs & Vergeest, 2013). The literature review in Chapter Two will further discuss the appropriateness of this theory.

Research Questions and Hypotheses

The focus of this study has resulted in four main research questions and eleven hypotheses. The researcher's experience as an American expatriate educator and observation of teaching colleagues has influenced the design of the research questions. The literature in the field further aided in the development of these research questions.

In conducting this research, the researcher analyzed data that is representative of two types of smartphone usage. The first area of research was the use of smartphones that allows one to maintain native culture communal ties while living in a foreign country. The second area of study focused on how American expatriate educators use smartphones as a tool for assimilation and emersion in the culture of their host country. The analyses of the uses and gratifications of smartphone usage allows the reader gain perspective about the ways in which these types of smartphone usage affect the experiences of American expatriate educators.

The study examined American expatriate educators employed by an American-accredited international school located outside of the United States. The research addressed differences in smartphone usage by demographics such as gender, age, prevalence of English within a host culture, etc. To understand the significance of the study, it is important to recognize the

worldwide acceptance and use of mobile communication, specifically the smartphone. Unlike the home phone, smartphones are mobile, and allow for instant access at any time with whomever, or whatever, users wish to connect throughout the world (Alazani, 2014). Whereas the traditional telephone is solely an oral medium, the smartphone has integrated multiple forms of media such as photos, videos, and text messaging into one device and has made for more convenient and accessible communication.

RQ1: How effective do American expatriate educators believe smartphone technologies are in helping maintain native culture communal ties while working in a foreign country?

H1: There is no pattern in the perception that smartphones are beneficial to maintain native culture communal ties.

H2: There is no significant difference between American expatriate educators' usage of smartphones to maintain native culture communal ties and the prominence of English in their host culture.

Research question one speaks to the gratifications aspect of the theoretical basis of this study. It provided insight into how effective smartphones are to American expatriate educators as a resource to maintain contact with friends and family in their native culture community. Respondents rated the effectiveness of their smartphone on a 4-point ordinal category scale (1=Not at all; 4=Extremely) in communicating with people in their native culture, newsgathering, etc. This question examined the relationship between the amount of time spent using the smartphone for this purpose, its level of effectiveness, and the degree to which the respondent feels a maintained connection to their native culture via the smartphone. The prominence of English within the host culture and its effect on frequency of use was also examined.

RQ2: How effective do American expatriate educators believe smartphone technologies are in helping them assimilate to their host culture?

H3: There is no pattern in the perception that smartphones are beneficial to assimilate to their host culture.

H4: There is no significant relationship between American expatriate educators time spent using smartphone technologies and their sense of host culture assimilation.

H5: There is no significant relationship between prominence of English spoken in a host country and expatriate educators usage of their smartphone to assimilate to their host culture.

This question was designed to analyze how effective smartphones are to American expatriate educators as a resource to assimilate to their host culture. This question explored the relationship between the amount of time spent using the smartphone as an assimilation tool, its level of effectiveness, level the respondents feel assimilated to their host culture, and prominence of English within their host culture. This question was designed to analyze the gratifications of smartphone usage as a host culture assimilation device by expatriate educators.

RQ3: To what degree do demographic factors effect American expatriate educators' use of smartphone technologies help to maintain native culture communal ties?

H6: There is no significant difference between gender and the perception of effectiveness of smartphone usage to maintain native cultural communal ties.

H7: There is no significant difference between age and how often American expatriate educators use smartphones to maintain native culture communal ties.

H8: There is no significant difference between distance from the United States and how frequently expatriate educators utilize their smartphone to maintain native culture communal ties.

This question examined how smartphone usage differs by demographic categories in regard to the maintenance of native culture communal ties. The researcher sought to find variations between the following independent variables: age, gender, and location of international placement. The question was designed to compare the amount of time spent using a smartphone and the perceived level of effectiveness amongst each demographic group. This question is necessary to determine the extent to which American expatriate educators purposefully and selectively use their smartphone to maintain native culture communal ties.

RQ4: To what degree do demographic factors affect American expatriate educator use of smartphone technologies help to assimilate to their host culture?

H9: There is no significant difference between gender and the perception of effectiveness of smartphone usage to assimilate to their host culture.

H10 : There is no significant difference between age and how often expatriate educators use smartphones to assimilate to their host culture.

H11: There is no significant difference between distance from the United States and how frequently expatriate educators utilize their smartphone to assimilate to their host culture.

Question four investigated how demographic factors influence American expatriate educators' utilization of smartphones as a cultural assimilation tool. The researcher aims to uncover any disparity between the following independent variables: age, gender, and distance from the United States during their international placement. The question was created with the idea that American expatriate educators could estimate the amount of time they spent using a smartphone as an assimilation tool and the perceived level of effectiveness. This question seeks to determine the degree to which American expatriate educators purposefully and selectively use their smartphone to assimilate to their host culture.

Definition of Terms

American Expatriate Educator

A United States citizen who has been issued a bachelor's degree and/or teaching certificate for the field in which they are employed from an accredited American university. The place of employment is an American-accredited international school located outside of the United States. Each time the phrase 'expatriate educator' is used in this document, it refers to American expatriate educators employed at ISS-affiliated international schools.

Cultural Assimilation

"Changes that take place as a result of contact with culturally dissimilar people, groups, and social influences" (Schwartz, et. al., 2010). For the purpose of this study, the concept of cultural assimilation refers to how expatriate educators explore and adapt to the host country in which they are teaching.

Expatriate

"A voluntary, temporary migrant who resides abroad for a particular purpose and ultimately goes back to his or her home country" (Cohen, 1977). For the purpose of this study, the research focused on American expatriate educators who are currently employed at an American-accredited international school.

Native Culture Communal Ties

The extent to which an American expatriate educator maintains a connection to his or her community of origin within the United States. This includes contact with family members and friends (who may be from different areas of the country), local media consumption, and other forms of connection.

Smartphone

"a variety of mobile devices that combine a cell phone with a hand held computer, typically offering Internet access, data storage, and email capability" (PC Magazine, 2011). For the purpose of this study, cell phone, mobile phone, and smartphone are interchangeable terms.

Scope

The data presented is the result of a Qualtrics survey of American expatriate educators employed by American-accredited schools located outside of the U.S. The investigator authored and designed the questionnaire. All international schools surveyed are affiliated with International School Services (ISS). ISS is the largest recruiter of foreign teaching positions, affiliated with 650 affiliated schools in 160 countries (Bruno, 2015). The selection of ISS for survey distribution served two purposes. First, it focused the research on a specific subset of American expatriate educators. Second, it allowed for the researcher to analyze the usage and gratifications of smartphones by American expatriate educators to maintain native culture communal ties and assimilate to their host culture.

Limitations

The population for this study is limited to American expatriate citizens with a certified teaching license who are currently employed by an International School Services (ISS) affiliated international school. Former ISS-affiliated school employees who have repatriated to the United States did not participate in the survey. Expatriates employed as ESL teachers at non-affiliated schools and higher education faculty were excluded from the population. Therefore, the results may not be applicable to these specific populations. Since the survey hyperlink was disseminated by international school directors to their American employees, the research was

able to focus on a specific population of American expatriate educators. An additional limitation to the research is those American expatriate educators who do not own a smartphone, or do not have one active in their host country did not complete the survey. In some regions of the world, Internet access is intermittent due to inefficient infrastructure which may limit access at times for the educators to use their smartphone as often as they would prefer.

Organization of Study

The ensuing four chapters discuss the research in further detail. Chapter Two presents a review of the literature in regard to expatriates, the importance of maintaining native culture communal ties, the evolution of the smartphone, and cultural assimilation. Uses and Gratifications Theory provided the framework for the study and is discussed, along with other theories the researcher considered.

Chapter Three explains the research methodology. The chapter begins with a justification for conducting the Qualtrics survey as means of exploration. The sample population, how access was granted, survey dissemination procedures, and timeline are presented. This chapter includes the units of study. The four research questions and eleven hypotheses are explained along with the data analysis procedure. The reliability and validity of the instrument is detailed.

Chapter Four is the research findings including analysis of response patterns from the total population in relations to frequency of use and perceived effectiveness. Chapter Four also explores the impact of demographic factors on smartphone usage. The data analysis procedures outlined in Chapter Three provided the basis for the findings. Chapter Five reports the findings, provides an examination of the results, and answers to each of the four research questions. Chapter Five also provides the researcher's perspective on the student and discusses limitations

of the study. Finally, this chapter considers opportunities for future research related to American expatriate educators and how they use media to maintain native cultural communal ties and to assimilate to their host culture.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Smartphones are an emergent technology that has interconnected people unlike the communication technology available at any other time in history. As such, these devices have become a part of the cultural fabric in countries throughout the world. Smartphone users have instant access to any person, information, or video at any time and location. With this accessibility, the smartphone can be a useful tool for American expatriate educators to ease the transition into a host country for an extended period of time. It allows for sustained contact with loved ones and friends at home. The smartphone can help users assimilate to a host culture as well through the development of new relationships. Uses and Gratifications Theory provides the theoretical foundation of this research designed to better understand how American expatriate educators use their smartphone during their time abroad to maintain their native cultural communal ties, while at the same time, as a cultural assimilation tool.

Theoretical Perspective

The review of the literature demonstrates that the use of smartphones as a communication tool for expatriates is still an area devoid of prevalent study. The mobility and instant Internet access that smartphones offer have led to the creation of specific types of media to fulfill a variety of needs. Uses and Gratifications Theory (UGT) offers an ability to research a new medium, such as the smartphone, its functions, and the reasons why users seek out a particular media (Lee, 2004; Lee & Lee, 2014). Katz, et. al. (1973) founded the theory focusing on what gratifications are provided to an audience by media through its use. UGT is not limited to mass communication research. Disciplines such as politics, sociology, social psychology,

criminology, and urban studies have integrated UGT into their research (Feaster, et. al., 2008). As an emergent technology, the smartphone has increased channels of information and communication. The incorporation of these multiple media into a single device provides a multitude of uses and gratifications. UGT is the most pertinent theoretical approach to analyze smartphone users' actions, motivations, and feelings regarding usage and its benefits (Albarran & Hutton, 2009).

Uses and Gratification Theory

Overview

The effects of mass media have been a disputed subject for communication scholars over the past century. The emergence of the radio and film industries in the early 1900s led communication researchers to examine the effects media messages had on recipients. The majority of early research professed media acted as a 'hypodermic needle", which sent direct and deliberate messages to an impressionable mass audience to yield standardized effects (Hanson, 2008). The principle of UGT states that media messages are not directly sent and absorbed by consumers. UGT discouraged the notion that audiences are passive and receptive, but instead deliberately seek out which messages they will be exposed to (Croucher, 2015). Though the beginnings of uses and gratifications research occurred before 1950, the perspective did not begin to take its current form until the latter part of the twentieth century. The growth and perception of the theory during the mid-20th century expanded the idea of a receiver-driven approach to research.

UGT attempts to examine and explain how individuals and groups use the functions of media for personal benefit (Katz & Blumler, 1974). According to UGT, individuals are not passive, but active, consumers of media. UGT observes and details what people do with media,

as opposed to what the media does to people (Grellhesl & Punyanunt-Carter, 2012). The theory purports people assert personal choice to actively seek out and adopt mass media (smartphones, mobile apps) which satisfy their individual needs and goals on a daily basis (Katz, et. al., 1973; Gerlich, et. al., 2015).

UGT examines the consumer's ability to selectively choose what media they wish to consume. The notion that "interest in the gratifications that the media provide their audiences goes back to the beginning of empirical mass communication research" forms the basis of UGT (Katz et. al., 1973). The active and intentional selection of media is based on "our psychological and social environment, our needs and motives to communicate, our attitudes and expectations about the media, functional alternatives to using the media, our communication behavior, and the outcomes or consequences of our behavior" (Rubin, 2002).

Consumption Factors

Different personal factors may influence the uses and gratifications a media user seeks. Personal experiences of the media consumer can influence Internet search behavior and the medium through which they seek information (Lehto, et. al., 2006). The prior knowledge of the user concerning a specific topic may influence search and consumption habits. Familiarity and expertise of a particular media may increase or decrease the likelihood of usage (Alexander, Kim, & Groves, 2012). Prior experience with computers and technology may also have an effect on the level and type of media consumption. People with higher levels of computer skills and experience levels are less likely to develop an attachment to traditional modes of communication and may be more flexible to the possibilities offered by new technologies such as smartphones (Lee & Lee, 2014).

Media users do not always consciously seek out potential benefits of specific media usage. Katz, Blumler, and Gurevitch determined UGT was an approach directed at the "social and psychological origins of needs, which generate expectations of the mass media or other sources, which may lead to differential patterns of media exposure (or engagement in other activities), resulting in need gratifications and other consequences, perhaps mostly unintended ones" (McQuail, 2010). UGT follows these five assumptions (Table 1):

Table 1

Five Assumptions of Uses and Gratification Theory

1	The audience is active and its media use is goal oriented
2	The initiative in linking need gratification to a specific medium choice rests with the audience member
3	The media compete with other resources for need satisfaction
4	People have enough self-awareness of their media use, interests, and motives to be able to provide researchers with an accurate picture of that use
5	Value judgments of media content can only be assessed by the audience

Note. Adapted from Introducing communication theory: Analysis and application *by* West, R. L., & Turner, L. H. (2006), McGraw-Hill Humanities/Social Sciences/Languages, p. 42.

UGT as a theoretical foundation is relevant for a wide number of new media. Researchers have used UGT to understand the usage of Facebook (Valentine, 2013), Internet television (Li, 2013), blogging (Li, 2005), mobile phones (Jacobs & Vergeest, 2013), and Twitter (Croucher, 2015). The ability of the smartphone to include all these types of media has increased potential uses and gratifications that can be obtained through the use of the device and makes UGT an appropriate framework for this study of American expatriate educators. These educators purposely seek out smartphone technologies that are the most beneficial and gratifying to maintain native culture communal ties and assimilate to their host culture. Smartphones can

bring media such as video and music, communication, and language skills into an owner's hands in an economical manner.

UGT and Smartphones

Like the telephone, the smartphone is an interactive, person-to-person medium that transcends the limitations of time and space. The smartphone fulfills the same functions of the traditional telephone, but can overcome the mobility barriers of its predecessor (Leung & Wei, 2000). In addition, the smartphone can provide unmediated access to multipurpose content such as email, news, video chats, weather updates, streaming music, social media, banking information, and Internet access. Smartphones can deliver media content with "diminishing technological boundaries of media networks that enable content to travel across various platforms" (Yuan, 2011).

UGT has explored different purposes for which people use their smartphone. In general, this research indicates smartphone users purposely seek out media for the following uses and gratifications: entertainment, socialization, mobility, immediate access, information seeking, and psychological reassurance (Leung & Wie, 2000). Previous research in UGT has shown a difference in mobile phone usage in relation to demographic factors. A study of 317 college undergraduates found that 40 percent of college students have gone to places they would not have without their use of a mobile phone (Nasar, et. al., 2007). These studies have also indicated differences in gender and smartphone usage for socialization purposes. Women have been shown to more commonly use their smartphone for socialization purposes (video calling, texting, social media) than men (Jacobs & Vergeest, 2013). However, differences in smartphone usage are not limited to gender. A 2014 study of 2,418 smartphone users found negative associations between education level and age related to daily smartphone usage. Higher

education levels of the respondents correlated with a decrease in the amount of time spent using their smartphone on a daily basis. Time spent daily on a smartphone decreased as the age of the respondents increased (Montag, et. al., 2015). This media usage included time spent using mobile applications.

The ability of mobile apps to offer several features available at once provides for an interactive experience. Users can connect instantly with others through Apps like 'Facebook' or 'Twitter' and post comments about postings of friends, or the share a news story. The social aspect of the smartphone has led individuals to select desired mobile applications (Rubin, 2002). The mobility, constant access, and customization of smartphones have provided the basis of research behind mobile phone usage. Leung and Wei (2000) found six main uses and gratifications related to smartphone usage: affection/sociability, entertainment, psychological reassurance, fashion/status, mobility, and instrumentality.

The smartphone offers a variety of uses and gratifications in relation to one's ability to sustain relationships. Functionality and convenience provide smartphone owners the capability to stay in contact with others at any time (Nurullah, 2009). Immediate access to other people from social networking websites apps such as Facebook and Twitter, provide a platform for users to communicate with family, friends, and their native culture community (Scarpino & Alshif, 2013). American expatriate educators seek out specific media to acquire gratifications through a variety of uses available on a smartphone. Though UGT is the theoretical framework for the study, there were additional theories considered.

Other Theories Considered

Media Dependency Theory

Media Dependency Theory (MDT) was the first potential theoretical foundation for this research. Proposed by Ball-Rokeach and DeFleur (1976), the theory can trace its roots to Uses

and Gratifications Theory. Media Dependency Theory seeks to explain media effects through the interconnection of mass media, social systems, and the individual. The model helped to explain the when, why, and how audiences come to develop a dependency on the mass media systems (Bell-Rockeach, 1985). According to Media Dependency Theory, as an individual relies on media to meet specific needs, the more important media will be in their life, and, as a result, the more effects media will have on the person (Ognyanova & Ball-Rokeach, 2015). Three different needs influence the necessity of media to a person at any particular moment. Rubin and Windahl (1986) identified the three needs as: the need to better understand their social world (surveillance), the need to act purposefully and adequately in that world (social utility), and the need to escape from that world when stress-levels are high (escapism). These needs dictate which media audiences consume through their smartphone.

Mass media audiences utilize news and information in a variety of ways. The consumption of information helps people to make sense of themselves and society, understand cultural values and norms, and interact with others. The consumption of media is not just functional to kill time, but also to develop an understanding in the orientation of behaviors that are expected or appropriate within a particular culture (Ling, 2012). Media Dependency Theory helped to understand how audiences depend on media in a number of different situations. The theory has helped to interpret the development of understanding of the September 11, 2001 attacks (Lowrey, 2004), mobile family communications among college students (Chen & Katz, 2009), communication during the Iraq War (Jackob, 2010), and online communities in rural areas (Matei & Ball-Rokeach, 2003). Though individuals may become dependent on media, there are benefits to its use for the maintenance and development of relationships.

MDT did not fit as the foundational theory of this research for specific reasons. First, the study does not aim to determine the extent to which expatriate educators need their smartphone. Secondly, although this research seeks to study whether smartphones have helped the cultural assimilation process, it does not focus on specific ways the device has created a sense of cultural understanding. The overarching theme of the research is to determine whether the smartphone is of benefit in general, not in specific situations.

Social Capital Theory

Social Capital Theory was the second possible theoretical framework for this study. Social capital is the sum of resources accumulated through someone's relationships with other people (Ellison et. al., 2007). There are two types of social capital: bridging and bonding. "Bridging" social capital is inclusive and occurs when people from different cultures or backgrounds make a connection. Bridging social capital is the weaker bond (Williams, 2006). The second type is "bonding" social capital. This is more exclusive and includes relationships with family members and friends. Concerning this study, bonding social capital would include relationships that existed before an educator's relocation (Putnam, 2000). With the significant number of American expatriate educators, social capital theory is relevant for the study of how smartphone technologies build and maintain social capital.

The evolutions of the smartphone and instant access capability have created more avenues to build social capital than ever before. The spread of online technology has led to an overall increase of media usage (Salehan & Negahban, 2013). There are benefits to the establishment and maintenance of personal relationships built or sustained through the usage of smartphone technologies (Park, et. al, 2012). Social capital bonds can be used as emotional support, to promote cultural specific context, or integrate into a host culture (Kavanaugh &

Patterson, 2001; Naseer, 2012). Expatriate educators may download mobile apps or utilize technological features of a smartphone in a very direct and customizable manner. Mobile applications allow for new and unique ways to facilitate both bridging and bonding social capital. Previous studies have analyzed the benefits of building social capital through social networking platforms such as Facebook, Twitter, and Instagram (Kavanaugh & Patterson, 2001; Williams, 2006). Each of the aforementioned platforms have a mobile phone application that is free to download.

Though SCT analyzes the maintenance and development of relationships, it was not applicable to this study. Since this research aims to examine the assimilation process in areas other than solely interpersonal relationships, SCT was not appropriate. SCT would be an applicable theory in a future study regarding how American expatriate educators develop and maintain relationships with host country nationals on an interpersonal level.

American Expatriates

The United States has the largest population of emigrants in the world. Currently, approximately 8.7 million American citizens (excluding military) live in a foreign country. This is an increase from 4 million in 1999 (Association of Americans Resident Overseas, 2015). However, two-thirds reside in only ten countries. Mexico and Canada have the largest population of U.S. citizens, followed by the Philippines, Israel, and the United Kingdom. Costa Rica, South Korea, Germany, France, and China complete the ten most popular locations (Costanzo & von Koppenfels, 2013) (Table 2).

Table 2

Top 5 Countries by American Expatriate Population

Rank	Country	Population of U.S. Citizens
	World Total	8.7 million
1	Mexico	1.2 million
2	Canada	750,000
3	Philippines	500,000
4	Israel	200,000
5	United Kingdom	175,000

Note. United States Department of State (2015).

Americans choose to live and work in a foreign country for a plethora of reasons. A minority of emigrates pursue economic opportunity, but the majority of American expatriates have different motivations. Previous research has shown the most prominent reasons American citizens emigrate are for an opportunity to return to their country of origin, religious purposes such as missionary work, and the opportunity to experience different cultures and locations (Sullivan, 2009; Evans, 2012). Among these expatriates are teachers and administrators who pursue employment opportunities in other countries.

American Expatriate Educators

The field of education employs American expatriates (or expats) living and working in countries across the globe, and the number is on the rise. With 195 countries around the word, educators probably have more options about where to work than any profession (Richardson et al., 2006). There are approximately 300,000 full-time American expatriate teachers and administrators employed worldwide. By 2022, that number will likely grow to 529,000 (Brownell, 2012).

Demographic characteristics of expatriate teachers vary. In a survey of 790 international teachers, Cox (2011) found there were significantly more females (59.9%) than males (41.1%). The mean age of the respondents was 40.6 years and with an average of 7.3 years of overseas teaching experience. In addition, the survey discovered that 35.3% of respondents had a teaching spouse and 28.6% had dependent children. American expatriate educators constituted the largest number of respondents (49.1%), followed by Other (15.3%), then citizens of the United Kingdom (13.9%), Australia (5.8%), and New Zealand (4%). The survey also found the average total years of teaching experience to be 10.2. However, the average overseas experience was 3.9 years.

The literature has identified factors that affect the employment selection process and retention probability. Compensation, administrative/school leadership, job challenge, teacher autonomy, career advancement, and working conditions are the most likely predictors in a teacher's decision to renew his or her contract (Odland & Ruzicka, 2009). The ability to see and experience different parts of the world are an incentive. International schoolteachers may be more attracted to positions based on sense of adventure than teachers who remained in the United States (Mancuso, 2010). A desire for interaction with people from other cultures can lead to an international teaching position. A teacher's individual culture may influence the desire to seek inter-cultural learning that occurs throughout international teacher employment (Joslin, 2002). Overseas teaching experience plays a role in employment-related decisions. Candidates with less than five years of overseas teaching experience view personal factors such as well-being and the ability to experience new places as the most important criteria in job choice. Educators with more international experience are more likely to cite compensation and career advancement as important factors when seeking a new position (Cox, 2012).

International Schools

As foreign nations have prospered economically, the demands for a Western-based curriculum and staff have grown. There are approximately 6,400 international schools in approximately 170 countries, which represents a 153% increase since 2001. The number of international schools will likely reach 11,000 by 2022 (Brownell, 2013). The increase of international schools has been most prominent across the Middle East and China, but is not limited to the eastern hemisphere. The number of schools offering an American-based curriculum is on the rise throughout Latin America and Europe as well (Bruno, 2015). International schools are private, independent, tuition-based schools (Mancuso, 2010) and differ from national system public schools in that they have a predominant population of non-native teachers and/or students who are the children of expatriates. American-university trained educators, especially native English speakers, are highly sought by these schools in an effort to provide their students with skills necessary to compete in a borderless economy (Brown, 2004).

Though national system public schools and international schools may include various grade levels, have administrators, and follow a specific curriculum, there are differences. International schools are markedly different from American stateside schools (Gillies, 2001). Unlike the majority of host country national public schools, international schools follow a specific, foreign-influenced curriculum. Though teachers and administrators have university degrees from the United States, the host country, or both, the curriculum aligns with an American or European accreditation society (Lauder, 2007). It is the administrators and teachers of these international schools that formed the basis of this study. Recruitment and retention of

these educators may be influenced by their ability and desire to assimilate to their host culture as well as their ability to maintain existing relationships.

The model of international educator recruitment plays an important role in candidate selection. Many overseas teaching positions hire candidates through job fairs or international placement organizations such as International School Services. Expat hiring failure can bear high costs for the school's budget. The monetary cost of hiring a new teacher can range from 20 to 150 percent of a departing teacher's salary (Mancuso, 2010). There are personal costs as well. Poor educator hiring decision can result in a loss of self-esteem and self-confidence for the school administration, and damage to its reputation (Dowling et al., 1999). High levels of teacher turnover can have a negative impact on the student body as well. Increased levels of turnover causes gaps in the consistency of teaching methods, curriculum design, school policy, and classroom expectations (Ingersoll, 2001).

Institutional leaders such as the school director or principal generally act as the head recruiter at job fairs. This is of importance to the job candidate as they enter the selection phase to reflect upon their relationship with the school representative as a key factor in their decision-making process and perception of the school (Boswell, et. al., 2003). These interpersonal relationships can play an important part for international educators, particularly those who do not get a job in a specific region or school of interest. Cox (2011) found that 72% of expatriate educators enter the recruitment process with preferred regions and/or schools of employment. Only 67% were able to find employment in their preferred region, while only 48% accepted jobs at their school of preference. The presence of strong administrative leadership plays a role in the post-hiring phase of employment. International educators view leadership as a significant factor in their decision to remain at the school or seek employment elsewhere (Mancuso, 2010)

therefore the individuals who represent schools at teacher recruitment events will influence the teacher's decision.

International School Services

Much international school hiring occurs either in a job fair or through a recruiting service. One of the largest providers of international teaching positions is International School Services (ISS), which hosts job fairs and offers a staffing service. This organization agreed to provide direct contact between job candidates and schools for the purpose of this research. Based in Princeton, New Jersey, ISS's mission is "to advance the quality of education for children in international schools by providing innovative services and solutions for learning communities and corporations throughout the world. This is accomplished by working with all groups that are involved in the education process" (About Us, 2015). ISS connects job candidates and international schools through a recruitment service and a series of job fairs. ISS international teaching job fairs take place in an annual cycle from November of a given year to the subsequent summer. In 2014, ISS helped over 2,000 teachers and administrators find employment overseas (Bruno, 2015). For the 2015-2016 hiring season, ISS has planned seven job fairs throughout the world and online (Table 3).

Table 3

International School Services Recruitment Fairs

Fair Name	Location	Date
ISS Fall iFair	Online	November 24, 2015
ISS Seattle IRC	Seattle, WA	December 6-8, 2015
ISS Bangkok IRC	Bangkok, Thailand	January 4-7, 2016
ISS Winter iFair	Online	January 20, 2016
AAIE 50th Annual Conference	Atlanta, GA	February 8-10, 2016
ISS Atlanta IRC	Atlanta, GA	February 10-15, 2016
ISS Spring iFair	Online	May 11, 2016

The influence of ISS within international educator placement was the reason for their selection as a research partner. Since its founding in 1955, ISS has paired over 20,000 candidates to schools (ISS, 2015). Currently, ISS has 650 affiliated schools in approximately 160 countries (Explore Global Schools, 2015). In addition to job placement, ISS has helped to launch new schools. ISS has helped found over 90 schools in the location and distribution of materials and supplies, establishment of proper curriculum, and development school policies. For educators who seek international employment through job fairs or staffing agencies such as ISS, there may be a challenge to adjust to life as an expatriate in and out of the workplace. To understand those challenges it is first important to understand the difficulties of life abroad for any American expatriate.

Expatriate Adjustment

While the specific population of study for this research is expatriate American educators, this group will face the same challenges as any American employed in a foreign country. Therefore, the researcher first explored literature related to expatriate adjustment and then identified issues specific to the population of expatriate educators.

Employment in an overseas workplace can be a high-stress environment that is a continual process of adaptation and one of importance. The three areas of adjustment for international workers are to the job itself, adjustment to interaction with host-country nationals, and the adjustment to the nonwork (social) environment (Haslberger, et. al., 2013). The nature of expatriate adjustment has become more important as the number of expats from foreign countries has risen. A lack of successful adjustment to their host culture is one of the most popular reasons for unsuccessful expat experiences (Caliguiri, 2000). Inadequate cross-cultural adjustment may contribute to poor expatriate job performance and early repatriation (Kraimer & Wayne, 2004).

Expatriate employees face multiple struggles in and out of their place of employment. The biggest challenges expats face to assimilate to their host culture are the workplace, interaction with host nationals, and the general environment (Haslberger, et. al., 2013). A lack of success in either of these areas can hamper work-based production. If expat assimilation attempts are to their host culture are unsuccessful, the employee will be more likely to struggle in his or her new workplace and suffer from culture shock that can decrease production (Patterson, 2002). The economic development of the host country may play a role in expatriate adjustment. On average, between 30 percent and 50 percent of expatriate employment contracts result in termination before the original expiration date. Those numbers are lower in developed countries

where the failure rate is between 20 to 40 percent. However, in developing countries, the number of early-terminated contracts can reach as high as 70 percent (Richardson, et al., 2006).

Intrinsic and external factors can be a predictor of success. Many potential candidates lack personal characteristics that permit them to handle cultural differences (Kumar, et. al., 2008). Specific personality traits can help ease the culture shock and improve the expatriate experience. Personal attributes such as an expat's previous overseas experience, their proficiency in the host culture language, and cultural intelligence can be anticipatory factors of cultural assimilation (Bhaskar-Shrinivas, 2005; Chen et al., 2010). Family-related influences also play a role in the ability of an expatriate to adapt to his or her host culture. Marital status, along with spousal and children adjustment, can effect assimilation and have effects on work performance (Froese & Peltokorpi, 2013). Personality traits of the expatriate also have an effect on cultural assimilation. Expats who are open-minded to the experience, agreeable, willing to try new things, are non-judgmental, and have emotional stability have a higher likelihood of success (Ward, et. al., 2004). Expats with an extrovert personality type may find higher levels of success than those with an introvert personality. In order to increase the likelihood of success, expats need to have a desire to communicate with host culture nationals as a means to understand the host country's culture (Huang, et. al., 2005). Expatriates' interpersonal skills can influence how their coworkers perceive them. Extroverts have received higher job performance evaluations by employers than those who are less willing to communicate with host nationals (Caligiuri, 2000).

The self-efficacy of an expatriate can also be a predictor of success. Individuals with higher levels of self-efficacy had greater degrees of general interactions and workplace adjustment than those with low self-efficacy (Harrison, et. al., 1996). Individuals with higher levels of self-confidence and social skills have less apprehension about interacting with host

country nationals and those of different cultural backgrounds. These individuals are more likely to have a desire to learn about their host culture, exhibit flexible behavior, a willingness to learn new things, and seek out and try novel and unfamiliar activities associated with their host culture (Ang, et. al., 2006). The ability to develop interpersonal relationships with those from a host culture may play a role in the success of expat assimilation. Expats with high levels of self-efficacy are more likely to seek out and develop interpersonal relationships with host nationals that can help to learn cultural norms, social skills, and behaviors (Evans, 2012).

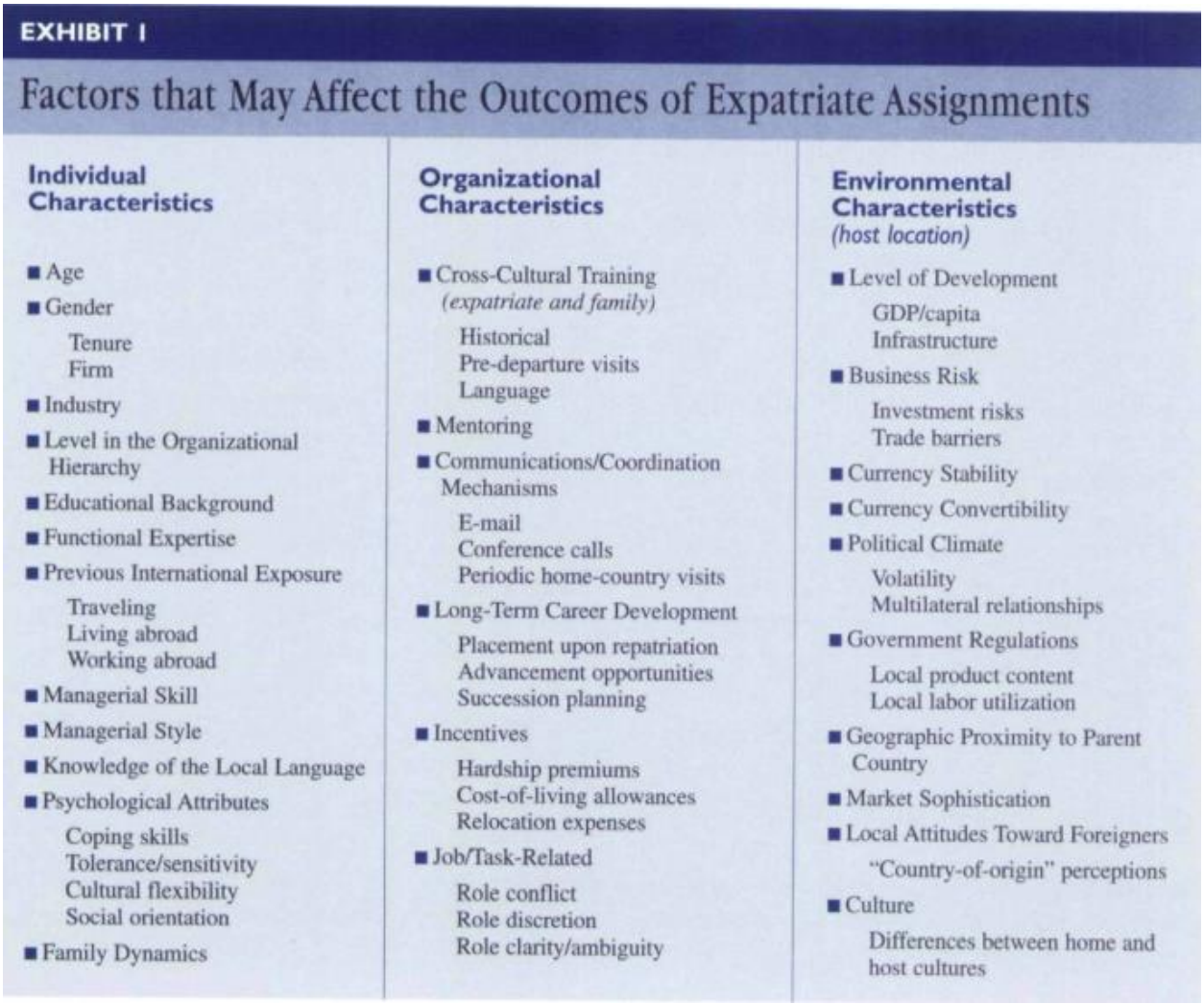


EXHIBIT I

Factors that May Affect the Outcomes of Expatriate Assignments

Individual Characteristics

- Age
- Gender
  - Tenure
  - Firm
- Industry
- Level in the Organizational Hierarchy
- Educational Background
- Functional Expertise
- Previous International Exposure
  - Traveling
  - Living abroad
  - Working abroad
- Managerial Skill
- Managerial Style
- Knowledge of the Local Language
- Psychological Attributes
  - Coping skills
  - Tolerance/sensitivity
  - Cultural flexibility
  - Social orientation
- Family Dynamics

Organizational Characteristics

- Cross-Cultural Training *(expatriate and family)*
  - Historical
  - Pre-departure visits
  - Language
- Mentoring
- Communications/Coordination Mechanisms
  - E-mail
  - Conference calls
  - Periodic home-country visits
- Long-Term Career Development
  - Placement upon repatriation
  - Advancement opportunities
  - Succession planning
- Incentives
  - Hardship premiums
  - Cost-of-living allowances
  - Relocation expenses
- Job/Task-Related
  - Role conflict
  - Role discretion
  - Role clarity/ambiguity

Environmental Characteristics *(host location)*

- Level of Development
  - GDP/capita
  - Infrastructure
- Business Risk
  - Investment risks
  - Trade barriers
- Currency Stability
- Currency Convertibility
- Political Climate
  - Volatility
  - Multilateral relationships
- Government Regulations
  - Local product content
  - Local labor utilization
- Geographic Proximity to Parent Country
- Market Sophistication
- Local Attitudes Toward Foreigners
  - "Country-of-origin" perceptions
- Culture
  - Differences between home and host cultures

Figure 1. Factors that may affect the outcomes of expatriate assignments. Adapted from Managing overseas assignments to build organizational knowledge by Downes & Thomas (1999), *People and Strategy*, *22* (4), 33.

Demographic variables also influence the assimilation process. An increase in age has been associated with a lower level of receptiveness to a foreign culture. Older adults are less likely to monitor their automatic associations toward other cultures and can result in an unwillingness to interact with host country nationals (Gonsalkorale, et. al., 2009). Younger expatriates may have a smoother transition to the assimilation process. Expatriates who emigrate at a younger age have less difficulty in the adjustment process (Lineberry, 2012). Age has been shown to play a factor in the maintenance of their home culture. Though older expatriates may have a similar degree of adjustment, they are more likely to maintain home culture relationships than pursue new ones in their host culture (Hechanova, et. al., 2003). Regarding gender, research has suggested women may be better equipped to handle expatriate employment. A study of expatriates in Turkey found host country colleagues rated female expats performance higher in communication and the establishment and maintenance of relationships. Men are less likely to interact with host country nationals and more likely to insulate themselves with other expatriates (Sinangil & Ones, 2003).

The research undertaken in this study sought to determine how modern technology might aid in the assimilation process, specifically with the population of expatriate educators. In addition to the issues identified in the literature cited in the previous paragraphs, educators working in international locations face further integration challenges.

Expatriate Educator Readjustment

Newly hired educators face a period of adjustment at an international school. For educators in a new foreign culture, there is an initial period where a psychological recalibration occurs (Richardson, et. al., 2006). The timeframe until a new teacher is up to speed can vary. New teachers can take anywhere between five to 18 months until they are fully productive

(Timmer, 2003). A new teacher requires time to adjust to the organizational structure of the school as well. Incoming teachers need to invest time in the orientation of school procedures and policies and assimilation into the school culture (Flamholtz, 2012).

Retention rates of international and domestic teachers widely differ. Despite an abundance of employment opportunities, there is a higher rate of failure for expatriate teachers than their American-based colleagues (Richardson, et. al., 2006). The average rate of failure for state-side America teachers is around 17 percent, compared to up to 40 percent for expatriate teachers (Mancuso, 2010). Expatriate educators may find it difficult to be assertive or volunteer for extracurricular activities or committees due to fear of resentment from co-workers. A difficulty in workplace culture assimilation, or outright refusal to assimilate, can lead to isolation from colleagues and hamper productivity (Thompson, 2012).

International educators may struggle with culture shock in terms of expectations for content delivery, curriculum design, as well as student perception of international teachers. The personal and educational background of the teacher and the cultural traditions of the students may have an effect on the pedagogy selection of the teacher (Thompson, 2012). A study of Asian secondary school science students found a difference in how students view the classroom environment based upon the teacher's origin of training. The students felt there was more cohesiveness, teacher support, equity, and opportunity for involvement in classes with American-trained educators compared to their Asian colleagues (Thompson, 2012). Teachers also need time for adjustment to the school's curriculum. With the advent of Common Core Curriculum standards, newly hired American-trained teachers often arrive with "curriculum in a suitcase" (Moreau, 2004). A lack of knowledge about their new school's curriculum can have negative

consequences. New teachers may intend to teach content that does align with the mission, strategic plans, or overall curriculum of the school (Mancuso, 2010).

The understanding of these integration and assimilation issues and identifying to what degree current technology may help to resolve them is one of the primary points of this investigation. Therefore, before beginning the research the investigator also explored the background and uses of the smartphone.

Evolution of the Smartphone

The development of a means to communicate has fostered an eagerness to further the accessibility and convenience of communication by way of technological advancement. Since the introduction of the telephone during the latter part of the nineteenth century, it has become an integral part of life for billions of people throughout the world. For the first time, the telephone allowed people to speak instantly with others over great distances, learn about social events, coordinate plans, and conduct business. However, it was not until the invention of the cellular phone that people could speak with others in a mobile fashion from outside their home or office.

Since the introduction of the mobile phone, the number of subscribers has risen drastically. In 1995, approximately 91 million people were cell phone subscribers worldwide (Goggin, 2012). The number of subscribers has risen substantially in the past 20 years. By 2015, that number had increased to 4.43 billion and will likely reach nearly 5.07 billion by 2019 (Truss, 2015). The trends of cell phone ownership are no different in the United States. In 2000, only 35% of Americans owned a cell phone, compared to 92% as of 2015 (Pew Research, 2015). In addition to interpersonal communication, more than four in five Americans (86%) have used a smartphone in the last 30 days to plan a social activity, decide whether to visit a

particular restaurant or business, look up a sporting event, or access local information (Pew Research, 2015).

The transition from cell phones to smartphones began in the late 2000s. Today, smartphone owners comprise nearly one-third of the worldwide cellular phone market. Of the one and a half billion smartphone users globally, Android is the most popular (798 million users), followed by Apple (294 million) and Windows smartphones (45 million) (ABI Research, 2013). In 2011, approximately 35% of Americans owned a smartphone. The number of American smartphone users has risen to 68% as of 2015 (Pew Research, 2015).

The cellular phone has advanced technologically since its inception in 1973. In that year, the Motorola DynaTAC prototype was unveiled and the first public call from a cell phone occurred. The public unveiling of the smartphone occurred in 1997. The Synergy, produced by Philips Consumer Communications, was the first to offer mobile and wireless access to the Internet, emails, and faxes (Harris, 2014). The unveiling of the Apple iPhone in 2007 revolutionized the smartphone industry. The iPhone was hailed by Apple Chief Executive Steve Jobs as "a revolutionary and magical product that is literally five years ahead of any other mobile phone" (Arthur, 2007). The last decade has seen tremendous economic growth in the smartphone industry. In 2005, the smartphone industry totaled $3.8 billion. That figure had grown to $51.3 billion by 2015 (Swider, 2015).

The smartphone has evolved from a device that solely could make phone calls, send email, or surf the Internet to one that now allows communication to become mobile, customizable, and instant (Goggin, 2012). The smartphone has also become an integral and indispensable part of culture. Smartphones allow for constant contact, newsgathering, music listening, television viewership, Internet access, dating, and commerce among other features

(Alanazi, 2014). In addition, various hardware functions of the smartphone have become essential. Features such as a photo and video camera, video player, global positioning, and touch screen capabilities demonstrate how smartphones have taken technologies that once were separate and combined them into one convenient, economical and readily available all-purpose device. Smartphones have altered the way people travel, date, organize, socialize, and shape identities in a customizable way. As Turkle (2012) noted, "we make our technologies, and they, in turn, shape us". These features and their use by American expatriate educators are of significant interest in this study.

Emergence of Smartphone Mobile Applications

With advent of the smartphone, mobile applications ('apps') have become popular and are available for many purposes. Education, entertainment, productivity, information, commerce, and social networking are the most popular categories of apps (Gerlich, et. al., 2015). The introduction of the mobile app came after the release of the Apple iPhone in 2007 and the launch of Apple App Store in 2008. At that time, the App Store consisted of 552 apps, most of which were either free or low-cost, though some had higher prices (Arrington, 2008). The number of apps available for the iPhone has grown exponentially. As of 2015, there are approximately 1.4 million apps available for download through the Apple App Store (Statista, 2015). The number of downloads has increased as well. Within three months of business, the Apple App Store had seen 100 million downloads. At the end of 2014, that number had reached 85 billion (Sims, 2015).

The first purchase of Android phone occurred in 2008 and Google Play was opened that same year. The Google-owned Android phone accounts for 75% of smartphones currently in use (Bradshaw, 2012). Unlike the Apple iOS operating system, Android phones use an open source

system. The fewer restrictions on market entry has attracted app developers to Google Play (Mitroff, 2012). In 2015, Google Play overtook the Apple App Store with 1.6 million total apps (Statista, 2015). Though Google Play may have more apps available for download, the Apple App Store leads in revenue. Apple had 70% higher revenues than Google, which was a 10% increase from 2014 (Dal Porto, 2015). Other producers of apps are Amazon Appstore (400,000), Windows Phone Store (340,000), and Blackberry World (130,000) (Gerlich, et. al., 2015). The availability of this multitude of smartphone applications has provided expatriates a number of ways to communicate with people in the United States and within their host culture.

Smartphones and Expatriates

The new and advanced technology of smartphones allows American expats to stay connected with friends and family at home, while providing a way to gain access to and understanding of their host culture. A 2013, Natwest International survey of expats found 87% owned a smartphone, while 78% of smartphone owners stated the biggest benefit of smartphone technology was the ability to stay in touch with friends and family (Clancy, 2014). Smartphones provide an instant link to home while in a foreign country. The immediate connectivity offered through Internet-based communication allows individuals to keep a sense of 'home' with them wherever they go (Turkle, 2012). The smartphone may play a part in expatriate social identity during their time abroad. The mobility of smartphones has created a more global consciousness that has altered people's sense of belonging to one single space (Spiteri, 2013).

The research study undertaken here specifically focused on how expatriate educators use their smartphones to maintain relationships with those at home through video communication software such as Skype and Facetime, social media (Twitter, Facebook, Instagram), text messaging (iMessage, WhatsApp), and mobile apps for local and national news and

information. The study also analyzed how expats use these same technologies, along with others, to help ease the transition of living and working in a foreign country.

Smartphone technology allows for Americans who live and work in a foreign country to maintain ties with family, friends, and their local community more than ever before. The potential to establish contact with someone from an emotional support network, especially those who are geographically distant, can enhance feelings of connectedness (White & White, 2005). The advancement and availability of communication technologies, such as video chat and instant messaging, allow expats to fulfill needs for emotional support through regular contact with family and friends in their home country (Farh, et. al., 2010). It is beneficial for expatriates to stay connected with those back home and their cultural communities as they assimilate to their new host culture (Takeuchi & Chen, 2013). Contact with friends and family at home can provide emotional support. Staying connected with their local community can provide a lifeline to combat loneliness and provide encouragement for those living in a foreign country (Froese & Peltokorpi, 2013; Bian & Leung, 2014).

The mobility and connectedness of the smartphone serve a variety of roles for expats to avoid homesickness. Instant face-to-face video conversation with family or friends they cannot visit in their host culture can help to alleviate the human anxiety of loneliness (Mengwei & Leung, 2014). Users can seek and obtain information to stay on top of current events back at home in multiple ways. Smartphones offer the ability for people to access the Internet anywhere and retrieve events and news of the day from their home community at any time (Cheng & Liang, 2014). The affordability and access of smartphones play a role as well. Smartphone-based technologies provide an economical and convenient way for expats to engage in face-to-

face communication, access photos and videos posted by users at home, post comments on social media, and news collection (Hess & Linderman, 2011).

Smartphones and Cultural Assimilation

Expatriates face many challenges in and out of the workplace. Expatriates who live abroad view it as a high-pressure situation with numerous pitfalls, and their personal well-being is reliant upon the ability to adjust to their new environment as quickly as possible (Harvey, 1983; Haslberger, 2013). The use of smartphone technologies can ease the cultural adjustment process. Smartphone usage can be an aid in learning a foreign country's cultural practices and provide contextual meanings (Pachler, et. al., 2010).

Socially, expatriate educators face challenges as well. The immediacy of interaction available on a smartphone can help to increase feelings of belonging and help develop social connections (Spiteri, 2013). Smartphones may soften the language barrier and help communication with non-English speaking natives. Expatriate educators located in countries where English is not the first language may be hesitant speak the native language for fear of ridicule. However, it is important that people living in foreign cultures engage in the local community to avoid loneliness and homesickness when living abroad (Hendrickson, 2009). Information readily available through smartphones such as restaurant guides or event calendars can help to ease the assimilation process. Trying new foods and or attending sporting events is a necessity because the familiar is unavailable (Caliguiri, 2000). Smartphone social media mobile apps, such as WhatsApp and Snapchat, can be used in tandem with language translation mobile apps to allow people to connect in cyberspace where they can acquire language skills in a less intimidating manner.

Synopsis of the Reviewed Literature

The literature review presented here provides insight into American expatriates, American expatriate educators, international schools, the emergence of the smartphone, and its use to help aid the expatriate assimilation process. Multiple theoretical frameworks that used qualitative and quantitative research methods provided the foundation of this chapter. The merger of the approaches formed the basis for the research questions and purpose of study in Chapter One. The assessment of the literature revealed a need for the study and laid the foundation for the problem statement.

American expatriates are located in countries throughout the world. A large portion of the related literature focused on a human resources perspective concerning expatriate assignments. Research has focused on the adjustment process for employees of multinational corporations who receive international assignments and factors that may predict the likelihood of success. The adjustment to an expatriate assignment is a high-stakes environment that can be very stressful. Many expatriates struggle with the adaptation to their host culture, which can have a negative impact on their personal and professional life. American expatriate educators face similar and additional challenges. Newly hired international educators face initial struggles with curriculum differences and school policies. In addition, American expatriate teachers face higher rates of failure than their domestic colleagues. Poor teacher retention rates can add to recruiting costs, lower the self-efficacy of school administrators, and reflect poorly on a school's image, all of which can affect the school's reputation and limit their pool of potential teacher candidates.

The researcher found that literature is missing related to expatriate motivations to maintain native culture communal ties while living in a foreign country. Although previous

studies have shown expatriates maintain contact with people left behind can combat homesickness and loneliness, there has been little investigation into additional motivating factors. The researcher was unable to locate literature that analyzed American expatriate usage of smartphones to maintain native culture communal ties or as a cultural assimilation tool. The author looked at well over one hundred articles from databases such as EBSCOHost and Google Scholar in an attempt to discover literature related to this topic. The lack of literature in this particular area adds value to this study. An understanding of motivational factors of American expatriate educators to maintain native culture communal ties may help to promote the cultural assimilation process, which can lead to higher rates of teacher retention and an increase of school image.

Smartphones provide a means by which American expatriate educators can ease the assimilation process to a host country, while providing the means to maintain connection with the community they left behind. The majority of American expatriates own a smartphone. One of the biggest reasons expats cite as the most useful feature of their smartphone is the ability to provide instant access and mobility. At any time, smartphone users can establish contact with anyone in any location. Media consumption is not bound to a fixed location. Smartphones can be help the user learn a new language, discover a place he or she otherwise would not have visited, develop cultural context, and modify behavior to more similarly match the host culture. The ability that smartphones offer through video chat and instant messaging help reduce loneliness and provide access to a person's support network at home.

Uses and Gratifications Theory (UGT) provided a basis to analyze the ways American expatriate educators purposely seek out and use specific types of smartphone technologies to obtain enjoyment. UGT explores what people do with the media they consume, as opposed to

what the media does to them. People utilize technology for a variety of reasons such as escapism, socialization, and information seeking. UGT applies to a variety of media, including the usage of social networking sites (i.e. Twitter and Facebook), television viewership, blogging, online message boards, and smartphones. The active and purposeful consumption of smartphone-based technologies make this theoretical foundation a relevant framework to use for this research.

CHAPTER 3

PROCEDURES

Introduction

This research aims to analyze the effectiveness of the smartphone as a cultural assimilation tool for American expatriate educators. In order to investigate the relationship between smartphone usages, the maintenance of native culture communal ties (as defined in Chapter One), and cultural assimilation, a survey questionnaire approach was merited. The survey respondents consisted of 369 American expatriate teachers and administrators from 78 countries currently employed at an International School Services (ISS) affiliated international school. Survey questions inquired about particular aspects of smartphone usage by the target population such as interpersonal communication, information seeking, and language learning. Survey respondents were asked to identify themselves with basic demographic information and to specify their general use of smartphones, such as frequency of use and time spent using their device.

The president and director of international staffing for ISS agreed, via email correspondence with the researcher, (see Appendix A) to disseminate the survey to affiliated international school directors to assist with the research. This ISS official sent an email to the organization's 650 international school directors containing a hyperlink to the Qualtrics survey designed by the researcher (see Appendix H). This email included a request for the school directors to forward the email, with the hyperlink to the Qualtrics survey, to their American expatriate faculty and administration for completion. Seven days after the delivery of the first email, ISS sent a follow-up email as a reminder to member school directors that once again

asked them to forward the survey hyperlink to their American expatriate faculty and administration.

Prior to the distribution of the survey, the reliability and validity of the questionnaire was confirmed in two ways. The researcher employed jury validity method and a test-retest of the questionnaire to establish reliability, both of which are explained further in this chapter. Upon the establishment of validity and reliability, the survey was distributed.

Rationale for Using a Survey Questionnaire

This quantitative study investigated the use of smartphones by American expatriate educators as a tool to maintain native culture communal ties and to establish cultural assimilation into their new host culture. The survey method is a "quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. From sample results, the researcher generalizes or makes claims about the population" (Creswell, 2009). A survey is an instrument to collect and interpret cultural, psychological, economic, social, technical and other categories of data (Fowler, 2013). This instrument can be effective in the assessment of a particular group's feelings about a specific subject. Surveys can be an effective tool to gauge a population's beliefs and attitudes regarding a specific topic (Berger, 2013). Surveys fulfill a number of different purposes. However, in quantitative research, the research questions and hypotheses form the scope of the study (Creswell, 2009).

Given the nature of this research and the research questions outlined in Chapter One, this methodology permitted the researcher to identify a specific sample from the population of expatriate educators. Access to current American expatriate educators at ISS-affiliated schools provided opportunities to uncover similarities, differences, and patterns between respondents and allowed for generalized claims about the overall expatriate educator population.

The focus of the survey was two-dimensional. The survey examined how American expatriate educators utilize their smartphones to maintain native culture communal ties during their time in a foreign country. This included questions about their communication with friends and family members they left behind, newsgathering, and the amount of time spent each week on this interaction. The second focus of the study was to determine how participants used smartphones to connect with their new communities, become aware of local events, build new relationships, use geospatial mobile apps, and gather local news. Data was collected through a Qualtrics survey. The researcher had access to and previous experience with this survey software. Additionally, this software is "user friendly" for the respondents and therefore can help to increase the responses to the survey. The survey consisted of multiple types of questions. Respondents rated their agreement to specific questions related to the study with items on a 4-point ordinal category scale (1= 'Not at all' and 4= 'extremely'). Other questions were rank-order and nominal in nature to uncover information such how many times a person may utilize his or her smartphone each day for communication purposes, amount of time spent on the phone, how much time the user accesses an app to practice a native language, etc.

Unit of Analysis

The unit of analysis for this study was American expatriate educators currently employed by an ISS-affiliated international school. The survey sought demographic information among the participants including age, location of host culture, home state in the United States, income, teaching area, and gender. Following the demographic section, the survey focused on two specific aspects of smartphone usage by American expatriate educators. The first part of the survey analyzed how the educators used their smartphone to perform a variety of functions to maintain native culture communal ties. Participants reflected on how well a smartphone helps to

maintain their native culture communal ties along with time spent each week communicating with people at home. Participants identified their most common usages of smartphone technologies, preferred communication tools such as social media mobile applications, and their importance.

The second part of the survey gathered data on how expatriate educators utilized their smartphone to assimilate to their host culture. Participants were asked to rate how much their smartphone has aided the assimilation process. Respondents identified how many times per week they used their smartphone to interact with their host culture and the total amount of time spent. The survey then focused on how frequently respondents use a variety of smartphone technologies to assimilate to their host culture. Participants were asked to rate the importance of specific mobile applications in the process. The analysis focused on the ability of various smartphone applications and technical capabilities to assimilate were analyzed. The final part of the survey asked the respondents how often they interact with various population groups such as the parents of their students, and school colleagues through use of the smartphone. All participants were currently employed American expatriate educators.

Respondents

A sum of 369 male and female American educators who currently work at an ISS-affiliated international school and live in a foreign country participated in the survey. A dropout rate of 11% resulted in 326 usable responses. ISS distributed the survey via an email to their 650 affiliated school directors with a request to forward the survey to their American faculty. The survey was open between March 17 and March 31, 2016. The questionnaire had a total population of approximately 3,000 American expatriate educators. In order to achieve a representative sample with a confidence level of 95%, 350 respondents was desired (Fowler,

2013). This number of participants would equal a 9% response rate. The researcher received consent from International School Solutions (ISS) to provide access to its members for participation in the survey. The population included state-certified teachers and administrators in American-accredited international schools. The population encompassed teachers and administrators in the elementary and secondary (kindergarten through grade 12) age groups. Educators excluded from the population included any other education expatriates such as higher education faculty and administrators and adult educators.

The researcher chose ISS because this organization is the largest facilitator of international teaching jobs. Founded in 1955, ISS currently has nearly 650 affiliated schools in 160 countries across North America, South America, Asia, Africa, Europe, and Australia. Since its inception, ISS has been responsible for filling over 23,000 vacancies, including more than 2,300 in 2014. ISS officials agreed to send an email with a hyperlink to the informed consent and Qualtrics survey designed for this study to the director of each of their affiliated schools. The email requested that the directors forward the email containing the consent form and Qualtrics survey hyperlink to their American expatriate employees. The researcher provided sample language for this email and that sample is included here in Appendix B. The email sent from ISS to the school directors also contained the informed consent (see Appendix C). The school directors were asked to forward the informed consent and a hyperlink to the survey to their staff in the appropriate email. Sample language for this email from the school directors to their staff members is included in Appendix D.

As indicated in the informed consent, recipients of this email with the request for their participation had the option not to decline participation. These respondents were directed out of the survey. Those who accept the consent form could , for whatever reason, discontinue their

participation at any time without any negative consequences. The researcher maintained the confidentiality of the respondents. The survey did not contain any identifiers of respondents that may have compromised their confidentiality. The researcher, on a university-based file storage system, will keep the survey results for three years, after which they were be destroyed.

The survey was designed to answer a specific set of research questions laid out by the researcher. The questions sought to find correlations between usage of smartphone by American expatriate educators as a tool to maintain native culture communal ties and assimilate to their host culture. Survey respondents provided insight into the usage of smartphones by American expatriate educators. The variety of question types allowed for the interpretation of data to generalize about the intended population and their perceptions of the smartphone as an effective cultural assimilation tool.

Data Analysis

The Qualtrics survey was constructed to be straightforward for the respondents and to provide the researcher with appropriate and relevant data. The survey was comprised of questions in a variety of types: ordinal category scale, write-in, multiple selection, and multiple choice. The questions were designed and composed to uncover discrepancies and patterns in the responses, to provide data to answer the research questions and support or disprove the hypotheses.

The survey design incorporated multiple types of questions to illicit a diversity of answers. The survey questions were in accordance with the expected type of data analysis. The survey used 4-point ordinal category scale and multiple selection questions to produce ordinal data. Multiple choice question responses provided nominal data for analysis. Ratio data was collected by questions that have an absolute zero as a possible answer. Upon the completion of

data collection, the researcher exported the results from Qualtrics to the Statistical Package for the Social Sciences (SPSS) for study.

The dependent variables were: perceived effectiveness of the smartphone as a tool to maintain native cultural communal ties and for host country assimilation, frequency of use, and amount of time spent using a smartphone. Prior to distribution of the survey to the target population of expatriate educators, the researcher first conducted tests of reliability and validity. Self-reporting of the respondents provided insight into the dependent variables through the use of ordinal category scale-type questions.

Reliability and Validity

When a survey is the main data collection instrument, reliability and validity are of major importance. Reliability measures the consistency of survey responses and is required in order for a survey to be valid (Goertz & Mahoney, 2012). In this study, the use of the test-retest method established reliability for the survey. Test-retest reliability can access the consistency of an instrument from one time to another (Fowler, 2013). Participants for the two-stage test-retest came from a convenience sample of professional associates known to the researcher. The participants consisted of current expatriate American educators employed at an international school. The researcher selected these respondents because of their role as international educators and their ability to relate on a personal level to the content of the survey. The Qualtrics survey hyperlink reached this group of current American expatriate educators through an email from the researcher. Email addresses of peer professionals were obtained by the researcher during time spent as an international teacher. Participants were asked to complete the survey two times. Participants were contacted via two separate emails. In the first email, participants were asked to read the informed consent (see Appendix E) and complete the survey by clicking on the

hyperlink. The first email also informed participants that they would receive a second email in seven days to retake the survey. The second email was sent seven days later and included a hyperlink to a second survey and informed consent. Data collected from the test-retest were only used to test reliability and validity of the survey.

The consistency of the response scores were measured over a 14-day period from March 14 through March 28, 2016. The first test of reliability yielded 26 responses. The survey was resent seven days later and had 17 responses. The responses of each participant who were tested for inter-rater reliability. The results of both surveys indicated a rater agreement of 83%. When the scores were measured within 1 point of agreement from the original response, the number increased to 93%. The criterion standard for rater agreement within one point of agreement is 90% (Graham, et. al., 2012). These scores demonstrated that the survey was able to taken by professionals in the field with a consistent response pattern.

Content validity for the survey was established through face and jury validities. At the outset, face validity may provide a foundation for whether the survey "appears to be measuring what it intends to measure" (Marguerite, et. al., 2010). To ensure face validity, faculty members of the Department of Communications Media at Indiana University of Pennsylvania (IUP), who are serving on the researcher's dissertation committee, reviewed the survey questions. Comments and suggestions helped to determine the value and wording of questions in preparation for the validity survey. Based upon their feedback, the researcher intended to create new questions, revise language, or omit problematic questions. To bolster the claim for validity, a panel of experts in the field was selected to establish jury validity for this survey. Jury validation provides more evidence of the quality of a measure than face validity (Novak & Buddenbaum, 2001).

Members of the five-person jury consisted of various stakeholders within international education at ISS and their affiliated schools. Due to the researcher's experience as an international teacher, jury members consisted of peer professionals within the industry. Participants included current staffing directors, school directors, administrators, and teachers. Jury members were purposely selected to offer different perspectives and expertise on the validity of the questionnaire. Communication was coordinated through previously obtained peer professional email addresses during the researcher's time in the field. A hyperlink to the informed consent (see Appendix F) and survey was in the content of the email. A survey analysis questionnaire (see Appendix G) was included as an attachment in the email from the researcher. The members of the jury answered the questionnaire after their analysis of the survey (see Appendix H). Jury members provided narrative feedback on the survey analysis questionnaire in either written or verbal form.

The data from completed jury survey analysis questionnaires was used to modify the survey and was not included in the analysis section of the dissertation but used by the researcher to improve the survey instrument. Incomplete survey analysis questionnaires were not utilized. Members of the jury for validity were instructed by the researcher to not complete the survey should they receive it via their ISS school director at some future point. The members of the jury did not participate in the test-retest process.

Summary of the Procedures

To initiate this study, the researcher has undertaken several relevant tasks. The Director of Communication at ISS was contacted via telephone requesting permission to survey ISS-affiliated educators. In email correspondence with the researcher, ISS officials agreed to provide their support and cooperation with the research and doctoral dissertation. As a result, ISS

offered to forward an email to their 650 affiliated school directors on behalf of the researcher. The email contained a hyperlink to the informed consent and Qualtrics survey for distribution to their American faculty and administration. This arrangement between the researcher and ISS allowed the target population to be surveyed. The researcher developed the survey with the guidance of faculty from the Department of Communications Media at Indiana University of Pennsylvania (IUP).

Prior to the dissemination of the survey to ISS-affiliated school directors, the researcher solidified the reliability and validity of the questionnaire. The test-retest method established the reliability of the survey. Current American expatriate educators comprised the population of respondents for the test-retest procedure. These participants did not participate in the official survey. The test-retest method ensured that questions were rationale in manner and would yield consistent results. The jury validity method established content validity. The members of the jury consisted of experts in the field of teaching, school administration, and international staffing experts. The jury participation helped to determine that the survey questions addressed the areas of research as intended.

Finally, the study participants accessed the survey by clicking on the hyperlink provided in the request email. After participants clicked on the hyperlink, a new webpage was provided with the statement of purpose, potential benefits of the study, and an informed consent form. Contact information for the researcher was provided should respondents have had any questions. This information allowed people to make a decision about their survey participation. Response was on a voluntary basis and participants could exit the survey at any point. There were no negative consequences for those who chose not to participate. Responses were confidential with no personal identifying information. There were no negative

consequences for those to opted to quit the survey before completion. The survey had a target population of 3,000 American expatriate educators. A target response sample of 350 respondents was desired to attain a confidence level of 95%. A total of 369 participants accessed the survey, with 326 useable responses. From this number the analysis of this research is provided in Chapter Four.

CHAPTER 4

DATA ANALYSIS

This quantitative study examined American expatriate educators' use of smartphones to maintain native culture communal ties and assimilate to their host culture while living and working in a foreign country. This investigation resulted in volunteer responses of 369 American expatriate educators (teachers and administrators) from 78 countries employed at K-12 international schools affiliated with International School Services (ISS). The researcher used the results of 326 completed surveys for this study. ISS distributed the researcher-designed, Qualtrics survey via an email to the school directors at each of their 650 affiliated schools with a request to forward the email to their American faculty. If all 650 school directors forwarded the survey, it would have been received by 3,000 teachers and administrators. Excluded American expatriate educators were those employed in non-affiliated ISS schools (i.e. Department of Defense Schools), institutions of higher education, and English as a Second Language (ESL) programs. Data collection occurred in April of 2016.

This chapter has three separate parts. The first part examines the establishment of the questionnaire's reliability and validity. The second part investigates the demographic information of the research sample. The third section focuses on descriptive and inferential statistics that provided a detailed examination of the research questions. In total, data analysis for each of the four research questions and eleven hypotheses determined whether they were supported.

Establishment of Validity

Establishment of validity and reliability for the survey transpired prior to dissemination to the survey population. The establishment of validity consisted of a two-stage process. The first

stage was an inspection of the survey language and format consistency. Faculty members of the Department of Communications Media at Indiana University of Pennsylvania conducted the review. The faculty members also comprised the researcher's dissertation committee. Questions and responses were modified based upon their feedback and comments.

For the second stage, in order to strengthen the claim for validity, a five-member jury validity process transpired following feedback from the dissertation committee. Jury members were selected due to their various roles in international schools and included teachers, principals, school directors, and staffing professionals. Members of the jury are peer professionals of the researcher, and were contacted by the researcher via email addresses previously obtained during the researcher's time in the field. The email contained a hyperlink to the informed consent form. The informed consent form included a hyperlink to the survey itself. A six-question survey analysis questionnaire was attached to the email. The questionnaire asked jury members for their thoughts in respect to wording, relevance, and clarity of the survey.

Four modifications to the survey resulted from feedback of the jury panel. Four of the five panel members recommended the inclusion of an additional answer choice for questions 23 and 31. The option 'a few times a week' was added to the questions to close the gap between 'weekly' and '1-4 times a day'. Members of the jury felt the gap between these two responses was too large and could result in confusion for potential respondents. A second change occurred to questions 31 and 32. Three jury members suggested the addition of an answer choice that dealt solely with social media smartphone applications. This answer option was added to the questions based upon this feedback.

Establishment of Reliability

Reliability for the survey was performed following the establishment of validity through the test-retest method in March of 2016. Participants emanated from a convenience sample of the researcher's professional associates and current American expatriate educators at ISS-affiliated international schools. The survey was distributed via email addresses the researcher had collected during time spent in the field. The email to participants included a hyperlink to the informed consent page. Once the respondents read the informed consent, they accessed the survey via a hyperlink included in the informed consent. Twenty-three participants completed the first test of reliability.

Seven days after the completion of the first survey, participants received a second email with a request to retake the survey. A hyperlink in the second email took the respondents to an informed consent page. At the bottom of the informed consent page was a hyperlink to the second survey. Seventeen respondents participated in the second stage of reliability. Respondents that participated in either stage of the reliability process were not eligible to participate in the official survey. The responses from both exams were analyzed using inter-rater agreement. Survey answers were repeated for 83% of the questions. When a +/- 1 from the original answer was used, the percent of agreement increased to 93%. This rate of agreement established the reliability of the survey for distribution.

Demographic Distribution

The Qualtrics survey asked respondents a variety of demographic questions such as age, gender, education level, host country, employment status, years' experience as an educator within an international school, marital status, and prominence of English as a spoken language within their host culture. A summation of 369 participants accessed the Qualtrics survey.

Overall, 326 respondents from 78 countries completed the survey. The respondent dropout rate was 11 percent. An exclusionary question at the beginning of the survey filtered out respondents who indicated they did not own a smartphone and re-directed them to the end of the survey. Respondents who answered they did own a smartphone were granted access to the demographic questions.

From the initial 369 respondents, a frequency of 343 respondents (96%) stated they own a smartphone, while 15 (4%) did not own a smartphone (Table 4). The percent of American expatriate educators who own a smartphone is above previously reported levels of the American expatriate population as a whole. A 2013 Natwest International study found 87% of American expats owned a smartphone (Clancy, 2014). This new data may indicate expatriate educators are more likely to own a smartphone than expatriates employed outside of education.

Table 4

Smartphone Ownership

Ownership	Frequency	Percent
Yes	343	96
No	15	4
Total	358	100

The majority of respondents were females with a frequency of 203 (60%); males had a frequency of 138 (40%) (Table 5). This variation between female and male respondents has been cited in previous research and is in agreement with this study. A 2011 study of 790 international teachers had a similar response rate of females (59.9%) to males (41.4) (Cox, 2011).

Table 5

Demographic Gender

Gender	Frequency	Percent
Female	203	60
Male	138	40
Total	341	100

Respondents identified their age based upon six age ranges. The most common age range was 36-45 with 98 respondents (29%), followed by 26-35 with 94 respondents (27%), 46-55 with 70 respondents (20%), the 56-65 age group with 58 respondents (17%), then under 25 with 13 respondents (4%), and the 66 and over age group with 10 respondents (3%) (See table 3). Previous research (Cox, 2011) has shown the average age of an international teacher to be 40.6 years. The mean score of 3.28 (SD=1.22) indicated the average age of American expatriate educators completing this survey to be approximately the age of 40, consistent with previous research (Table 6).

Table 6

Demographic Age

Age groups	Frequency	Percent
Under 25	13	4
26-35	94	27
36-45	98	29
46-55	70	20
56-65	58	17
66+	10	3
Total	343	100

Note. Mean=3.28; SD=1.22.

Respondents revealed their highest level of education obtained, regardless of location of study. The majority of respondents have earned a master's degree with a frequency of 238 (70%), 66 (19%) have obtained a bachelor's degree as their highest level of education, and 39 (11%) have earned a doctoral degree (Table 7). These numbers differ somewhat from previous research. A 2013 study of 211 international teachers indicated a master's degree was most prevalent with a frequency of 137 (65%), followed by 71 (34%) participants who listed a bachelor's degree, and one (0.47%) who earned a doctoral degree (Desroches, 2013).

Table 7

Obtained Level of Education

Level of Education	Frequency	Percent
Bachelor's	66	19
Master's	238	70
Doctorate	39	11
Total	342	100

American emigrants live in various countries throughout the world. Approximately 8.7 million American citizens (excluding military) live in a foreign country (Association of Americans Residents Overseas, 2015). Previous research has shown Mexico and Canada have the largest population of U.S. citizens, followed by the Philippines, Israel, and the United Kingdom (United States Department of State, 2015). The literature review revealed no information about the population of American expatriate educators by country. From this survey, China was the most popular location for American expatriate educators with a frequency of 39 (10.5%), followed by Qatar, South Korea, and Vietnam with a frequency of 15 (4.1%), and

Argentina with 14 respondents (3.8%). The remaining 228 (73.4%) participants hailed from 73 different countries (Table 8).

Table 8

Location of Host Country

Host Country	Frequency	Percent
China	39	10.5
Qatar	15	4.1
South Korea	15	4.1
Vietnam	15	4.1
Argentina	14	3.8
Other (N=73)	271	73.4

Respondents were requested to indicate their current employment status; teacher, administrator, or teacher and administrator. Most respondents were employed as only teachers with a frequency of 199 (60%), 110 (33%) participants were employed as an administrator, and 23 (7%) served dual roles as a teacher and administrator (Table 9). These results indicate the majority of respondents were solely international teachers and did not serve in an administrative capacity.

Table 9

Employment Type

Employment Status	Frequency	Percent
Teacher	199	60
Administrator	110	33
Teacher and administrator	23	7
Total	332	100

The respondents revealed their number of years of experience as an educator, as an international educator, and at their current position. Previous research found a disparity between average total years of teaching experience and time spent teaching in an international school. Cox (2011) found in a survey of 790 international teachers the average was 10.2 years of overall teaching experience. A second study found the mean years of teaching experience to be 12.14 years (Desroches, 2013). The average years of experience for international educators in this study appear to be comparable to earlier research in terms of total teaching experience. Respondents have worked as an educator for an average of 10.75 years (maximum of 40 years), with a standard deviation of 7.17 years (Table 10).

Table 10

Years Experience as an Educator

Years Experience as Educator	Range	Mean	Standard Deviation
worked as a teacher?	1-31	10.75	7.17
worked as an administrator?	1-26	5.14	5.61

The average time for respondents as an educator at an international school was 5.14 years, which is higher than previous findings. Cox (2011) found the average overseas educator had only 3.9 years of experience at an international school with a maximum of 38 years. In this study, the average time as an educator at an international school had a standard deviation of 5.61 years with a maximum of 38 years (Table 11).

Table 11

Years Experience as an International Educator

Years Experience as International Educator	Range	Mean	Standard Deviation
worked as a teacher in an international school?	1-26	5.14	5.61
worked as an administrator in an international school?	1-38	9.87	8.21

Respondents who identified as a teacher had been at their current position for an average of 1.86 years (maximum of 17 years) with a standard deviation of 2.19 years (Table 12). International school administrators reported a higher amount of time at their current position with an average of 3.7 years and maximum of 18 years.

Table 12

Years Experience at Current Position

Years Experience at Current Position	Range	Mean	Standard Deviation
worked in your current school in your current position as a teacher?	1-17	1.86	7.17
worked in your current school in your current position as an administrator?	1-18	3.7	3.46

Respondents were requested to specify their marital status. Previous research had revealed that 35% of international teachers were married (Cox, 2011). The results of this study are not consistent with the previous findings. The majority of respondents to this survey are married, with frequency of 181 (55%). Unmarried international educators had a frequency of 146 (45%) (Table 13).

Table 13

Marital Status

Marital Status	Frequency	Percent
Married	181	55
Not married	146	45
Total	327	100

The demographics of American expatriate educators in relation to this study did yield a share of expected and unanticipated findings. The average age and years of experience for expatriate educators remained approximately equal to previous research Four Asian countries (China, Qatar, South Korea, and Vietnam) registered the largest number of respondents. The high rate of smartphone ownership is an indication that the majority of the population is potentially able to interact with people despite geographic boundaries at any time. The studied revealed a much higher percentage of educators with a doctoral degree than previous research. The proportion of married expatriate educators who participated in the survey was also higher than previously reported numbers.

Descriptive and Inferential Statistics

Descriptive and inferential statistics supported the analysis and interpretation of the results from the subsequent four research questions:

RQ1: How effective do American expatriate educators believe smartphone technologies are in helping maintain native culture communal ties while working in a foreign country?

The first research question focused on how well American expatriate educators felt their smartphone helped them to maintain native culture communal ties during their time in a foreign country. The rationale for this hypothesis is that smartphones have become prevalent in society,

particularly with American expatriate educators. The instant access a smartphone provides to the Internet has allowed for connectivity at any moment or setting and may provide a sense of home, regardless of location (Turkle, 2012). The various communication applications available for download have allowed expatriates to interact with friends and family at home, providing a support system that does not have geographic limitations.

First Hypothesis

H1: There is no pattern in the perception that smartphones are beneficial to maintain native culture communal ties.

Respondents were asked to rate how well their smartphone helped to maintain native culture communal on a 4-point ordinal category scale (1=Not Well at All; 4= Extremely). Coming into the study, the researcher anticipated that American expatriate educators would reveal their smartphones do help to maintain native culture communal ties. The researcher further surmised that respondents would feel their smartphone was effective and that the distribution of answers would follow a set pattern with distribution approximately equal to the four choice options (Table 14).

Table 14

Smartphone and Native Culture Communal Ties

	Frequency	Percent
Not well at all	14	4
Slightly well	41	13
Moderately well	106	33
Extremely well	161	50
Total	322	100

Note. N=322, Median=3.50.

A one-sample Kolmogorov-Smirnov goodness-of-fit test examined the normality in the pattern of answer distribution. The results rejected the null hypothesis with a p value of .05 (Figure 2). The K-S test rejected the hypothesis that scores were normally distributed. The responses were non-normally distributed ($\tilde{X}$=3.50), with skewness of -1.01 (SE=.13) and kurtosis of .242 (SE=.27). The test indicated there is a statistically significant difference between the hypothesis and the validated responses. The findings are significant and show the vast majority of respondents felt their smartphone was an effective tool to maintain native culture communal ties during their time of employment at an international school located outside of the United States.

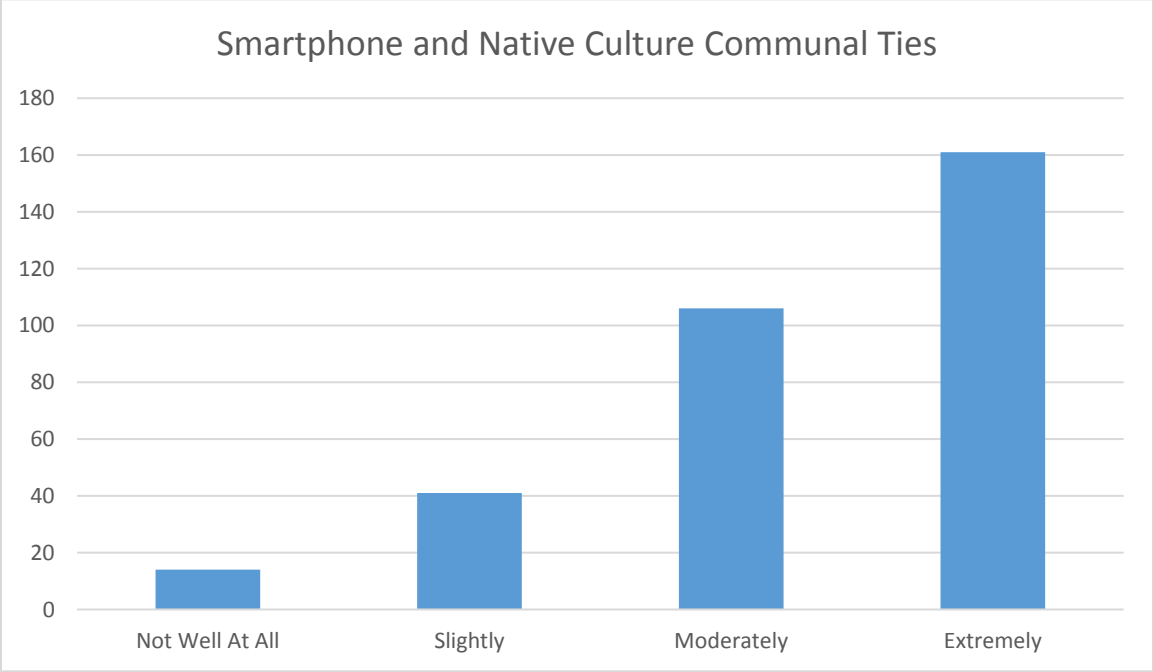


Figure 2. Smartphones and native cultural communal ties response distribution.

Note. N=327, Median=3.50, SD 0.85, k^s=.242, p<.001.

All told, 267 (83%) respondents believed their smartphone was either extremely or moderately effective. A frequency of 161 (50%) respondents stated their smartphone was extremely effective in the maintenance of native culture communal ties, followed by 106

respondents (33%) who revealed their smartphone was moderately effective. A sum of 41 respondents (13%) believed their smartphone was slightly effective, while 14 participants (4%) felt the smartphone was not effective at all. The mean score indicated that expatriate educators felt their smartphone was moderately effective. The findings show that the use of smartphones may serve an effective role for keeping expatriate educators in contact with people and news from back home during their time in a foreign country.

Second Hypothesis

H2: There is no significant difference between American expatriate educators' usage of smartphones to maintain native culture communal ties and the prominence of English in their host culture.

The second hypothesis looked at the impact of the prominence of English spoken within a host culture and the expatriate educators use of their smartphone to maintain native culture communal ties. Many American expatriate educators relocate to a host country where the native population speaks a language other than English. Expatriate educators may utilize their smartphone to alleviate loneliness and decrease isolation. Smartphones have been shown to be an effective tool to prevent homesickness for people living in a foreign country through the maintenance of native culture communal ties (Hendrickson, 2009). The researcher expected to find no pattern between the prominence of English in a host culture and the frequency of smartphone usage to maintain native culture communal ties (Table 15).

Table 15

Prominence of English in Host Culture

Prominence of English in Host Culture	N	Percent
Never	5	2
Rarely	80	24
Somewhat	108	33
Common	108	33
Native Language	26	8
Total	327	100

Note. Mean=3.21, SD=0.95.

A Spearman's rank-order coefficient (r_s =.055, N=325, p=.326) examined the relationship between prominence of English and smartphone usage (Table 16). Results of the survey supported the hypothesis. The analysis indicated that there is not a significant relationship at the $p < .05$ level between the prominence of English within a host culture and how frequently expatriate educators use their smartphone to maintain native culture communal ties. To further explore the hypothesis, a one-way ANOVA test analysis was performed. An analysis of variance showed the effect of prominence of English in a host culture on smartphone was not significant and supported the hypothesis [F (4, 320) = 0.74, p = .57].

The results indicate that 108 respondents (33%) live in a country where English is somewhat spoken, while 108 (33%) stated English is common in their host country. A frequency of 80 respondents (24%) stated spoken English is rare in their host culture and 26 participants (8%) live in a host culture where English is the native language. Only 5 respondents (2%) live in a host culture where English is never spoken (Table 16).

Table 16

Prominence of English and Frequency of Smartphone Usage per Week

	Never	1 time	2-4 times	5-9 times	10-20 times	20+ times	Total	Percent
Never	0	2	2	0	0	1	5	1.5
Rarely	7	11	15	14	16	16	79	24.4
Somewhat	6	11	28	16	24	22	107	32.9
Common	6	7	29	18	20	28	108	33.2
Native Language	0	6	5	6	4	5	26	8.0
Total	19	37	79	54	64	75	325	100
Percentage	5.7	11.2	24.2	16.4	19.5	23.0	100	

Note. r_s =.055, N=325, p=.326.

The first research question offered interesting insight into American expatriate educators' usage of smartphones for the maintenance of native culture communal ties. Respondents indicated their smartphone was beneficial for this function (M=3.29). This data did not support the first hypothesis that there was no pattern in the answer distribution. The second hypothesis sought to determine the influence of English as a native language within a host culture. The data supported the hypothesis that the amount of English spoken in a host culture did not have an impact on the expatriate educators' frequency of usage.

RQ2: How effective do American expatriate educators believe smartphone technologies are in helping them assimilate to their host culture?

The second research question concentrated on how well American expatriate educators felt their smartphone acted as a cultural assimilation tool. Respondents rated how well their smartphone facilitated cultural integration on a 4-point ordinal category (1=Not at all; 4=Extremely). The researcher aimed to uncover any potential relationship between the frequency of time spent interacting with host country nationals on their smartphone related to the

educator's sense of cultural assimilation. Living in a foreign country is viewed a high-pressure environment, and assimilation can help the adjustment to a new culture when expats learn a host country's cultural practices and develop interpersonal relationships with host country nationals (Pachler, et. al., 2010).

Third Hypothesis

H3: There is no significant pattern in the perception that smartphones are beneficial to assimilate to their host culture.

The third hypothesis investigated how beneficial American expatriates believe their smartphone is as a means of cultural assimilation. The researcher anticipated there would be no pattern in relation to smartphones as a facilitator to the assimilation process. Smartphones offer a variety of ways for people to ease the transition to the international work and life experience. In a country where English is not the native language, smartphones can help expatriates speak the native language, develop cultural context clues, and enrich cultural understanding (Nasser, 2012). Smartphones may influence the exploration of new and unknown places. Smartphone owners are more likely to venture to locations they would not have visited without the use of their mobile phone (Nasar, et. al., 2007) (Table 17). The results of this survey indicate that respondents felt their smartphone was only a slight help in the cultural assimilation process. A one-way Kolmogorov-Smirnov test sought to uncover a pattern in the responses concerning the effectiveness of a smartphone as a cultural assimilation device.

Table 17

Smartphone and Host Culture Assimilation

	Frequency	Percent
Not well at all	45	15
Slightly well	127	40
Moderately well	102	32
Extremely well	42	13
Total	316	100

Note. Median=2.0, k^s=-.724.

The K-S goodness-of-fit test rejected the hypothesis that scores were normally distributed (Figure 3). The responses were non-normally distributed (M=2.45, SD=0.89), with skewness of .123 (SE=.14) and kurtosis of -.724 (SE=.27). The median score of responses was 2.0. The test indicated there is a statistically significant difference between the hypothesis and the validated responses. The vast majority of respondents felt their smartphone was not an overly effective cultural assimilation instrument. The mean score of 2.45 indicated that participants felt their smartphone was only slightly effective.

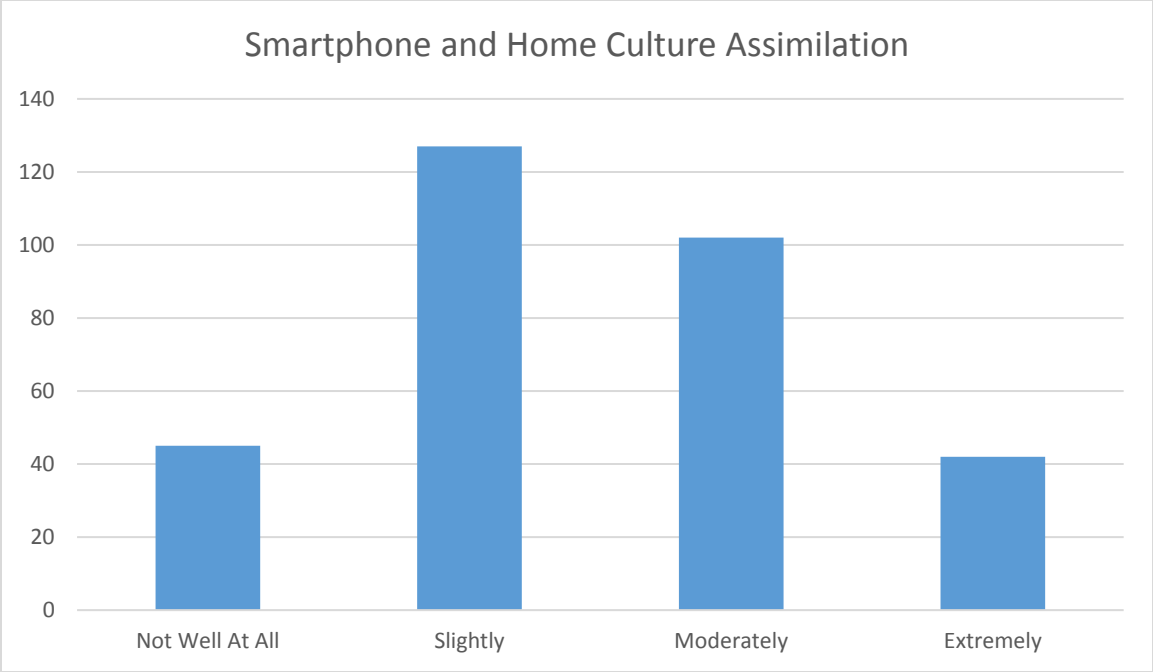


Figure 3. Smartphones and host culture assimilation response distribution.

Note. N=316, Median 2.00,, SD 0.89, k^s=-.724, p<.001.

The majority of respondents (55%) stated their smartphone either was not effective at all (N=45, 15%) or only slightly effective (N=127, 40%) in relation to cultural assimilation. A frequency of 102 respondents (32%) felt their smartphone was moderately effective. Only 42 respondents (13%) stated their smartphone was extremely effective in the cultural assimilation process. Together, these findings show American expatriate educators do not view their smartphone as an effective cultural assimilation tool. The mean of 2.45 is much lower than the mean for the smartphone as a tool to maintain native culture communal ties (M=3.29).

Fourth Hypothesis

H4: There is no significant relationship between American expatriate educators time spent using smartphone technologies and their sense of host culture assimilation.

The fourth hypothesis explored the relationship between smartphone usage frequency and sense of cultural assimilation. The researcher expected to find there would be no relationship

between American expatriate educators' sense of assimilation and use of their smartphone as an integration tool. One benefit of the smartphone is that it provides a platform for expatriates to connect with people from their host culture in an immediate and non-intimidating fashion though a variety of applications which may lead to increased integration and promote cultural specific context (Kavanaugh & Patterson, 2001; Scarpino & Alshif, 2013). Smartphones provide alternate opportunities for cultural assimilation such as maps, restaurant finders, newsgathering, and dating platforms, which can foster knowledge of a country's cultural practices and encourage people to seek out foods and events that are unfamiliar (Spiteri, 2013).

Participants were asked to identify how assimilated to their host culture they felt based upon a 4-point scale (1=Not assimilated at all; 4=Extremely assimilated). A frequency of 134 (42.4%) respondents indicated a slight sense of host culture assimilation, followed by 121 (38.3%) respondents who believed they are moderately assimilated. A frequency of 42 (13.3%) respondents expressed they were not culturally assimilated at all, while only 19 (6%) participants identified as extremely assimilated. A mean score of 2.37 indicated that respondents felt slightly assimilated (Table 18).

Table 18

Expatriate Educators Sense of Host Culture Assimilation

	Frequency	Percent
Not assimilated at all	42	13
Slightly assimilated	134	42
Moderately assimilated	122	38
Extremely assimilated	19	6
Total	317	100

Note. Mean=2.37, SD=0.79.

Hypothesis four was not supported. A Spearman's correlation coefficient was run to determine the relationship between the two variables. The analysis determined there was a moderate, positive monotonic correlation (r_S=.342, N=317, p<.001). In the field of communications, this correlation would qualify as a moderate, significant relationship (Alikilic & Atabek, 2012). The results indicate very strong evidence that the frequency of smartphone usage as a tool to assimilate to their host culture is related to respondents sense of cultural assimilation. The more adapted to their host culture an expatriate educator felt, the more likely they were to use their smartphone to assimilate. Conversely, those expatriate educators who did not feel assimilated to their host culture interacted with host country natives on a less frequent basis (Table 19).

Table 19

Cultural Assimilation and Frequency of Smartphone Usage Per Week

	Not assimilated at all	Slightly assimilated	Moderately assimilated	Extremely assimilated	Total	Percent
Never	5	17	3	1	26	8.2
1 time	15	31	11	1	58	18.4
2-4 times	15	44	29	5	93	29.4
5-9 times	5	17	37	4	63	19.9
10-20 times	1	11	25	4	41	13.0
20+ times	1	14	16	4	35	11.1
Total	42	134	121	19	316	100
Percent	13.3	42.4	38.3	6.0	100	100

Note. r_s =.342, N=317, p<.001.

Fifth Hypothesis

H5: There is no relationship between prominence of English spoken in a host country and expatriate educators usage of their smartphone to assimilate to their host culture.

The fifth hypothesis sought to uncover an association between the prominence of English and the frequency of smartphone usage as a cultural assimilation tool by American expatriate educators. Inadequate assimilation can lead to poor job performance, difficulties in acclimation to the non-work (social) environment, and early contract termination (Kraimer & Wayne, 2004; Haslberger, et. al., 2013). The researcher believed a pattern would emerge that revealed expatriate educators who live in a culture where English is not the native language would be more likely to utilize their smartphone to assimilate within their host culture. Prior scholarship has shown a smartphone may help people communicate with others in a new or different culture with language barriers in a non-intimidating environment and create a sense of belonging (Pachler, et. al., 2010).

A Spearman Rho correlation (r_s =.004, N=317, p=.597) analysis examined the two variables and did support the fifth hypothesis. There was no correlation between the prominence of English within a host culture and the frequency of usage by expatriate teachers at the $p<.05$ level. The most common response (n=32) was educators who stated English was "somewhat" spoken in their host culture and who reported using their smartphone two to four times per week to interact with host country nationals (Table 20).

The researcher's prediction did not align with the respondent's data. There are possible explanations for the results. Smartphones may help dismantle traditional communication barriers such as language acquisition and speaking of a country's native language. Users can employ language translation applications to facilitate discussion over social media smartphone

applications. This helps to remove the nervousness and embarrassment often associated with speaking a new language (Hendrickson, 2009). In addition, communicating in an electronic fashion is a lower stakes environment than face-to-face conversation.

Table 20

Prominence of English and Frequency of Smartphone Usage Per Week

	Never	Rarely	Somewhat	Common	Native Language	Total	Percent
Never	1	3	7	11	4	26	8.2
1 time	3	14	19	22	0	58	18.4
2-4 times	1	21	32	29	10	93	29.4
5-9 times	0	14	24	20	5	63	19.9
10-20 times	0	14	10	12	5	41	13.0
20+ times	0	10	12	12	1	35	11.1
Total	5	76	104	106	25	316	100
Percent	1.6	24.1	32.9	33.5	7.9	100	100

Note. $r_s = .004$, $N = 317$, $p = .597$.

The second research question focused on the perceived effectiveness of the smartphone as a host culture assimilation tool. The third hypothesis stated that there would be no pattern in the results. However, respondents believed their smartphone was slightly effective in this role, therefore rejecting the null hypothesis. The fourth hypothesis examined the perceived level of host culture assimilation and its effect on frequency of use. Contrary to the hypothesis predicted, there was a positive relationship that indicated expatriate educators who feel a higher sense of assimilation are more likely to utilize their smartphone for this purpose. The fifth hypothesis stated there was no relationship between prominence of English and frequency of use. The hypothesis was supported. Usage of English within a host culture had no impact on frequency of use for either the second or fifth hypotheses.

RQ3: To what degree do demographic factors effect American expatriate educators' use of smartphone technologies help to maintain native culture communal ties?

Having examined whether general factors influenced smartphone usage by American expatriate educators in general, the study sought to identify how specific demographic factors impacted the results. The third research question looked at the influence of demographic factors on smartphone usage to maintain native culture communal ties. The demographic factors analyzed were age, gender, and distance between the United States and the host country in air miles. The researcher sought to determine whether the patterns established within RQ1 would match the demographic factors in relation to the maintenance of native culture communal ties.

Sixth Hypothesis

H6: There is no significant difference between gender and the perception of effectiveness of smartphone usage to maintain native cultural communal ties.

The first demographic variable analyzed was the impact of gender. The sixth hypothesis sought to determine the relationship between gender and the perception of effectiveness of the smartphone to maintain native culture communal ties. The researcher believed gender would not have an impact on the perceived effectiveness of the smartphone as a tool to maintain native culture communal ties. However, previous research has indicated women are more likely to employ their smartphone for socialization through the use of video calling, social networking, and email than males (Jacobs & Vergeest, 2013) (Table 21).

Table 21

Smartphone and Native Culture Communal Ties by Gender

	Gender	**N**	**Percent**
Not well at all	Female	5	2.6
	Male	9	7
	Total	14	4.4
Slightly	Female	20	10.5
	Male	21	16.1
	Total	41	12.8
Moderately	Female	56	29.4
	Male	49	37.7
	Total	105	32.7
Extremely	Female	110	57.5
	Male	51	39.2
	Total	161	50.1
Total	Female	186 (M=3.51), SD=1.55)	
	Male	130 (M=3.09, SD=0.91)	
	Total	321	

Note: X^2=12.10, df=3, N=321, p <.01

A chi-square test of independence further inspected the relationship between the two variables. The relation between the variables was moderately significant, X^2=12.10, DF=3, N=321, p < 0.1. These results further validated that women are more likely to feel their smartphone is an effective device to maintain native culture communal ties than males.

Women had a higher agreement as 166 of 186 respondents (86.9%) stated their smartphone was extremely effective (N=110, 57.5%) or moderately effective (N=56, 29.4%). Although female respondents had a higher mean score (M=3.51), a standard deviation of 1.55 indicated their answers were more diverse than males. Males had a lower percent of agreement. Of 130 male respondents, 100 (76.9%) believed their smartphone was extremely effective

(N=51, 39.2%) or moderately effective (N=49, 37.7%). Males were nearly twice as likely to feel their smartphone was slightly effective or not effective at all. A frequency of 21 (16.1%) males stated their smartphone was slightly effective, while 9 (7%) did not believe their smartphone was effective at all. By comparison, 20 (10.5%) females felt their smartphone was slightly effective, while only 5 (2.6%) believed their smartphone was not effective at all. The mean score for males was 3.09 and a standard deviation of 0.91. This indicates that while the mean score for males was lower, their answers were more consistent than females.

Seventh Hypothesis

H7: There is no significant difference between age and how often American expatriate educators use smartphones to maintain native culture communal ties.

The second demographic variable examined was the effect of age. The researcher aimed to find a relationship between age and the frequency of smartphone usage as a tool to maintain native culture communal ties. It was expected there would be no difference in smartphone usage by age group. Previous research has shown age may be a key component in the maintenance of one's home culture. Expatriates who emigrate at an older age are more likely to have difficulty in the assimilation process and are more likely to uphold home culture relationships than seek out new ones within their host culture (Hechanova, et. al., 2003; Lineberry, 2012). However, an adverse relationship between age and smartphone usage could negate the use of a smartphone for this purpose. Previous studies have shown a negative correlation between age and frequency of smartphone use (Montag, et. al., 2015)

Table 22

Age and Frequency of Smartphone Usage Per Week

	Never	1 time	2-4 times	5-9 times	10-20 times	20+ times	Total	Percent
Under 25	0	0	2	1	3	7	13	4.0
26-35	2	9	20	15	23	22	91	28.0
36-45	4	6	21	18	21	23	93	28.6
46-55	3	12	15	13	10	12	65	20.0
56-65	8	9	19	4	7	7	54	16.6
66+	2	1	2	3	0	1	9	2.8
Total	19	37	79	54	64	72	325	100
Percentage	5.8	11.4	24.3	16.7	19.6	22.2	100	100

Note. r_s =-.266, N=325, p<.001.

Inferential statistical analysis did not support the hypothesis that age is not a factor in the usage of smartphones to help maintain native culture communal ties (Table 22). A Spearman's correlation coefficient assessed the relationship between age and frequency of smartphone usage. The analysis concluded there was a significant relationship amongst the variables. The data found a moderate negative correlation (r_s = -.266, p<.001) between age and the employment of a smartphone to maintain native culture communal ties. The results are consistent with previous research that showed a negative correlation between smartphone usage and age (Bian & Leung, 2014; Montag, et. al., 2015).

The highest mean score on usage of respondents was the under-25 age group (3.69), followed by 36-45 (3.56), 26-35 (3.37), 46-55 (3.23), 66+ (2.89) and 56-65 (2.70). The results indicate expatriate educators under the age of 46 were the most likely to use their smartphone, with a sharp drop-off in use after age 55. Although a small sample, the group in this study with the highest frequency of use was American expatriate educators under the age of 25. Of 13 total

respondents in this age range, 10 (77%) revealed they interacted with people back home either 10-20 times or over 20 times per day. The 26-35 age group had 45 respondents (49%), followed by 36-45 (N=44; 47%), then 46-55 (N=22; 34%), trailed by 56-65 (N=14; 26%), and finally 66+ (N=1; 11%). The data showed that as the age of the expatriate educator increased, they were less likely to use their smartphone to interact with people at home compared to their younger peers. Negative associations between and age and smartphone usage have been examined before. The amount of time spent daily on a smartphone has been shown to decrease as the age of the user increased (Montag, et. al., 2015).

With a frequency of three (33%), participants in the 66 and older age group were the most likely to either never use or use one time per day their smartphone to interact with people from the United States (Table 23). The next least likely age group was 56-65 with a frequency of 17 (31%), followed by 46-55 (N=15; 23%), then 26-35 (N=11; 12%), and lastly 36-45 (N=10; 11%), which all indicated they interacted with people from back home either never or one time per day. The under 25 year-old age group reported no responses in either category. The data showed that as the age of the expatriate educator increased, they were more likely to either never use or use their smartphone only once daily to interact with people at home, which was in agreement with previous research.

Eighth Hypothesis

H8: There is no significant relationship between distance from the United States and how frequently expatriate educators utilize their smartphone to maintain native culture communal ties.

The eighth hypothesis explored the relationship between distance from the United States by country and expatriate frequency of maintaining native culture communal ties. Participants identified how frequently they used their smartphone in a typical week to fulfill this role. A six-

point scale was used, with one being "never" and 6 being "more than 20 times" in a typical week. The researcher sought to determine whether the average mileage from the United States increased would increase the use of a smartphone to maintain native culture communal ties. Conversely, the researcher wanted to uncover whether expatriate educators working geographically closer to the United States (i.e. North America and South America), would utilize their smartphones less frequently to maintain native culture communal ties. The website airmilescalculator.com calculated air mileage between Chicago, Illinois (O'Hare International Airport) and the host country's capital city international airport (Table 23, Table 24).

Table 23

Largest Mean Distance and Native Culture Communal Ties (minimum 5 responses)

Country	**Respondents**	**Distance (miles)**	**Frequency Mean**
Indonesia	5	9,819	5.75
Singapore	5	9,363	4.2
Malaysia	6	9,298	5.33
Thailand	5	8,562	3.25
Kenya	8	8,030	3.0

Table 24

Smallest Mean Distance and Native Culture Communal Ties (minimum 5 responses)

Country/Territory	**Respondents**	**Distance (miles)**	**Frequency Mean**
Cayman Islands	5	1,612	4.20
Mexico	5	1,691	4.80
Venezuela	5	2,513	4.20
Colombia	5	2,715	3.80
Brazil	6	4,745	4.83

A Pearson correlation coefficient (r=-.023, N=319, p=.693) analyzed the variables revealed no correlation at the $p < .05$ level. The data did not reject the null hypothesis. The results of the test for correlation did support the hypothesis and were found to be statistically insignificant. This shows distance does not factor into the maintenance of native culture communal ties. A possible explanation for the validation of the hypothesis is that with the accessibility of the Internet throughout the world, it is easier than ever for people to communicate, regardless of geographic location. Communication via a smartphone is not as cost dependent as before when American expatriate educators needed to purchase calling cards or send items through a foreign country's parcel service. This instant contact allows people to have a sense of home with them wherever they may be located (Turkle, 2012).

Mean scores (Table 26) from each continent did offer insight. The questionnaire reflected that American expatriate educators who worked in international schools within North America (i.e. Cayman Islands, Dominican Republic, Mexico, Panama) were the most likely to maintain native culture communal ties with a mean score of 4.73 despite being located the closest to the United States with an average of 2,007 air miles (Table 25). The data showed those who worked in North American international schools utilized their smartphone approximately 9 times per day to interact with someone from home. Educators who worked in Africa (i.e. Ivory Coast, Egypt, Kenya, Morocco) (M=4.33) were the second most likely to use their smartphone to interact with people at home, followed by Asia (M=3.73), and Europe (M=3.68). South American (i.e. Brazil, Colombia, Paraguay, Venezuela) expatriate educators were the least likely to maintain native culture communal ties via their smartphone (M=3.32).

Table 25

Mean Distance by Continent and Native Culture Communal Ties

Location and Mean Distance	Number of Countries/Territories	Total number of respondents	Mean frequency times per week
North America (2,007 miles)	9	25	4.73
Africa (6,334 miles)	16	44	4.33
Asia (7,407 miles)	33	187	3.73
Europe (4,703 miles)	11	25	3.68
South America (3,918 miles)	9	38	3.32
Total	78	319	3.96

Note. r=-.023, N=319, p=.693.

The third research questions examined the impact of demographic factors on how American expatriate educators use their smartphone to maintain native culture communal ties. Hypothesis six explored the relationship between gender and perception of effectiveness. The hypothesis stated there would be no significant difference in the responses, however this was not supported. The results indicated females believe their smartphones to be more effective than males. The seventh hypothesis stated there would be no difference in age and frequency of smartphone usage as a cultural assimilation device. Data indicated age did have a negative correlation to smartphone use, and did not support the hypothesis. The eighth hypothesis stated there would be no significant difference between distance from home and frequency of usage. The hypothesis was supported as no relationship between the variables was discovered.

RQ4: To what degree do demographic factors affect American expatriate educator use of smartphone technologies help to assimilate to their host culture?

The fourth research question looked at the impact demographic factors had on American expatriate educators and the operation of their smartphone to assimilate to their host culture. Similar to RQ3, the demographic factors analyzed were age, gender, and distance between the United States and the host country in air miles. The researcher sought to determine whether the patterns established within RQ3 would match with the demographic factors in relation to the use of a smartphone to assimilate to a host culture.

Ninth Hypothesis

H9: There is no significant difference between gender and the perception of effectiveness of smartphone usage to assimilate to their host culture.

The first demographic factor analyzed was the impact of gender. Previous research has shown that females are more likely to communicate with others than males (Bian & Leung, 2014). In addition, female expatriates have shown to be more likely to develop relationships with people within their host culture. Male expatriates are less likely to interact with host country nationals than females and tend to surround themselves with fellow expatriates (Sinangil & Ones, 2003). The researcher did not expect to find similar results for each gender and their perception of the effectiveness of their smartphone to help the assimilation process.

Table 26

Smartphone as Tool to Assimilate to Host Culture by Gender

	Gender	**N**	**Percent**
Not well at all	Female	23	12.3%
	Male	22	17.1%
	Total	45	
Slightly	Female	78	41.9%
	Male	48	37.2%
	Total	126	
Moderately	Female	63	33.9%
	Male	39	30.2%
	Total	102	
Extremely	Female	22	11.9%
	Male	20	15.5%
	Total	42	
Total	Female	186 (M=2.45), SD=0.86)	
	Male	129 (M=2.45, SD=0.95)	
	Total	321	

Note. X^2=2.681, df=3, N=315, p<.44.

The data did support the ninth hypothesis. The data showed that both males and females had a very similar opinion of the effectiveness of their smartphone to help them assimilate to their host culture and confirmed the hypothesis (Table 26). Both genders reported little faith in the smartphone as a cultural assimilation tool with a mean score of 2.45 out of 4. Males (SD=0.95) did report a slightly higher standard deviation than females (SD=0.86) (Table 27). To ensure that gender had no effect on the variables, a chi-square test for independence validated the hypothesis. The relation between the variables was further corroborated as statistically insignificant (X^2=2.681, DF=3, N=315, p<.44).

A total of 70 (54.3%) of males and 101 (54.2%) females stated their smartphone either performed not well at all or only slightly well as a cultural assimilation device. Females (N=63, 33.9%) had a higher frequency of responses that identified the smartphone as moderately effective than males (n=39, 30.2%). However, males (n=20, 15.5%) were more likely to claim their smartphone was extremely effective as a cultural assimilation tool compared to females (n=22, 11.9%).

Tenth Hypothesis

H10: There is no significant difference between age and how often American expatriate educators use smartphones to assimilate to their host culture.

The second demographic factor analyzed was the effect of age. Participants identified how frequently they interacted with people from their host culture in a typical week on their smartphone. The researcher aimed to find a relationship between the age of American expatriate educators and the frequency of smartphone usage to assimilate to their host culture. Previous scholarship has indicated frequency of smartphone usage and age are associated. The amount of time spent on a smartphone has been shown to increase as the age of the user decreased (Montag, et. al., 2015). Previous research has shown age to play a large factor in how expatriates interact when in a different country. As age increases, people are less likely to be receptive of a foreign culture. As adults age, they are less likely to interact with people within their host culture and have an increased sense of isolation (Gonsalkorale, et. al., 2009). Younger expatriates may have an easier transition to a host culture. Previous research has shown expatriates who move to a new country at an earlier age are better-equipped to handle the assimilation process (Lineberry, 2012) (Table 27).

Table 27

Frequency of Smartphone Usage by Gender

	Never	1 time	2-4 times	5-9 times	10-20 times	20+ times	Total	Mean
Under 25	2	1	3	4	0	2	12	3.41
26-35	8	15	29	14	12	8	86	3.36
36-45	6	18	28	15	12	13	92	3.52
46-55	6	8	21	14	9	5	63	3.22
56-65	4	15	10	14	4	7	54	3.37
66+	0	1	2	2	4	0	9	4.0
Total	26	58	93	63	41	35	316	3.48
Percentage	8.2	18.4	29.4	19.9	13.0	11.1	100	

Note. r_s =.025, N=315, p=.663.

The results of this survey were not similar to prior scholarship in relation to age and smartphone usage and support the hypothesis. These findings indicate American expatriate educators are not restricted by age when they use their smartphone. A Spearman Rho correlation test found reported a significance level of .663, well above the critical value of 0.05. With a correlation of .033, the findings indicated there was an extremely weak correlation between age and the frequency in which expatriates operate their smartphone to assimilate to their host culture.

The highest mean score (M=4.0) belonged to the 66+ age group, though it was a small sample with only 9 responses, followed by 36-45 (M=3.52), under 25 (M=3.41), 56-65 (M=3.37), 26-35 (M=3.36), and 46-55 (M=3.22) (Table 28). The group with the lowest mean score (46-55 years of age) was not the oldest age group. Conversely, the 36-45 age range outscored the two younger age ranges. The typical frequency of smartphone utilization to assimilate to a host culture was approximately 7 times per week. The 66+ age group on average

used their smartphone approximately 10 times. The lowest average belonged to the 46-55 age group, who used their smartphone an average of two times per week.

The group most likely to use their smartphone at least two times per day was the 66+ age group with a frequency of 8 (89%). The next most likely group to use their smartphone two or more times per day was 46-55 (N=49, 78%), followed by under 25 (N=9, 75%), then 36-45 (N=68, 73.9%), trailed by 26-35 (N=63, 73.2%), and lastly the 56-65 age group (N=35, 65%).

With a frequency of 19 (35%), respondents in the 56-65 age group were the least likely to either never use or use their smartphone one time daily to interact with people from their host culture. The next least likely age group was under 25 with a frequency of 3 (33%), followed by 26-35 (N=23; 27%), followed by 36-45 (N=24; 26%), then 46-55 (N= 14; 22%), and finally 66+ (N=1; 11%). The data showed that as the age of the expatriate educator increased, they were more likely to either not use or use their smartphone only once daily to interact with people within their host culture.

Eleventh Hypothesis

H11: There is no significant relationship between distance from the United States and how frequently expatriate educators utilize their smartphone to assimilate to their host culture.

Hypothesis eleven sought to examine the relationship between distance from home and how often smartphones are used as a cultural assimilation tool. Smartphones can help to learn the local language, locate places on a map, and develop interpersonal relationships. The researcher anticipated distance from the United States, would not have an impact on smartphone usage as an assimilation device. Air mileage was calculated in the same manner as in hypothesis eight. The five countries with the largest and smallest mean distance from the United States are included with the mean score of their responses (Table 28, Table 29).

Table 28

Largest Mean Distance and Cultural Assimilation (minimum 5 responses)

Country	Respondents	Distance (miles)	Frequency Mean
Indonesia	5	9,819	4.0
Singapore	5	9,363	3.6
Malaysia	6	9,298	3.5
Thailand	5	8,562	2.25
Kenya	8	8,030	2.88

Table 29

Smallest Mean Distance and Cultural Assimilation (minimum 5 responses)

Country/Territory	Respondents	Distance (miles)	Frequency Mean
Cayman Islands	5	1,612	3.80
Mexico	5	1,691	4.20
Venezuela	5	2,513	3.80
Colombia	5	2,715	4.50
Brazil	6	4,745	5.50

The results of the Pearson's Correlation Coefficient inquiry did not support the eleventh hypothesis. A slight significant negative relationship was associated with distance from home ($r=-.117$, $n=291$, $p<.05$). The results of the correlation indicate that there is an adverse association between the two variables. As expatriate educators move further from the United States, they are less likely to assimilate to their host culture through the use of their smartphone.

A mean distance and mean frequency of respondents indicated a variation of responses (Table 30). The results were different from those predicted by the researcher. The mean score for all respondents was 3.38, or an average of three times per week. Overall, 23 respondents from eight countries located in North American participated in the survey. The highest mean

score (M=3.56) belonged to those employed at international schools in North America. The second highest mean score (M=3.55) was found in 38 respondents from nine South American countries. North America had the lowest mean distance at 2,007 miles, followed by South America (3,918 miles). South American was the only continent that had a higher mean score for the use of a smartphone as a cultural assimilation tool (M=3.55) than native culture communal ties (M=3.32).

One possible explanation could be, especially in relation to North America, is that the cultures may be somewhat similar and English is likely to be prominently spoken. These commonalities may help to ease the assimilation process through the removal of traditional barriers such as language and cultural expectations. American expatriate educators in North and South America utilized their smartphone four times in a typical week as a cultural assimilation tool.

With a mean score of 3.36, the third most likely group was international educators located in Asia. Asia had the most total countries represented (33) and the most respondents (187). Asia also had the highest average mean distance from home at 7,407 miles. European-based international educators reported a mean score of 3.27 from 25 respondents located in 11 countries. American expatriate educators who worked in African countries had the lowest mean frequency of uses per week. An aggregate of 44 respondents from 16 countries had a mean score of 3.14.

Table 30

Mean Distance by Continent and Cultural Assimilation

Location and Mean Distance	Number of Countries/Territories	Total number of respondents	Mean frequency times per week
North America (2,007.38 miles)	8	23	3.56
South America (3,918.89 miles)	9	38	3.55
Asia (7,407.28 miles)	33	187	3.36
Europe (4,703.82 miles)	11	25	3.27
Africa (6,334.06 miles)	16	44	3.14
Total	78	319	3.38

The null hypothesis was rejected after a Pearson r coefficient analysis ($r=-.117$, $n=291$, $p<.05$) revealed a weak relationship between continent and frequency of smartphone usage. The researcher thought a pattern may emerge in relation to continents with more developing countries, but this was not the case. The two continents with the highest mean score also had the lowest mean distance. These results were interesting in that they reflect smartphone usage as a cultural assimilation device is not effected by location alone.

In summary, the fourth research question produced interesting insight into the smartphone usage tendencies of American expatriates. The ninth hypothesis was supported when data concluded there was no relationship between gender and perception of effectiveness as a cultural assimilation tool. The tenth hypothesis stated there was no relationship between age and frequency of use. Statistical analysis indicated the hypothesis was supported, contrary to previous research. The final hypothesis investigated the relationship between distance from home and smartphone usage. The hypothesis was not supported when a slight significant negative relationship was found between the two variables.

Conclusion

The prevalence of smartphones in the American expatriate educator community is very high, with an ownership rate of 343 (96%) respondents. Overall, respondents felt smartphones are more beneficial to the maintenance of native culture communal ties than as a cultural assimilation device. Mean scores for both males and females were higher for native culture communal ties. Interestingly, distance from home had no impact on frequency of smartphone usage for either purpose. However, prominence of English within a host culture did have an impact. Those expatriates who live in a country where English is at least somewhat spoken were more likely to integrate with their host culture than those where English is rarely or never spoken. Although this study focused solely on expatriate educators, the concept of this particular type of smartphone usage may be applicable to the more than 8 million American expatriates worldwide. The study has demonstrated that the instant access and connectivity of the smartphone has allowed for expatriates to keep a sense of home, irrespective of geographic location.

The researcher compared various demographic variables to the independent variables (age, gender, and distance from home) (Table 31). The analysis of the data revealed significant points about how American expatriates use their smartphone and how a variety of variables may impact their usage. Using statistical and factorial analysis, the study determined that gender, sense of cultural assimilation, and age had an impact on expatriate educators' use of smartphones to maintain native culture communal ties and to assimilate to their host culture. Gender was found to be largest predictor of smartphone usage, particularly in relation to maintenance of native culture communal ties. The impact of gender supports previous findings by Jacobs and Vergeest (2013) and Bian and Leung (2014). Age had a slight negative correlation in relation to

the maintenance of native culture communal ties, which also supports previous scholarship (Lineberry, 2012; Montag, et. al., 2015).

Table 31

Summary of the Hypotheses

Hypotheses	Independent Variable 1	Independent Variable 2	Significant Difference
H1	Effectiveness		
H2	Frequency of Use	Prominence of English	No
H3	Effectiveness		
H4	Frequency of Use	Sense of Assimilation	Yes
H5	Frequency of Use	Prominence of English	No
H6	Effectiveness	Gender	Yes
H7	Frequency of Use	Age	Yes
H8	Frequency of Use	Distance from United States	No
H9	Effectiveness	Gender	No
H10	Frequency of Use	Age	No
H11	Frequency of Use	Distance from Home	No

The researcher will further explore the results presented in Table 31 throughout Chapter 5. In this chapter, the researcher provides analysis and conclusions of the study as well as discusses the significance of the relationship between the independent and dependent variables, which yielded interesting results.

CHAPTER 5

DISCUSSION & RECOMMENDATIONS

Introduction

The primary objective of this study was to examine smartphone usage by American expatriate educators to maintain native culture communal ties and to assimilate to their host culture. The researcher developed an interest in the research area during four-years spent as an international educator in South America. During this time, the investigator interacted with friends and family at home more frequently while overseas when compared to the time spent living in the United States. This was a result of a desire to share new experiences, but those back home had a piqued curiosity of the researcher's international experience and sought interaction at a more frequent level than before the researcher's relocation. As a smartphone owner during the expatriate experience, the researcher had the ability to interact with non-English speakers in the online environment, which aided cultural assimilation through the location of restaurants and the study of maps to plan road trips during his time in South America.

The purpose of the research presented in this document was twofold. First, it was designed to better understand how American expatriate educators use their smartphone to stay connected with those at home. Secondly, the study aimed to better comprehend the cultural assimilation process in an effort to promote teacher retention and ease the cultural assimilation process. The frequency of smartphone usage was investigated in relation to age, gender, distance from home while employed at an ISS- affiliated international school, prominence of English spoken in the host country, and the respondents' sense of assimilation.

The majority of the data collected from the questionnaire yielded expected results and largely confirmed the eleven hypotheses presented in Chapters One and Four. In general, both males and females indicated their smartphone was an effective tool for the maintenance of native

culture communal ties. Females remained more likely to use their smartphone to maintain native culture communal ties than males. Conversely, both genders revealed their smartphone was either only slightly or not helpful at all in the cultural assimilation process. The research did uncover a slight positive correlation between sense of assimilation and frequency of use as an integration device. Smartphone usage continued to be dependent upon the age and gender of the user. In line with previous research, there was a negative relationship between age and frequency of smartphone usage. As a smartphone users age increased, the frequency of use in a typical week decreased.

Methods

A quantitative approach was used for this research in the form of an online Qualtrics survey. Prior to the dissemination of the questionnaire, validity and reliability were established as explained in Chapters Three and Four. Following the establishment of validity and reliability, and subsequent revisions to the survey, the questionnaire was ready for distribution. International School Services (ISS) disseminated the survey for the researcher via email to each of their 650 affiliated school directors. Included in the email was a request to forward the message to all of their American educators along with a hyperlink to the informed consent. One week later, ISS sent a follow-up email as a reminder to participate in the survey. Volunteer responses yielded 369 participants, which resulted in 326 completed surveys from 78 countries, representing a dropout rate of 11%.

ISS was chosen due to its prominence in the staffing of educators and formulation of international schools throughout the world. The high rate of failure for international educators can have a negative impact on school culture and image, future candidate recruitment, and recruiting budgets. Understanding this research may provide organizations such as ISS and

international school employers insight into how smartphones may aid in the assimilation of faculty, thereby aiding faculty retention. Potential employers may be able to accelerate the assimilation process by connecting newly-hired employees with local smartphone applications to familiarize them with host country nationals, places of interest, and language acquisition. In addition, employers can utilize the survey results to encourage expat educators to maintain native culture communal ties to provide a support system in times of need.

Discussion

Smartphones and Native Cultural Communal Ties

The initial research question explored how effective American expatriate educators believed their smartphones to be in the maintenance of native culture communal ties. The first hypothesis was not supported and indicated a pattern in relation to perceived effectiveness. The findings suggest that smartphones are seen as a beneficial tool by expatriate educators (M=3.29). A one-sample Kolmogorov-Smirnov goodness-of-fit test uncovered a pattern in the responses with a skewness of -1.01 (SE=13) and kurtosis of .242 (SE=.27). The majority of respondents (N=267; 83%) indicated they believe smartphones to be either moderately or extremely effective in supporting native culture communal ties. A frequency of 41 (13%) of respondents stated their smartphone was not effective, while only 14 participants (4%) felt their smartphone was not effective at all for this purpose.

Previous studies have shown benefits of smartphone usage by expatriates. Smartphones are effective in helping to alleviate homesickness and offer a means to maintain a support system from friends and family back home that is not confined to geographical barriers (Hendrickson, 2009; Farh, et. al., 2010). The various communication functions of the smartphone such as email, audio/voice call, text messaging, and social media networks allow for expatriates to

maintain contact with friends and family at home as easily as if they were employed in the United States. The immediate access offered by a smartphone can impact an expatriate's adjustment and promote personal well-being (Haslberger, 2013). The ability to access a support network at home may be one of the largest appeals of the smartphone for expatriate educators. When a sense of loneliness or homesickness may develop, friends and family at home can provide emotional support. Though an over-reliance on people back home can lead to a possible sense of isolation from a host culture, it is important that expatriate educators feel as though contact with their support network can occur at any time regardless of geographic location.

The second hypothesis sought to reveal a relationship between prominence of English in an educator's host culture and frequency of smartphone use. A Spearman's rank order coefficient and one-way ANOVA explored any potential correlation. The statistical analysis discovered no statistically significant relationship between frequency of usage and prominence of English [F (4, 320) = 0.74, p = .57].

One possible explanation for the lack of a relationship between the variables is the immediate connectivity of smartphones. Internet-based communication has allowed expatriates to have a sense of 'home' with them at any time through a variety of smartphone applications (Turkle, 2012). The added stress of living in a host country where local citizens do not regularly speak English can be alleviated through contact with friends and family back home. It was surprising to the researcher that educators who reside in a host country where English is rarely spoken are no more likely to maintain native culture communal ties than peers in a country such as the United Kingdom or Jamaica. One of the most stressful aspects of living in a foreign culture is the language barrier, and speaking one's native tongue can offer a great sense of relief. Prior to the advent of mobile phones, a phone call was placed to a home phone at an arranged

time. However, the instant access of smartphones has created an environment where communication with friends and family at home is literally a touch away.

Smartphones and Cultural Assimilation

The second focal point of the study was to examine whether expatriate American educators believed their smartphone to be beneficial to the cultural assimilation process. A one-way Kolmogorov-Smirnov test determined respondents were more likely to believe their smartphone was either only slightly or not effective at all in the cultural assimilation process with a skewness of .123 (SE=.14) and kurtosis of -.724 (SE=.27). Respondents indicated their smartphone is not as beneficial for cultural assimilation (M=2.45) as it is for the maintenance of native culture communal ties (M=3.29). One reason for this disparity is it may be difficult for expatriate educators to learn of host-country or city specific smartphone applications that focus on social activities such as dining, movies, events, and shopping. It is also possible that expatriate educators do not use their smartphone for language acquisition because of the necessity to use translation apps when sending text or social media messages to host country nationals.

A higher level of cultural assimilation was linked to an increased frequency of smartphone use. A Spearman's correlation coefficient determined there was a moderate, positive monotonic correlation (r_S=.342, N=317, p<.001) between an expatriate educator's sense of host culture assimilation and frequency of use. Smartphones have been shown to be beneficial for interaction with host country nationals because they can eradicate language barriers in a low-stakes, low-risk environment while helping expatriates develop a sense of cultural context and values (Pachler, et. al., 2010; Nasser, 2012). A second Spearman's correlation coefficient uncovered a strong correlation (r_S=.493, N=316, p<.001) between respondents sense of cultural

assimilation and perceived effectiveness. These scores indicate that as the educator becomes more comfortable using his or her smartphone to assimilate, the frequency of use will increase. As expatriates develop an increased level of cultural assimilation, they may feel comfortable interacting with host country nationals and seek out events and places of interest through social media or travel mobile applications. In addition, through interaction with host nationals, expatriate educators can learn of smartphone applications related to the host city or country that can increase a sense of assimilation via socialization, event planning, and newsgathering.

Similar to results in relation to the maintenance of native culture communal ties, the findings showed no significance between prominence of English and frequency of smartphone usage at the $p<.05$ level. A factor that may have contributed to this result is that often American expatriate educators form small communities in their host city and country. Between interaction with English-speaking coworkers and friends and family, expatriate educators speak in English throughout the day in many cases.

Demographics and Native Culture Communal Ties

This study explored the effects of demographics on American expatriate educators' smartphone usage to maintain native culture communal ties. Age, gender, and distance from the United States were selected for analysis. A slight positive relationship was discovered between gender and frequency of usage through a Spearman Rho rank order correlation (r_s =.191,p=.001) and chi-square test of independence (X^2= 12.10, DF=3, N=321, p < 0.1). The results indicated women are more likely to perceive their smartphone as effective than male expatriate educators. Women reported a higher mean score (M=3.51; M=3.09), although a higher standard deviation (SD=1.55), SD=0.91) revealed their answers were more diverse than males. These findings align with previous research that has stated women are more likely than men to use their smartphone

to interact with other people. Women are more likely to socialize on their smartphone via video calling, texting, and social media than men (Jacobs & Vergeest, 2013).

The effect of age and smartphone usage was also examined. A Spearman's correlation coefficient test uncovered significant moderate negative correlation ($r_s = -.266$, $p<.001$) between age and frequency of smartphone use. The data suggested that as the age of the expatriate educator increased, his or her frequency of use decreased. This was an interesting result as older expatriates had been shown to be more likely to maintain native culture communal ties while living in a foreign country. There are possible explanations for the lower frequency rate. Older expatriate teachers may be more likely to communicate with people at home through other devices such as a tablet, laptop, or desktop computer. In addition, younger expatriate teachers have used the device for a larger percentage of their life and are seen as 'digital natives' who are more accustomed to communicating with people though text messaging, video calling, and social media applications.

A Pearson correlation coefficient revealed no relationship between distance from home and frequency of smartphone usage to maintain native culture communal ties at the $P<.05$ level. Although respondents were employed in 78 countries across five continents, no pattern emerged in relation to distance. The interconnectivity of smartphones have helped to shorten the distance from home in terms of ability to communicate. An expatriate educator can utilize social media applications such as Facebook or Twitter to stay abreast of events at home regardless of their location. As a result, educators can interact with friends and family as though they were employed by an American public school district. Due to the ease of contact with friends and family back home, location of employment did not impact the frequency of smartphone usage.

Demographics and Cultural Assimilation

The research set out to uncover any relationships between demographic characteristics and smartphone use as a cultural assimilation device. The demographic factors analyzed were age, gender, and distance from the United States. A Spearman correlation analysis revealed no statistically significant relationship (r_s =-.008, N=315, p<.01*)* between gender and perceived effectiveness. Both groups reported a lower mean score compared to native culture communal ties (M=2.45) which indicated expatriate found their smartphone slightly effective. The study did not find data to support previous research that has found female expatriates are more likely to develop relationships with host country nationals (Bian & Leung, 2014). The results were not able to validate previous research that found males are less likely to interact with host country nationals than females and are more likely to insulate themselves with fellow expats (Sinangil & Ones, 2003). Due to the unique climate of many international schools, it is not essential for foreign teachers to interact with host country nationals outside of the workplace. This may be a factor in why smartphones were viewed as only slightly effective in this role by both genders.

The second demographic factor was the impact of age. A Spearman rho correlation test found no significance between age and frequency of use. The group most likely group to utilize a smartphone was expatriates between the ages of 36 to 45, followed by those under the age of 25. People in the 36 to 45 age group were also most likely to use their smartphone 20 or more times in a week as an assimilation tool. This is significant because there was a moderate negative correlation associated with age in hypothesis seven. However, overwhelmingly expatriate educators under the age of 45 are much more likely to assimilate through a smartphone. The results align with previous research on age and expatriates. Older expatriates are less likely to interact with host nationals and more likely to maintain native culture communal ties

(Gonsalkorale, et. al., 2009). The opposite has been proven true for younger expatriates, who are more likely to better handle the assimilation process (Lineberry. 2012). These factors, along with a negative correlation between sense of cultural assimilation and frequency of smartphone use, would signal that younger expatriates do utilize their smartphone as a cultural assimilation tool for their benefit. This may be attributed to the fact that younger expatriate educators are more likely to encounter peers of their age that routinely communicate via a smartphone. A moderate negative correlation between age and marriage ($r=-.300$, $n=327$, $p<.001$) may have an impact as younger expatriate educators are less likely to be married. Being single may to promote a desire to assimilate to a host culture because there is no spouse at home to spend time with.

The last variable analyzed with frequency of use was distance from home. A Pearson's correlation coefficient discovered a weak negative relationship between the variables ($r=-.117$, $n=291$, $p<.05$). The data indicated that the further an expatriate educator was located from the United States, the less likely they were to assimilate via their smart phone. Expatriates who are located in countries nearer to the United States may find themselves in a somewhat similar culture, though the native language may differ. However, when employed in a more distant country such as in Asia or Africa, the cultures can be significantly different in terms of not only language, but also customs and religions. Respondents from Africa indicated the lowest levels of satisfaction in relation to access ($M=3.43$) and speed ($M=3.07$) of their internet connection. For comparison, North American-based expatriate educators reported higher scores in access ($M=4.0$) and speed ($M=3.76$). This may be a factor in the decreased use of the smartphone by the survey respondents to interact with host country nationals. Although the target population partook in this research, there were limitations to the study.

Limitations

The research examined the usage of smartphones by American expatriate educators as a tool to maintain native cultural communal ties and assimilate to their host culture. Although the respondent size is acceptable for the purpose of study, there were naturally limitations. The responding population was overwhelmingly Caucasian, as no other ethnic group totaled more than 5% of the total responses. Because of this limited variability, the data was not analyzed by ethnicity as may be typical with other questionnaires. The majority of respondents (N=187; 58%) hailed from Asia, though this was not unexpected. Respondents in Asia represented 33 countries, more than double the next closest continent in terms of countries. Africa had 44 (14%) participants from 16 countries, followed by respondents from 9 South American nations (N=38; 12%), 11 European countries (N=25, 8%), and finally North America with 8 countries or territories (N=23, 7%). Future research can sample continent specific educational associations (i.e. Association of South American Schools, Association of International Schools in Africa) in an effort to elicit a more diverse population.

A second limitation of the research was the population itself. Only American K-12 educators at ISS-affiliated international schools were studied. This excluded additional expatriate American educators such as those employed in higher education, non-ISS affiliated K-12 schools (i.e. Department of Defense Schools), and teachers of English as a Second Language (ESL). Although many ISS affiliated schools employ non-American foreign-born educators, that category of individuals was omitted from the research. This could also be an area of potential research in the future.

Other potential limitations include access to smartphone and Internet technologies. Though the majority (N=343; 96%) of respondents indicated they own a smartphone, it is not the

entire population. Also, many people indicated they use other devices such as laptops and tablets to maintain native culture communal ties and assimilate to their host culture. Lastly, the quality of Internet access and speed could be considered a limitation of the study. Those educators who live in a country or city with poor Internet access or speed may not be able to communicate as often, which could lower their motivation to use a smartphone. This is especially true in developing nations that have yet to establish a reliable Internet infrastructure.

Recommendations for Future Research

For future research regarding this topic, a qualitative approach would be appealing. Although the quantitative data is interesting and provides a better understanding of the relationship between smartphones and American expatriate educators, there is no data represented in the form qualitative responses from the respondents. Prospective research could focus on participant interviews with expatriate educators to improve comprehension of exactly the manner in which owners utilize their smartphones for the two roles discussed in this research. There is potential to discover discrepancies between gender, age, marital status, and number of children in terms of motivations and gratifications of smartphone usage while living and working in a foreign country.

A second area of potential research is to determine how expatriate educators utilize their smartphone to create a self-identity to friends and family back home and to host country nationals. A questionnaire to analyze social media behavior such as the posting of comments, photographs, music, hyperlinks, and videos could be beneficial to understand how expatriate educators represent their host and home cultures during their time abroad. There has been research in this area concentrated on non-American international students at campuses in the United States, but none in regards to expatriates who live and work in a foreign country. This

could especially be interesting when looking at how educators who are employed in a developing nation portray their environment to those back home through social media postings.

An additional area of inquiry is the general American expatriate population and international students who are studying at the university level in the United States. There has been very little research on American expatriates in terms of their use of technologies in relation to the assimilation process. With over 8 million non-military Americans residing in a foreign country, it is an area ripe for future study. In addition, the growth of international students on American college campuses deserves future study in respect to how they maintain contact with family and friends in their native country while integrating into American culture. While there has been research in this area focused on South Korean international students, the literature has a need for a more in-depth analysis of how foreign-born higher education students utilize their smartphone to avoid homesickness and learn American cultural contextual clues.

Based upon feedback from participants, other mobile technologies could be analyzed in the future such as laptop computers and tablets. Both technologies offer instant Internet access, a larger screen, and a more convenient typing mechanism. However, they do not offer the same advantages in terms of mobility or size. Though the smartphone is useful, the convenience of a laptop or tablet could have an impact on the way expatriates utilize the technology to interact with people in the United States and within their host culture.

The final area of potential future research worth consideration is non-American educators who work in higher education at campuses throughout the United States. The number of international scholars at universities and colleges has risen dramatically. Currently, an all-time high of 115,000 foreign-born researchers, instructors, professors, and administrators are employed at American universities, which is an increase from 86,000 in 2001 (Foderaro, 2011).

These expatriates can offer insight into how they utilize their smartphone to maintain native culture or communal ties in their home country as well assimilation to American culture.

Conclusion

Beyond the discussion of the stated research questions and hypotheses, the survey yielded surprising insight into how marital status may affect smartphone usage. Married respondents indicated they felt their smartphone was effective at the maintenance of native culture communal ties more than non-married educators. A Spearman's rho correlation analysis discovered a slight positive relationship (r_S=.134, N=321, p<.02). Marital status did not have a statistically significant impact on smartphone usage in relation to host culture assimilation. With such a large percentage of married expatriate educators in the study, this is an area that may benefit from future research.

A second area of surprise in the study was the relationship found between the perceived effectiveness of the smartphone to maintain native culture communal ties and frequency of use. A Spearman's rho analysis discovered a statistically strong relationship between the two variables (r_S=.526, N=322, p<.001). As the expatriates' perceived level of effectiveness increased, so did their frequency of use. This data indicated that respondents actively seek to utilize various smartphone applications to maintain native culture communal ties in relation to perceived benefits.

The research questions of this quantitative research study focused on American expatriate educators' usage of smartphones to maintain native culture communal ties and assimilate to their host culture. Various factors such as age, gender, sense of cultural assimilation, and distance from the United States were factored into the data analysis. Significant findings were found in relation to age, gender, and sense of cultural assimilation.

The survey revealed that smartphones are perceived to be an effective tool to stay in contact with friends and family at home. This was especially true of females, as the majority (N=110, 58%) of respondents indicated their smartphone was extremely effective in this role. While males (N=51, 39%) did not indicate the same high level of optimism, they believed it was a moderately effective device. The negative impact of age on smartphone usage was in line with previous research and indicated younger expatriates are more likely to utilize their smartphone when interacting with people from home.

Results from the survey in relation to the smartphone as a cultural assimilation tool were mixed. Both males and females regarded their smartphone as only a moderately effective tool for cultural assimilation (M=2.45). Age was not a significant factor in frequency of usage. Expatriates below the age of 46, in particular those under 25, are most likely to utilize their smartphone as a cultural assimilation device. It was revealed distance of a host culture from the United States may have a slight negative correlation with smartphone usage. Those expatriates located in Asia and Africa were more likely to assimilate than their peers in North or South America.

The last significant finding was the relationship between an educator's sense of host culture assimilation and frequency of use in relation to cultural assimilation. The findings indicate those educators who felt higher levels of assimilation were more likely to use their smartphone in this manner. These findings could help to eliminate potential barriers to social integration and promote greater understanding of a host country's culture, values, and societal norms.

This study does not claim to be a complete examination of the impact of mobile technologies on expatriate educators or the general expatriate population. Rather, this is a step

toward a better understanding of how expatriate educators utilize new technologies to maintain native culture communal ties and assimilate to their host culture. With 8 million non-military American expats overseas, it is important to improve comprehension of the assimilation process to promote job retention, lower recruitment costs, and attract highly qualified job candidates across all industries. When the findings and potential related research topics are considered, this remains an area of study that is worthy of future exploration.

References

Allied Business Intelligence Research. (2013). Smartphone technologies and markets. [Data file]. Retrieved from https://www.abiresearch.com/research/product/1004938-smartphone-technologies-and-markets/

About AARO. (2015). Retrieved from https://aaro.org/who-we-are/8m-americans-abroad

Albarran, A. B., & Hutton, B. (2009). Young Latinos use of mobile phones: A cross-cultural study. *Revista de Comunicacion*, *8*, 95-108.

Association of Community Organizations for Reform Now [ACORN] (2004). Where Have All the Teachers Gone? The Costs of Teacher Turnover in ACORN Neighborhood Schools in Chicago. Retrieved from www.acorn.org/index.php?id=315

Alexander, A. C., Kim, D. Y., & Groves, J. (2012). Individual and organizational characteristics influencing event planners perceptions of information content and channel choice. *Journal of Convention & Event Tourism*, *13*(1), 16–38.

Alikilic, O., & Atabek, U. (2012). Social media adoption among Turkish public relations professionals: A survey of practitioners. *Public Relations Review*, *38*(1), 56-63.

Ang, S., Van Dyne, L., & Koh, C. (2006). Personality correlates of the four-factor model of cultural intelligence. *Group & Organization Management*, *31*(1), 100-123.

Arrington, M. (2008, July 10). iPhone app store has launched (Updated). Retrieved from http://techcrunch.com/2008/07/10/app-store-launches-upgrade-itunes-now/

Ball-Rokeach, S. J., & DeFleur, M.L. (1976). A dependency model of mass media effects. *Communication Research, 3*, 3-21.

Baron, N. S. (2010). The dark side of mobile phones. Washington, D.C: Department of Language and Foreign Studies, American University.

Baran, S. J., & Davis, D. K. (2011). Mass communication theory: Foundations, ferment, and future. Belmont, CA: Wadsworth.

Berger, A. A. (2013). *Media and communication research methods: An introduction to qualitative and quantitative approaches*. Location: Sage.

Bergström, A., & Wadbring, I. (2012). Strong support for news media: Attitudes towards news on old and new platforms. *Media International Australia, Incorporating Culture & Policy,* (144), 118-126.

Bian, M., & Leung, L. (2014). Smartphone addiction: Linking loneliness, shyness, symptoms and patterns of se to Social Capital. *Media Asia*, *41*(2), 159-176.

Boswell, W. R., Roehling, M. V., LePine, M. A., & Moynihan, L. M. (2003). Individual job choice decisions and the impact of job attributes and recruitment practices: A longitudinal field study. *Human Resource Management*, *42*(1), 23-37.

Bradshaw, T. (2012, December 27). Android puts pressure on Apple. *Financial Times.* Retrieved from http://www.ft.com/cms/s/0/95338878-4daa-11e2-a0fc-00144feab49a.html#axzz2JC1JdIQm

Brownell, G. (2013, April 28). Teachers Vie for Overseas Postings. *The New York Times.* Retrieved from http://www.nytimes.com/2013/04/29/world/europe/teachers-compete-for-overseas-jobs.html?ref=internationaleducation&_r=1

Bruno, D. (2015, March 25). Want to teach abroad? Expat educator opportunities abound. *Wall Street Journal.* Retrieved from: http://blogs.wsj.com/expat/2015/03/25/want-to-teach-abroad-opportunities-abound/

By the Numbers. (2015). U.S. Department of State. Retrieved from http://travel.state.gov/content/dam/travel/CA%20by%20the%20Numbers-%20May%202015.pdf

Caligiuri, P. M. (2000). The big five personality characteristics as predictors of expatriate's desire to terminate the assignment and supervisor-rated performance. *Personnel Psychology*, *53*(1), 67.

Charles, A. (2012). The history of the smartphone: Timeline. *The Guardian.* Retrieved from http://www.theguardian.com/technology/2012/jan/24/smartphones-timeline

Cheng, Y., Liang, J., & Leung, L. (2014). Social network service use on mobile devices: An examination of gratifications, civic attitudes and civic engagement in China. *New Media & Society*, doi: 1461444814521362.

Clancy, R. (2014). Expats boost the use of new tech banking. Retrieved from: http://www.expatforum.com/banking/expats-boost-the-use-of-new-tech-banking.html

Chen, Y. F., & Katz, J. E. (2009). Extending family to school life: College students' use of the mobile phone. *International Journal of Human-Computer Studies*, *67*(2), 179-191.

Cohen, E. (1977). Expatriate communities. *Current Sociology*, 24(3), 5– 90.

Costanzo, J., & von Koppenfels, A. (2013). Counting the uncountable: Overseas Americans. Migration Policy Institute. Retrieved from http://www.migrationpolicy.org/article/counting-uncountable-overseas-americans

Cox, D. S. (2012). *A global study of international teacher recruitment.* (Doctoral Dissertation). Retrieved from Proquest. LLC. Accession Number ED548122.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.

Croucher, S. M. (2015). *Understanding Communication Theory: A Beginner's Guide*. Routledge.

Dal Porto, C. (2015, April 15). Apple's lead over Google in app store earning increases despite Google's massive lead in total downloads. *Android Headlines.* Retrieved from http://www.androidheadlines.com/2015/04/apples-lead-google-app-store-earnings-increases-despite-googles-massive-lead-total-downloads.html

Desroches, S. M. (2013). *Exploring Teacher Turnover in American-Accredited Schools in South America* (Doctoral Dissertation). Retrieved from PsycINFO. Accession Number 2014-99090-239.

Dowling, P., Festing, M., & Engle, A. D. (2008). *International human resource management: Managing people in a multinational context*. Cengage Learning.

Downes, M., & Thomas, A. S. (1999). Managing overseas assignments to build organizational knowledge. *People and Strategy*, *22* (4), 33.

Evans, E. H. (2012). *Expatriate success: cultural intelligence and personality as predictors for cross-cultural adjustment* (Masters Thesis). Retrieved from http://scholar.utc.edu/theses/19 .

Farh, C. I., Bartol, K. M., Shapiro, D. L., & Shin, J. (2010). Networking abroad: A process model of how expatriates form support ties to facilitate adjustment. *Academy of Management Review*, *35*(3), 434-454.

Feaster, J., Dimmick, J., & Ramirez, A. (2008). Uses and gratifications and competitive superiority: Interpersonal communication goals as gratifications sought leading to use. *Conference Publications--National Communication Association* (p. 1).

Flamholtz, E. G. (2012). *Human resource accounting: Advances in concepts, methods and applications*. Springer Science & Business Media.

Froese, F. J., & Peltokorpi, V. (2013). Organizational expatriates and self-initiated expatriates: Differences in cross-cultural adjustment and job satisfaction. *The International Journal of Human Resource Management*, *24*(10), 1953-1967.

Foderaro, L. (2011, March 9). More Foreign-Born Scholars Lead Universities. *The New York Times.* Retrieved from: http://www.nytimes.com/2011/03/10/education/10presidents.html?_r=0

Fowler, F. J. (2013). *Survey research methods*. Sage publications.

Gerlich, R. N., Drumheller, K., & Babb, J. (2015). App consumption: An exploratory analysis of the Uses & Gratifications of mobile apps. *Academy of Marketing Studies Journal*, *19*(1), 69.

Gillies, W. D. (2001). American international schools: Poised for the twenty-first century. *Education*, *122*(2), 395.

Goertz, G., & Mahoney, J. (2012). *A tale of two cultures: Qualitative and quantitative research in the social sciences*. Princeton University Press.

Goggin, G. (2012). *Cell phone culture: Mobile technology in everyday life*. Routledge.

Gonsalkorale, K., Sherman, J. W., & Klauer, K. C. (2009). Aging and prejudice: Diminished regulation of automatic race bias among older adults. *Journal of Experimental Social Psychology*, *45*(2), 410-414.

Graham, M., Milanowski, A., & Miller, J. (2012). Measuring and Promoting Inter-Rater Agreement of Teacher and Principal Performance Ratings. *Center for Education Reform*. Retrieved from ERIC. Accession Number ED532068.

Grellhesl, M., & Punyanunt-Carter, N. M. (2012). Using the uses and gratifications theory to understand gratifications sought through text messaging practices of male and female undergraduate students. *Computers in Human Behavior*, *28*(6), 2175-218

Harris, L. (2014). The history of the mobile phone. *The Washington Post.* Retrieved from https://www.washingtonpost.com/news/the-switch/wp/2014/09/09/the-history-of-the-mobile-phone/

Hanson, R. E. (2008). *Mass communication: Living in a media world*. 2nd ed. Washington, DC: CQ Press.

Hardman, J. (2001). Improving recruitment and retention of quality overseas teachers. In S. Blandford, & M. Shaw (Eds.), Managing International Schools (pp. 123-135). New York: Routledge.

Haslberger, A., Brewster, C., & Hippler, T. (2013). The dimensions of expatriate adjustment. *Human Resource Management*, *52*(3), 333-351.

Hayden, M. (2006). Introduction to international education: International schools and their communities. London: Sage Publications.

Hechanova, R., Beehr, T. A., & Christiansen, N. D. (2003). Antecedents and consequences of employees' adjustment to overseas assignment: a meta analytic review. *Applied Psychology*, *52*(2), 213-236.

Hendrickson, B., & Rosen, D. (2009). Intercultural networking: An analysis of international students' friendship networks and satisfaction. In *annual conference of the international communication conference*.

Hess, M., & Linderman, P. (2011). *The Expert Expat: your guide to successful relocation abroad*. Nicholas Brealey Publishing.

Huang, T. J., Chi, S. C., & Lawler, J. J. (2005). The relationship between expatriates' personality traits and their adjustment to international assignments. *The International Journal of Human Resource Management*, *16* (9), 1656-1670.

Ingersoll, R. M. (2001c). Teacher turnover, teacher shortages, and the organization of schools (Report). Seattle, WA: Center for the Study of Teaching and Policy.

Jackob, N. G. E. (2010). No alternatives? The relationship between perceived media dependency, use of alternative information sources, and general trust in mass media. *International Journal of Communication*, *4*, 18.

Joslin, P. (2002). Teacher relocation reflections in the context of International Schools. *Journal of Research in International Education*, *1*(1), 33-62.

Katz, E., & Blumler, J. G. (1974). *The uses of mass communications: current perspectives on gratifications research*. Sage Publications.

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public opinion quarterly*, 509-523.

Kraimer, M. L., & Wayne, S. J. (2004). An examination of perceived organizational support as a multidimensional construct in the context of an expatriate assignment. *Journal of Management*, *30*(2), 209-237.

Kumar, N., Che Rose, R., & Sri Ramalu, S. (2008). The effects of personality and cultural intelligence on international assignment effectiveness: a review. *Journal of Social Sciences*, *4*(4), 320-328.

Lauder, H., Brown, P., Dillabough, J. & Halsey, A. (2007). Introduction: The prospects for Education: Individualization, Globalization, and Social Change. In H. Lauder, P. Brown, J. Dillbough & A. Halsey (eds). Education, Globalization & Social Change, 1-70, Oxford, New York.

Lee, S. S., & Lee, C. H. (2014, April). An exploratory study of convention specific social media usage by attendees: Motivations and effect of generations on choice of convention information source and intention to use mobile application. *Journal of Convention & Event Tourism* (Vol. 15, No. 2, pp. 135-149). Routledge.

Lehto, C., Kim, D., & Morrison, A. (2006). The effect of prior destination experience on online information search behavior. *Tourism and Hospitality Research*, 6(2), 160–178Leung, L.;

Wei, R. (2000). "More than just talk on the move: A use-and-gratification study of the cellular phone". *Journalism & Mass Communication Quarterly* **77** (2): 308–320.

Lineberry, M. (2012). Expatriates' acculturation strategies: Going beyond “how adjusted are you?" to" how do you adjust?”

Ling, R. (2012). *Taken for grantedness: The embedding of mobile communication into society*.

MIT Press.Lowrey, W. (2004). Media dependency during a large-scale social disruption: The case of September 11. *Mass Communication & Society*, *7*(3), 339-357.

Ognyanova, K., & Ball-Rokeach, S. J. (2015). Political efficacy on the Internet: A Media System Dependency Approach. *Communication and Information Technologies Annual (Studies in Media and Communications, Volume 9) Emerald Group Publishing Limited*, *9*, 3-27.

Marguerite, G. L., Dean, T. S., & Katherine, H. V. (2010). Methods in educational research: from theory to practice.

Matei, S., & Rokeach, S. (2003). The Internet in the communication infrastructure of urban residential communities: Macro or Mesolinkage? .*Journal of Communication*, *53*(4), 642-657.

Mancuso, S. V. (2010). *An analysis of factors associated with teacher turnover in American overseas schools*. Lehigh University.

McQuail, D. (2010). *McQuail's mass communication theory*. Sage publications.

Mengwei, B., & Leung, L. (2014). Smartphone addiction: Linking loneliness, shyness, symptoms and patterns of use to Social Capital. *Media Asia (Asian Media Information & Communication Centre)*, *41*(2), 159-176.

Moreau, K. (2004). Moving beyond the suitcase curriculum. *The International Educator*, 19, 9.

Li, D. (2005). *Why do you blog: A uses-and-gratifications inquiry into bloggers' motivations* (Vol. 17). Marquette University.

Li, N. S. (2013). *Gratifications obtained from television shows on Internet TV and conventional TV* (Doctoral dissertation, Iowa State University).

Mitroff, S. (2012, Dec. 18). Android is bigger, but here's why Apple is still the undisputed app cash king. Wired.com. Retrieved January 27, 2013 from: http://www.wired.com/business/2012/12/ios-vs-android/

Montag, C., Błaszkiewicz, K., Sariyska, R., Lachmann, B., Andone, I., Trendafilov, B., & Markowetz, A. (2015). Smartphone usage in the 21st century: who is active on WhatsApp?. *BMC research notes*, *8*(1), 331.

Nasar, J., Hecht, P., & Wener, R. (2007). 'Call if you have trouble': Mobile phones and safety among College Students. *International Journal of Urban and Regional Research*, *31*(4), 863-873.

Naseer, M. (2012). Digital omnivores, social Media and Social Capital: Expatriates interactions using smartphones in Stockholm.

Novak, K. B., & Buddenbaum, J. M. (2001). *Applied communication research*. Iowa State University Press.

Nurullah, A. S. (2009). The cell phone as an agent of social change. *Rocky Mountain Communication Review*, 6(1), 19-25.

Odland, G., & Ruzicka, M. (2009). An investigation into teacher turnover in international schools. *Journal of Research in International Education*, *8*(1), 5-29.

Oksman, V. (2010). The mobile phone: A medium in itself. Retrieved from VTT Technical Research.

Pachler, N., Cook, J., & Bachmair, B. (2010). Appropriation of mobile cultural resources for learning.

Park, K. G., Han, S., & Kaid, L. L. (2012). Does social networking service usage mediate the association between smartphone usage and social capital? *New Media & Society*, 1461444812465927.

Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behavior*, *12*(6), 729-733.

Patterson, J. M. (2002). Integrating family resilience and family stress theory. *Journal of Marriage and Family*, *64*(2), 349-360.

PC Magazine (2011), "Definition of smartphone." Retrieved from www.pcmag.com

Richardson, W., von Kirchenheim, C., & Richardson, C. (2006). Teachers and Their International Relocation: The Effect of Self-Esteem and Pay Satisfaction on Adjustment and Outcome Variables. *International Education Journal*, *7*(7), 883-894.

Rubin, A. M. (2002). The Uses-and-Gratifications perspective of media effects. In J.Bryant and D. Zillmann (Eds.), Media effects. *Advances in theory and research* (pp. 525-548). Hillsdale, NJ: Lawrence Erlbaum.

Rubin, A. M., & Windahl, S. (1986). The uses and dependency model of mass communication. *Critical Studies in Media Communication*, *3*(2), 184-199.

Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behavior*, *29*(6), 2632-2639.

Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: implications for theory and research. *American Psychologist*, *65*(4), 237.

Shaffer, M. A., & Harrison, D. A. (1998). Expatriates' psychological withdrawal from international assignments: work, nonwork, and family influences. *Personnel Psychology*, *51*(1), 87-118.

Sherry, M., Thomas, P., & Chui, W. H. (2010). International students: A vulnerable student population. *Higher Education*, 60(1), 33-46.

Sims, G. (2015, April 20). Google Play Store vs the Apple App Store: by the Numbers (2015). *Android Authority*. Retrieved from http://www.androidauthority.com/google-playstore-vs-the-apple-app-store-601836/

Sinangil, H. K., & Ones, D. S. (2003). Gender differences in expatriate job performance. *Applied Psychology*, *52*(3), 461-475.

Smith, A. (2015, April 1). U.S. Smartphone Usage in 2015. *Pew Research Center*. Retrieved from http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/

Spiteri, C. (2013). Cultural Identity construction through Smartphone Use.

Sullivan, A. (2009, September 22). The New American Diaspora. *The Atlantic*. Retrieved from http://www.theatlantic.com/daily-dish/archive/2009/09/the-new-american-diaspora/196238/

Swider, M. (2015). 10 Best Smartphones in the United States. *Tech Radar*.

Takeuchi, R., & Chen, J. (2013). The impact of international experiences for expatriates' cross-cultural adjustment: A theoretical review and a critique. *Organizational Psychology Review*, 2041386613492167.

Thompson, N. (2012). Why do we have expat teachers? The effect of expatriate teachers on school culture. *UCCI Conference* presentation. March 14, 2012.

Truss, M. (2015). Number of Mobile Phone Users Worldwide from 2013 to 2019. *Statista*. Retrieved from http://www.statista.com/statistics/274774/forecast-of-mobile-phone-users-worldwide/

Turkle, S. (2012). *Alone together: Why we expect more from technology and less from each other*. Basic books.

Valentine, A. (2013). Uses and gratifications of Facebook members 35 years and older. *The Social Media Industries*, 166.

Von Kirchenheim, C., & Richardson, W. (2005). Teachers and Their International Relocation: The Effect of Self-Efficacy and Flexibility on Adjustment and Outcome Variables. *International Education Journal*, *6*(3), 407-416.

Ward, C., Leong, C. H., & Low, M. (2004). Personality and sojourner adjustment an exploration of the big five and the cultural fit proposition. *Journal of Cross-Cultural Psychology, 35*(2), 137-151.

Wei, R., & Lo, V. H. (2006). Staying connected while on the move: Cell phone use and social connectedness. New Media & Society, 8(1), 53-72. doi:10.1177/1461444806059870

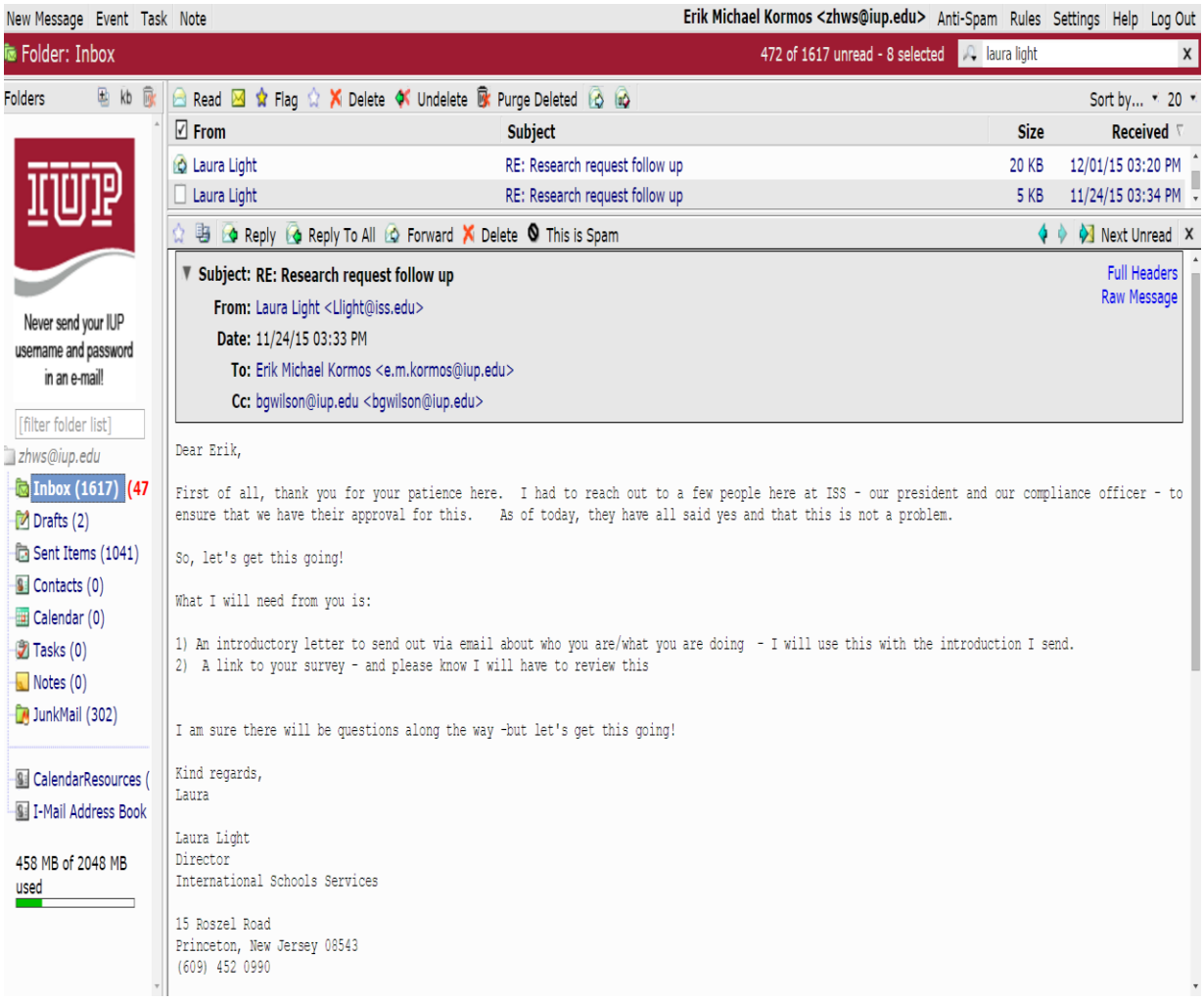
West, R. L., & Turner, L. H. (2006). *Introducing communication theory: Analysis and application*. McGraw-Hill Humanities/Social Sciences/Languages.

Woodward, B., & Alam, N. (2010, June). The international schools market: Growing, changing, evolving. Presented at the Commission on American and International Schools Abroad Training Workshop (CAISA). Endicott College, Beverly, MA.

Yaun, E. (2011). News consumption across multiple media platforms. *Information, Communication and Society.* Academy of Marketing Studies, 14(7), 998-1016. doi: 10.1080/1369118x.2010.549235

Appendix A

International School Services Research Approval



Appendix B

Language for Email to ISS School Directors

Dear International School Director,

I am a teaching assistant and doctoral candidate at Indiana University of Pennsylvania. My current research is focused on how American expatriate educators use smartphones to maintain native culture communal ties at home and assimilate into their host culture. As such, I am hoping to briefly survey your American faculty and administration. My data collection will consist of a brief survey included in this email as a hyperlink. All responses will remain confidential. Included in the hyperlink are the informed consent for participants. The survey and its content have been approved by the Institutional Review Board at IUP.

My request for you today is that you please forward this email to your American faculty and administration for their participation in the survey. There are two ultimate goals of this research. The first is to help expatriate teachers assimilate to their host culture. The second area is to help promote teacher retention at ISS affiliated schools. You will receive a follow-up email in 7 days that will act as reminder for completion of the survey. Please forward the follow-up email to your American employees as well.

If you have any questions, please let me know. Your help is greatly appreciated!

Thank you very much for your assistance!

Follow this hyperlink to the Survey:

https://iup.co1.qualtrics.com/SE/?SID=SV_8w4ISvpEJqIuytn

Erik Kormos

Appendix C

Informed Consent

Project Title **The Usage of Smartphone Technologies by American Expatriate Educators as a Communication and Cultural Assimilation Tool**

Researcher 1: Erik M. Kormos, **Affiliation:** Indiana University of Pennsylvania
Campus phone: 724.357.2492
Email address: zhws@iup.edu

Research 2: B. Gail Wilson, **Affiliation:** Indiana University of Pennsylvania
Campus phone: 724.357.2492
Email address: bgwilson@iup.edu

Overview

My name is Erik Kormos and I invite you to complete a brief survey that should take approximately 5-7 minutes of your time. This survey is part of my doctoral research at Indiana University of Pennsylvania and is designed to provide general information about how expatriate educators use smartphones to maintain cultural ties back home and to assimilate to their host culture. The goal of the research is to help ease the assimilation process for educators and promote teacher retention.

Confidentiality

This online survey has been set up using Qualtrics software, so your response will be confidential. The information obtained from this survey may be published in a scholarly journal or presented at academic conferences, but your identity will be kept strictly confidential. You will not be asked to provide your name or any contact information.

Participation

Your participation in this survey is voluntary. You may choose to opt out of completing the survey at any time by simply closing the browsing window. Incomplete surveys will be excluded from analysis.

If you agree to participate, please click the hyperlink below to start taking the Qualtrics survey. By clicking the hyperlink, you certify that you have read and understood the information in this email and consent to volunteer to be a participant. You understand that your responses are completely confidential and that you have the right to end the survey at any point. Please feel free to retain a copy of this email for your records.

This research project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects; phone number 724.357.7730.

Thank you for your participation.

Appendix D

Language for Email to American Expat Teachers

Dear International School Teacher,

Please take 5-7 minutes to fill out the Qualtrics survey below. This short, voluntary, and confidential questionnaire is designed to better understand how American expatriate educators utilize their smartphone to maintain native culture communal ties in the United States and as a cultural assimilation device within their host culture. The goal of this research is to better understand your uses of the smartphone to promote cultural assimilation and job retention.

As a former international teacher myself, I understand how important cultural assimilation is to the job. Currently, I am a teaching assistant and doctoral candidate at Indiana University of Pennsylvania. My request for you today is that you please participate in the survey to help continue my research.

You will receive a follow-up email in 7 days that will act as reminder for completion of the survey if you have not already done so. Included in the hyperlink are the informed consent for participants. The survey and its content have been approved by the Institutional Review Board at IUP.

Follow this hyperlink to the Survey:

https://iup.co1.qualtrics.com/SE/?SID=SV_8w4ISvpEJqIuytn

Warm regard, and thank you for your time.

Erik Kormos

Appendix E

Informed Consent

Project Title **The Usage of Smartphone Technologies by American Expatriate Educators as a Communication and Cultural Assimilation Tool**

Researcher 1: Erik M. Kormos, **Affiliation:** Indiana University of Pennsylvania
Campus phone: 724.357.2492
Email address: zhws@iup.edu

Research 2: B. Gail Wilson, **Affiliation:** Indiana University of Pennsylvania
Campus phone: 724.357.2492
Email address: bgwilson@iup.edu

Overview

My name is Erik Kormos and I invite you to participate in the establishment of reliability for a brief survey. This survey is part of my doctoral research at Indiana University of Pennsylvania and is designed to provide general information about how expatriate educators use smartphones to maintain cultural ties back home and to assimilate to their host culture.

Confidentiality

The information obtained from your participation will remain confidential and will only be used to modify the survey. Only the researcher will see the responses and contact information of participants. The information will not be published.

Participation

Your participation is voluntary. You may opt out of completing the survey at any time by closing the browser window. Incomplete surveys will be excluded from analysis.

Participation is a two-step process. The first step is completion of the survey that can be found by clicking on the hyperlink below. In 10 days, you will receive a second email that will include a hyperlink and ask you to please retake the survey. Your survey responses will be compared to ensure the questions and responses are consistent and reliable.

If you agree to participate, please click hyperlink below to access the Qualtrics survey. By clicking the hyperlink, you certify that you have read and understood the information in this email and consent to participate. You understand that your responses are completely confidential and that you have the right to exit the survey at any point. Please feel free to retain a copy of this email for your records.

This research project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects; phone number 724.357.7730.

Thank you for your participation.

Click here for the survey:

https://iup.co1.qualtrics.com/SE/?SID=SV_8w4ISvpEJqIuytn

Appendix F

Informed Consent

Project Title **The Usage of Smartphone Technologies by American Expatriate Educators as a Communication and Cultural Assimilation Tool**

Researcher 1: Erik M. Kormos, **Affiliation:** Indiana University of Pennsylvania
Campus phone: 724.357.2492
Email address: zhws@iup.edu

Research 2: B. Gail Wilson, **Affiliation:** Indiana University of Pennsylvania
Campus phone: 724.357.2492
Email address: bgwilson@iup.edu

Overview

My name is Erik Kormos and I invite you to participate in the establishment of validity for a brief survey. This survey is part of my doctoral research at Indiana University of Pennsylvania and is designed to provide general information about how expatriate educators use smartphones to maintain cultural ties back home and to assimilate to their host culture. After analyzing the survey, please complete the attached questionnaire.

Confidentiality

The information obtained from your analysis of the survey will remain confidential and will only be used to modify the survey. Only the researcher will see the returned questionnaire. The information will not be published.

Participation

Your participation is voluntary. You may opt out of completing the validity questionnaire at any time. Incomplete validity questionnaires will be excluded from analysis.

If you agree to participate, please click hyperlink below to analyze the Qualtrics survey. By clicking the hyperlink, you certify that you have read and understood the information in this email and consent to volunteer. You understand that your responses are completely confidential and that you have the right to end the questionnaire at any point. Please feel free to retain a copy of this email for your records.

This research project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects; phone number 724.357.7730.

Thank you for your participation.

Click here for the survey:

https://iup.co1.qualtrics.com/SE/?SID=SV_8w4ISvpEJqIuytn

Appendix G

Survey Validity Questionnaire

Name:_____

Please provide responses to the following questions in relation to the survey.

1. Given your professional experience, do the survey questions accurately address the research topic?

2. Does the format of the survey seem logical and consistent?

3. Is the language and structure of the questions appropriate for American expatriate educators?

4. How long did it take to analyze the survey? What, if any, concerns do you have regarding the length or time needed to complete the survey?

5. What questions, if any, may be confusing or unclear?

6. What, if any, questions would you recommend to be omitted from the survey?

7. What, if any, questions would you recommend to be included in the survey?

Appendix H

Final Survey

Survey Questions

Demographics

1. Do you own a smartphone?
Yes
No

2. What is your age range?
Under 25
26-35
36-45
46-54
55-64
65+

3. What is your gender?
Male
Female

4. What is your ethnicity?
American Indian or Alaska Native
African American
Asian or Pacific Islander
Caucasian
Hispanic
Other:_____

5. Highest degree obtained?
Bachelors
Masters
Doctorate
Other:_____

6. What is your home state?
_____

7. In which country do you currently work?
_____

8. Please indicate your current employment status.
Teacher
Administrator
Administrator and Teacher

9a. What grade level do/did you teach? (check all that apply)
Pre K-5
6-8
9-12

10a. What subject(s) do you currently teach? (Check all that apply)

Math	Science	English	Social Studies	Health/P.E.
Fine Arts	Foreign Language (other than English)	Elementary	Technology	Other

11a. For how many years have you:
worked as a teacher?
worked as a teacher in an international school?
worked in your current school in your current position?

9b. For what grade level are you currently an administrator? (check all that apply)
Pre K-5
6-8
9-12

10b. For how many years have you:
worked as an administrator?
worked as an administrator in an international school?
worked in your current school in your current position?

12. What is your current marital status?
Married
Not married

13. Does your spouse live with you in your host country?
Yes
No

14. Is your spouse also a teacher, employed by your current school?
Yes
No

15. Is your spouse employed by someone other than your school in your host country?
Yes
No

16. How many dependent children reside with you at your current position?

17. How prominent is English as a spoken language in your host culture?
Native Language
Common
Somewhat
Rarely
Never

Smartphone Usage and Native Culture Communal Ties

For the purpose of this research, native culture communal ties refers to the extent to which an American expatriate educator maintains a connection to his or her community of origin within the United States. This includes contact with family members and friends (who may be from different areas of the country), local media consumption, and newsgathering.

1. To what degree are you interested in maintaining native culture communal ties while working in a foreign country?

Not at all	Slightly interested	Moderately	Extremely

2. In a typical week, how many times do you interact with someone from home on your smartphone?

Never	1 time a week	2-4 times a week	5-9 times a week	10+ times a week

3. On average, how many hours per week do you spend on your smartphone communicating with people at home? _____

4. In general, how well does your smartphone help you to maintain native culture communal ties in the United States?

1 Not at all	2 Slightly	3 Moderately	4 Extremely

5. How frequently do you use the following smartphone features to maintain native culture communal ties?

	Never	Monthly	Weekly	1 time each day	2-4 times a day	5-9 times a day	10+ times a day
Interpersonal Communication: (Phone/video calls, text/mobile messaging, email)							
Commenting/interacting with social media posts of others from home (photos, videos, messages)							
Sharing information about yourself (personal information, photos, videos, etc.) on social media							
Reading social media (Facebook, Twitter, Snapchat, Instagram, etc.)							
Consuming local media from home (radio, newspaper, television, etc.)							
Accessing information about events occurring back home							
Other (please fill in:_____)							

6. How important are the following smartphone features to help you maintain native culture communal ties?

	Not at all	Slightly	Neutral	Moderately	Extremely
Interpersonal Communication - phone call - video call - email - text messaging					
Mobile messaging applications - WhatsApp - Facebook Messenger - Skype - Other (please fill in)					
Consuming local media - native culture radio stations - native culture newspapers - native culture television shows					
Social media mobile applications - Facebook - Twitter - Instagram - Snapchat - Other (please fill in)					
Other (please fill in:_____)					

Smartphone Usage and Cultural Assimilation

For the purpose of this study, the concept of cultural assimilation refers to how expatriate teachers explore and adapt to the host country in which they are teaching.

7. How interested are you in assimilating within your host culture?

Not at all	Slightly interested	Moderately	Extremely

8. How assimilated to your host culture do you feel?

Not at all	Slightly	Moderately	Extremely

9. In general, how well does your smartphone help you to assimilate to your host culture?

1 Not at all	2 Slightly	3 Moderately	4 Extremely

10. In a typical week, how many times do you interact with someone from your host culture on your smartphone?

Never	1 time a week	2-4 times a week	5-9 times a week	10+ times a week

11. On average, how many hours per week do you spend on your smartphone communicating with people from your host culture? _____

12. How frequently do you use your smartphone for the following activities to assimilate to your host culture?

	Never	Monthly	Weekly	1 time each day	2-4 times a day	5-9 times a day	10+ times a day
Interpersonal Communication (Phone calls, text messaging, email)							
Mobile messaging applications (WhatsApp, Messenger, etc.)							
Interacting with social media posts of others from my host culture (photos, videos, messages)							
Sharing information about yourself (personal information, photos, videos, etc.) on social media							
Reading social media (Facebook, Twitter, Snapchat, Instagram, etc.)							
Locating a restaurant/Order food							
Learning the local language							
Dating							
Using a Map/GPS							
Other (please fill in:_____)							

13. How important is using your smartphone for the following activities that help you assimilate to your host culture?

	Not at all	Slightly	Neutral	Moderately	Extremely
Interpersonal Communication - phone call - video call - email - text messaging					
Mobile messaging applications - WhatsApp - Facebook Messenger - Skype - Other (please fill in)					
Consuming local media - host culture radio stations - host culture newspapers - host culture television shows					
Using Social media - Facebook - Twitter - Instagram - Snapchat - Other (please fill in)					
Developing interpersonal relationships					
Locating a restaurant/Order food - restaurant finders - order food for takeout/delivery					
Learning the Local Language					
Dating					
Using a Map/GPS					
Other (please fill in:_____)					

14. How likely are you to continue working at your current location after the end of your contract?

1 Not at all	2 Slightly	3 Moderately	4 Extremely

15. What is the most likely reason you would leave your current position?

Desire to travel/live in a new place
Administration
Compensation
Desire to return to the United States
Career Advancement
Lack of cultural assimilation