THE USE OF MOBILE COMMUNICATION TECHNOLOGY AFTER HOURS AND ITS EFFECTS ON WORK LIFE BALANCE AND ORGANIZATIONAL EFFICIENCY

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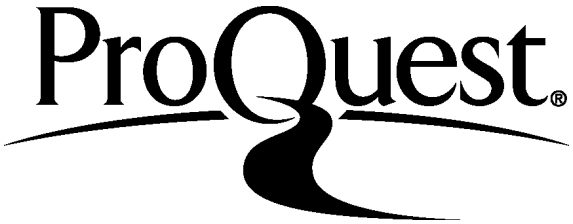

Abstract

Advances in mobile communication technologies have made it easier for individuals to connect to the workplace during non-work time. The attraction of mobile devices by employers is they enhance productivity, reduce response time and costs, and enhance customer service, while at the same time an individual's constant connectivity to the workplace can cause conflict between the work and home domains. This research study focused on the individual's connectivity behavior after hours while using mobile technologies and the effect it had on work-life balance and organizational efficiency. The research study used a quantitative research methodology to survey Information Technology Professionals. The survey was sent to 877 potential participants, of which 329 responded. The focus of the research was to learn how the use of mobile technology after hours related to employee satisfaction, work-life balance, absenteeism, burnout, and the inability to detach from work. Results indicated a significant relationship between the use of mobile technology after hours and absenteeism, burnout, and the inability to detach from work, while indicating no significant relationship with work-life balance and employee satisfaction. Because mobile technologies are influencing the way we remain connected to the workplace during non-work time, it is important to understand how this technology affect work-life balance and organizational efficiency. The implication for both employer and employees is discussed with emphasis on strategies for maintaining work-life balance and employee satisfaction.

Dedication

I would like to dedicate this achievement to my loving wife Bernita. I am eternally grateful for your unwavering love, encouragement, and patience throughout this journey. You have sacrificed a lot for me so that I may complete this program. Thank you for your support. To my friends and other family members that has been supportive of me through this time, thanks to you as well! Lastly, I dedicate this work to two special people not with us anymore, my father and mother Henry and Alice Davis, who taught me the value of education.

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I would like to thank Charde', Simuel and the members of my family for their continuous encouragement throughout this process. I am grateful to them for never losing faith in me and pushing me every day to complete the program. I owe this degree to all of you. I would like to thank Franklin Gaillard for assisting me through the final chapters of my dissertation. Lastly, I would like to thank my loving wife, Bernita, for her emotional and spiritual support during the last stages of my degree. Her unconditional love, brilliance, and encouragement has made every day enjoyable and I cannot wait to spend the rest of my life with her. Thank you to all!

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CHAPTER 1. INTRODUCTION

Introduction to the Problem

Mobile communication technologies are a primary source for communication in organizations today. Employers are quickly introducing these technologies into the organization and the expectation to connect for work related activity anytime and anywhere is increasing (Bott, Montagno, & Lane, 2010). The attraction of mobile devices by employers is they enhance productivity, reduce response times and costs, enhance customer service and increase efficiency. At the same time, employees perceive increased imposition on their personal lives and their balance of work and personal life as a conflict that make it an arduous task to satisfy the demands of his or her family role (Khan & Agha, 2013). The constant connectivity of the employee to the workplace can lead to employee satisfaction issues, higher turnover, absenteeism, burnout, and the feeling of being overworked due to the longer working hours and the inability to detach from work (Kanwar, Singh, & Kodwani, 2009). The focus of this study was on the individual's behavior in the workplace and their connectivity behavior after hours (WCBA) using mobile communications technology and its effects on work-life balance (WLB) and organizational efficiency. Richardson and Benbunan-Fich (2011) defined connectivity behavior as an individual's use of mobile handheld devices such as an IPad, tablet, laptop or smart device to operate in work-related activity with co-workers during off hours.

Background of the Study

Due to advances and innovations in technology and mobile communications, many researchers concluded that distinctions between time in the workplace and time not in the workplace are unclear (Hassan, 2003; Kaufman-Scarborough, 2006). The use of mobile devices such as smart phones, tablets and laptops that allow an individual to connect to their organizations any time and from anywhere has increased. At the same time, expectations to work anytime and anywhere has complicated the struggle for work-life balance (Bardoel, 2012). These mobile devices have created a new wave of connectivity for organizational and social purposes.

In previous years, employees achieved connectivity to the workplace through connection to a desktop computer, accessing organizational resources from remote locations. Initially, employees identified as telecommuters or virtual users performed work activities remotely using these tools to maintain the employee/employer relationship (Boswell & Olson-Buchanan, 2007; Bardoel, 2012). Employees can accomplish this connectivity through mobile communication technologies and handheld devices. Mobile devices support a variety of applications such as short message service (text) and voice communication have become ubiquitous among employees in traditional work settings. The smart phone, tablet and other handheld devices have become the most common communication devices and have taken the place of the common cell phone as the symbol of status among office executives. Technological advances in mobile

technologies have produced devices that can provide the same functionality of a computer making the choice for which device to carry insignificant.

Richardson and Thompson (2012) stated the design of wireless communication devices makes communication over time and space easier, causing both boundaries to become nonexistent. However, from an individual perspective, the distinction between work and home is not clear. Without a distinction of clear boundaries, the possibility exists to remain connected at any time and from any location to the workplace (Richardson & Thompson, 2012). Because of blurred boundaries, the capability of connecting anytime and from anywhere can result in constant connectivity (Jarvenpaa, Lang, & Tuunainen, 2005). The constant connection to the workplace, while beneficial to employers, can make employees feel as if they are constantly switched on which could lead to stress and employee burnout.

An organization will imply or infer expectations associated with the use of mobile technology to employees through its availability or distribution (Sarker, Xiao, Sarker, & Ahuja, 2012). The distribution of mobile communication technology such as laptops or other handheld devices to employees influences WCBA as connectivity to network resources and data are readily available. Because of the availability of mobile technologies, employees in an organization have the capability to communicate with colleagues outside normal work hours. The distribution of mobile communication technologies in an organization infers to the employee the expectation of continuous availability to the organization (Sarker et al., 2012). In contrast, individuals that purchase

mobile devices outside of organizational distribution purchase them for social reasons and not necessarily for connectivity to the workplace.

This topic is of interest to organizations so that employers can recognize the advantages as well as disadvantages in productivity and efficiencies in allowing their employees to detach from work (Sarker et al., 2012). Appropriate work-life balance will alleviate stress and premature employee burnout, and increase employee satisfaction. It is the responsibility of senior leadership to provide an organizational strategy that will balance WCBA and work-life balance. The present topic will discuss the behavior of individuals that use mobile communication technologies after hours for work-related business and the effects that it has on their work, personal life, and organizational efficiency. Additionally, there could be positive effects for the organization because of improved response to customer needs and productivity or negative effects such as stress and absenteeism (Dery & MacCormick, 2012).

Statement of the Problem

As mobile communication devices are distributed into the workplace organizational expectations for employee work connectivity are increasing. While benefits can be gained by the use of mobile technologies, employees that use these technologies often express a sense of hopelessness from the intrusion of the constant connectivity has on their personal lives (Sarker et al., 2012). From an organizational standpoint, the negative aspect of constant connectivity to the workplace can lead to lack

of productivity, stress, inability to detach from work, absenteeism, and burnout. According to Richardson and Benbunan-Fich (2011), there is an increasing behavior of employees who use computer technology in a traditional work environment of eight hours per day and a five day work week, that continue to communicate and engage with their organizations after-hours using mobile communications technology. This behavior makes it difficult for mobile communication technology users to detach from the work environment. Being constantly connected to the workplace, employees may find themselves concerned with premature burnout, absenteeism, and decreased employee satisfaction. Organizations have done little to respond to the growing behavioral patterns of individual mobile technology users. To provide a sound strategy to balance these behavioral patterns a thorough understanding of the motivational factors that cause users to constantly engage with their workplace is needed.

Purpose of the Study

The purpose of this study is to analyze the relationship of an individual's work connectivity behavior after hours (e.g., evenings, weekends, vacation) using mobile technologies on employee stress, inability to detach from work, burnout, and absenteeism. This study investigated work-life conflict and well-being of the individual engaged in this behavior during non-work time. Additionally, this study focused on how work connectivity behavior affected the work-life balance of the individual and organizational efficiency as it related to absenteeism, stress, and burnout. The study

included IT professionals (i.e., chief information officers (CIO), IT directors, IT managers, and IT supervisors) who work in a traditional setting rather than individuals that work in telework agreements that use mobile technology primarily for their employment. Participants in the survey were recruited through Qualtrics, an online survey tool that provides access to an online database service. This service allows researchers access to an extensive member pool of participants throughout the United States through the Internet. This method of administering surveys is growing as it allows for greater control over research attributes, cost, the speed in which data is collected, and the probability of generalizability is higher due to the extensive participant pool.

Rationale

As research in the area of mobile technology use after normal work hours expands, studies show there are both positive and negative effects related to the use of mobile technology after normal work hours (Boswell & Olson-Buchanan, 2007; Richardson & Thompson, 2012; Soylu & Campbell, 2012). A rising cost to organizations in today's environment is excessive absenteeism (Culbertson, 2009). Excessive absenteeism can be quite costly to organizations, which has been estimated annually at $300 billion (Soylu & Campbell, 2012). As more companies require innovation due to the competitive global economy, there is increased pressure on employees work demands (Soylu & Campbell, 2012). Mobile communication technologies have expanded the traditional workplace into various life domains that lead to increased stress for

employees. This type of workplace stress can lead to adverse behavior such as absence and turnover (Soylu & Campbell, 2012). Employees that use mobile communication technologies after hours for work-related activity often endure negative consequences such as work-life conflict (Boswell & Olson-Buchanan, 2007). The positive effects include improved customer service and improved productivity by the employee. The negative effects can result in increased stress levels, premature burnout, high turnover rates, absenteeism, and other health conditions (Soylu & Campbell, 2012; Culbertson, 2009). In order to minimize the negative effect that mobile technology connectivity has on employees; organizations must put in place strategies to address these issues (Sarker et al., 2012).

Hopefully, this topic is of value to the academic community as this research examines the emerging phenomena of an individual's behavior using wireless communications technologies during non-work hours to connect to the workplace. The lack of available research on the implications of WCBA provides an opportunity to expand the research on mobile communication technology use after normal work hours and the potential effects on work life balance and organizational efficiency. This research builds upon previous work-life balance literature conducted by Richardson and Thompson (2012) that used the conservation of resource (COR) theory to examine work connectivity behavior after hours. COR theory establishes a framework to examine the results of WCBA. As demonstrated by the COR model, individuals strive to acquire

various kinds of resources to achieve balance in their lives to avoid the negative effects related to stress, burnout and absenteeism.

Research Questions

The aim of the current study was to define the relationship of an individual's mobile connectivity behavior after hours (e.g., evenings, weekends, vacation) using mobile technologies on employee satisfaction, burnout, absenteeism, work-life conflict, and well-being. This study also focused on how this work connectivity behavior affected the work-life balance of the individual and how it affected organizational effectiveness. This study investigated and responded to the following research questions:

RQ1.To what extent does employees' use of mobile technology after hours relate to employee satisfaction and work life balance? The independent variable is the usage of mobile communications and the dependent variables is employee satisfaction and work life balance.

RQ2. To what extent does employees' use of mobile communication technology after hours relate to work burnout?

The independent variable is the use of mobile communications and the dependent variables is work burnout.

RQ3. To what extent do employees' use of mobile communication technology after hours relate to absenteeism?

The independent variable is the use of mobile communications and the dependent variable is absenteeism.

The current research design used a quantitative approach using correlation and linear regression analysis to determine WCBA and the effects on work-life balance and organizational efficiency. This approach documented in a systematic way the behavioral and technological practices of mobile technology users during non-traditional work hours. Data was collected from IT professionals using an online survey. The target population included senior executives, mid-level managers, supervisors, and employees. Not all participants used mobile communications technologies; that will allow examination of the distinctions in work connectivity behavior after-hours between those who owned the devices and those who did not. Additional variables for the research were age, gender, location, marital status, children at home, and job level.

Measurement of the constructs was achieved through validated scales used in Richardson and Thompson's (2012) research. Appropriate permissions were obtained to use the existing Work Family Conflict, Recovery, Work Stress scales. Scale items were rated on a Likert type scale unless otherwise noted. WCBA was measured with items developed through existing literature. The survey items asked respondents to report on frequency of use and what mobile devices were used (e.g. tablets, laptops, and smart devices). Responses were collected for various times considered non-work time.

Significance of the Study

The present research builds upon previous work-life balance literature in relation to the use of mobile technology after-hours (e.g., Richardson & Thompson, 2012; Richardson & Benbunan-Fich, 2011; Boswell & Olson-Buchanan, 2007; Scholarios & Marks, 2004). The present study adds to the existing literature by 1) researching the population of IT professionals, and 2) providing potential organizational strategies to increase organizational efficiency and minimize the negative effects of mobile connectivity after hours. This study aimed to assess the relationship of the use of mobile technology after-hours to employee stress, burnout, absenteeism, work-life balance and organizational efficiency. There are potential practical implications to the current research. The results of the research provide support for applying COR theory to gain a better understanding of the factors influencing an individual or user to continuously engage with wireless communication technology. As there are potentially positive benefits of remaining connected to the organization, individuals or users should also recognize the negative aspects of remaining connected or failing to detach from work (Boswell & Olson-Buchanan, 2007; Richardson & Thompson, 2012; Scholarios & Marks, 2004).

From an organizational standpoint, employers must be aware of the possible health concerns related to employees' continuous connection to their organizations (Richardson & Thompson, 2012). With the increased usage of mobile technologies and the ease of connectivity, organizational expectations create additional concerns for

employees. Being constantly connected to the workplace employees may find themselves concerned with premature burnout, employee satisfaction issues, absenteeism, and stress (Richardson & Benbunan-Fich, 2011; Richardson & Thompson, 2012). Employees' constant connectivity to the workplace can make it difficult for employees to realize when technology governs or facilitates their activities. Mobile technologies continue to be a part of organizational strategies to enhance productivity. As such, research should continue in determining if mobile communication technologies blur distinctions between normal work time and work after-hours and if health concerns of employees are positive or negative.

Definition of Terms

Chief information officer. This refers to the title of the senior information technology employee in an organization and is a member of the executive staff (Harris, 2011).

Conservation of resources theory. This theory is founded on the school of thought that persons endeavor to acquire resources that are valued and when resources are lost stress occurs (Hobfoll, 1989).

Communications technology. This refers to the activity of designing, constructing, and maintaining communication systems.

Family interference with work. This phrase refers to conflict that arises from pressure from family when an individual is engaged with work after normal work hours.

Information technology. The application of telecommunication and computers that allows an individual to manipulate data (i.e., retrieve, transmit, and store, etc.)

Personal data assistant. A mobile device that manages an individual's personal information (Boswell & Olson-Buchanan, 2007).

Work connectivity behavior after-hours. This phrase refers to the use of a mobile device to engage in activity related to work after normal work hours (Richardson & Benbunan-Fich, 2011).

Wireless enabled devices. These electronic devices use radio waves for internet connectivity and the transmission of data.

Work interference with family. This phrase refers to conflict that arises from pressure from work when engaged with family during non-work time (Greenhaus & Beutell, 1985).

Work-life balance. This phrase refers to the balance between the work and personal domains.

Assumptions and Limitations

The basic assumptions of this research are that respondents or participants will answer survey questions honestly and objectively. Another assumption is the sample selected will be representative of the population or will be applicable to the specific sample selected. The researcher will not introduce bias or error into the sampling. The

privacy, confidentiality, and security of the participants was maintained. The research was conducted in an ethical manner.

The limitations of the research can include, but not be limited to, the actual sample size and the use of existing or new instruments and their reliability and validity. The nature of the research makes predictability difficult because it is imprecise. The study focused on specific causes of job related stress and the relationship between mobile technology use after hours and burnout, absenteeism, and job satisfaction among technology users. A different sample size could strengthen or lessen the data analysis and findings; in particular, the findings could vary if the sample size was increased or decreased.

Nature of the Study (or Theoretical/Conceptual Framework)

Richardson and Thompson (2012) applied the COR framework to work connectivity behavior after-hours to understand individuals' motivations to continually be connected to the organization. The researchers also thought it assists individuals to maintain control of job obligations and demands. The current research applied the COR framework to review the relationship of the use of mobile technologies during non-work hours and the levels of employee stress, burnout, failure to detach from work, absenteeism, and work-life balance in a higher education setting. The potential downside of constant connectivity to the workplace after hours is that it allows users to remain connected to work, which hinders the ability to disconnect from the job. When COR is

applied to WCBA individuals are motivated to remain continuously accessible to the organization as the thought follows that it will assist them in building or conserving resources in connection with their job they consider important for staying on top of work demands. Since wireless mobile technologies allow access anytime and anywhere to the workplace the determination of this study is concerned with the degree to which the technology relates to work demands, its interference with family, and organizational effectiveness. The COR model has also been applied to work and family relationships and that research has determined that inter-role conflict has a negative effect on resources when trying to balance both roles for work and family (Grandey & Cropanzano, 1999).

The COR theory is founded on the school of thought that persons endeavor to acquire resources that are valued. When these resources are lost, or threatened to be lost, psychological stress occurs (Richardson & Thompson, 2012). These psychological effects have an impact on personal lives as well as organizational performance. In organizations today many employees are faced with high job demands due to global commitments, increased competition, and increased pressure to meet deadlines. This can lead to high stress, burnout and absenteeism. Research indicates that job demands can threaten employees' resources and can cause emotional exhaustion if exposed over long periods of time (Hobfoll & Freedy, 1993). If resources are depleted in a work setting, it is difficult to replenish those same resources in the same environment. According to Richardson and Thompson (2012) there are positive benefits related to time away from work as explained by COR theory. Resources are replenished when employees spend

time away from work (Richardson & Thompson, 2012). Since wireless mobile technologies allow access anytime and anywhere to the workplace the determination of this study is concerned with the degree to which the technology relate to work demands and its interference with family and personal time.

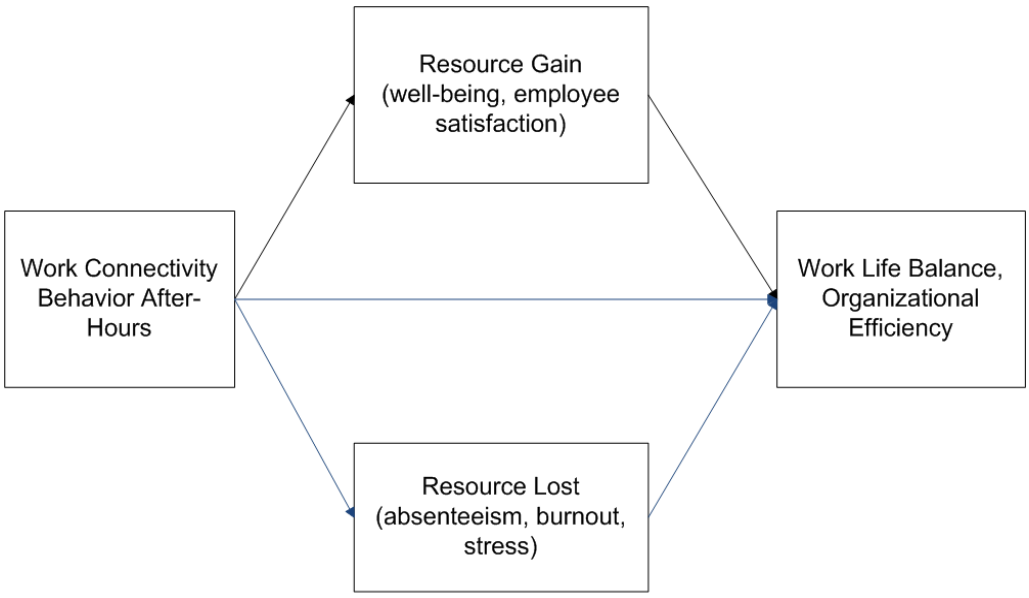

Figure 1. Concept Model

Organization of the Remainder of the Study

Chapter 2 is a review of the literature on mobile technology connectivity and work-life balance and its effect on personal, social, and work environments. Chapter 3 discusses the methods for data collection and the measures used in the study. Chapter 4

provides the descriptive analysis and results of the data. Chapter 5 will discuss the study findings and limitations. Additionally, the chapter will address the scholarly and practical contributions of the study, their implications and recommendations for future research.

CHAPTER 2. LITERATURE REVIEW

This chapter presents an overview of the mobile technology and work life balance literature. A review of prior research provided the foundation for selection of research methodology, data sampling, and data analysis. This is essential to the present research for attempting to resolve the issues related to constant connectivity and work-life balance from employee and employer perspectives. It is a reality that organizations today have produced new ways for an individual to extend beyond the normal work boundaries making the lives of individuals more complex adding additional stress (Khan & Agha, 2013). There are both advantages and disadvantages related to the use of mobile technology such as increased organizational productivity, the ability to meet job demands, and having the ability to communicate with those in other time zones (Sarker et al., 2012). Technology has changed the way we work and provides challenges in the pursuit of work-life balance. In contrast, from an organizational perspective, the disadvantages of constant connectivity to the workplace are employee dissatisfaction, absenteeism, high turnover, burnout and the inability to separate work from home life. The sections that follow will review prior research, the conservation of resource theory, define stress, resources, resource loss and resource gain and review the conflict between family and work and the balance of both.

Prior Research on Work Connectivity Behavior after Hours

Various researchers (Boswell & Olson-Buchanan, 2007; Lal & Dwivedi, 2010; Richardson & Benbunan-Fich, 2011; Richardson and Thompson, 2012; Scholarios &Marks, 2004) and others examine the relationship between mobile technology use for work activity after normal work hours and the psychological effect it has on the individual's family life. . Additionally, researchers have examined mobile technology use after normal work hours to carry out work-associated activities (Golden & Geisler, 2007).

The focus of the studies presented above centered on an individual's WCBA. WCBA is characterized as an individual's utilization of mobile technology to interact with work or colleagues after normal work hours. The research performed by Richardson and Benbunan-Fich (2011) focused on WCBA using the theoretical model of human agency theory to study this behavior. Human agency theory is based on the school of thought that an individual exercises his or her free will engaging in the use of technology (Carroll, 2008). From the technology perspective, human agency theory suggests that individuals use their free will to interact with technology in different ways whether working individually or collectively producing behavior that has the possibility of unexpected consequences (Richardson & Benbunan-Fich, 2011).

The research of Richardson and Benbunan-Fich (2011) suggest WCBA is a result of organizations distributing mobile devices to their employees conveying the expectation

of connectivity to the workplace. Distributing mobile technology to employees signals the availability of communication (Richardson & Benbunan-Fich, 2011). In contrast, when individuals or employees acquire mobile devices for personal use it is more likely to be used for social activities and not for connectivity to the organization.

Richardson and Thompson (2012) using scales validated in prior research, and adapted for the study, used quantitative methods in the research. According to Richardson and Thompson (2012) they were Likert-type scales that measured WCBA, subjective norms, and organization distribution. The demographic variables such as age, gender, marital status and job level were used as control variables for a population of 139 study respondents from an organization that specialized in technical media. Statistical analysis for this study was accomplished using SPSS for Windows. Calculations included charts, tables, and graphs and tested the reliability and validity of the scales using Cronbach alpha coefficients (Richardson & Thompson, 2012). Hierarchical multiple regressions were used to investigate the relationships between WCBA and the independent variables. The results of the study indicate WCBA has a significant relationship to mobile devices distributed by the organization (Richardson & Benbunan-Fich, 2011).

Similarly, the work of Boswell and Olson-Buchanan (2007) focused on mobile technology use during non-work time and the way it affected an employee's management of the challenges between home and work. The concentration of the study is on the employee working the normal workday and not those engaged in telework. According to Boswell and Olson-Buchanan (2007) the mobile technologies used is inclusive of voice

mail, cell phones, email, pagers, and PDAs. Employees are increasingly remaining connected to the workplace extending beyond the normal workday. Boundaries, whether temporal, behavioral, or physical bring order to the segmentation of the roles an individual has in different domains (Boswell-Olson-Buchanan, 2007). These mobile technologies i.e., voice mail, cell phones, e-mail, pagers and PDAs permit greater integration between work and family causing the lines between domains to blur.

Technology in the workplace causes a blurring of boundaries between work and home resulting in work-home tensions (Thomas, 2014). The studies by Boswell and Olson-Buchanan (2007) and Thomas (2014) draw on boundary theory and the integration of roles to examine the differences in using mobile technologies during non-work time and the impact it has on the individual's conflict between work and family. Boundary theory, as developed by Ashforth, Kreiner, and Fugate (2000) illustrate an individual's creation of boundaries between home and work defined by time and space.

The study by Richardson and Thompson (2012), as in other work-life balance studies, used quantitative methods to collect data. Scales validated in prior research were used for Richardson and Thompson's (2012) study. Likert-type scales were used that measured ambition, work life conflict, job involvement, and affective commitment. In addition, a modified survey was sent to the significant other of the survey respondent (Boswell & Olson-Buchanan, 2007). The results of Richardson and Thompson's (2012) research indicated there are differences akin to job involvement and ambition, which are

significantly important in the explanation of mobile technology use after normal work hours.

Lal and Dwivedi (2010) examined users that worked at home using mobile phones to remain connected to the workplace. Mobile technologies like the mobile phone enabled users to connect to the workplace at anytime and anywhere regardless of time and location (Lal & Dwivedi, 2010; Richardson & Thompson, 2012). Individuals that work traditional office-based, paid employment while at home are designated as "homeworkers" (Lal & Dwivedi, 2010, p. 751). Homeworkers often work by means of mobile technologies either full time or part time. Lal and Dwivedi (2010) focus on the use of mobile phones as the technology that enables the homeworker to remain connected to the workplace. Similarly, research by Boswell and Olson-Buchanan (2007) examined the usage of mobile technologies such as mobile phones, voice mail, and the PDA as the enabler for users to remain connected to the workplace during non-work time.

Lal and Dwivedi (2010) used qualitative methods using semi-structured interviews to research employees designated as a homeworker. The results of the interviews indicated that homeworkers attempted to distinguish between the work and non-work domains by designating time and space for each domain. Although time and space were allocated for each domain, the mobile phone use allowed work to occur outside the times designated.

Waller and Ragsdell's (2012) research on WCBA focused primarily on e-mail usage and the effect it had on work-life balance. E-mail is the primary means for

communication in organizations today. As companies expand globally, e-mail affects communication geographically across time and space (Richardson & Thompson, 2012). E-mail communication is an integral part of an organization's communication infrastructure as employees can access e-mail from multiple devices or media at any time (Waller & Ragsdell, 2012). Advancing technology has made it easier for individuals to communicate over a wide range of digital media. Waller and Ragsdell's (2012) research on accessibility of e-mail and its usage after normal work hours which is consistent with WCBA studies (Boswell & Olson-Buchanan, 2007; Richardson & Benbunan-Fich, 2011; Richardson & Thompson, 2012; Scholarios & Marks, 2004) and the impact on employees balance between work and non-work time.

There are advantages and disadvantages to using e-mail within an organization. An advantage of e-mail use in the organization is an employee can respond to email anytime and anywhere at no cost. In contrast, a disadvantage is email use at anytime and anywhere affects work life balance for the employee (Waller & Ragsdell, 2012). As e-mail is the preferred choice for organizational communication, employee accessibility at all hours intrude on the employee's work life balance (Greenhaus et al., 2003, p. 512). Work-life balance has increased significance for organizational productivity and efficiency as stress may occur because of pressure to respond to e-mail. Waller and Ragsdell (2012) posit absenteeism, high turnover, and burnout can occur for the employee because of stress. Waller and Ragsdell (2012) state, "employees describe feelings of anticipation, anxiousness or urges which resulted in a conscious decision to

check e-mails despite the negative implications associated with doing so outside of office hours" (p.160). The current study seeks to address organizational responsiveness to the employee's usage of mobile technology after hours, work life balance, and organizational efficiency.

Thomas' (2014) research examined WCBA and the boundaries of work and personal domains and the advances in technology that enables an employee access to the workplace at any time. Mobile devices such as mobile phones, laptops, and PDAs enable an individual to connect to the workplace anytime and anywhere (Boswell & Olson-Buchanan, 2007; Lal & Dwivedi, 2010; Richardson & Benbunan-Fich, 2011; Richardson & Thompson, 2012). Continued connectivity to the workplace has increased the time an employee works outside normal work hours (Bowell & Olson-Buchanan, 2007; Waller & Ragsdell, 2012). Technology usage allows for increased access to the workplace, increased flexibility, and increased productivity and efficiency, but also leads to blurred boundaries between the two domains of work and home (Boswell & Olson-Buchanan, 2007; Orlikowski & Scott, 2008; Park & Jex, 2011).

According to Thomas (2014), blurring of the work and home domains has created an environment where individuals must choose between family and work or vice versa. The use of technology after hours has the potential to effect work-life balance, organizational productivity, and employees within the organization. A desired outcome of Thomas' (2014) research is balancing the work and non-work domains and the usage of technology after hours. Similarly, the research of Adkins and Premeaux (2014) examined

WCBA, mobile technology usage and balance between the home and work domains. According to Adkins and Premeaux (2014), the increased usage of mobile phones and PDAs has significantly transformed the way employees connect with the organization and family. Mobile devices allow work to be accomplished outside the normal workday. The research by Adkins and Premeaux (2014) focused on the usage of mobile technologies to connect with the workplace during non-work time. Because of this connectivity, work-family conflict may occur as the work domain integrates into the family domain.

Boundaries, whether behavioral, temporal, or physical, provide organization and segment the roles a person has in different domains (Olson-Buchanan & Boswell, 2006). The integration of roles occurs when there is no clear distinction between home and work (Nippert-Eng, 1996). In contrast, role segmentation is high when work and non-work domains are separate and each has its separate purpose (Nippert-Eng, 1996). For example, issues from the work domain remain at work when the non-work domain is entered. Puertas (2009) states, "When investigating segmentation and integration, from the perspective of boundary theory, the distinction between segmentation and integration is not a dichotomy but a continuum between the two".

Conservation of Resources Theory

The conservation of resource framework (Hobfoll, 1989, 2001) is founded on the school of thought that persons endeavor to acquire resources that are valued. When these

resources are lost, or threatened to be lost, psychological stress occurs (Richardson & Thompson, 2012). These psychological effects affect one's personal life as well as organizational performance. In organizations today, many employees are faced with high job demands due to global commitments, increased competition, and increased pressure to meet deadlines. This can lead to high stress, burnout and absenteeism. Research indicates that job demands can threaten an employee's resources and can cause emotional exhaustion if exposed over long periods of time (Hobfoll & Freedy, 1993). If resources are depleted in a work setting it is difficult to replenish those same resources in the same environment. According to Richardson and Thompson (2012) there are positive benefits related to time away from work as explained by COR theory. Resources are replenished when employees spend time away from work (Richardson & Thompson, 2012).

COR theory establishes a framework/model to examine the results of WCBA. As demonstrated by this model, individuals strive to acquire various kinds of resources to achieve balance in their lives to avoid the negative effects related to stress and burnout. Richardson and Thompson (2012) applied the COR framework to connectivity behavior after-hours to understand an individual's motivation to continually be connected to the work organization. The researchers also think it assists the individual to maintain control of job obligations and demands. The potential downside of constant connectivity to the workplace after hours is that it allows the user to remain connected to work, which hinders the ability to disconnect from the job. When COR is applied to WCBA individuals are compelled to stay engaged with the workplace as the thought follows that

it will assist them in building or conserving resources in connection with their job they consider important for staying on top of work demands. Since wireless mobile technologies allow access anytime and anywhere to the workplace the determination of this study is concerned with the degree to which the technology relate to work demands, and its interference with family. The COR model has also been applied to work and family relationships and that research has determined that inter-role conflict has a negative effect on resources when trying to balance both roles for work and family (Grandey & Cropanzano, 1999).

The conservation of resource theory was developed by Steven Hobfoll (1989) as an alternative to the homeostatic and transactional models of stress. According to Hobfoll (1989) COR is a model that is resource oriented which identifies, reviews, and explains behavior patterns during stressful situations. The COR theory's school of thought is that persons endeavor to acquire resources that are valued. When these resources are challenged, individuals will work to keep and protect them (Hobfoll, 1989; Richardson & Thompson, 2012). When individuals feel threatened with the loss of valued resources, stress occurs. Maslow (1968) introduced a hierarchical manner in the way individuals seek resources; which is physical, social, and psychological. The fundamental goal that individuals strive to achieve is the protection and enhancement of self. According to Hobfoll (1989), individuals obtain positive reinforcement by actively engaging their environment. To achieve these goals individuals move in the direction of situational reinforcement (Swann & Read, 1981). Individuals will be more successful in seeking the

activities that influence the creation and maintenance of their personal characteristics and social status that prompts the receipt of positive reinforcement while avoiding the loss of such circumstances and characteristics (Wicklund & Gollwitzer, 1982).

Definition of Stress

As stated by Hobfoll (1989) a decrease in resources gained following the investment of resources, actual resource loss, and threat of resource loss is a stimulant for psychological stress. The conditions are sufficient for causing stress. As COR is founded based on resources, gaining a sufficient understanding of stress is based on the knowledge of the resources gained. In the context of the current research resources are the characteristics, energies, objects, or conditions valued by an individual that provide the impetus for obtaining these characteristics, energies, objects or conditions (Hobfoll, 1989). Some resource examples can include but are not limited to skillfulness, resourcefulness, job level, social status, and self-esteem. Multiple circumstances can contribute to the cause and loss of resources. One of these circumstances is environmental (Hobfoll, 1989). Environmental situations can threaten an individual's personal relationships, social status, economic capacity, belief system, or position (Richardson & Thompson, 2012; Chen, Westman, & Eden, 2009).

Resources

The COR model identifies that stress can be attributed to the loss and gain of four types of resources. They four types of resources are conditions, energies, personal

characteristics, and objects. *Conditions* are resources valued and sought by an individual. Some examples of these are marriage, tenure, and seniority. Roles of individuals (e.g., employee, partner, and wife) are vital to the discernment of an individual's resistance to stress (Greenhaus & Beutell, 1985; Boswell & Olson-Buchanan, 2007; Richardson & Thompson, 2012). *Energies* are resources that include finances, cognitive ability and time. These types of resources have value in attaining other types of resources. *Personal characteristics* are resources that assist in the resistance of stress. Individuals that see events as foreseeable and occur at the best interest of an individual suggest one's outlook on life is key to stress resistance (Hobfoll, 1989). *Object resources* are resources that are valued based on their scarceness and cost (Hobfoll, 1989). The social aspect of resources is also a consideration. Social relations are resources that can either facilitate or provide the protection of resources that are valued, but can also decrease an individual's valued resources (Hobfoll, 1989).

WCBA and the Inability to Detach From Work

The COR theory's school of thought is that persons endeavor to acquire resources that are valued. When these resources are challenged, individuals will work to keep and protect them (Hobfoll, 1989; Richardson & Thompson, 2012). In the context of this research resources are the characteristics, energies, objects or conditions valued by an individual that provide the impetus for obtaining these characteristics, energies, objects,

or conditions (Hobfoll, 1989). When individuals feel threatened with the loss of valuable resources, stress occurs.

Detachment from work means being away from the workplace or business. When an individual is not engaged in duties that relate to work he/she psychologically detaches from work (Richardson & Thompson, 2012). Sonnentag and Fritz (2007) also state psychological detachment from the workplace means the individual disengages from a mental standpoint and does not think about work and related issues. Mobile communication technology allows an individual to answer email any time of the day. When mobile devices were introduced into the workplace the employees instinctively reviewed email and realized the difficulty in shutting the equipment off at home (Richardson & Thompson, 2012).

According to Ayyagari, Grover and Purvis (2011) mobile technologies have become integrated in employees work and personal lives. From an organizational standpoint, increased productivity and employee effectiveness have resulted using these technologies. The availability and use of mobile communication devices provides the individual with a sense and expectation of the obligation to work. Individuals and employees who use mobile communications technologies usually are individuals who work exceptionally hard, spend more hours at work, and remain connected to the organization (Ayyagari et al., 2011). Constant connectivity leads to workplace stress. Employees will experience increased degrees of work interfering with family when engaged in WCBA (Richardson & Thompson, 2012).

WCBA and Employee Burnout

The COR theory's school of thought is that people endeavor to acquire resources that are valued. When these resources are challenged, individuals will work to keep and protect them (Hobfoll, 1989; Richardson & Thompson, 2012). In the context of this research resources are the characteristics, energies, objects or conditions valued by an individual that provide the impetus for obtaining these characteristics, energies, objects, or conditions (Hobfoll, 1989). When individuals feel threatened with the loss of valuable resources, stress occurs.

An individual who feels exhausted, isolated, and ineffective is known to be "burned out" (Pryardarsini & Maran, 2009). According to Hobfoll (1989), individuals seek to obtain and maintain resources. In situations where there is the possibility of loss of resources, actual resource loss, or resources are not adequate to meet the demands of work, burnout is likely to occur (Wright & Hobfoll, 2004). For the organization, exhaustion results in unproductive and negative relationships. Exhaustion can be attributed to stress, feelings of being overworked, and job dissatisfaction. The consequences of burnout are considerable for both employer and employee (Brummelhuis, Hoeven, Baker, & Peper, 2011). The consequences for the employer include loss of productivity, absenteeism related to sickness, and decreased job performance. For the employee, reduced feelings of well-being and family conflict ensue. According to Priyadarsini and Maran (2009), both psychological and physical behaviors

can be directly related to stress. Oftentimes these behaviors will leave an individual with feelings of job dissatisfaction.

Situations at work such as lack of communication, inadequate work relationships and proper leadership can contribute to exhaustion (Priyadarsini & Maran, 2009). When an employee lacks family structure and support, stress ensues which leads to burnout. Organizationally, the need to address the issue of burnout is vital to its success. As an individual loses valuable resources, stress occurs. Individuals strive to acquire various kinds of resources to achieve balance in their lives to avoid the negative effects related to stress and burnout. When and employee is committed to an organization the replenishment of resources take place (Wright & Hobfoll, 2004). From a COR perspective, employees must have the initiative to invest valuable resources to achieve a level of attachment to the organization (Wright & Hobfoll, 2004). From an organizational standpoint there should be clear policies that enrich the morale of the employee.

WCBA and Absenteeism

The COR theory's school of thought is that persons endeavor to acquire resources that are valued. When these resources are challenged, individuals will work to keep and protect them (Hobfoll, 1989; Richardson & Thompson, 2012). In the context of this research resources are the characteristics, energies, objects or conditions valued by an individual that provide the impetus for obtaining these characteristics, energies, objects,

or conditions (Hobfoll, 1989). When individuals feel threatened with the loss of valuable resources, stress occurs.

A rising cost to organizations in today's environment is excessive absenteeism (Culbertson, 2009). Excessive absenteeism can be quite costly to organizations, which has been estimated annually at $300 billion (Soylu & Campbell, 2012). As more companies require innovation due to the competitive global economy, there is increased pressure on employees work demands (Soylu & Campbell, 2012). Mobile communication technologies have expanded the traditional workplace into various life domains, which leads to increased stress for employees. This type of workplace stress can lead to adverse behavior such as absence and turnover (Soylu & Campbell, 2012). Organizations should review and monitor factors that may cause an individual to be absent from the workplace. Strain in the workplace has been identified as one such factor as research demonstrates a significant relationship with workplace absenteeism (Culbertson, 2009).

Absenteeism from the workplace leads to reduced productivity and turnover. The utilization of mobile technology after normal work hours adds to the stress factor in the workplace (Soylu & Campbell, 2012). Technological stress in the workplace can include the use of telecommunication devices such as smartphones, the Internet, and email. Technology use has integrated into all aspects of businesses today and represents the 21st century workplace (Soylu & Campbell, 2012). Mobile communications technology has an increased presence in the new workplace. The use of these technologies has begun to intrude on an individual or employee's personal time.

Most mobile communication devices have internet capabilities and access to e-mail, which permeates constant connectivity to the workplace. Employees that use mobile communication technologies after hours for work-related activity often endure negative consequences such as work-life conflict (Boswell & Olson-Buchanan, 2007). Mobile communication technologies as used by employees are more likely to experience increased workload, increased time constraints, and greater stress (Soylu & Campbell, 2012). According to the COR theory individuals endeavor to acquire resources that are valued. When these resources are lost, or threatened to be lost, psychological stress occurs (Richardson & Thompson, 2012). In organizations presently, many employees face high job demands due to global commitments, increased competition, and increased pressure to meet deadlines. Research indicates that job demands can threaten an employee's resources and can cause emotional exhaustion if exposed over long periods of time (Hobfoll & Freedy, 1993). This prolonged behavior can lead to excessive absenteeism. From an organization standpoint, employers must be mindful of the factors that can lead to workplace absenteeism. According to Soylu and Campbell (2012) organizations that respond to workplace stress by implementing some type of programs that aid in stress management can reduce the costs associated with reduced productivity and absenteeism. Mobile communications technologies are integral to the workplace of today. Constant connectivity to the workplace increases employee – technology interaction (Soylu & Campbell, 2012). The use of mobile communications technology or any technology for that matter is intended to increase employee and organizational

productivity but the negative aspects of constant technology use can be considered counterproductive (Soylu & Campbell, 2012). Organizations can mitigate costs related to workplace stress and absenteeism. The current research attempts to address this issue.

WCBA and Job Control

The COR theory's school of thought is that persons endeavor to acquire resources that are valued. When these resources are challenged, individuals will work to keep and protect them (Hobfoll, 1989; Richardson & Thompson, 2012). In the context of this research resources are the characteristics, energies, objects or conditions valued by an individual that provide the impetus for obtaining these characteristics, energies, objects, or conditions (Hobfoll, 1989). When individuals feel threatened with the loss of valuable resources, stress occurs.

According to Hobfoll (1989), the gain of resources can either negate or replenish loss spirals as intimated by COR theory. The gain of personal resources can have a positive effect on the conflict between work and family and increase well-being. Hobfoll (1989) further state that positive resource gain can be obtained when an individual has control over his or her environment. Research indicates an individual that exhibits WCBA can also be akin to an increased sense of control (Richardson & Thompson, 2012). Individuals who use mobile communication technologies after hours for workplace activity indicated that the technology enabled them to manage their workload. Having control over one's work related activity is having the ability to manage the

demands of work and family while decreasing resource loss associated with workplace activity (Valcour, 2007).

According to Sonnentag and Spychala (2012), job control is the level to which an individual has the freedom in scheduling his or her work and the way in which it is carried out. In contrast, a lack of job control can directly affect and restrict the accomplishments of goals and have a negative effect on work and personal life conflict. Job control plays a critical role in the current research as mobile communication technologies more often than not cross over into an individual's family life. When an individual has control over when and where he or she works decreases the stress that is felt when work demands hinders the attention to family matters (Valcour, 2007). However, when an individual has control over when and where they work, the balance of work and personal life can be achieved (Adkins & Premeaux, 2014). Organizations may infer the expectations of constant connectivity for their employees who were not traditionally "on call" by the availability and distribution of mobile communications technology (Adkins & Premeaux, 2014). With the advances of mobile communications technologies, the determination of when and where the job gets done are critical aspects to job control as more employees are completing their work away from the workplace (Kossek, Lautsch, & Eaton, 2006).

As job control is the level to which an individual has the freedom in scheduling his or her work and the way in which it is carried out, investigation can be made between the use of technology and workplace flexibility (Puertas, 2009). Two examples of

flexibility in the workplace are the virtual office and telework. According to Tremblay, Paquet, and Najem (2006) telework has been a vehicle used to balance responsibilities between work and family. Two modes of telework or working from home are employees who work full-time and employees who work on a part-time basis (Tremblay et al., 2006).

The idea of working from home is not a novel idea. What advances the idea is being able to access workplace resources (Tremblay et al., 2006). An individual utilizing this type of work agreement has increased levels of job control and determines when and where he or she will work. Research indicates that a large number of individuals who telework consider the arrangement more desirable as time spent with family increased (Tremblay et al., 2006). According to Tremblay et al. (2006) although the flexibility afforded by telework increases job control the possibility of work family conflict still exists.

The other example of work flexibility is the virtual office (Hill, Ferris, & Martinson, 2003). Organizations have used this type of arrangement as a strategic initiative to reduce costs, reduce stress, increase job performance, and increase job satisfaction and motivation (Hill et al., 2003). The virtual office allows an individual the opportunity to work wherever it makes sense to complete business goals and objectives. Both forms of workplace flexibility enables increased autonomy and job control. From an organizational standpoint, these types of arrangements can expand flexibility in where work is done, increasing productivity and job satisfaction (Hill et al., 2003).

WCBA and Segmentation and Integration

Another aspect of boundary management is segmentation and integration. According to Nippert-Eng (1996) the extent to which roles are segmented or integrated is dependent on the individual. Research (Lambert & Kossek, 2005; Valcour & Hunter, 2005) has shown that employees experience inter-role conflict when trying to manage the roles of personal life and work. As the boundaries between non-work time and work become blurred, it is critical to determine how individuals and employees integrate instead of separate their roles to minimize the consequences of role integration (Olson-Buchanan & Boswell, 2006).

Boundaries, whether behavioral, temporal, or physical, provide organization and segment the roles a person has in different domains (Olson-Buchanan & Boswell, 2006). The integration of roles occurs when there is no clear distinction between home or work (Nippert-Eng, 1996). In contrast, role segmentation is high when work and non-work domains are viewed as separate and each has its separate purpose (Nippert-Eng, 1996). For example, issues from the work domain remain at work when the non-work domain is entered. When investigating segmentation and integration, from the perspective of boundary theory, the distinction between segmentation and integration is not a dichotomy, but a continuum between the two (Puertas, 2009). Two important aspects of segmentation and integration are permeability and role referencing (Olson-Buchanan & Boswell, 2006). Role permeability is the extent to which behavioral or psychological aspects from one domain enter into another (e.g., the ability to make or receive work calls

while at home). Role-referencing is when a person recognizes participation in a role while in another role domain (Nippert-Eng, 1996). Role referencing occurs when individuals symbolically refer to their other roles. An example of role referencing is when an individual refers to non-work artifacts (e.g., personal pictures) in the work domain and work artifacts in the non-work domain.

According to Olson-Buchanan and Boswell (2006), there are costs and benefits to segmentation and integration. Individuals who segment work and home roles minimize the blurring between roles. The individuals who segment work and home roles compartmentalize their roles between non-work and work separating work and life and any interference of work into non-work time is undesirable (Sarker et al., 2012). In contrast, individuals who integrate work and home roles may have easier transitions between the role domains. The integration of work and home roles increases the likelihood of blurred boundaries and work-life conflict. However, individuals that integrate the work and home roles have an overlapping perspective of non-work and work (Sarker et al., 2012). The integration of work and non-work for these individuals is allowed and may even be desirable.

The use of computer and mobile communications technology has far-reaching implications for individual well-being and functions of the family (Chesley, 2005). The use of mobile communications technology is prevalent in all aspects of an individual's personal and work environment. The use of mobile phones, e-mail, laptops, and PDAs can blur work and family boundaries as they provide access anytime and anywhere

(Chesley, 2005). As the use of technology increases, the work and non-work domains become blurred. Advances in technology have decreased the demarcation of the work and non-work time boundaries that causes an overlap of the roles between work and family.

WCBA and Work-life Conflict

According to Iqbal, Iqbal, Ameer, and Marium (2012), work family conflict (WFC) is defined as role demands from one domain interfering, or is incompatible with the role of another domain. The responsibilities that an individual has in either the work or home domain are important and when these responsibilities conflict, work family conflict occurs. When applying the COR framework to the relationship of work and family, role conflicts can cause the loss of resources when an individual tries to juggle both family and work roles (Grandey & Cropanzano, 1999).

Mobile communication technology allows access to the workplace anytime and anywhere and the determination needs to be made as to the extent these technologies relate to the interference with family or personal time (Richardson & Thompson, 2012). When the demands are equal on an individual's time to perform in both the home and work roles successfully, personal conflict can occur (Grandey & Cropanzano, 1999). Some feel technology is a positive force that enables the integration of various roles allowing better management of work and non-work time (Jackson, 2002). In contrast, some view technology as a way to remain connected to the workplace, which blurs the domains between work and personal time (Sarker et al., 2013).

The blurring of the two domains with work related activity will take away from and extend into an individual's personal life (Olson-Buchanan & Boswell, 2006; Valcour & Hunter, 2005). According to Olson-Buchanan & Boswell (2006) when an individual devotes time to work when in the non-work role, the individual experiences difficulty in satisfying the requirements of the non-work domain. Research in the work-life conflict and technology literature has shown that increased use of technology increases work-life conflict, stress, and burnout (Batt & Valcour, 2003; Frone, 2003). Mobile communication technologies can enhance an individual's productivity and efficiency but can also have differing effects on an individual's work-life balance (Puertas, 2009).

As previously stated, research (Sarker et al., (2012) has demonstrated both positive and negative relationships between mobile communications technology and work-life conflict. Research has been done within the last decade to investigate technology use in general but have not reviewed the effects of mobile communication technologies on work-life balance. From an organizational standpoint, work-life conflict can have negative effects on organizational success. Organizational responses to work-life conflict are gaining traction in the current environment (Wang & Verma, 2012). To ensure success of the organization's goals and objectives, new practices, processes and procedures must be implemented to address the issues with the conflict that occurs between work and life and its balance. The current research will attempt to address these issues organizationally.

WCBA and Work Life Balance

Work life balance (WLB), simply put, is obtaining balance between one's life and one's life outside of work (Kumar and Chakraborty, 2013). Having balance in one's life means the individual or employee has established equilibrium between two things that demand equal time. WLB plays a major role in organizational efficacy and effectiveness (Kumar & Chakraborty, 2013). From an organizational standpoint, WLB positively effects performance, productivity, employee gratification, retention, and employee well-being. The reality of today's workplace environment is that stressful situations and the lives of employees have become more complex (Khan & Agha, 2013). The working environment is more demanding, which causes difficulty in striking the balance between work and personal life. The advancements in technology, particularly mobile communication technology, have made it easier to remain connected to the workplace.

Mobile communication technologies are a primary source for communication in organizations today. Employers are quickly introducing mobile devices i.e., laptops and smart devices into the organization and the expectation to connect for work related activity anytime and anywhere is increasing (Bott et al., 2010). The attraction of mobile devices by employers is enhanced productivity, reduced response times and costs, enhanced customer service and increased efficiency. At the same time, employees perceive increased imposition in the personal domain and the balance of work and personal life conflict, which make it challenging to meet the requirements of his or her role within the family (Greenhaus & Beutell, 1985). Constant connectivity by the

employee to the workplace can lead to work-life balance issues (Kanwar, Singh, & Kodwani, 2009). An organization will imply or infer expectations associated with the use of mobile technology to employees through its availability or distribution (Sarker et al., 2012).

Organizations are beginning to view work-life balance as a critical issue to success (Downes & Koekomoer, 2011). Both employer and employee are increasingly aware of the benefits of work-life balance. According to Downes and Koekomoer (2011) some of the benefits to the employer include increased productivity, reduced turnover and absenteeism, employee satisfaction, retention, and customer satisfaction. Organizations are beginning to focus on work-life balance initiatives that offer the advantages so that employees can manage multiple life roles with a focus on health improvement, increased performance and well-being (Brough & Driscoll, 2010). Work-life balance policies and procedures should be designed to reduce work-life conflict. The present research addresses this issue and provides organizational recommendations.

Summary

This chapter analyzed COR theory (Hobfoll, 1989), which is the theoretical construct for this research. The theory is founded on the school of thought that persons endeavor to acquire resources that are valued. When these resources are lost, or threatened to be lost, psychological stress occurs (Richardson & Thompson, 2012). Also discussed in the chapter was workplace stress, resources identified in theory, resource

loss, and resource gain. Second, the chapter discussed the use of mobile technologies and the blurring domains between work and an individual's personal life. Third, the chapter discussed work-life conflict (WFC) which can be defined as role demands from one domain interfering or is incompatible with the role of another domain. Fourth, the chapter discussed work-life balance, which simply put, is obtaining balance between one's life and one's life outside of work (Kumar and Chakraborty, 2013).

The next chapter will discuss the research methodology for the current study. The methodology includes research design, sampling, settings, instrumentation and measurements, data collection, treatment/interventions, data analysis, validity and reliability, and ethical considerations.

CHAPTER 3. METHODOLOGY

Constant connectivity to the workplace can lead to employee satisfaction issues, high turnover, and absenteeism in the organization. The phenomenon of work anytime and anywhere during non-work time is increasing. Mobile technologies make it possible for employees to remain connected to the workplace while not located in the workplace (Boswell & Olson-Buchanan, 2007). The constant use of mobile technologies has increasingly blurred the boundaries between work and home.

The purpose of this chapter is to operationalize the research design and methods used to analyze the relationship of an individual's work connectivity behavior after hours and the effect on employee satisfaction, turnover and absenteeism, and the way organizations can potentially minimize the negative effects of such behavior. This study investigated and responded to the following research questions: 1) To what extent do the employees' use of mobile communication technology after hours affect employee satisfaction and work life balance? 2) To what extent is the employees' use of mobile communication technology after hours lead to work burnout? 3) To what extent do the employees' use of mobile communication technology after hours lead to absenteeism? The present research builds upon previous work-life balance literature with relation to the use of mobile technology after-hours (e.g., Richardson & Thompson, 2012; Richardson & Benbunan-Fich, 2011; Boswell & Olson-Buchanan, 2007; Scholarios & Marks, 2004).

Research Design

The current study used quantitative methods to document in a systematic way the behavioral and technological practices of mobile technology users during non-traditional work hours. This correlational, non-experimental study looked for relationships among multiple variables. The study provided a descriptive analysis of the relationship between the use of mobile communication technology after-hours and employee satisfaction, burnout, absenteeism, and the inability to detach from work; all of which is believed to be related to organizational efficiency. Quantitative research tests theories through examination and analysis of variable relationships. Measurement of quantitative research is accomplished using scientific tools analyzed through statistical processes. The variables were measured using instruments with numbered data that was analyzed statistically. The current research was conducted through a post-positivist worldview (Creswell, 2008).

Population, Sample, and Sample Size

The target population for this study was information technology (IT) professionals i.e., chief information officer, IT director, IT manager, and IT supervisor. The framed population of IT professionals were recruited through Qualtrics, an online survey tool that provided access to an online database service. This service allows researchers access to an extensive member pool of participants throughout the United States through the Internet. This method of administering surveys is growing as it allows for greater control

over research attributes, cost, the speed in which data is collected, and the probability of generalizability is higher due to the extensive participant pool. Qualtrics' panel members were recruited from actively managed research panels. The panel members are randomly selected for surveys in which they are likely to qualify. The research sample selected is proportioned to the general population and is subsequently randomized prior to survey distribution (Esomar 28, 2014). Qualtrics ensures the population surveyed will meet the requirements of the specific survey defined by the needs of the researcher. The respondents was filtered and qualified based on age (must be 18 or older) and job position i.e., IT professional. Non-IT professionals were excluded from the analysis and results. The minimum number of qualified participants was approximately 310.The measure consisted of an electronic survey using multiple instruments.

Participants who responded to the survey were asked about their work connectivity behavior after work hours and their frequency of use during various activities.

Participants were asked about:

- their ability to separate their work and home environment
- if the use of mobile technology provided control over the work environment (i.e., project demands and workload)
- how the use of mobile technology conflicted with work and home
- if the use of mobile technology affected their health
- how they recovered from the use of mobile technology after hours

Participants were also asked to provide their gender, age, marital status, and job level at work. Participants participated in the study via email through Qualtrics. All participants who responded to the email and agreed to the informed consent were included in the study.

An alternative to simple random sampling is a concept known as River Sampling. This sampling method is a web-based opt-in approach that asks participants to participate in the survey creating a sample of research respondents (Baker, Brick, Bates, Battaglia, Couper, Dever, Gile, Tourangeau, 2013). This method relies on persons that may be viewing one or many websites where these options are located. In order to attract visitors to the site banners, pop-ups, and links are used by researchers to encourage participation (Baker et al., 2013). Individuals that are willing to respond to the survey will initiate the screening process to determine if the survey requirements are met. If the persons are included into the survey, the possibility exists for a participation in a larger profile survey. This method of sampling is also a form of convenience sampling (Baker et al., 2013).

Setting

The research was conducted in an online setting using Qualtrics. Qualtrics is an organization known for its reputation for working with researchers and the social sciences. Qualtrics reports that member profiles are representative of the United States population and can be filtered based on research criteria. Qualtrics sent invitations to its

member pool to participate in the survey via email to the target population. The email explained the purpose of the research, and survey, and how privacy and confidentiality will be accomplished (Boswell & Olson-Buchanan, 2007). Recipients self-certified themselves for participation and clicked submit at the end of the survey to transmit results to the researcher. The results of the survey were downloaded from Qualtrics as raw data for analysis.

Instrumentation/Measures

The instruments used in the current research were based on scales validated in prior research (Kopelman, Greenhaus, & Connoly, 1983; Kossek, Lautcsh & Eaton, 2006; Sonnetag & Fritz, 2007; Richardson & Benbunan-Fich, 2011, Richardson & Thompson, 2012). The survey instrument was used to determine the relationship between the use of mobile communication technology after hours and employee satisfaction, burnout, absenteeism, detachment from work, and work life balance among IT professionals.

The first part of the survey covered demographics based on Richardson and Thompson's (2012) research. The second section covered WCBA based on Richardson and Benbunan-Fich's (2011) research. The purpose of these questions determined the type of mobile device used, frequency of use and nature of the activity. The third section covered psychological detachment from work based on Sonnentag and Fritz's (2007) research investigating how employees spend time away from work. A four-item scale

was used in this section. The fourth section of the survey covered the Job Control measure based on Kossek et al.'s (2006) research investigating an employees' control over their working environments and conditions when using mobile communication technology after hours. A four-item scale was used in this section to measure scheduling, individual control, flexibility, and work location. The fifth section of the survey covered work-family conflict used in Kopelman et al.'s (1983) research on work-family conflict which investigated how work after hours interfered with family roles. An 8-item scale was used in this section to measure work/family conflict. The sixth section of the survey covered the Recovery Experience Questionnaire based on Sonnentag and Fritz's (2007) research that investigated how an employee spends time away from work. A 4-item scale was used in this section to measure the reduction of stress.

The purpose of this study was to determine the relationship between individuals' work behavior in the workplace and their connectivity behavior after hours using mobile communications technology and its relationship to work life balance and organizational efficiency. The survey instrument is tied to the current research questions because they are based on individuals' connectivity behavior after hours. These questions were analyzed and coded. The questions used a Likert scale with 1– *Strongly Disagree* to 5– *Strongly Agree*.

Data Collection

Data was collected in electronic format using the online survey tool Qualtrics and the analysis of the data was accomplished using the Statistical Package for the Social Sciences software. Qualtrics allows the researcher to create, distribute, and analyze survey data.

The survey tool was available for a period of three weeks to collect data. The data collected was then downloaded for analysis and saved to the researcher's hard drive. The hard drive will be maintained in a locked safe for seven years after publication. When the seven-year period expires, the researcher will destroy the data. The researcher ensured privacy and confidentiality by reviewing all survey questions verifying no personal identifying information was revealed by the participants in the study. All survey questions were collected anonymously. Additionally, the researcher will not discuss any details of the survey other than what is published.

Data Analysis

The survey data was downloaded to the researcher's hard drive for review and analysis. The raw data was then be uploaded to SPSS version 22 software package for analysis. After the data was uploaded into SPSS the researcher reviewed the raw data for irregularities and completeness prior to analysis.

The current research used a five point Likert scale, which is commonly used in the various domains of survey research (de Winter & Dodou, 2010). Most often survey

participants respond with their level of agreement to a particular statement. The current research used parametric tests to test all hypotheses and analyze the data. The statistics of interest included a Pearson correlation coefficient, alpha threshold, and p-value, all of which was derived via regression analysis. The descriptive analysis was used to provide additional detail of the data by utilizing tables, charts, and graphs.

Research Questions and Hypotheses

The purpose of this study was to analyze the relationship of an individual's work connectivity behavior after hours (e.g., evenings, weekends, vacation) using mobile technologies on employee stress, inability to detach from work, burnout, absenteeism, work-life balance and organizational efficiency. Therefore, the investigation of work connectivity behavior after hours using mobile technology and the relationship between employee stress, inability to detach from work, burnout, absenteeism, work-life balance and organizational efficiency among IT professionals sought to answer the following questions and hypotheses:

1. To what extent do employees' use of mobile technology after hours relate to employee satisfaction and work life balance?

$H1_0$ Work-life balance and employee satisfaction are not linearly related to the use of mobile technology after hours.

$H1_a$ Work-life balance and employee satisfaction are linearly related to the use of mobile technology after hours.

2. To what extent is employees' use of mobile communication technology after hours relate to work burnout?

$H2_o$ Burnout and the inability to detach from work are not linearly related to the use of mobile technology after hours.

$H2_a$ Burnout and the inability to detach from work are linearly related to the use of mobile technology after hours.

3. To what extent do employees' use of mobile communication technology after hours relate to absenteeism?

$H3_0$ Absenteeism is not linearly related to the use of mobile technology after hours.

$H3_a$ Absenteeism is linearly related to the use of mobile technology after hours.

Validity and Reliability

The work-interference with family scale was established in Kopelman et al.'s (1983) research and was used subsequently in Richardson and Thompson's (2012) research on work life balance and mobile technology use. The scale has a Cronbach alpha coefficient of .91 meaning its reliability is sufficient for use.

The job control scale was established in Kossek et al.'s (2006) research on perceived job control and was used also in Richardson and Thompson's (2012) on work life balance and mobile technology use. The scale was tested for reliability and has a Cronbach alpha coefficient of .75; that makes the scale sufficient for use in the current research. The psychological detachment from work scale was part of the Recovery Experience Questionnaire established by Sonnentag and Fritz (2007). This scale was used to measure how an individual spends his/her time away from the workplace. The measure was tested by Richardson and Thompson (2012) for reliability and validity and has a Cronbach alpha coefficient of .89, which makes the scale sufficient for use in the current research. Richardson and Benbunan-Fich (2011) to measure an individual's use of mobile technology after hours to connect to the workplace established the WCBA scale. The measure was used subsequently by Richardson and Thompson (2012), and tested for reliability, and has a Cronbach alpha coefficient of .93.

Ethical Considerations

There are many ethical threats associated with conducting business research. According to Osei (2013) the threats associated with conducting business research are plagiarism, risk assessment, informed consent, privacy and confidentiality, data handling, and mistakes and negligence. In any research study, care and consideration should be taken to protect the rights of any participant that participates in the research (Cooper & Schindler, 2011). An important consideration in the research process is the informed

consent of the participant. Osei (2013) posits that the informed consent process is the act of the researcher being truthful and respectful to the research participants. In this regard, the following processes were followed when conducting research for the current study. The introductory email from the researcher, via Qualtrics, to the participants explained the purpose of the research, participant involvement, research risks, options for participation, and contact information should questions about the survey arise. A statement was included in the instructions that indicated the risks to the participant were minimal as no personal identifying information or information considered sensitive was solicited. Respondent participation in the study could be discontinued at any time if he or she became uncomfortable. Participation in this research was voluntary. However, the benefit of the research may not directly benefit the respondent but will help researchers assist others in the future.

The data was collected in electronic format via Qualtrics. After the data was collected, it was then downloaded to the researcher's hard drive for analysis. The hard drive will be maintained in a locked safe for a period of seven years after publication. At the end of the seven-year period, the researcher will destroy the data.

To maintain privacy and confidentiality, the researcher took the necessary steps to minimize risk to research participants by ensuring all regulations and rules were followed for the prevention of unintentional and accidental abuse of confidential and private information. The researcher reviewed the survey questions to ensure no personal identifying information was revealed. All survey questions were collected anonymously.

Additionally, to protect the privacy and confidentiality of the participants, the researcher will not disclose any details of the survey to anyone other than what is published for research.

CHAPTER 4. RESULTS

This chapter presents the findings of this study. This chapter also includes a data collection section and a discussion of hypotheses testing. A detailed analysis of results and descriptive analysis is also included in the chapter. The chapter concludes with a summary.

The purpose of this correlational, non-experimental study was to analyze and define the relationship between an individual's mobile connectivity behavior after normal work hours (e.g., evenings, weekends, vacation) on employee satisfaction, turnover, absenteeism, and well-being among IT professionals. For this study, IT professionals were classified as CIOs, IT directors, IT managers, IT supervisors, and IT staff. The research addressed the following research questions: 1) To what extent do the employees' use of mobile communication technology after hours relate to employee satisfaction and work life balance? 2) To what extent is the employees' use of mobile communication technology after hours relate to work burnout? 3) To what extent do employees' use of mobile communication technology after hours relate to absenteeism?

To answer the research questions the study used a six-part survey. The first part of the survey covered demographics based on Richardson and Thompson's (2012) research. The second section covered Work Connectivity Behavior After-hours based on Richardson and Benbunan-Fich's (2011) research. The purpose of these statements determined the type of mobile device used, frequency of use and nature of the activity. The third section covered psychological detachment from work based on Sonnentag and

Fritz's (2007) research that investigated how employees spend time away from work. A four-item scale was used in this section. The fourth section of the survey covered the Job Control measure based on Kossek et al.'s (2006) research that investigated an employees' control over their work environment and conditions when using mobile communication technology after hours. A four-item scale was used in this section to measure scheduling, individual control, flexibility, and work location. The fifth section of the survey covered work-family conflict used in Kopelman et al.'s (1983) research on work-family conflict that investigated how work after hours interfered with family roles. An 8-item scale was used in this section to measure work/family conflict. The sixth section of the survey covered the Recovery Experience Questionnaire based on Sonnentag and Fritz's (2007) research that investigated how an employee spends time away from work. A 4-item scale was used in this section to measure the reduction of stress.

The population of IT professionals was recruited through Qualtrics, an online survey tool that provides access to online databases. The minimum number of potential participants for this study was 310. The survey was transmitted to 877 potential participants by email. The email included the directions for the survey and the informed consent form that allowed the participants to click on the link at the bottom of the email to take the survey. The survey took approximately 9 – 13 minutes to complete. The actual number of completed surveys was 337. Of the 337 completed surveys, 329 were used in the analysis of the data. Eight individuals did not complete the survey in its entirety.

The average age range of the participants was 25-31 and 42.2% were female. The participants operated at various job levels, including CIOs (11.9%), IT directors (31.3%), IT managers (29.5%), IT supervisors (9.4%), and IT staff (17.9%). Demographic information obtained included age, gender, job level, marital status, and which mobile device was used i.e., handheld wireless device or laptop. Figures 2 and 3 show the results for WCBA frequency, by device, and activities and events in which the mobile device was used.

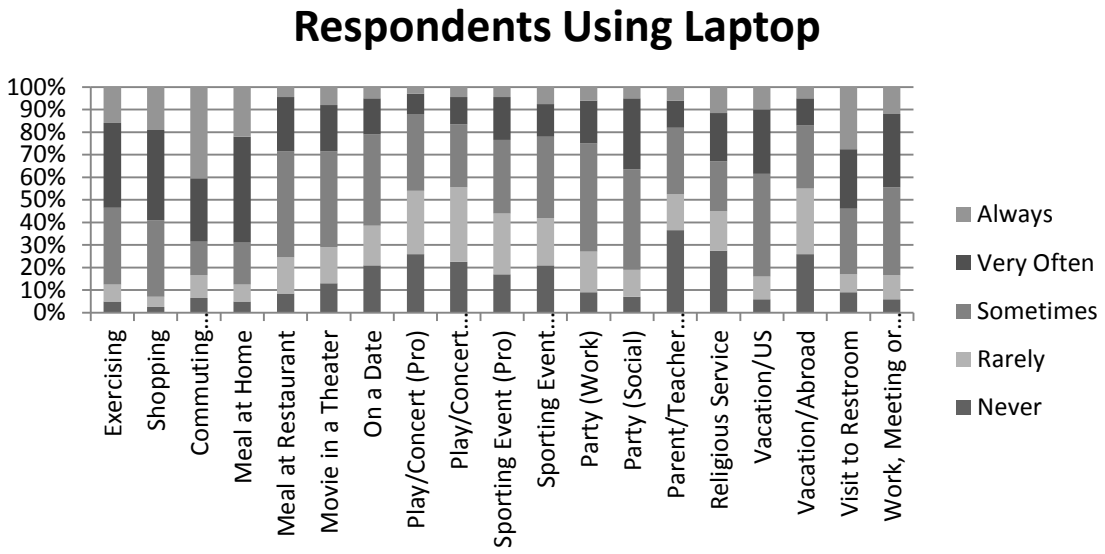

Figure 2. WCBA Frequency - Laptops

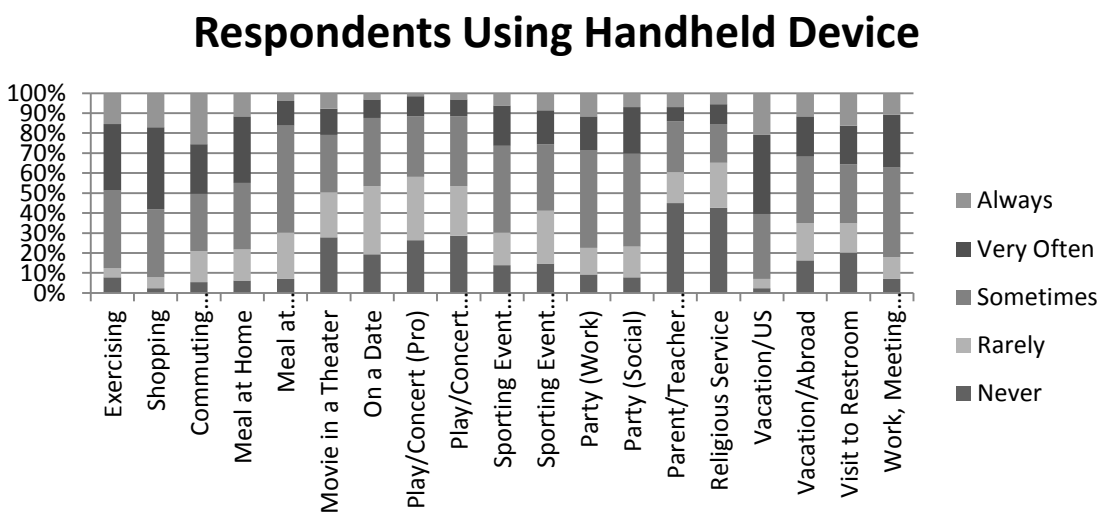

Figure 3. WCBA Frequency – Handheld Devices

Descriptive Analysis

In part two of the survey, the duration of mobile technology use had five different timeframes participants could choose. The timeframes were 1-30 minutes, 31-60 minutes, 61-90 minutes, 91-120 minutes, and 121-150 minutes per day. The survey also asked which device was used, handheld or laptop. The results (Table 1) show during the timeframe of 1-30 minutes 59.1% used a handheld device while 40.9% used a laptop each day. During the timeframe of 31-60 minutes, 32.6% used a handheld device while 67.4% used a laptop each day. During the timeframe of 61-90 minutes, 35.6% used a handheld device while 64.4% used a laptop each day. During the timeframe of 91-120 minutes, 25.8% used a handheld device while 74.2% used a laptop each day. During the timeframe of 121-150 minutes, 25% used a handheld device while 75% used a laptop each day.

Table 1. Descriptive Analysis of Mobile Technology Use Each Day

*Device * Duration Used Crosstabulation*

			Duration Used					
			1-30 min	31-60 min	61-90 min	91-120 min	121-150 min	Total
Device	Handheld	Count	55	30	26	8	10	129
		% within Duration Used	59.1%	32.6%	35.6%	25.8%	25.0%	39.2%
	Laptop	Count	38	62	47	23	30	200
		% within Duration Used	40.9%	67.4%	64.4%	74.2%	75.0%	60.8%
Total		Count	93	92	73	31	40	329
		% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

A further breakdown of the descriptive analysis by gender is presented in Table 2.

Table 2. Descriptive Analysis of Mobile Technology Use by Gender

*Device * Duration Used * Gender Crosstabulation*

				Duration Used					
Gender				1-30 min	31-60 min	61-90 min	91-120 min	121-150 min	Total
Male	Device	Handheld	Count	32	18	14	3	7	74
			% within Duration Used	58.2%	31.6%	33.3%	17.6%	36.8%	38.9%
		Laptop	Count	23	39	28	14	12	116
			% within Duration Used	41.8%	68.4%	66.7%	82.4%	63.2%	61.1%
	Total		Count	55	57	42	17	19	190
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Female	Device	Handheld	Count	23	12	12	5	3	55
			% within Duration Used	60.5%	34.3%	38.7%	35.7%	14.3%	39.6%
		Laptop	Count	15	23	19	9	18	84
			% within Duration Used	39.5%	65.7%	61.3%	64.3%	85.7%	60.4%
	Total		Count	38	35	31	14	21	139
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Device	Handheld	Count	55	30	26	8	10	129
			% within Duration Used	59.1%	32.6%	35.6%	25.8%	25.0%	39.2%
		Laptop	Count	38	62	47	23	30	200
			% within Duration Used	40.9%	67.4%	64.4%	74.2%	75.0%	60.8%
	Total		Count	93	92	73	31	40	329
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3 presents a descriptive analysis of mobile technology used by job level, device used, and duration of use.

Table 3. CrossTabulation of Mobile Technology Use by Job Level

Device * Duration Used * Job Level Crosstabulation

Job Level				Duration Used 1-30 min	31-60 min	61-90 min	91-120 min	121-150 min	Total
CIO	Device	Handheld	Count	9	4	1	0	1	15
			% within Duration Used	60.0%	44.4%	14.3%	0.0%	25.0%	38.5%
		Laptop	Count	6	5	6	4	3	24
			% within Duration Used	40.0%	55.6%	85.7%	100.0%	75.0%	61.5%
	Total		Count	15	9	7	4	4	39
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Director	Device	Handheld	Count	14	19	15	2	6	56
			% within Duration Used	77.8%	47.5%	55.6%	33.3%	50.0%	54.4%
		Laptop	Count	4	21	12	4	6	47
			% within Duration Used	22.2%	52.5%	44.4%	66.7%	50.0%	45.6%
	Total		Count	18	40	27	6	12	103
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Manager	Device	Handheld	Count	13	4	7	6	2	32
			% within Duration Used	44.8%	16.7%	36.8%	60.0%	13.3%	33.0%
		Laptop	Count	16	20	12	4	13	65
			% within Duration Used	55.2%	83.3%	63.2%	40.0%	86.7%	67.0%
	Total		Count	29	24	19	10	15	97
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Supervisor	Device	Handheld	Count	8	0	0	0	0	8
			% within Duration Used	80.0%	0.0%	0.0%	0.0%	0.0%	25.8%
		Laptop	Count	2	5	7	5	4	23
			% within Duration Used	20.0%	100.0%	100.0%	100.0%	100.0%	74.2%
	Total		Count	10	5	7	5	4	31
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Staff	Device	Handheld	Count	11	3	3	0	1	18
			% within Duration Used	52.4%	21.4%	23.1%	0.0%	20.0%	30.5%
		Laptop	Count	10	11	10	6	4	41
			% within Duration Used	47.6%	78.6%	76.9%	100.0%	80.0%	69.5%
	Total		Count	21	14	13	6	5	59
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Device	Handheld	Count	55	30	26	8	10	129
			% within Duration Used	59.1%	32.6%	35.6%	25.8%	25.0%	39.2%
		Laptop	Count	38	62	47	23	30	200
			% within Duration Used	40.9%	67.4%	64.4%	74.2%	75.0%	60.8%
	Total		Count	93	92	73	31	40	329
			% within Duration Used	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Hypotheses Analysis

To analyze the hypotheses, a Pearson correlation coefficient (*r*) and multiple regression analysis were used. The null and alternate hypotheses were formulated as

$H1_0$ Work-life balance and employee satisfaction are not linearly related to the use of mobile technology after hours.

$H1_a$ Work-life balance and employee satisfaction are linearly related to the use of mobile technology after hours.

To assess the relationship between the use of mobile technology after hours and work-life balance and employee satisfaction, *r* was derived via linear regression analysis (Table 4). According to Chatterjee and Simonoff (2013), regression analysis is appropriate for modeling the relationship between factors, as well as for testing hypotheses. The regression analysis (Table 4) found no statistical significance between mobile technology use after hours and work-life balance and employee satisfaction (r = 0.124; R-squared = 0.015; Adjusted R-squared = 0.009; Sig = .081) which supports acceptance of the null hypotheses.

Table 4. Regression Analysis - Mobile Technology Use, Work-life Balance, Satisfaction

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.124[a]	.015	.009	1.312

a. Predictors: (Constant), Employee Satisfaction, Work Life Balance

b. Dependent Variable: Duration Used

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.746	2	4.373	2.539	.081[b]
	Residual	561.485	326	1.722		
	Total	570.231	328			

a. Dependent Variable: Duration Used

b. Predictors: (Constant), Employee Satisfaction, Work Life Balance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.665	.416		6.404	.000
	Work Life Balance	-.145	.072	-.112	-2.027	.044
	Employee Satisfaction	.099	.084	.065	1.180	.239

a. Dependent Variable: Duration Used

A Probability-Probability (P-P) plot was used to assess the assumption that the residuals are normally distributed (Figure 2). The normality assumption is supported to the extent that the plotted points match the diagonal line (Chatterjee & Simonoff, 2013). A visual analysis of the P-P plot revealed no obvious violations of the normality assumption (Figure 4).

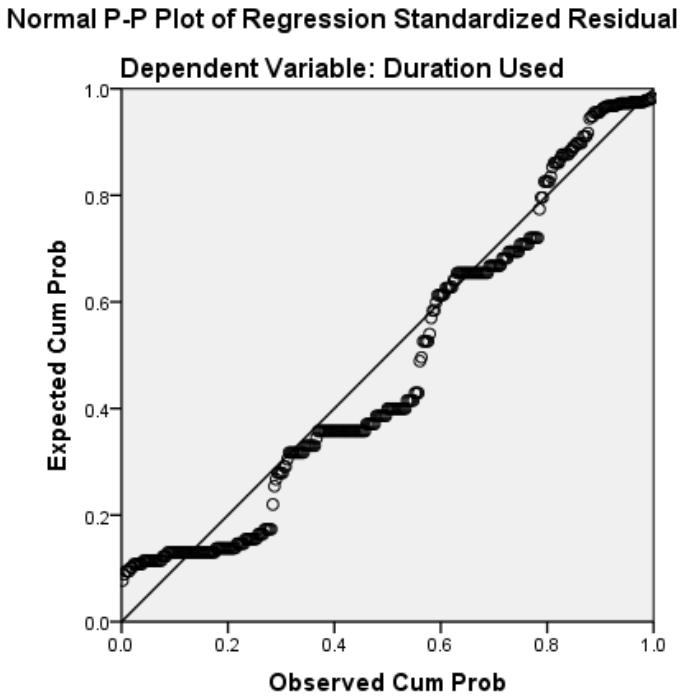

Figure 4. Probability-Probability Plot of Residuals Duration Used, Work-life Balance, Satisfaction

$H2_o$ Burnout and the inability to detach from work are not linearly related to the use of mobile technology after hours.

$H2_a$ Burnout and the inability to detach from work are linearly related to the use of mobile technology after hours.

To assess the relationship between the use of mobile technology after hours and burnout and the inability to detach from work, *r* was derived via linear regression analysis (Table 5). According to Chatterjee and Simonoff (2013), regression analysis is appropriate for modeling the relationship between factors, as well as for testing hypotheses. The regression analysis (Table 5) found a statistically significant relationship

between mobile technology use after hours and burnout and detachment from work (r = 0.159; R-squared = 0.025; Adjusted R-squared = 0.019; Sig = 0.015) which supports acceptance of the alternate hypotheses.

Table 5. Regression Analysis – Mobile Technology Use, Burnout, Detachment from Work

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.159[a]	.025	.019	1.306

a. Predictors: (Constant), Detachment from work, Burnout
b. Dependent Variable: Duration Used

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.416	2	7.208	4.228	.015[b]
	Residual	555.815	326	1.705		
	Total	570.231	328			

a. Dependent Variable: Duration Used
b. Predictors: (Constant), Detachment from work, Burnout

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.597	.233		11.151	.000
	Burnout	.092	.063	.080	1.466	.144
	Detachment from work	-.163	.064	-.138	-2.530	.012

a. Dependent Variable: Duration Used

A Probability-Probability (P-P) plot was used to assess the assumption that the residuals are normally distributed (Figure 3). The normality assumption is supported to the extent that the plotted points match the diagonal line (Chatterjee & Simonoff, 2013). A visual analysis of the P-P plot revealed no obvious violations of the normality assumption (Figure 5).

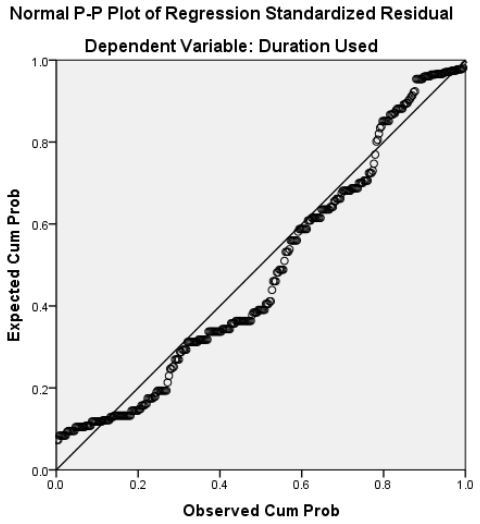

Figure 5. Probability-Probability Plot of Residuals Duration Used, Burnout, Detachment from Work

$H3_0$ Absenteeism is not linearly related to the use of mobile technology after hours.

$H3_a$ Absenteeism is linearly related to the use of mobile technology after hours.

To assess the relationship between the use of mobile technology after hours and absenteeism, *r* was derived via linear regression analysis (Table 6). According to Chatterjee and Simonoff (2013), regression analysis is appropriate for modeling the relationship between factors, as well as for testing hypotheses. The regression analysis (Table 6) found a statistically significant relationship between mobile technology use after hours and burnout and detachment from work ($r = 0.112$; R-squared = 0.013; Adjusted R-squared = 0.010; Sig = 0.042) which supports acceptance of the alternate hypotheses.

Table 6. Regression Analysis – Mobile Technology Use and Absenteeism

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.112[a]	.013	.010	1.312

a. Predictors: (Constant), Absenteeism
b. Dependent Variable: Duration Used

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.154	1	7.154	4.155	.042[b]
	Residual	563.077	327	1.722		
	Total	570.231	328			

a. Dependent Variable: Duration Used
b. Predictors: (Constant), Absenteeism

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.036	.235		8.655	.000
	Absenteeism	.141	.069	.112	2.038	.042

a. Dependent Variable: Duration Used

A Probability-Probability (P-P) plot was used to assess the assumption that the residuals are normally distributed (Figure 4). The normality assumption is supported to the extent that the plotted points match the diagonal line (Chatterjee & Simonoff, 2013). A visual analysis of the P-P plot revealed no obvious violations of the normality assumption (Figure 6).

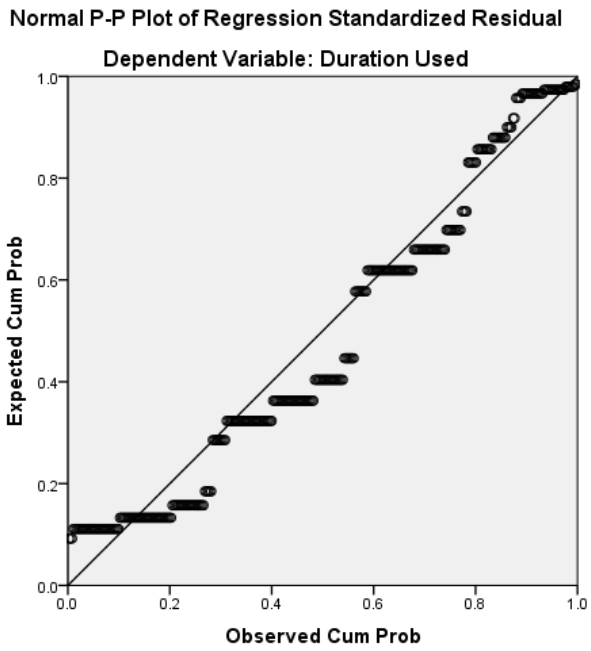

Figure 6. Probability-Probability Plot of Residuals Duration Used and Absenteeism

Summary

Quantitative methodology was used in this study to analyze the results of responses from 329 participants. A Pearson correlation coefficient and multiple regression analysis were used to analyze the hypotheses. According to the data that was compiled, for hypothesis 1, there is no statistical significant relationship between mobile technology use after hours and work-life balance and employee satisfaction supporting acceptance of the null hypothesis. For hypothesis 2, there is a statistically significant relationship between mobile technology use after hours and the inability to detach from work and burnout supporting rejection of the null hypothesis. For hypothesis 3, there is a

statistically significant relationship between mobile technology use after hours and absenteeism supporting the rejection of the null hypothesis. In summation, null hypothesis 1 is not rejected but null hypothesis 2 and null hypothesis 3 are rejected.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

Discussion

The current study sought to analyze the relationship of an individual's work connectivity behavior after hours using mobile technologies on employee satisfaction, work-life balance, burnout, absenteeism, and burnout. Building upon previous work-life balance literature (e.g., Richardson & Thompson, 2012; Richardson & Benbunan-Fich, 2011; Boswell & Olsen-Buchanan, 2007; Scholarios & Marks, 2004) the current research attempted to add to the existing body of literature in the following ways. First was to investigate the role of mobile technology use after hours on work-life balance on the population of IT Professionals. Second was to provide potential recommendations to increase organizational efficiency and minimize the negative effects of mobile connectivity after hours.

The foundation of the current study is based on conservation of resource theory. The framework for COR was founded on the school of thought that individuals seek to acquire resources that are needed to obtain balance in their lives. When these resources are lost, or threatened to be lost, psychological stress occurs (Richardson & Thompson, 2012). These psychological effects can influence personal lives and organizational performance. Employees face increasing demands due to global commitments, increased competition, and increased pressure to meet deadlines (Soylu & Campbell, 2012). The

following sections will present research findings, research implications, future research, recommendations and suggestions for practice.

The purpose of this study was to analyze the relationship of an individual's work connectivity behavior after hours using mobile technologies on an employee's work-life balance, employee satisfaction, absenteeism, burnout, and the inability to detach from work using the conservation of resource theory. This study accomplishes the purpose of the research by asking research questions that focused on the analysis of mobile technology use after hours and various aspects of work-life balance. Survey questions were formulated by focusing on:

- Richardson and Thompson's (2012) research on WCBA and nature of activity
- Richardson and Benbunan-Fich's (2011) research on mobile device used and frequency of use
- Sonnentag and Fritz's (2007) research on psychological detachment from work
- Kossek et al., (2006) research for job control and employee satisfaction
- Kopelman et al., (1983) research on work-family conflict and burnout
- Sonnentag and Fritz's (2007) research that also reviewed the reduction of stress and work-life balance

The research questions were to analyze:

1) The extent of employees' use of mobile communication technology after work hours and how it relate to employee satisfaction and work-life balance

2) The extent of employees' use of mobile communication technology after hours and how it relate to work burnout

3) The extent of employees' mobile communication technology after work hours and how it relates to absenteeism

The research addressed these questions by using the results of the administered survey and performed a Pearson's Correlation Coefficient. The analysis showed there was a weak relationship among the variables studied, null hypothesis 1 was not rejected but null hypotheses 2 and 3 were rejected.

The potential for mobile communication technology use after hours has continued to expand, as more companies require innovation due to the competitive global economy and employee work demands increase. Mobile communications technology has increased the expectation for an individual to work anytime and anywhere (Bardoel, 2012). According to Towers, Duxbury, Higgins, and Thomas (2006) electronic tools such as email, iPhones, and laptops have increased the expectations of being available anytime, anywhere. These tools have increased the ability to work from home outside of normal work hours.

This chapter provides a summarization of the specific conclusions reached in this research study including recommendations for future research. This research study was conducted to analyze:

1) The extent of employees' use of mobile communication technology after work hours and how it relate to employee satisfaction and work-life balance,

2) The extent of employees' use of mobile communication technology after hours and how it relate to work burnout, and

3) The extent of employees' mobile communication technology after work hours and how it relate to work absenteeism.

Previous research has shown mobile communications technology use after hours is increasing (e.g., Richardson & Thompson, 2012; Richardson & Benbunan-Fich, 2011; Boswell & Olsen-Buchanan, 2007; Scholarios & Marks, 2004). This study used a quantitative approach focused on answering the research questions by using a survey to see how the frequency of mobile technology use after hours affected work-life balance and organizational efficiency.

Research Findings

One of the goals of the current study was to investigate the relationship of outcome variables associated with the use of mobile communication technology after hours. As previously discussed most research has focused on the negative effects associated with mobile communication technology use after hours such as work-family conflict, work interference with family, employee stress, burnout, and absenteeism (Richardson & Thompson, 2012; Richardson & Benbunan-Fich, 2011; Boswell & Olson-Buchanan, 2007; Chesley, 2005).

The findings of this study show, in hypothesis 1, there is no statistically significant relationship between the use of mobile communications technology after

hours and work-life balance and employee satisfaction. The conclusion supports acceptance of the null hypothesis. The study also shows there are statistically significant relationships between the use of mobile communication technology after hours and detachment from work, burnout and absenteeism.

In support of hypothesis 2, and consistent with previous research showing a relationship between mobile communication technology use after hours and inability to detach from work (Richardson & Benbunan-Fich, 2011; Ayyagari et al., 2011; Sonnentag & Fritz, 2007; Sonnentag & Baker, 2005), the conclusions illustrate the difficulty in switching off mentally from the workplace. When an individual is not engaged in duties that relate to work he/she psychologically detaches from work (Richardson & Thompson, 2012; Sonnentag & Fritz, 2007). The current study shows that the inability to detach from work is negatively related to the use of mobile technology use after hours. According to Leung (2011) mobile devices can both facilitate work and overwork. The increased connectedness can lead to mental exhaustion leading to burnout (Leung, 2011). The data show a statistically significant relationship between the use of mobile technology after hours and the inability to detach from work and burnout. The finding supports rejection of the null hypothesis.

In support of hypothesis 3, and consistent with previous research showing a relationship between mobile communication technology use after hours and absenteeism (Soylu & Campbell, 2012; Culbertson, 2009; Boswell & Olson-Buchanan, 2007), the conclusion illustrates prolonged use of mobile technology use after hours negatively

affected workplace performance and loss of productivity for the organization. Mobile communication technologies as used by employees are more likely to experience increased workload, increased time constraints and greater stress (Soylu & Campbell, 2012). This finding further corroborate the abundance of literature suggesting the negative effects of mobile technology use on work-life balance (Chesley, 2005; Batt & Valcour, 2003; Galinsky et al., 2001). The data show a statistically significant relationship between the use of mobile technology after hours and the inability to detach from work and burnout. The finding supports rejection of the null hypothesis.

One of the fundamental questions of the current research can be summarized: Does mobile technology use after hours increase or reduce work-life conflict? Thus, the reasoning for the current study, which then lead to additional questions investigating the relationship and their effects. Two of the three findings of these relationships are consistent with previous studies on mobile technology use and work-life conflict as stated previously. Thus, additional future research into alternative factors that could better account for the differences between the use of mobile communications technology after hours and work-life balance and organizational efficiency is advised.

These factors could include the population of research respondents, which was limited to IT professionals by the current research, the age of the research respondents (Bardoel, 2012), the perspectives that the research respondents may hold in relation to work and personal life (Sarker et al., 2012), and organizational support for work-life balance (Chimote & Srivastava, 2013). Prior to the study, and based on previous research

(Richardson & Thompson, 2012: Waller & Ragsdell, 2012; Chesley, 2005; Batt & Valcour, 2003), the learner felt that there would be a relationship, whether positive or negative, between the use of mobile communications technology after hours and work-life balance and organizational efficiency.

Research Implications

An unexpected finding from the research was that most users of mobile communications technology after hours, in fact, integrated the use of this technology into their personal life experiences. The implications for using mobile communications technology after hours to connect to the workplace provide a wide range of solutions that will be sensitive to the needs of the specific situations and preferences of the users (Sarker et al., 2012). There is no universal solution to the work-life balance challenges of mobile technology users because different users have different ways of handling conflict between the work and personal life domains. From and organizational perspective, policies should be put in place that take into account the different ways these conflicts are handled.

Another implication of this research is that more research is needed to address the additional factors that affect the use of mobile communications technology after hours and work-life balance and organizational efficiency as stated above. Additional research includes the population being studied, the age of the population being studied, the perspectives on work-life balance and personal life of the population being studied, and

organizational strategies for work-life balance. Research could be conducted to expand on motivational factors such as job satisfaction, employee productivity, employee perception, and organizational decisions and strategies.

Future Research Recommendations

Future research has many directions for expansion. Previous literature on work-life balance (e.g., Richardson & Thompson, 2012; Richardson & Benbunan-Fich, 2011; Lal & Dwivedi, 2010; Boswell & Olsen-Buchanan, 2007) focused on the negative aspects of mobile communications technology use after hours. In certain situations, the use of mobile communications technology after hours for work related purposes led to stress because of interference with family roles. For future research, Richardson and Thompson (2012, p. 40) suggest "one should continue to seek whether these technologies are truly blurring the distinction between work and non-work time and whether the overall consequences to one's health is positive or negative". Boswell and Olsen-Buchanan (2007, p. 608) suggested "continued research is needed to help us understand the potential benefits (e.g., productivity) as well as the possible costs to an employee's personal life and well-being".

Future research could also look at a population other than IT Professionals. The current research was restricted to IT Professionals and the generalizability to other employee groups remains unclear. Future research can also explore the various perspectives on mobile communications technology use after hours on work-life balance

and organizational efficiency. Research can also be conducted to determine the perspective of the individual employee as it relates to work-life balance. According to Sarker et al. (2012) there are three perspectives an individual may have in relation to their work and personal life domains. The three perspectives are 1) compartmentalization – which is a total separation of the work and personal life domain, 2) overlap – which means there is an overlap of the two domains, and 3) encompassing – which means the personal life domain is encompassed into the work domain and success in the work domain equates to success in the personal domain.

The use of mobile communications technology after hours to connect to the workplace is not a new concept to organizations. The advantages to mobile communication technology after hours include increased productivity, reduced response times and costs, enhanced customer service, and increased organizational efficiency. The disadvantages include stress and work-life conflict. Strategies should be in place within an organization that include an understanding of employee perspectives on work and work-life balance that maximizes productivity while allowing for individual optimization of work-life balance between work and personal life.

Suggestions for Practice

This study can assist organizations in determining work-life balance practices that will ensure employees achieve appropriate work-life balance while maximizing organizational efficiency. Possible recommendations for organizational practice can

include flexible scheduling and appropriate compensation, which will be based on organizational strategy. The framework for organizational efficiency and work life balance would also include three components of work-life balance, which are time balance, involvement balance, and satisfaction balance meaning equal balance between work and family for all three components (Chimote & Srivastva, 2013). Additional recommendations for practice are identifying those employees that would be amenable to using mobile communications technology after hours to connect to the workplace if organizational support is in place for work-life balance practices. The goal of the study was to analyze the use of mobile communications technology after hours and its effects on work-life balance and organizational efficiency. This information will be used in building an organizational strategy that supports work-life balance and organizational efficiency when using mobile communication technology after hours.

Summary

Mobile technologies have been in use for over 30 years. Although there are many advantages to mobile communication technology use, including increased productivity, reduced response times and costs, and enhanced customer service, there are also challenges. This study examined the use of mobile communication technology after hours and its effect on work-life balance and organizational efficiency. Quantitative methodology was used in this study to survey 329 participants. A Pearson correlation coefficient and multiple regression analysis was used to analyze the hypotheses.

According to the data that was compiled, for hypothesis 1, there is no statistical significant relationship between mobile technology use after hours and work-life balance and employee satisfaction supporting acceptance of the null hypothesis. For hypothesis 2 there is a statistically significant relationship between mobile technology use after hours and the inability to detach from work and burnout supporting rejection of the null hypothesis. For hypothesis 3 there is a statistically significant relationship between mobile technology use after hours and absenteeism supporting the rejection of the null hypothesis.

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APPENDIX A. SURVEY INSTRUMENT

Work Connectivity Behavior

Q1.1 Demographics

Q1.2 What is your gender?
- ❍ Male (1)
- ❍ Female (2)

Q1.3 What is your age?
- ❍ 18 -24 (1)
- ❍ 25 - 31 (2)
- ❍ 32 - 38 (3)
- ❍ 39 - 45 (4)
- ❍ 46 - 55 (5)

Q1.4 What is your marital status?
- ❍ Married (1)
- ❍ Single (2)
- ❍ Divorced (3)

Q1.5 What is your job level?
- ❍ Chief Information Officer (1)
- ❍ IT Director (2)
- ❍ IT Manager (3)
- ❍ IT Supervisor (4)

Q2.1 Below is a list of various activities and events. Using the selection responses please indicate if you ever used a handheld or laptop wireless enabled device (WED) to perform job-related duties (e.g., review email, communicate with colleagues or clients, log on to a network server) during the stated event.For example, if you sometimes use your handheld WED to check work-related voicemail messages while you are shopping, select "Sometimes" as the appropriate response.

Q2.2 Which device do you use?
- ❍ Handheld WED (1)
- ❍ Laptop WED (2)

Q2.3 Exercising
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.4 Shopping
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.5 Commuting to/from work
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.6 Meal at Home
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.7 Meal at Restaurant
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.8 Movie in a theater
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.9 On a date
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.10 Play/concert (professional)
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.11 Play/concert (child/friend/other loved one)
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.12 Sporting Event (professional)
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.13 Sporting Event (child/friend/other loved one)
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.14 Party or social event (with work colleagues/clients)
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.15 Party or social event (with family/friends)
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.16 Parent/teacher conference
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.17 Religious service (e.g., church or synagogue)
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.18 Vacation in the U.S.
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.19 Vacation abroad
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.20 Visit to the restroom
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.21 Work meeting or class
- ❍ Never (1)
- ❍ Rarely (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)
- ❍ Always (5)

Q2.22 What is the duration of use when using your mobile device?
- ❍ 1 - 30 minutes (1)
- ❍ 31 - 60 minutes (2)
- ❍ 61 - 90 minutes (3)
- ❍ 91 - 120 minutes (4)
- ❍ 121 - 150 minutes (5)

Q3.1 These statements will review how you spend your time away from work. Select if you "Strongly Disagree" or "Strongly Agree" with the statements below.

Q3.2 I forget about work.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q3.3 I don't think about work at all.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q3.4 I distance myself from my work.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q3.5 I get a break from the demands of work.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q4.1 These statements review your autonomy in your working environment; individual control and flexibility. Select if you "Strongly Disagree" or "Strongly Agree" with the statements below.

Q4.2 I feel like I can decide for myself what to do.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q4.3 I decide my own schedule.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q4.4 I determine for myself how I will spend my time.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q4.5 I take care of things the way that I want them done.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.1 These statements review if you feel there is interference between work and family roles. Select if you "Strongly Disagree" or "Strongly Agree" with the statements below.

Q5.2 At work I have to do things that should be done differently.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.3 At work I am not able to be myself.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.4 On the job I work under incompatible policies and guidelines.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.5 My job offers too little opportunity to acquire new knowledge and skills.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.6 I wold like to have more power and influence over other people at work.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.7 At work I receive an assignment without adequate resources to complete it properly.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.8 Where I work I am not able to act the same regardless of whom I'm dealing with.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q5.9 At work I receive incompatible requests from two or more people.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q6.1 Statements on how you recover from work. Select if you "Strongly Disagree" or "Strongly Agree" with the statements below.

Q6.2 I kick back and relax.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q6.3 I do relaxing things.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q6.4 I use the time to relax.
- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)

Q6.5 I take time for leisure.

- ❍ Strongly Disagree (1)
- ❍ Disagree (2)
- ❍ Neither Agree nor Disagree (3)
- ❍ Agree (4)
- ❍ Strongly Agree (5)