SOCIAL MEDIA USE AT WORK

by

KRITI CHAUHAN

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2017

To Mom, for everything.

Acknowledgements

I am thankful to my dissertation chair, Dr. Sridhar Nerur, for his patience and guidance throughout my doctoral journey. I am grateful to Dr. Radha Mahapatra, Ph.D. advisor and committee member, for his encouragement and advice, helping me persevere. I am grateful to my inspirational department chair and committee member, Dr. Mary Whiteside, for her immense practical support. I am indebted to Dr. Marcus Butts, not only for guiding my exploration of research domain and methodology, but also for his amazing positive attitude and energy.

I am thankful for the training and exposure to new ideas and ways of thinking while pursuing my doctoral degree, along with good will and gems of wonderful advice, from Dr. James Teng, Dr. M. K. Raja, Dr. Riyaz Sikora, Dr. Jie (Jennifer) Zhang, Dr. Wendy Casper, Dr. Douglas Grisaffe, Dr. Craig Slinkman, Dr. Alan Cannon, Dr. Edmund Prater, Dr. Greg Frazier, Dr. Mary Crow, Dr. Mark Eakin, Dr. Kay-Yut Chen, Dr. Carolyn Davis and Dr. R. C. Baker, in addition to my fantastic committee members.

I would like to thank all my friends and colleagues who have helped my doctoral endeavor. I am especially thankful to Adel Yazdanmehr, Hardeep Singh Chawla, Ganapathiraman Raman, George Kurian, Kuldeep Singh, Rahul Dwivedi, Fereshteh Ghahramani, Jingjie (Angela) Su and Ramakrishna Dantu, for their help with the scale development and study pilot. I am grateful for help rendered by Anagha Vitonde, Krishna B. Nibhanupudi, Yesha Gupta, Alok Singh and Tadiana Jones. I am also grateful for the friendship of Philip Bond and Ola Al-Laymoun. Special thanks to Evelyn Lucas, Samantha Juniker and Jennifer Hill for their help and encouragement.

Lastly, I wish to thank my mama (uncle) Vivek Rao and my mom and dad for their constant love and support.

March 20, 2017

Abstract

SOCIAL MEDIA USE AT WORK

Kriti Chauhan, PhD

The University of Texas at Arlington, 2017

Supervising Professor: Sridhar Nerur

Social media use permeates everyday life, including work lives of employees. Banning social media use at work may is not entirely possible, therefore it is pertinent to question whether all social media use is detrimental for employees and their employing organization. Social media research to date has found conflicting results.

This research provides unique insight into within-person social media use and its outcomes, and opens an avenue for investigating social media using a new technology-independent measure. The study is anchored in the concepts of role theory from social psychology. The theory of role accumulation suggests that social media can be used to support interpersonal relationships, which may improve work-life balance.

This study developed and validated scales to measure social media use over three dimensions of social interaction- private, public and professional. Daily social media use at work and its relationships to interpersonal workplace trust, job stress, organizational citizenship behavior toward individuals (OCBI), job satisfaction and life satisfaction were then investigated, using multilevel modeling on repeated measures within individuals. Responses from 91 of the 160 individuals recruited using Qualtrics' Panel, and surveyed daily over the course of three weeks, were valid and included in the analysis.

This research found that on days the respondents used social media for private and professional reasons, more than their own average use, they exhibited higher OCBI. This effect is progressively pronounced for people with higher preference for integration of work and nonwork. On the days that respondents used more social media for public interaction, they experienced higher job and life satisfaction.

Interestingly, on days respondents displayed higher than usual interpersonal trust, their job satisfaction and OCBI were lower. Moreover, on days respondents reported a higher OCBI, than their own average, they also reported higher stress and work-to-life conflict. This indicates that excessive interpersonal trust at the workplace could be detrimental to OCBI and job satisfaction, and that there are costs attached to citizenship behavior, in terms of stress and work-to-life conflict.

Another interesting finding was that social media use was not related to job stress or work-to-life conflict at within-person level, but was related to both at between-person level. People who used more public social media and less private social media had higher job stress and lower work-to-life conflict, than others.

Table of Contents

List of Illustrations

List of Tables

Chapter 1

Introduction and Motivation

1.1 Introduction

In this day and age, everyone has multiple social media accounts, which are checked several times a day, either on a computer or smartphone (Junco, 2013). According to the International Telecommunication Union (ITU), the United Nations' specialized agency for information and communication technologies (ICTs), almost three billion people were using the Internet by the end of 2014. Around 9.8% and 32% of people worldwide currently have fixed broadband and mobile broadband, respectively, allowing them to be online. The number of users continues to grow, and these users are continuing to generate more and more online content through social media platforms and applications (such as Twitter, YouTube, WhatsApp, and Facebook). In fact, social media sites are the most accessed websites worldwide (ITU, 2014; Nielsen NetView, 2010). This trend continues into the workplace, with 21% of employees spending one hour or more on a typical workday using the Internet for nonwork purposes (CareerBuilder, 2014). Cellphones and texting lead workplace disruptions, with 50% of employees rating them primary productivity disruptors. Internet use and social media come in at 39% and 38% respectively (CareerBuilder, 2014; Gouveia, 2014).

Information and communication technologies (ICTs) have proven helpful for telecommuting employees, enabling them to work from home (Bélanger, Watson-Manheim, & Swan, 2013). But constant connectedness via ICTs results in work intruding upon personal lives of employees, and their personal lives intruding on work (Butts, Becker, & Boswell, 2015; Kossek, Noe, & DeMarr, 1999; Wright et al., 2014). Social media, whether on a PC/laptop or a mobile device, especially facilitates the latter – spending time on personal activities while supposedly at work. This blurring of

boundaries between work and home (Kreiner, 2006), and blurring between work and nonwork personas of an individual (Kossek et al., 1999), can lead to losses in resources such as time. However, it can also lead to gains in resources, such as emotions and skills (Greenhaus & Powell, 2006). Thus, one possible benefit of social media use is that it may possibly help employees achieve work-life balance (Anandarajan & Simmers, 2005). It is therefore pertinent to investigate whether social media usage at work enhances or depreciates quality of life and work for organizational employees.

The answer to whether an organization should allow/disallow, promote/discourage or advocate/ban use of social media at work depends upon whether social media use at work helps or hinders organizations. We examine this issue at the within-employee level, and investigate employee workplace outcomes and employees' work-life balance. The objective of this research is, therefore, to examine how social media use at work affects employees, from a role theory perspective of interaction between work and nonwork domains.

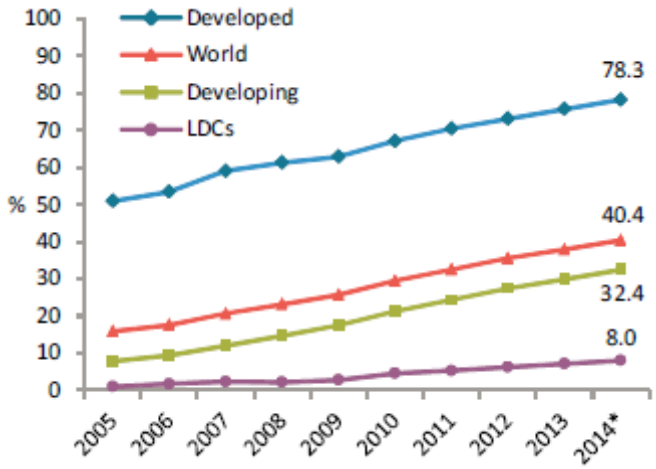


Figure 1-1: Estimated number of individuals using the Internet, by level of development, 2005-2014 (ITU, 2014)

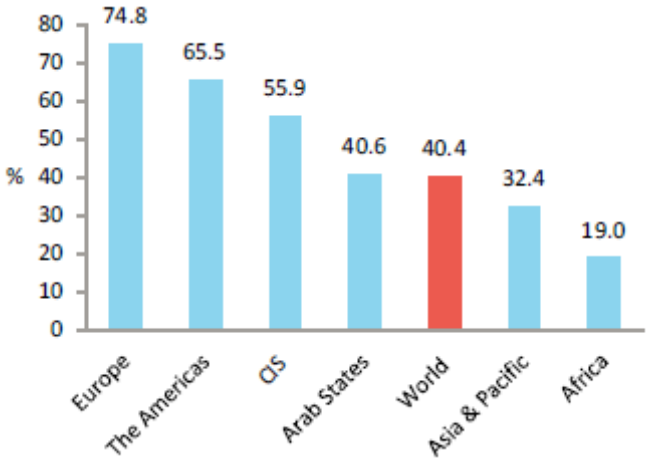


Figure 1-2: Individuals using the Internet, by region, 2014 (ITU, 2014)

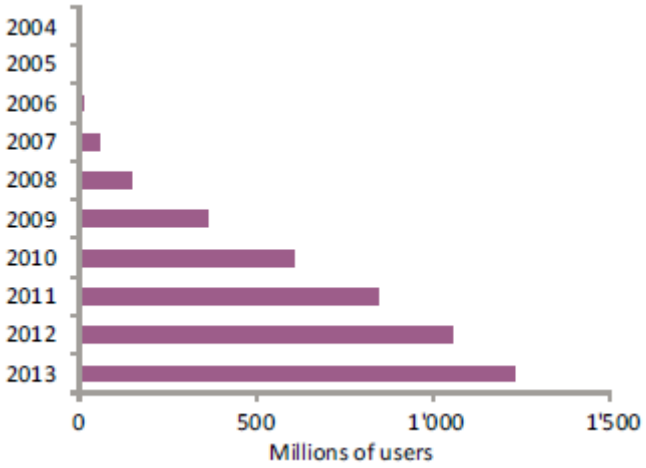


Figure 1-3: Growth in Facebook monthly active users, 2004-2013 (millions of users) (ITU, 2014)

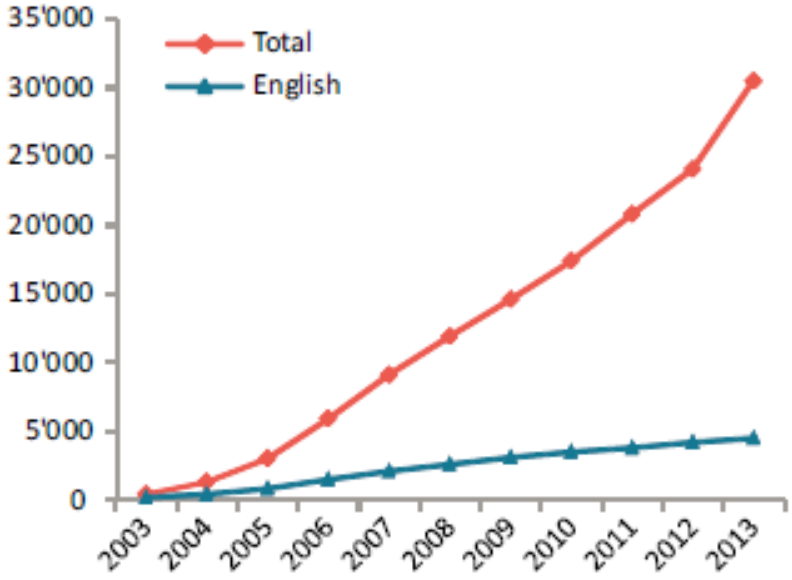


Figure 1-4: Wikipedia articles – total and English language, 2003-2013 (thousands of articles) (ITU, 2014)

Figure 1-5: Workplace productivity disruptions (CareerBuilder, 2014)

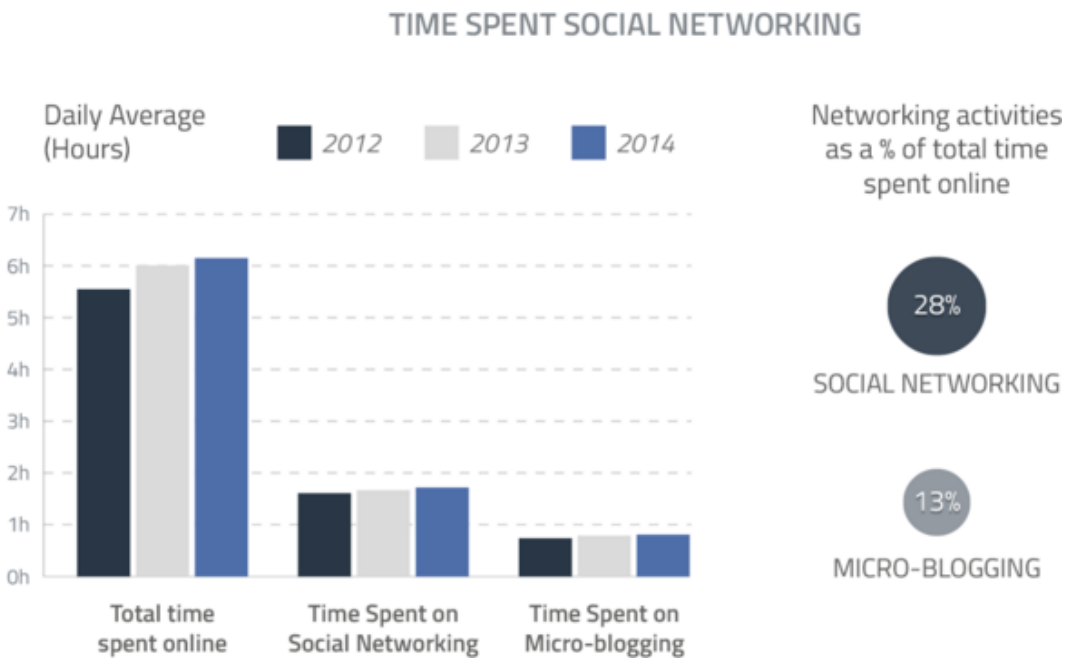


Figure 1-6: Time spent on social networking (Mander, 2015)

1.2 Motivation

Time magazine's person of the year for 2006 was "You", the millions of people making contributions to user-generated content online. This phenomenon of global participation was made possible with advances in information and communication technologies that have given rise to what is collectively referred to as "social media". During the ten years since then, the social media phenomenon has only grown larger.

In 2010, social media (social networks and blogs) accounted for nearly a quarter of total user online time, ranking well ahead of gaming (10%) and e-mail (8%). On mobile phones, though, email was still the dominant online activity at 41.6%, with social media coming in third at 10.5% (Nielsen NetView, 2010). The pervasiveness of social media has prompted a wide variety of research questions, such as, how do people represent themselves online, what objectives do users have for using different features, what

personal characteristics prompt certain kinds of activities online, and what are the affective outcomes of different types of usages, among others (Ellison, Steinfield, & Lampe, 2011; Papacharissi & Mendelson, 2010; Smock, Ellison, Lampe, & Wohn, 2011; Tifferet & Vilnai-Yavetz, 2014; Vitak, Lampe, Gray, & Ellison, 2012)

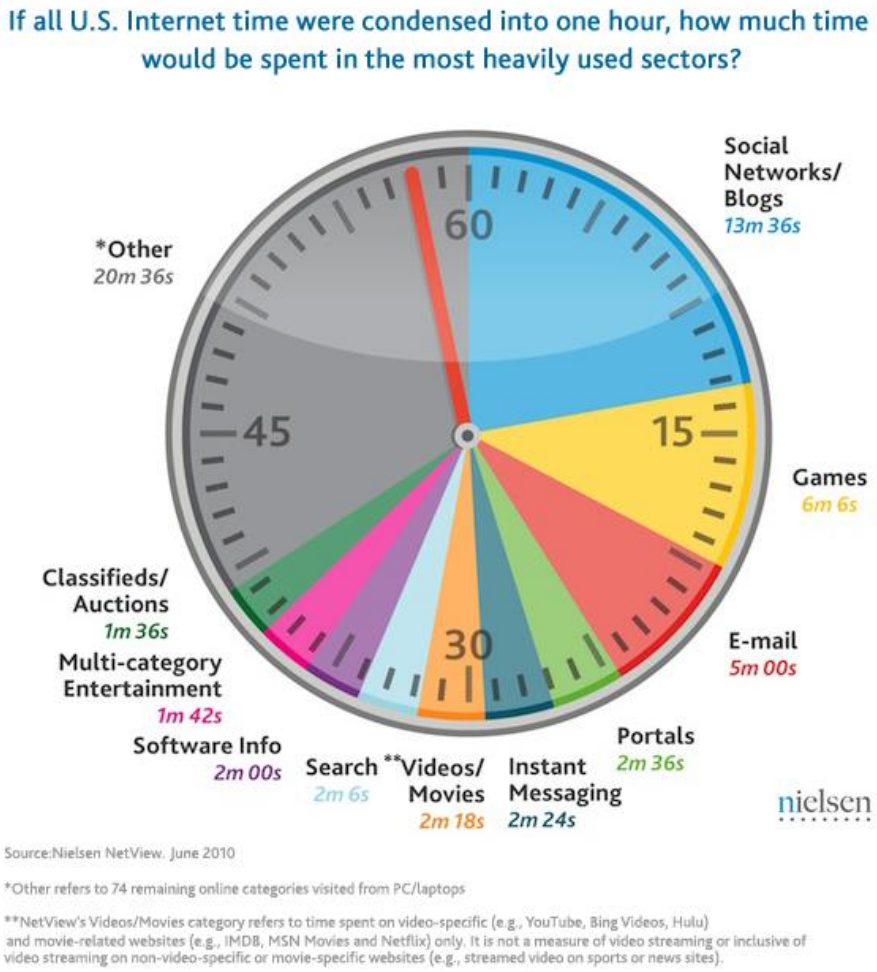


Figure 1-7: Breakdown of time spent on various online activities according to Nielsen NetView (2010)

Social media use at work involves risks and losses arising from mixing personal and professional personas and possibly inappropriate communication across firewalls (Dutta, 2010; Skeels & Grudin, 2009). On the other hand, social media has been touted

as an enabling tool that helps employees rejuvenate from stress, promote social connections that ultimately help them with their work, and manage their work-life balance (Charoensukmongkol, 2014; König & Caner De La Guardia, 2014; Moqbel, Nevo, & Kock, 2013). Not many studies have attempted to understand the relationship between social media use from the perspective of work-nonwork interface or work-life balance (König & Caner De La Guardia, 2014). The few that have considered the aspect of work-life balance, either did not actually use work-nonwork interface in their study model (Charoensukmongkol, 2014; Moqbel, Nevo, & Kock, 2013) or were conducted on actual social networks rather than online (Borgatti, Mehra, Brass, & Labianca, 2009; Sparrowe, Liden, Wayne, & Kraimer, 2001). This study intends to address this research gap.

By its very nature, social media occurs across spheres of professional and personal friends, and public and private lives. Currently, there is no measure that captures this concept. This makes it difficult to compare time and effort spent creating and maintaining connections that might be useful to one's profession, versus time and effort spent on personal friends (Papacharissi & Mendelson, 2010). To that end, this research attempts to address this limitation, imposed by current measures of social media use, by developing a measure that captures these four aspects of social media usage across personal/professional and private/public divides (Dutta, 2010).

1.3 Research Questions

The main research question this study aims to examine is: Does use of social media at work help or hinder employees at work? Specifically, do technologically independent usages of social media related to different life domains exacerbate or reduce job stress? Are they related to workplace trust? Eventually, how do they affect personal and professional outcomes in employees, such as work-to-life conflict, OCBI, job satisfaction and life satisfaction?

1.4 Contribution

This research contributes to Information Systems literature by (a) developing a new, technology-independent measure of social media use, (b) applying experience sampling methodology, a relatively less utilized methodology in IS, to study within-person effects, (c) empirically testing an existing conceptual framework of social media usages, and thus (d) furthering understanding effects of social media use at work on work behaviors and outcomes. This research expects to contribute to practice by making recommendations regarding social media usage policy at the workplace.

1.5 Dissertation Organization

Chapter 2 lists definitions of social media in IS literature and their interpretation within the scope of this research, summarizes the current literature on social media and social networking sites (the most widely used and studied type of social media), and outlines the theories that are applied in this study towards examining employee social media usage. Chapter 3 introduces the study model and hypotheses. Chapter 4 contains the construct definitions, measurement scales, and methodology used to collect and analyze data. In Chapter 5 the analyses conducted on the primary data are discussed, with Chapter 6 covering the discussion and conclusion.

Chapter 2

Literature Review

Chapter 1 introduced the purpose, motivation and research objectives of this study. This chapter summarizes current literature on social media, role theory and work-nonwork interface, and social capital and trust, in the context of the present study. The theoretical background presented here then serves as the backdrop of the theoretical model and hypotheses developed in Chapter 3.

2.1 Social Media

Research on social media has found mixed evidence towards positive and negative psychological outcomes such as self-esteem, depression, and life satisfaction. These differential outcomes have been attributed to the fact that interactions on social media can generate mixed emotions (Oh, Ozkaya, & Larose, 2014). Apart from these, social media has been found to have benefits such as increased social capital (Ellison, Gray, Lampe, & Fiori, 2014), and higher life and job satisfaction (Charoensukmongkol, 2014; Moqbel et al., 2013). The ubiquity of social media entails employees going online to social media sites for personal and work reasons while they are at work (Rooksby et al., 2009). While this may be a way for employees to achieve work-life balance in a technologically connected world where they are never off-work completely, it may simply be a distraction at work with resultant negative consequences (Anandarajan, Simmers, & D'Ovidio, 2011). It is therefore pertinent to understand the consequences of such activity at the workplace.

2.1.1 Social Media Use as a Type of Internet Use

Social media makes it possible to support a wide range of social relationships online (Kane et al., 2013; Dutta2010). It is therefore a type of personal web usage at work

(PWU), regarding which there is already a large body of literature. The PWU literature encompasses three distinct views (Anandarajan, Simmers, & D'Ovidio, 2011): first, PWU as problematic Internet use; second, PWU as production deviance; and third, PWU as constructive behavior, where PWU is used as a way to balance work and family. The production deviance view terms personal use of internet at work as "cyberloafing," where employees waste office hours in surfing web for personal reasons, with the negative consequences of increasing security and liability risks as well as network overload, and lowering productivity (Anandarajan et al., 2011; Garrett & Danziger, 2008). The positive, constructive view of PWU is that it may foster problem-solving, increase productivity by reducing stress, help achieve work-life balance, and allow users to increase skills and knowledge (Anandarajan & Simmers, 2005; Sonnentag, 2003). This research investigates whether the constructive view of PWU is applicable to social media.

2.1.1.1 Internet-based ICTs

The Internet has enabled a wide variety of communication technologies, which have made it possible for employees to stay connected to their workplace even when not in office. The telecommuting literature has found this to have tremendous implications on the work-life balance of employees, as well as employee quality of life (Boswell & Olson-Buchanan, 2007; Butts et al., 2015; Golden, Veiga, & Simsek, 2006; Kossek, Lautsch, & Eaton, 2006; Olson-Buchanan & Boswell, 2006; Rothbard, Phillips, & Dumas, 2005). While telecommuting makes it possible for employees to carry over their work into their nonwork lives, it also makes it acceptable for them to justify carrying over nonwork activities into work lives.

2.1.1.2 Social Media Use and Work-Life Balance

Studies in information systems are beginning to investigate social media use and work outcomes from the perspective of work-life balance (Charoensukmongkol, 2014; König & De La Guardia, 2014; Moqbel et al., 2013; Wright et al., 2014). However, these studies are limited by their measure of social media use, which measures attachment and time spent on social media, and does not distinguish between activities that are work-related and those that are nonwork-related (Charoensukmongkol, 2014; Moqbel et al., 2013; Wright et al., 2014). This research aims to address this gap by developing a new measure of social media use based on a framework for distinguishing the domain of social media use.

2.1.2 Social Media Types and Social Capital

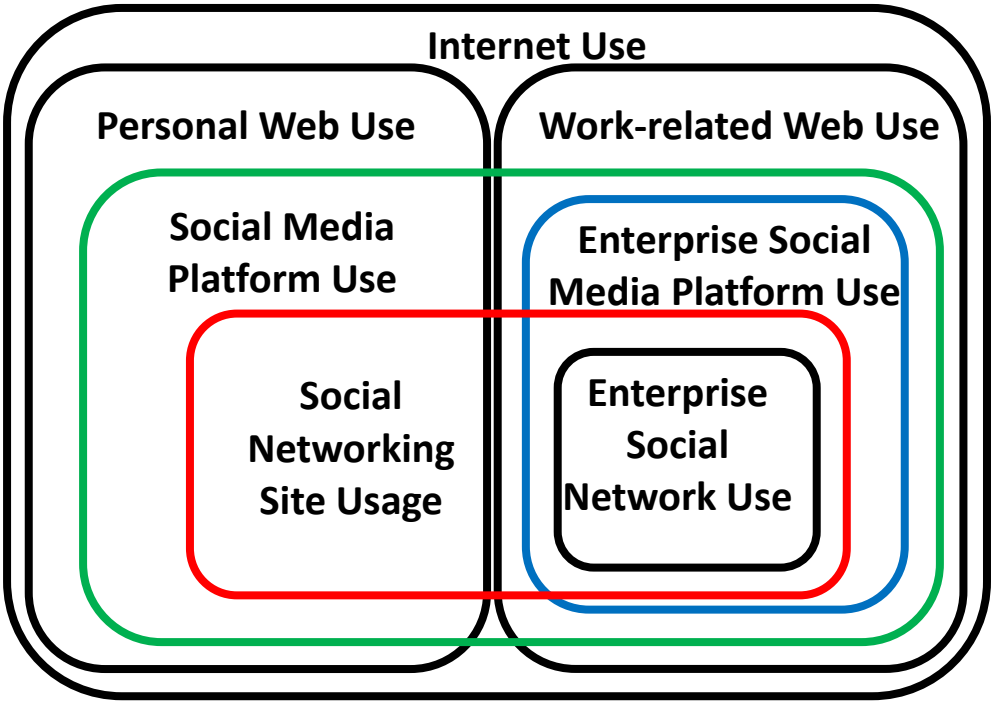


Figure 2-1: Social media subtypes as types of Internet use

Some of the most popular social media sites, and websites in general, are social networking sites (SNS), such as Facebook and LinkedIn (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). One of the main benefits of SNS is purported to be social capital (Ellison et al., 2014; Ellison, Steinfield, & Lampe, 2007). Dedicated social network sites for enterprises have typically been examined as case studies, and have been found to enhance knowledge sharing and social capital within the organization (Brzozowski, 2009; Kane, 2015; Kane, Majchrzak, & Ives, 2010; Kuegler, Smolnik, & Kane, 2015; Riemer, Finke, & Hovorka, 2015; Skeels & Grudin, 2009; Steinfield, DiMicco, Ellison, & Lampe, 2009; Subramaniam, Nandhakumar, & Baptista, 2013). Therefore, we also examine social media usage from the point of view of social capital theory, to examine its effect on organizational and personal outcomes of job stress, organizational citizenship behavior, job satisfaction and life satisfaction.

2.1.2.1 SNS and ESM as Social Media

With rapid changes in technology, it is difficult to make a distinction between traditional SNS and non-SNS social media (Kane, Alavi, Labianca, & Borgatti, 2014). Therefore uses and consequences of traditional SNS are likely to extend to what is presently called social media.

While dedicated enterprise-wide social media platforms oftentimes are used for communication and networking requirements within an organization, it is possible to use public social media platforms for this purpose as well (Rooksby et al., 2009). Organizations can take advantage of sites like Yammer that are built to facilitate within-organization interaction, or the exclusive group formation capability of open social networking sites like Facebook. Therefore. uses and consequences of enterprise social software platforms (Kuegler et al., 2015) or enterprise social media platforms (Leonardi,

Huysman, & Steinfield, 2013) are likely to extend to social media. Consequently, we borrow from SNS and ESM literature to justify our model and hypotheses.

2.1.3 Enterprise Social Media

Leonardi et al. (2013) define enterprise social media (ESM) as "web-based platforms that allow workers to (1) communicate messages with specific coworkers or broadcast messages to everyone in the organization; (2) explicitly indicate or implicitly reveal particular coworkers as communication partners; (3) post, edit, and sort text and files linked to themselves or others; and (4) view the messages, connections, text, and files communicated, posted, edited and sorted by anyone else in the organization at any time of their choosing." Group activities, in general, and not necessarily online, have an impact on production, member support, and group health (Skeels & Grudin, 2009). Theoretical benefits and detriments of social media use in professional setting, through the processes of social capital, boundary work, attention allocation, and social analytics, have been expounded by Leonardi et al. (2013). In this study we use the lens of boundary work and social capital to formulate a model of linkages between social media use at work, social capital, work-life balance, and personal and professional outcomes, for organizational employees. The two relevant viewpoints are summarized below.

2.1.3.1 Boundary view of ESM

Leonardi et al. (2013) list the following theoretical advantages of enterprise social media use, from the lens of boundary work, based in sociological theory of roles: (1) ESM can provide access to knowledge across boundaries between various work groups; (2) ESM may help connect people by making interpersonal connections visible; (3) ESM may foster a sense of belonging by allowing people to interact with others working towards

similar goals; (4) ESM can promote similarity and accessibility across geographical and cultural boundaries in global teams; (5) ESM allow and promote interaction between people who are not within the same social group; and (6) ESM blur boundaries between professional and personal communication, promoting mutuality.

Disadvantages of ESM are summarized (Leonardi, 2013) as: (1) interaction between people can be stilted due to the knowledge that it is visible to others; (2) there may be a risk to proprietary information from online dissemination; (3) boundaries between groups may get reinforced, thereby hampering interaction; (4) closed groups of like-minded people may get created; (5) context collapse may make consistent self-presentation difficult and hinder online interaction; and (6) cultural differences in communication may become more pronounced, inhibiting communication across boundaries.

2.1.3.2 Social Capital View of ESM

Advantages of enterprise social media use within theoretical framework of social capital (Leonardi et al., 2013) are that (1) it makes it easy to be aware of current events without too much social effort; (2) it makes knowledge sharing across groups possible; (3) online feedback from people with similar outlook can strengthen existing community; (4) it makes it possible to establish common ground, facilitate interaction and foster a sense of belonging in people; and (5) easily available information about people's work projects and connections can be used as conversation starters to initiate and maintain connections with others.

According to Leonardi et al. (2013), the disadvantages of ESM from the point of view of social capital are: (1) it makes people in a brokerage position less willing to publicly interact, since sharing information may undermine their position; (2) people may

face a potential loss of power if they allow others to see whom they know and how much brokerage they have; (3) people with divergent views may break away into like-minded groups that are antagonistic to each other; (4) groupthink is a possible outcome, arising out of dysfunctional group dynamics; (5) online interactions may create an illusion of a strong social connection when it does not exist offline; and (5) too much social information can be disruptive and distract from work-related communication.

2.1.4 Overview of Social Media Definitions and Uses

Definitions of social media focus on the combination of technology and the communication it facilitates. One popular definition of social media is: "the many relatively inexpensive and widely accessible electronic tools that enable anyone to publish and access information, collaborate on a common effort, or build relationships" (Jue, Marr, & Kassotakis, 2009).

Another widely used, more detail-oriented definition is: "Internet-based applications that build on ideological and technological foundations of Web 2.0, and that allow the creation and exchange of 'User Generated Content' are collectively defined as social media" (Kaplan & Haenlein, 2010). Web 2.0 refers to certain basic functionalities, rather than any specific technology. This description of social media relies on the content generated by the technology to differentiate it from other technologies. The "User Generated Content" refers to media content that fulfills three basic requirements: (a) it is accessible publicly or to a group of people via a website (which rules out e-mails and instant messages); (b) it shows a certain amount of creative effort (such as modification or comment on existing content); and (c) it is created outside of professional routines and practices (which excludes commercial marketing content).

Kaplan and Haenlein (2010) provide a 3x2 matrix with six categories to classify

social media tools. This classification is based on media research theories of social presence (Short-Williams & Christie, 1976) and media richness (Daft & Lengel, 1986), and social process theories (Goffman, 1959) of self-presentation and self-disclosure (Barczyk & Duncan, 2011).

Table 2-1: Categorization of social media tools (Kaplan and Haenlein, 2010)

		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

Kietzmann, Hermkens, McCarthy, & Silvestre (2011) provide a definition of social media based on the different functionalities that are supported. They define social media as platforms to create (and/or co-create), modify, share and discuss Internet content. The platforms include content-sharing sites, blogs, social networking, and wikis. According to them, social media consist of seven functional building blocks: identity, conversations, sharing, presence, relationships, reputation, and groups.

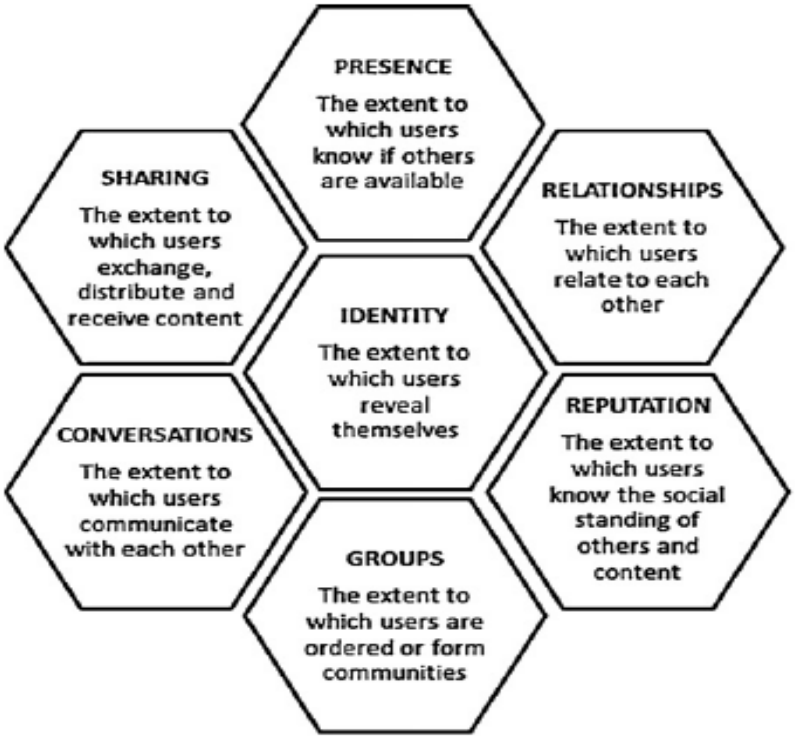


Figure 2-2: Honeycomb of social media – social media functionality (Kietzmann et al., 2011)

Another categorization of usage is as information-seeking activities, hedonic activities, sustaining of strong ties, and extending of weak ties (Scheepers, Scheepers, Stockdale, & Nurdin, 2014). Yet another categorization of SNS behavior is into active and passive, where active is when people post, comment or 'like' something on the platform, and passive is surveillance use (Tandoc, Ferrucci, & Duffy, 2015).

While most classifications provide ways to categorize social media and are useful in analyzing social media tools, Dutta (2010) provides a classification according to the type of relationships supported. Social media use has an effect on users, on the personal front (Ellison et al., 2007; Oh et al., 2014; Papacharissi & Mendelson, 2010; Sagioglou & Greitemeyer, 2014; Tandoc et al., 2015), as well as within the organizations they work in (Skeels & Grudin, 2009; Steinfield et al., 2009; Subramaniam et al., 2013). Consequently,

social media activities are categorized into two life spheres – personal and professional, and the target audience into two categories – private and public. This classification is meant to help users choose the right combination of platforms, and the appropriate amount of time spent on various activities on social media (Dutta, 2010). Since the main utility of social media is to support a wide variety of social relationships online (Kane et al., 2014), we use this framework to develop our measure for social media use at work.

Personal & Private **Family & Friends** **Message** I want to keep in touch with you. **Sample social media tools** Facebook **Goals** *Brand:* Show commitment to your relationships. *Engage:* Strengthen your ties. *Learn:* Keep abreast of changes in your social network.	**Personal & Public** **Society** **Message** I am passionate about ideas and want to share them with you. **Sample social media tools** blogs, YouTube, Twitter **Goals** *Brand:* Become known for your ideas. *Engage:* Find new outlets for your passions. *Learn:* Leverage others' ideas and viewpoints.
Professional & Private **Work Colleagues** **Message** I am a team player, and I want to collaborate with you. **Sample social media tools** Yammer and other corporate platforms **Goals** *Brand:* Enhance your image at work. *Engage:* Collaborate; boost productivity and effectiveness. *Learn:* Leverage your colleagues' input.	**Professional & Public** **Professional Peers** **Message** I am competent and growing professionally. **Sample social media tools** LinkedIn, Twitter, and sector-specific communities **Goals** *Brand:* Build peer recognition. *Engage:* Find new opportunities; show commitment. *Learn:* Boost industry knowledge; develop yourself.

Figure 2-3: Social media usage classification (Dutta, 2010)

2.1.5 Social Media Networks

Social media are vastly different from traditional or industrial media, which operated under a monologic (one source, many receivers) transmission model. As such, the presence of organizations on social media is less prominent than the vast number of individuals, when considering social media in its entirety. An organization's social media presence is managed by a single individual or a group of individuals, with access to an organizational (or individual) account on a social media platform, collaboratively (or individually) using it to maintain the organization's online presence. However, this type of social media use forms a very tiny slice of social media usage. For this research, we exclude usage to manage an organization's presence online when defining social media use.

On social networking sites (SNS), relationships linking individuals are explicitly identified, and interactions are based on formations of these networks. Boyd & Ellison (2008) defined SNS as: " web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system."

Kane, Alavi, Labianca, & Borgatti (2014) argue that with rapid changes in technology, the rigid distinctions among different types of social media technologies have become blurred. They define social media networks as having four features: (1) users have a unique user profile constructed by the individual users, by members of their network, and by the platform; (2) users access digital content through, and protect it from, various search mechanisms provided by the platform; (3) users can articulate a list of other users with whom they share a relational connection; and (4) users view and traverse their connections and those made by others on the platform. Thus, this definition

includes platforms such as Twitter that would not be considered social networking sites, but are considered as social media network (Kane et al., 2014; Murthy, 2011; Murthy, 2012)

Kane et al. (2014) also limit the definition of social media networks to focus on social media use for interpersonal interaction. This is the view of social media that we adopt in this study.

2.2 Role Theory

2.2.1 Role Theory Overview

Role theory is a perspective in sociology and in social psychology that explains behavioral expectations that people have of others and themselves in particular social positions. The origins of role theory can be traced to the works of Mead, Moreno and Linton in the 1920s and 30s (Hindin, 2007; Turner, 2001). Concepts of mind and development of self (Bandura, 1971) are used to explain how individuals take on the values, norms and beliefs of a group or society. These refer to the rights, duties, expectations and behaviors of a status or position. Thus, role is defined as the dynamic aspect of a status or position within role theory. Around the 1970s role theory began to be used to examine the relationship between work lives and nonwork pursuits (Greenhaus & Beutell, 1985).

2.2.1.1 Domains and Domain Boundaries

The domains considered in connection with role theory are usually separate with respect to time and location, such as working 9 to 5 (temporal boundary) at a workplace (spatial boundary). Since the industrial revolution, production activities (work) are typically conducted at a place and time distinct from other activities, with a different set of people and different norms for behavior and expressed emotion (Ashforth, Kreiner, & Fugate,

2000; Clark, 2000). This creates a distinct set of behavioral expectations in each domain. The boundary theory perspective of boundary management, within role theory, is that the domains occupied by an individual, while influencing each other positively or negatively, are isolated from one another, and people undergo role transformation when they switch from one role to another. The relatively newer perspective of border theory, on the other hand, contends that it is possible for people to integrate work and family domains, and the extent to which this is achieved is a choice that people make for themselves. Thus individual boundary management strategies range on a continuum from segmentation to integration (Ashforth et al., 2000; Clark, 2000; Kossek & Lautsch, 2012; Kreiner, 2006; Nippert-Eng, 1995)

2.2.2 Interdependencies between Domains – Interference and Enhancement

There are two predominant perspectives of explaining role interactions in role theory. Earlier research using role theory presumed the scarcity hypothesis (Goode, 1960), which states that people have fixed amount of time and energy to devote to the various roles that they are engaged in performing. According to this perspective, depletion of these scarce resources leads to strain, since people having difficulty meeting role expectations experience role strain. When people play more roles than they have time, energy, or resources for, role overload occurs. Role conflict may occur when people experience contradictory or incompatible behavioral expectations in the same domain (intrarole conflict) (Katz & Kahn, 1978), or across domains (interrole conflict) (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964).

The opposing perspective in role theory is the enhancement hypothesis (Marks, 1977; Sieber, 1974; Staines, 1980), which posits that participation in multiple domains leads to more positive outcomes than negative ones. When people engage in multiple

roles, one role may positively impact performance in another role, by transfer of personal and capital gains and by generation of resources that improve quality of life in another domain (Edwards & Rothbard, 2000; Grzywacz & Marks, 2000; Hanson, Hammer, & Colton, 2006; Kinnunen, Feldt, Geurts, & Pulkkinen, 2006; Kirchmeyer, 1992; Sieber, 1974).

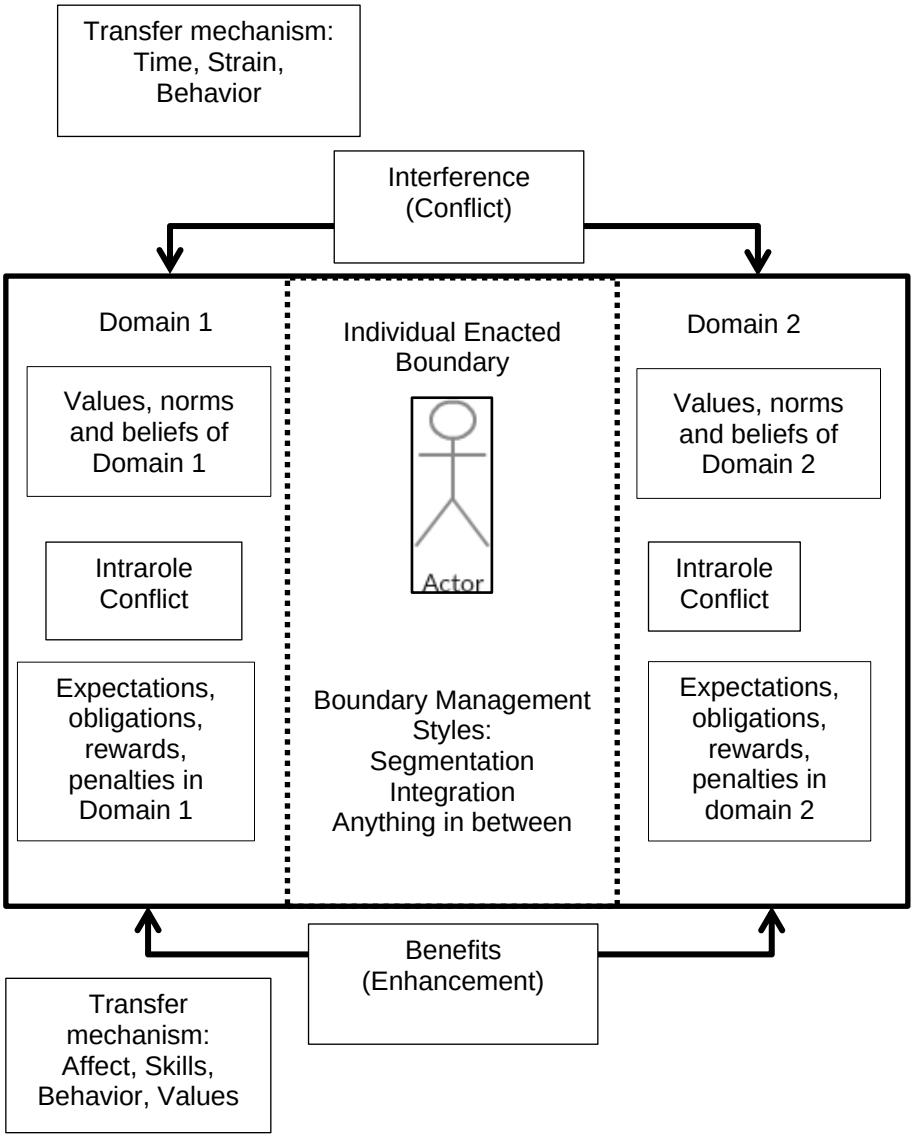


Figure 2-4: Conflict and enhancement, from engagement in two domains

2.2.2.1 Conflict and Enhancement Co-occurrence

The mechanisms of role conflict are substantially different from mechanisms of enhancement. It is therefore possible for both positive and negative outcomes of participating in multiple domains to occur simultaneously (Greenhaus & Powell, 2006; Hanson et al., 2006). Moreover, these positive and negative outcomes are distinct and independent of each other (Greenhaus & Powell, 2006; Powell & Greenhaus, 2006).

2.2.2.2 Resource Gains, Positive Spillover, Enhancement, Facilitation, Enrichment

The terms used to denote the benefits of participating in multiple domains differ somewhat in their conceptualization and, hence, measurement. Positive spillover is defined as the enhancement effect from one domain to another via transfer of personal gains (affect, skills, behavior and values). Facilitation encompasses the positive effects of personal gains as well as capital gains. Enrichment occurs when resources generated in one domain improve quality of life in another domain. These resources include social capital and material assets, apart from personal and capital resources (Carlson, Kacmar, Wayne, & Grzywacz, 2006; Edwards & Rothbard, 2000; Greenhaus & Powell, 2006; Hanson et al., 2006; Staines, 1980).This research uses the more widely-used concept of positive spillover to denote the benefits accruing to one domain from participating in another.

2.2.2.3 Nonwork Domain

Early studies predominantly investigated the interference between work and family roles (Greenhaus & Beutell, 1985). Research on interference and enhancement between work and other life activity domains, such as community, leisure/self/recreation,

and specific family roles such as parenting, either use specific domain names, or aggregate them under a single domain called life or nonwork (Kirchmeyer, 1992; Kossek & Lautsch, 2012). In this research we use the term nonwork to denote domains outside of work, to include all family and personal activities (Kirchmeyer, 1992). The term "family", in consistence with current literature, includes people with individuals have familial type social relationships involving ongoing mutual dependence (Rothausen, 1999).

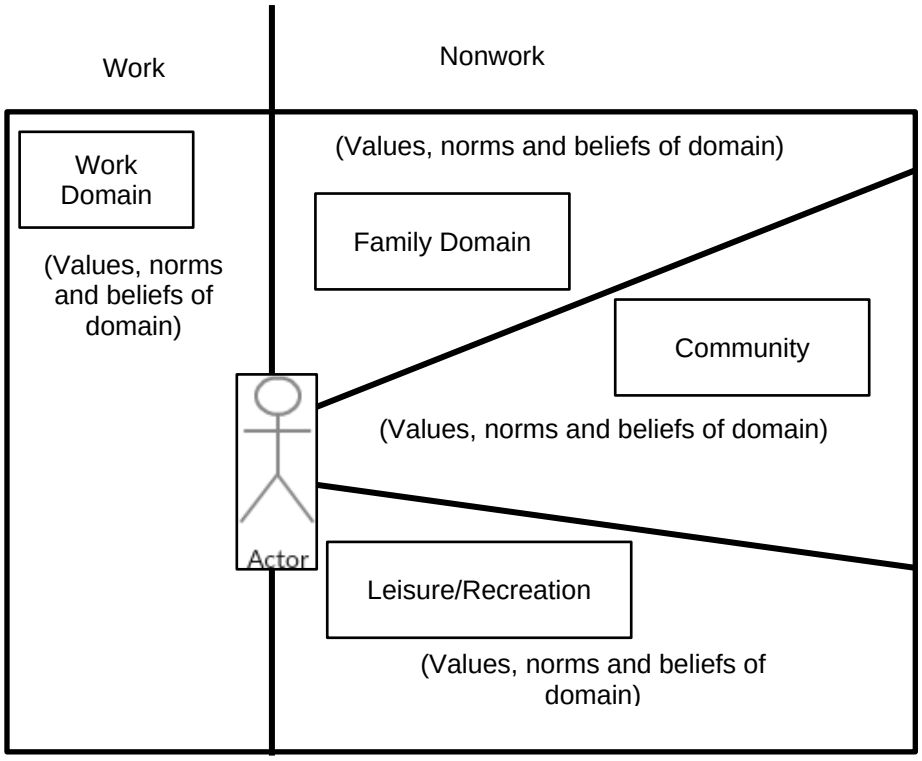


Figure 2-5: Role theory domains

2.2.2.4 Directionality of interdependencies

The positive and negative outcomes of participation in multiple domains are bidirectional (Carlson et al., 2006; Frone, 2003; Nohe & Sonntag, 2014; Wayne, Grzywacz, Carlson, & Kacmar, 2007). There are distinct positive (and negative)

outcomes of the work domain in the nonwork domain, distinguishable from the positive (and negative) outcomes of engaging in nonwork domain(s), arising in the work domain (Byron, 2005; Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Kossek & Ozeki, 1998; Mesmer-Magnus & Viswesvaran, 2005; Netemeyer, Boles, & McMurrian, 1996). Some of the terms associated with the negative outcomes are work-to-family conflict (WFC) and family-to-work conflict (FWC), work-interference-with-family (WIF) and family-interference-with-work (FIW), and work-to-nonwork (W to NW) negative spillover and nonwork-to-work (NW to W) negative spillover. The corresponding positive outcomes, for the last two, are termed work-to-nonwork positive spillover, and nonwork-to-work positive spillover. These four outcomes are together called the work-nonwork interface; also sometimes called work-family interface, work-family balance, work-life interface, and work-life balance (Kinnunen et al., 2006; Sonnentag, 2003). All four spillovers can and do co-occur, and exist simultaneously, since the causes and transfer mechanisms for each are different.

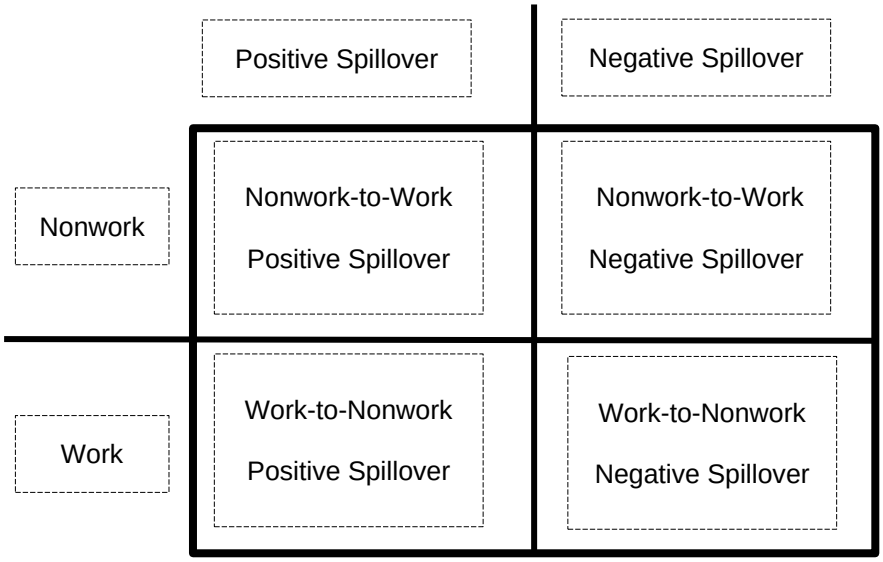


Figure 2-6: 2 x 2 Work-nonwork interface, with directionality and valence

2.2.2.5 Cross-domain and same-domain effects

The four types of spillovers from participation in multiple domains are associated with other outcomes in both the originating domain, and the resulting domain. There are mixed findings regarding which of these are stronger associations. The cross-domain perspective suggests that spillovers from other domains are stronger predictors than spillovers that originate in the same domain, while the matching-perspective proposes the opposite. Spillovers originating in the same domain have been found to be stronger predictors than spillovers that originated in a different domain (Byron, 2005; Eby et al., 2005; Nohe & Sonntag, 2014). For example, work-to-nonwork negative spillover is a stronger predictor of turnover intention than nonwork-to-work negative spillover (Nohe & Sonntag, 2014). In this research, while we acknowledge same-domain and cross-domain effects, we make no predictions concerning the predominance of either.

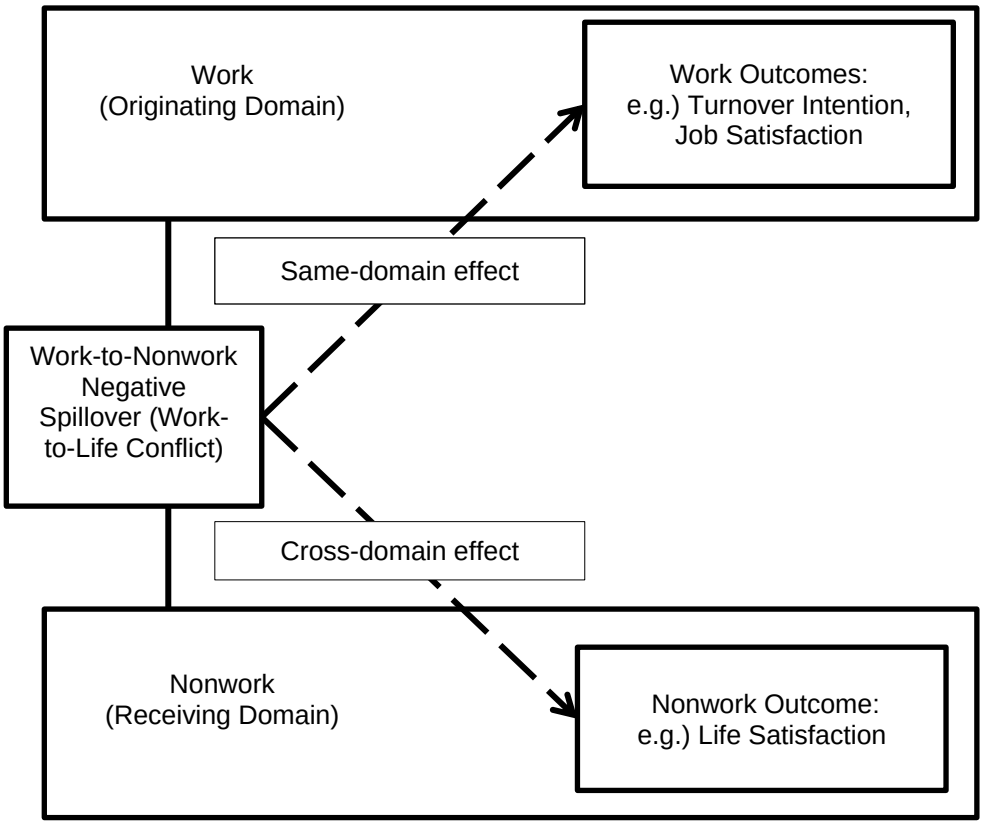


Figure 2-7: Cross-domain and same-domain effects

2.2.2.6 Segmentation Preference

Work and nonwork domains usually have distinct spatial and temporal boundaries (Ashforth et al., 2000; Clark, 2000). The domain of interest here is the work domain, and the term nonwork includes all other domains apart from work. Individuals negotiate domain boundaries as they go about their daily activities (Kreiner, 2006). Personal preferences regarding boundary negotiation, called segmentation preferences (Powell & Greenhaus, 2010) or boundary management strategies (Kossek, Noe, & DeMarr, 1999), range on a continuum from segmentation to integration (Ashforth et al., 2000; Nippert-Eng, 1996). Segmenters, people with high segmentation preference, prefer

to keep aspects – such as thoughts, concerns and physical markers – of work and nonwork domains separate from one another physically, cognitively or behaviorally (Kreiner, 2006). Integrators, people with low segmentation preference, prefer to blend the aspects of the two domains by maintaining highly permeable boundaries around their domains (Kreiner, 2006; Powell & Greenhaus, 2010). The two directions of segmentation preferences, crossing over of work into the nonwork domain and pervasion of nonwork into the work domain, are independent of each other (Kreiner, 2006).

2.3 Social Capital

Social capital, a key concept in social sciences, refers to the resources inherent in social relations or social relationship networks – whether they be formal or informal networks (Adler & Kwon, 2002; Coleman, 1988; Lin, 1999; Nahapiet & Ghoshal, 1998). It includes resources such as trust, norms of reciprocity, and social support (Nahapiet & Ghoshal, 1998). Networks and interactions, and the social capital resulting from them, can be further classified as bonding or bridging. Bonding social capital is a result of internal connections within a tightly knit, exclusive group (strong ties), such as a family and close friends who provide emotional and substantive support. Bridging social capital is inclusive, and results from tentative relationships (weak ties) between individuals in different groups, across their social networks, providing access to diverse resources (Adler & Kwon, 2002; Burt, 2001; Granovetter, 1985; Han & Hovav, 2013; Putnam, 2001; Dmitri C Williams, 2006).

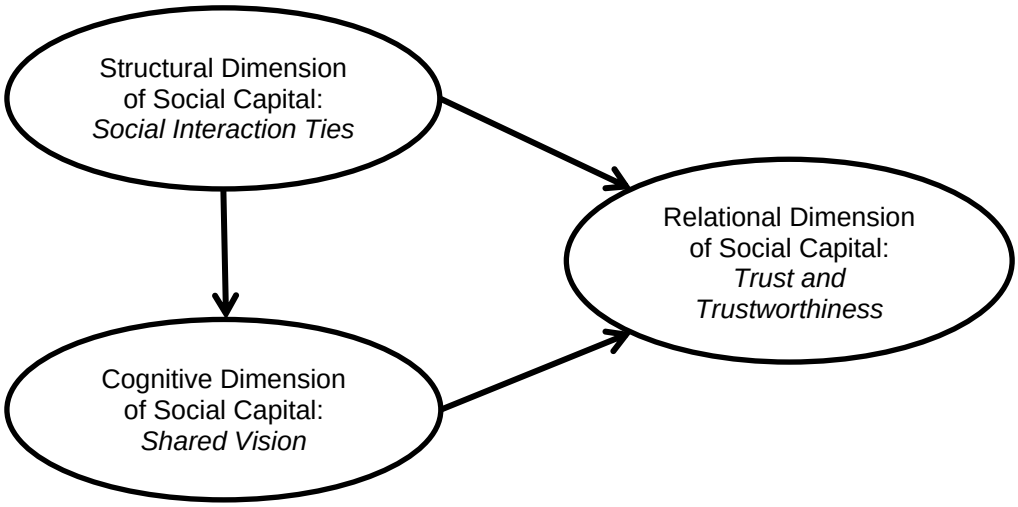


Figure 2-8: Relationships among structural, relational, and cognitive dimensions of social capital, from Tsai & Ghoshal (1998)

Within organizations, higher social capital has been found to be associated with higher organizational outcomes such as organizational advantage, knowledge sharing, and project performance (Han & Hovav, 2013; Nahapiet & Ghoshal, 1998; Sparrowe et al., 2001). With respect to work-nonwork interface, higher supervisor support has been found to help employees manage the work-family interface (Kelly et al., 2014). Moreover, receiving social support in one domain enables individuals to take advantage of support provided in a different domain (Greenhaus & Kossek, 2014). Higher social support has been found to be related to lower work-to-family negative spillover and lower family-to-work negative spillover (Ciabattari, 2007; Griggs, Casper, & Eby, 2013).

2.3.1 Social Capital and Social Media

According to Garson (1998), the role of ICTs on social capital is bidirectional. Social networking sites influence and are influenced by social capital. An online network is usually successful if there is already a strong real world network (Fukuyama, 1996).

Once established, the networking infrastructure lets people reach out and create weak ties and maintain strong ties, thus encouraging the formation of social capital (Calabrese & Borchert, 1996; Scheepers et al., 2014; Skeels & Grudin, 2009; Tandoc et al., 2015).

Early research on online social capital found that community-based information networks did not promote social capital (Garson, 2006; Kiesler, Siegel, & McGuire, 1984; Loch & Conger, 1996; Tonn, Zambrano, & Moore, 2001). Counter to this, research on social network platforms such as Facebook has found evidence that higher usage is associated with higher social capital (Ellison et al., 2014; Ellison et al., 2007). However, the measure of online social capital (Dmitri C Williams, 2006) used in these studies (Ellison et al., 2007; Smock et al., 2011; Steinfield et al., 2009) has been the subject of criticism (Appel et al., 2014).

2.3.2 Workplace Interpersonal Trust

A key component of social capital is trust and trustworthiness (Tsai & Ghoshal, 1998). Social trust is the extent to which an individual is willing to be vulnerable to another. While some experts view social trust as being distinct from social capital, it is a closely related consequence and therefore widely used as a proxy for social capital (Glaeser, Laibson, Scheinkman, & Soutter, 2000; Lillbacka, 2006; Mishra, 1996; Putnam, 2001).

Trust itself is a widely researched construct, defined as the willingness to be vulnerable to another, with various dimensions and categorizations (Colquitt, Scott, & LePine, 2007; Mayer, Davis, & Schoorman, 1995; Schoorman, Mayer, & Davis, 2007; Seppänen, Blomqvist, & Sundqvist, 2007). Trust within organizations can be categorized as trust in the organization, and interpersonal trust (Seppänen et al., 2007). Workplace interpersonal trust can further be categorized as trust in supervisors and trust in co-

workers (McCauley & Kuhnert, 1992; Ting, 1997). Interpersonal trust also has an affective component and a cognitive component (J David Lewis & Weigert, 1985; McAllister, 1995). Interpersonal trust is commonly measured by measuring distrust, which is viewed as the opposite of trust (Govier, 1994; Lewicki, McAllister, & Bies, 1998; Lillbacka, 2006).

Chapter 3

Research Model and Hypotheses

Chapter 2 summarized the literature on which the theoretical model and hypotheses introduced in this chapter are based. The operationalization of constructs in the model are contained in the following chapter, Chapter 4.

3.1 Research Model

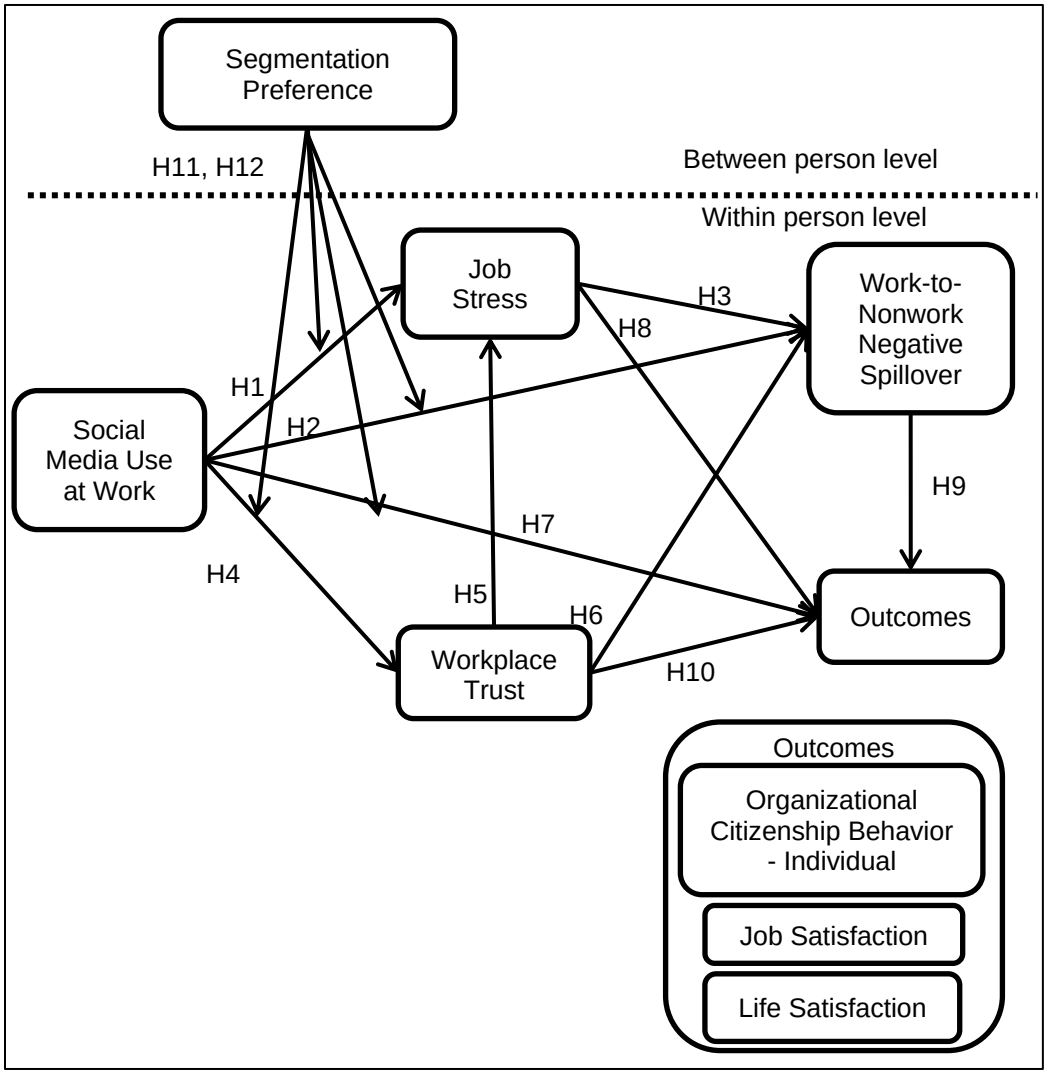


Figure 3-1: Research model

The information systems (IS) literature recognizes the impact of IS use on individual and organizational performance (DeLone & McLean, 1992; Devaraj & Kohli, 2003; Doll & Torkzadeh, 1998; Keen & Morton, 1978). Though social media differ from traditional IS deployed in organizations, their use is pervasive in employees' daily lives (Skeels & Grudin, 2009). It is therefore pertinent to investigate the implications of using social media at work on employee outcomes (Kuegler et al., 2015).

We use role theory as the foundation to hypothesize the relationships between online social relationship behaviors at work and consequent outcomes, using the framework of work-nonwork interface (also called work-life balance). According to role theory, people have different responsibilities and expectations in different domains of their lives, such as work, family, community and leisure (Hindin, 2007; Turner, 2001). This research examines use of social media at work through the lens of organizational role theory (Kahn et al., 1964; Katz & Kahn, 1978; Rothbard et al., 2005). The role that people engage in in one domain has an impact on their roles in other domains (Frone, 2003; Greenhaus & Powell, 2006; Kirchmeyer, 1992). Scarcity hypothesis (Goode, 1960) holds that this impact will be negative, a loss of resources; on the other hand, enhancement hypothesis (Marks, 1977; Sieber, 1974; Staines, 1980) argues that this impact will be positive, a gain in resources. These impacts or spillovers are directional in nature (Netemeyer et al., 1996). Thus interrole losses and gains, also called spillovers or interdependencies, in the work domain that arise due to engaging in the nonwork domain are distinct from spillovers in the nonwork domain that occur due to participation in the work domain (Carlson et al., 2006; Frone, 2003; Greenhaus & Beutell, 1985; Nohe & Sonntag, 2014; Wayne et al., 2007). The term nonwork is used to denote the aggregate of all domains outside of work, such as family, leisure and community (Kirchmeyer & Cohen, 1999; Kossek & Lautsch, 2012; Kreiner, 2006).

3.2 Overview

3.2.1 Personal SMU and NW to W Negative Spillover

Engaging in social media at work takes time away from work-related tasks, making it difficult to fulfill work requirements in the allocated time (Greenhaus & Beutell, 1985). Thus, the scarcity perspective of role theory suggests that time spent away from work, on nonwork activities, may increase time-based nonwork-to-work conflict (Goode, 1960; Netemeyer et al., 1996). The opposing perspective of border crossing suggests that using social media at work for personal reasons is driven by obligations in the nonwork role (Clark, 2000; König & De La Guardia, 2014). This border-crossing activity has positive outcomes, and enables employees to achieve work-nonwork balance (Ashforth et al., 2000; Greenhaus & Kossek, 2014; Moqbel et al., 2013). Being able to accomplish imperative nonwork tasks at work reduces strain (Marks, 1977), thus lowering strain-based nonwork-to-work conflict or negative spillover (Greenhaus & Beutell, 1985; Netemeyer et al., 1996). Moreover, not just the actual use, but the perception of having more control (Karasek, 1979) over the boundaries that demarcate work and nonwork could lower cross-domain conflict for employees (Kossek, Lautsch, & Eaton, 2006).

Based on these arguments, we posit that nonwork-to-work negative spillover (conflict) should be lower when social media is used at work. A reduction in strain-based conflict should lead to lesser job stress, according to role theory (Hanson et al., 2006). Similarly, a reduction in job stress is expected due to personal social media use at work, through increased nonwork-to-work positive spillover.

3.2.2 Personal SMU and NW-to-W Positive Spillover

Research has found conflicting positive and negative outcomes of social media usage. On the one hand, some research studies have found social capital (Ellison et al.,

2007) and happiness (Kim & Lee, 2011; Tandoc et al., 2015) to be positively influenced by social networking sites. On the other hand, some studies question whether relationships, such as between Facebook use and depression, exist at all (Jelenchick, Eickhoff, & Moreno, 2013; Moreno, Jelenchick, Koff, & Eickhoff, 2012), and some have found social media use to be related to reduced social capital and increased loneliness (Burke, Marlow, & Lento, 2010; Sagioglou & Greitemeyer, 2014), envy and decreased life satisfaction (Krasnova, Wenninger, Widjaja, & Buxmann, 2013; Sagioglou & Greitemeyer, 2014), cyberbullying (Hinduja & Patchin, 2010; O'Keeffe & Clarke-Pearson, 2011) and depression (Tandoc et al., 2015; Wright, Rosenberg, & Egbert, 2013). It is noteworthy that the population in these studies were teenagers and young adults, who are more prone to depression (Aseltine, Gore, & Colten, 1994; Fisher, 1988; Wright et al., 2013), and therefore experienced predominantly negative outcomes. Studies investigating Facebook and negative emotional consequences have found that this type of relationship is mediated by a feeling of having wasted time in activity that is not meaningful (Sagioglou & Greitemeyer, 2014) or by a feeling of envy towards others when engaging in surveillance use of Facebook (Krasnova et al., 2013; Tandoc et al., 2015). After accounting for these mediators, the relationships between Facebook and outcomes were found to be positive. Therefore, if employees engage in meaningful use of social networking sites (Boyd & Ellison, 2008; Dutta, 2010; Kane et al., 2014), it is likely to result in positive emotions rather than negative.

Evolving changes in information and communication technologies (ICTs) have blurred distinctions between different types of social media (Kane et al., 2014). People use social media to support a variety of social relationships. Consequently, social media networks can be formed by technologies other than those within the strict definition of social networking sites (Boyd & Ellison, 2008; Kane et al., 2014). The relationship

between SNS and positive affect can be expected to hold for social media and positive affect. We therefore assert that meaningful use of social media is likely to result in positive affect. This positive affect generated from engaging in nonwork activities while at work, can lead to positive spillover from nonwork-to-work domain, by way of transfer of positively valenced affect (Carlson et al., 2006; Edwards & Rothbard, 2000; Greenhaus & Powell, 2006; Hanson et al., 2006; Staines, 1980). Transfer of positive affect to work domain can lead to reduced stress in the work domain (Hanson et al., 2006).

3.2.3 Professional SMU

Some organizations have dedicated social networking sites, such as Watercooler (HP), Beehive (IBM), Harmony (SAP), D Street (Deloitte), and Town Square (Microsoft). Other organizations take advantage of established social media sites where employees can interact (Rooksby et al., 2009). These could be organization-oriented connection platforms, such as Yammer, Xing (formerly openBC), and Chatter, or open platforms with the capability of making organization-oriented closed groups, such as on Facebook (Kane, 2015). The term professional social media use used herein encompasses use of all three types of social media network platforms – dedicated, organization-oriented, and open.

Social media platforms can be used for connecting with other people professionally, and engaging in tasks that may be related either directly or indirectly to employees' work tasks (Dutta, 2010). Employees perceive social networking sites as being beneficial to their productivity (Leidner, Koch, & Gonzalez, 2010; Moqbel et al., 2013; North, 2010). In fact, enterprise social media platforms have been found to provide benefits such as improved communication and collaboration, and easier access to expertise and to digital content for enhanced knowledge sharing (Brzozowski, 2009;

Dutta, 2010; Kane, 2015; Leidner et al., 2010; Steinfield et al., 2009; Subramaniam et al., 2013). They also provide opportunities to gain recognition for expertise within an employee's organization or professional community (Dutta, 2010). Social media online platforms are a convenient tool for employees to connect and interact with their colleagues, regardless of their location (Kane, 2015; Raacke & Bonds-Raacke, 2008; Skeels & Grudin, 2009). Social media use within organization enhances access to people and content, which can result in positive outcomes (Kane, 2015).

Social media can negatively impact employees because of negative ties and relationships (Denyer, Parry, & Flowers, 2011; Kane, 2015). Though negative relationships form a very small percentage of all organizational relationships, 3 to 8% according to Labianca & Brass (2006), they have a much larger impact on employee outcomes, such as performance, compared to positive relationships (Kane, 2015; Labianca & Brass, 2006). Negative relationships and negativity tend to be amplified on social platforms (Denyer et al., 2011; Kane, 2015; Leonardi et al., 2013). Thus, social interaction typically reduces stress (Schreurs, Hetty van Emmerik, Gunter, & Germeys, 2012), unless dominated by negative interactions.

3.3 Hypotheses

Social media use may be used to support different types of relationships online. The use of social media, as used herein, is limited to use for supporting person-level relationships. Interactions in different domains are associated with different outcomes according to Work-Nonwork literature. Although it is hard to separate social and work-oriented interaction (Rooksby et al., 2009), one categorization of online social media use is along two dimensions – personal or professional aspects of employees' lives, and private or public nature of interaction (Dutta, 2010).

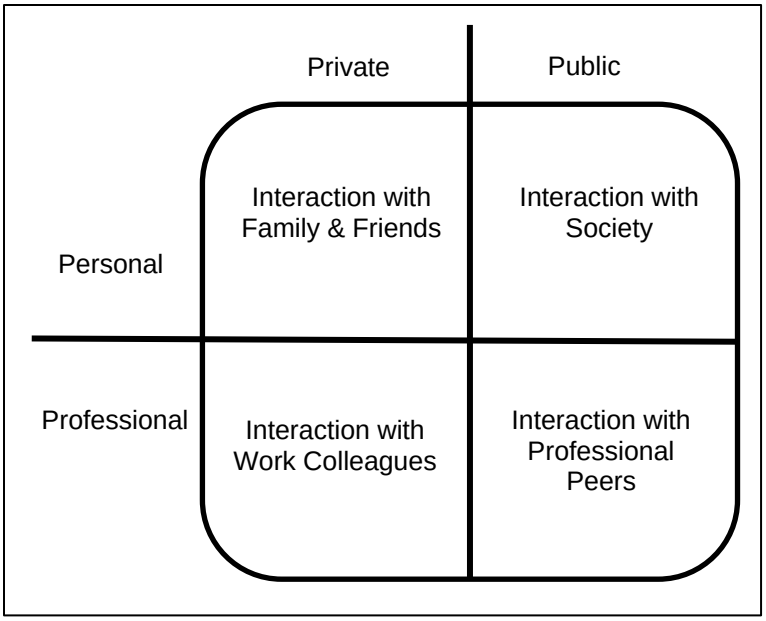


Figure 3-2: Categorization of social media use at work, according to Dutta (2010).

The work-nonwork literature identifies three domains apart from work, namely, family, community and leisure (Kreiner, 2006). While the leisure domain does not map onto any domain in Dutta's categorization (2010), family and community are the personal-private and personal-public domains. The work-nonwork literature recognizes the work (professional) domain of employees, but does not further categorize it as private or public. A possible reason could be that this distinction of private or within-organization interaction and public or outside-organization interaction is of interest from an organization's point of view, but not from an employee's. The pilot conducted for this study supports the idea that employees do not distinguish between private and public use of social media to support professional relationships.

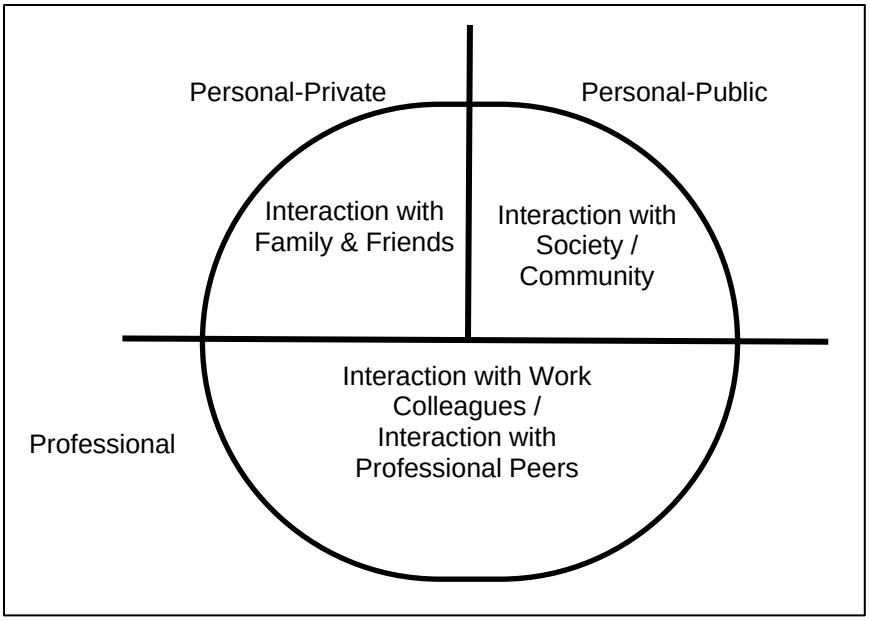


Figure 3-3: Domains of social media use to support relationships

In the following sections, we hypothesize about the associations between social media use at work for each domain and job stress. We introduce segmentation preference as a moderator, and workplace trust as mediator, to these relationships. We also hypothesize about the relationships of these variables of interest to organizational outcomes of organizational citizenship behavior towards individuals, and job satisfaction, and personal outcomes of work-to-nonwork negative spillover (work-life conflict) and life satisfaction.

3.3.1Job Stress

Organizational stress is an important consideration in work-nonwork research (Greenhaus & Beutell, 1985). The effect of job stress on productivity (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007) and on the physical and psychological health of employees is undeniable (Goh, Pfeffer, A., & Zenios, 2015; Harris & Fennell, 2014; Kelly

et al., 2008). IS literature also places importance on examining the impact of ICTs and technostress on job stress (Ayyagari, Grover, & Purvis, 2002; Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008; Tarafdar et al., 2007). The relationship between social media use for supporting online relationships, and job stress, is therefore of considerable interest.

Telecommuting literature, drawing on classic job design theory (Hackman & Oldham, 1980) and job demand-control model (Karasek, 1979), found autonomy and control over work processes to be related to well-being measures, such as job stress (Kossek et al., 2006). Social media use at work heightens psychological perception of flexibility (Kossek et al., 2006), thereby leading to less stress. This view is also supported by self-determination theory (Deci & Ryan, 2008), according to which the autonomy provided by possibility of breaks, such as using social media for leisure, should have a positive effect on employee motivation, and a negative one on job stress.

According to role theory, domain spillovers from social media use at work may be associated with job stress. Job stress is one of the mechanisms through which work-to-nonwork spillovers occur. However, nonwork-to-work spillovers affect job stress as well (Rantanen, Kinnunen, Feldt, & Pulkkinen, 2008). For example, participating in multiple roles may lead to reduction of stress in another domain (Kirchmeyer, 1993), while increase in time-based conflict from nonwork-to-work may increase job stress (Hanson et al., 2006). Thus, spillovers from nonwork-to-work influence job stress. The previous sections (3.2.1 through 3.2.3) detail the relationships between social media use in different domains with their respective spillovers, and the effect of those on job stress. Overall, social media use at work, driven by demands of the personal domain (whether private or public) may enhance nonwork-to-work positive spillover, and attenuate

nonwork-to-work negative spillover, which reduces stress. In the professional domain, social media supports work-related activities, helping to reduce stress.

H1: Within individuals, job stress is negatively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.

3.3.2 Work-to-Nonwork Negative Spillover

Work-to-nonwork negative spillover (work-life conflict) is a widely studied outcome in work-nonwork literature. Along with work-to-nonwork positive spillover and nonwork-to-work spillovers (positive and negative), it forms the work-nonwork interface rooted in role theory (Carlson et al., 2006; Frone, 2003; Nohe & Sonntag, 2014; Wayne, Grzywacz, Carlson, & Kacmar, 2007).

3.3.2.1 Social Media Use

Nonwork activities at work take time away from work and can lead to time-based nonwork-to-work negative spillover (Goode, 1960; Greenhaus & Beutell, 1985; Netemeyer et al., 1996). However, when work time is spent on other activities, then work activities need to be completed in the time allocated for nonwork domain. This manifests as work-to-nonwork negative spillover, since people have the impression that their work is interfering in their nonwork lives. Thus higher personal use of social media at work leads to higher work-to-nonwork negative spillover.

Professional social media use can not only affect work-to-nonwork negative spillover through time-based conflict, like personal social media use as explained above, but also through strain-based conflict. Perception of control in work environment can lower cross-domain conflict (Kossek et al., 2006). However, as noted earlier (Section 3.2.3), even though negative online interactions form a very minor percentage of all

interactions, they can have a much stronger impact (Denyer et al., 2011; Kane, 2015; Labianca & Brass, 2006; Leonardi et al., 2013).

Thus, we argue that social media use in both nonwork and work domains can lead to work-to-nonwork negative spillover, and hypothesize as follows:

H2: Within individuals, work-to-nonwork negative spillover is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.

3.3.2.2 Job Stress

Organizational stress has been well established to be one of the mechanisms through which work-to-nonwork negative spillover occurs in the social psychology of organizations (Frone, Russell, & Cooper, 1992; J. Greenhaus & Beutell, 1985; Kahn et al., 1964; Motowidlo, Packard, & Manning, 1986; Netemeyer et al., 1996; Voydanoff, 1988). While nonwork-to-work positive and negative spillovers reduce and increase job stress, respectively (Greenhaus & Beutell, 1985; Grzywacz, Almeida, & McDonald, 2002; Kirchmeyer, 1993; Motowidlo et al., 1986; Rantanen, Kinnunen, Feldt, & Pulkkinen, 2008), we restrict our focus to job stress and work-to-nonwork negative spillover, and hypothesize as follows:

H3: Within individuals, daily work-to-nonwork negative spillover is positively associated with daily job stress.

3.3.3 Workplace Trust

The growing literature on social networking sites' use finds increased social capital to be one of its benefits (Boyd & Ellison, 2008; Ellison et al., 2007; Kane et al., 2014; Papacharissi & Mendelson, 2010; Rooksby et al., 2009; Skeels & Grudin, 2009).

Kane et al. (2014) contend that all social media support social networks, whether formally or informally. Therefore, the benefit of increased social capital should accrue to users of all social media, and not a subset that supports formal networks.

Research on enterprise social networking (ESN) indicates that professional social media use can produce positive or negative outcomes depending on the type of interactions present in an organization's ecosystem, from the point of view of social capital (Kane et al., 2014; Leonardi et al., 2013). However, most case studies have reported gain in social capital from using ESN (Riemer et al., 2015; Subramaniam et al., 2013).

Workplace trust is a component of, and may be used as an indicator of, social capital (Brehm & Rahn, 1997; Glaeser et al., 2000; Lillbacka, 2006; Mishra, 1996; Putnam, 2001; Tsai & Ghoshal, 1998). We therefore hypothesize for higher workplace trust with higher social media use at work.

H4: Within individuals, workplace interpersonal trust is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.

Work-family studies on social capital have found increased social capital lowers same-domain and cross-domain conflicts (Griggs et al., 2013), and that social capital resources may spillover across domains (Ciabattari, 2007; Greenhaus & Kossek, 2014; Greenhaus & Powell, 2006; Griggs et al., 2013). Furthermore, distrust in the workplace has been identified as a possible cause of stress (Weinberg, Cooper, Sutherland, & Bond, 2010). Based on this, we argue for workplace trust lowering job stress and work-to-nonwork negative spillover, hypothesized below.

H5: Within individuals, job stress is negatively associated with workplace trust.

H6: Within individuals, work-to-nonwork negative spillover is negatively associated with workplace trust.

3.3.4 Outcomes

3.3.4.1 Social Media Use

This study examines employee and business outcomes of the work-nonwork interface. Outcomes associated with work-nonwork spillovers, which are being examined in this study, are job satisfaction (Boswell & Olson-Buchanan, 2007; Friedman & Greenhaus, 2000; Kossek & Ozeki, 1998), organizational citizenship behaviors (Lambert, 2000; Nathan P Podsakoff, Whiting, Podsakoff, & Blume, 2009; Smith, Organ, & Near, 1983) and life satisfaction (Kossek & Ozeki, 1998; Parasuraman & Greenhaus, 2002), which have consequences on workplace productivity and organizational costs (Porter, Steers, Mowday, & Boulian, 1974).

Positive work experiences, such as those arising due to personal and professional social media use at work (section 3.2.1 through 3.2.3) lead to higher positive spillover, according to role theory (Edwards & Rothbard, 2000; Greenhaus & Powell, 2006; Hanson et al., 2006; Staines, 1980). Moreover, use of social media at work increases perception of higher boundary control (Karasek, 1979), and is likely to lower cross-domain conflict (Kossek et al., 2006).

First, interrole conflicts are related to lower organizational citizenship behavior (Haun, Steinmetz, & Dormann, 2011), and lower job and life satisfaction (Bruck, Allen, & Spector, 2002; Frone et al., 1992; Greenhaus & Beutell, 1985; Kirchmeyer & Cohen, 1999; Marks, 1977; Netemeyer et al., 1996; O'Driscoll, Ilgen, & Hildreth, 1992; Voydanoff, 1988). Second, facilitation, enhancement or positive spillover between work and nonwork domains is related to higher organizational citizenship behavior (Haun et al., 2011;

Lambert, 2000; Mesmer-Magnus & Viswesvaran, 2005), and higher job and life satisfaction (Hanson et al., 2006). Lastly, work-nonwork literature has found positive and negative spillovers to be associated with outcomes in the originating domain as well as the resulting domain of the spillover (Nohe & Sonntag, 2014). Therefore, we can argue that both personal and professional social media use at work affect outcomes of work and nonwork domains (Charoensukmongkol, 2014; Michel & Hargis, 2008; Moqbel et al., 2013).

H7 (a, b, c): Within individuals, OCBI is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.

H7 (d, e, f): Within individuals, job satisfaction is positively associated with (d) personal-private, (e) personal-public and (f) professional social media use at work.

H7 (g, h, i): Within individuals, life satisfaction is positively associated with (g) personal-private, (h) personal-public and (i) professional social media use at work.

3.3.4.2 Job Stress

Job stress plays an important role in daily work life. It directly influences OCB, and job and life satisfaction (Kossek & Ozeki, 1998; Smith et al., 1983). We therefore hypothesize for the relationship between job stress and the three outcomes being measured.

H8: Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are negatively associated with job stress.

3.3.4.3 Work-to-Nonwork Negative Spillover

According to role theory, both positive and negative spillovers are associated with outcomes in the originating as well as the resulting domain of the spillover (Nohe &

Sonntag, 2014). We use this as the basis to hypothesize for the relationship between work-to-nonwork negative spillover and the outcomes under consideration.

H9: Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are negatively associated with work-to-nonwork negative spillover.

3.3.4.4 Workplace Trust

Social capital has been found to be an antecedent to organizational outcomes such as OCB and job satisfaction (Han & Hovav, 2013; Nahapiet & Ghoshal, 1998; Sparrowe et al., 2001). With respect to life satisfaction, it has been found that higher social support enables individuals to take advantage of support in other domains and thus enhance outcomes of that domain (Ciabattari, 2007; Greenhaus & Kossek, 2014; Griggs et al., 2013).

H10: Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are positively associated with workplace trust.

3.3.5 Segmentation Preference

Segmentation preference, preference of how much to integrate work and nonwork domains, has been found to moderate the relationship between workplace activities that promote flexibility, autonomy and control, and their outcomes (Kossek et al., 2006, 1999; Maertz & Boyar, 2011; Rothbard et al., 2005). People's segmentation preference is associated with cross-domain outcomes. Most studies have found higher segmentation preference (boundary management style higher on segmentation) to be related to lower interrole conflict (Kossek et al., 1999; Powell & Greenhaus, 2010). In other words, preference for integration was found to be associated with higher conflict

(Hecht & Allen, 2009; Kossek & Lautsch, 2012; Kossek et al., 2006; Kreiner, 2006; Olson-Buchanan & Boswell, 2006; Powell & Greenhaus, 2010; Voydanoff, 2005).

Table **3-1** lists the spillover outcomes consistent with this view.

Table 3-1: Expected spillovers for those with high segmentation preference, under high-integration-high-conflict view.

Under high segmentation preference, *domain activities lead to low cross-domain conflict*
Work activities in nonwork domain lead to low work-to-nonwork conflict
Nonwork activities lead to low nonwork-to-work conflict
Under high segmentation preference, *domain activities lead to high positive affect, low negative affect*
Work activities lead to high positive affect, which lead to high work-to-nonwork positive spillover
Nonwork activities lead to high positive affect, which lead to high nonwork-to-work positive spillover

Some studies, though, have found higher preference for integration to be related to lower negative outcomes such as negative affect (Butts et al., 2015) and higher positive spillover (Ilies, Wilson, & Wagner, 2009; Powell & Greenhaus, 2010). While some can also be attributed to the use of a global indicator of segmentation preference instead of a directional indicator of segmentation preference (Kossek & Lautsch, 2012), such contradictory findings can be attributed to the incongruence between preferred and actual work-nonwork boundaries (Kossek et al., 1999; Kreiner, Hollensbe, & Sheep, 2009). This perspective is supported by person-environment fit literature as well. The fit between the environment (such as organizational policies) and personal segmentation preference influences outcomes such as positive and negative spillovers, satisfaction and organizational commitment (Kossek et al., 1999; Maertz & Boyar, 2011; Rothbard et al., 2005). People with a preference for higher segmentation have lower positive and higher negative outcomes under conditions that encourage an integrated environment, when

compared to people who have a preference for integration (Kossek et al., 1999; Rothbard et al., 2005).

Table **3-1** lists the spillover outcomes consistent with this view.

Table 3-2: Expected spillovers for those with high segmentation preference, under high-integration-low-conflict view.

Under high segmentation preference, *domain activities lead to high cross-domain conflict*
Work activities in nonwork domain lead to high work-to-nonwork conflict
Nonwork activities lead to high nonwork-to-work conflict
Under high segmentation preference, *domain activities lead to low positive affect, high negative affect*
Work activities lead to low positive affect, which lead to low work-to-nonwork positive spillover
Nonwork activities lead to low positive affect, which lead to low nonwork-to-work positive spillover

Access to social media at work, like internet use, allows the possibility of blending nonwork and work easily at the workplace (Anandarajan et al., 2011; Garrett & Danziger, 2008). Nonwork activities at work are therefore more likely to produce higher negative and lower positive work outcomes for people with high segmentation preference. We hypothesize this as follows:

H11: The relationship between personal-private social media use at work and (a) job stress, (b) workplace trust, (c) work-to-nonwork negative spillover, (d) OCBI, and (e) job satisfaction is weaker for people with a high segmentation preference.

H12: The relationship between personal-public social media use at work and (a) job stress, (b) workplace trust, (c) work-to-nonwork negative spillover, (d) OCBI, and (e) job satisfaction is weaker for people with a high segmentation preference.

3.3.6 Summary of Hypotheses

Table 3-3: List of hypotheses

H1	Within individuals, job stress is negatively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.
H2	Within individuals, work-to-nonwork negative spillover is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.
H3	Within individuals, daily job stress is positively associated with daily work-to-nonwork negative spillover.
H4	Within individuals, workplace trust is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.
H5	Within individuals, workplace trust is negatively associated with job stress.
H6	Within individuals, workplace trust is negatively associated with work-to-nonwork negative spillover.
H7 (a, b, c)	Within individuals, OCBI is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.
H7 (d, e, f)	Within individuals, job satisfaction is positively associated with (d) personal-private, (e) personal-public, and (f) professional social media use at work.
H7 (g, h, i)	Within individuals, life satisfaction is positively associated with (g) personal-private, (h) personal-public, and (i) professional social media use at work.
H8	Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are negatively associated with job stress.
H9	Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are negatively associated with work-to-nonwork negative spillover.
H10	Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are positively associated with workplace trust.
H11	High personal-private social media use at work is associated with (a) high job stress, (b) low workplace trust, (c) high work-to-nonwork negative spillover, (d) low OCBI, and (e) low job satisfaction for people with high segmentation preference.
H12	High personal-public social media use at work is associated with (a) high job stress, (b) low workplace trust, (c) high work-to-nonwork negative spillover, (d) low OCBI, and (e) low job satisfaction for people with high segmentation preference.

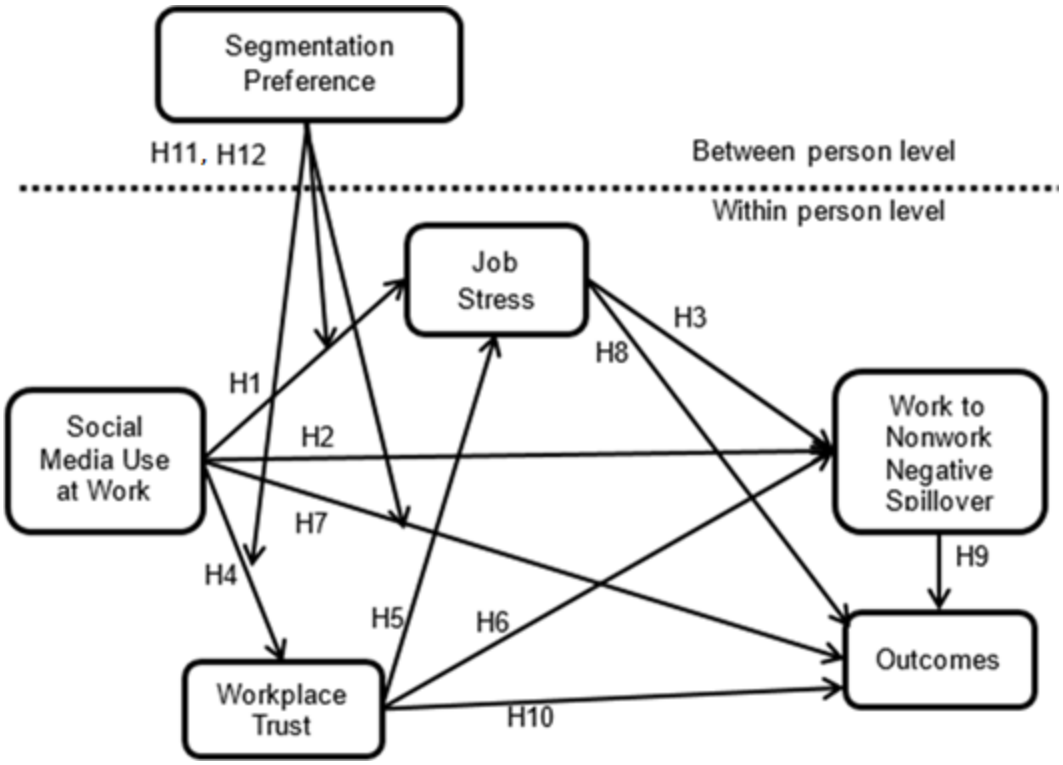


Figure 3-4: Hypothesized model

Chapter 4

Research Design and Variables

Chapter 3 introduced the research model and hypotheses based on literature reviewed in Chapter 2. The current chapter specifies measurement scales used for variables in the research model, their validity and reliability, and discusses the pilot and primary data collection techniques. Hypothesis testing on the primary data collected is presented in Chapter 5.

Data collection procedures were reviewed and approved by the UT Arlington Institutional Review Board (UTA IRB), under IRB Protocol number 2016-0243.

4.1 Measurement Scales

4.1.1 Social Media

Kane et al. (2014) define social media networks as

> having four features such that users: (1) have a unique user profile constructed by the user, by members of their network, and by the platform; (2) access digital content through, and protect it from, various search mechanisms provided by the platform; (3) can articulate a list of other users with whom they share a relational connection; and (4) view and traverse their connections and those made by others on the platform.

This excludes collaboration tools like email and electronic discussion boards that do not allow users to establish profiles or list connections for others to view or traverse. It may include technologies like wikis, blogs or microblogs, such as Twitter, that are not regarded as social network sites. The authors also limit the focus of social media networks to usage for supporting interpersonal interactions. Thus, broader applications of social media, such as product review networks, peer production communities, and organizational communication, are not considered when they diverge from interpersonal focus. This is the theoretical definition of the construct of social media used in this study.

The most commonly used measure of Facebook use (Ellison et al., 2007) has been criticized (Junco, 2013) for combining perception of actual time spent on Facebook, and attitudinal questions about Facebook, which obfuscates the meaning and relationships to other variables. In this study, social media usage at work is operationalized using measurement items based on recommendations for finding the right online social presence (Dutta, 2010). This framework (Dutta, 2010) is platform and technology independent and focuses on interpersonal relationships, making it ideally suited to adapt for this study. The refined measurement scale, developed at the end of the pilot, is in Table 4-1.

Table 4-1: Measurement scale items for daily social media use at work

	Approximately how much total time did you spend on social media at work today?	Slider for hours
	I used social media at work today to:	
	(Personal & Private; Family & Friends)	
	1) Strengthen ties with my family and friends	Measurement anchors: 1- None, 2- A little, 3- Moderate, 4- Quite a bit, 5- Almost all
	2) Stay informed of happenings in lives of people close to me	
	3) Keep in touch with family and friends	
	4) Connect with friends and relatives	
	(Personal & Public; Society)	
	1) Share my opinions and experiences with society	
	2) Engage with society by expressing my views and opinions	
	3) Learn ideas and viewpoints of other people in society	
	4) Follow ideas and viewpoints expressed by other members of society	
	(Professional)	
	1) Enhance my image at work	
	2) Collaborate with others at work	
	3) Boost my work productivity and effectiveness at work	
	4) Establish myself as a team player at work	
	5) Express willingness to collaborate with colleagues	
	6) Build professional peer recognition	
	7) Show commitment to my profession	
	8) Boost my industry knowledge	
	9) Develop myself professionally	
	10) Demonstrate competence in my profession	

4.1.2 Workplace Trust

Resources embedded in social interaction based on reciprocity, trust and mutual obligations, and which provide utility to the participants, are collectively called social capital (Lillbacka, 2006; Nahapiet & Ghoshal, 1998; Putnam, 1993; Tsai & Ghoshal, 1998). Social trust, the extent to which an individual is willing to be vulnerable to another, is one aspect of social capital, and has been used as a proxy for social capital (Glaeser et al., 2000; Lillbacka, 2006; Mishra, 1996; Putnam, 2001). It is also an important workplace consideration by itself (Mayer et al., 1995; Schoorman et al., 2007). It is

measured frequently by a single item: for example, in the National Opinion Research Center's General Social Survey (GSS) and the World Values Survey (WVS), the item used was, "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" (Delhey & Newton, 2005; Glaeser et al., 2000). This study measures trust at the individual level by adapting a general interpersonal trust measure (Lillbacka, 2006), for workplace interpersonal trust.

Table 4-2: Measurement scale items for trust

(Measurement anchors: 1- Strongly Disagree to 5- Strongly Agree)
1) At work today I felt that there are only a few people whom I can really trust
2) At work today I felt that others do not wish what is best for me
3) At work today I felt that if I am not careful, others will use me

4.1.3 Job Stress

Motowidlo et al. (1986) conceptualize stress as an unpleasant affective experience associated with emotions of "fear, dread, anxiety, irritation, annoyance, anger, sadness, grief, and depression." This study adapts their operationalization for measuring daily stress.

Table 4-3: Measurement scale items for job stress

(Measurement anchors: 1- Strongly Disagree to 5- Strongly Agree)
1) I felt a great deal of stress today because of my job
2) My work today was extremely stressful
3) Many stressful things happened to me at work today
4) I felt stress at work today

4.1.4 Work-Nonwork Interface

Spillovers between work and nonwork domains are defined as "transfer of characteristics from one domain to the other domain, resulting in similarities between the two domains" (Hanson et al., 2006). Work-to-nonwork negative spillover, also known as work-to-family conflict (WFC) is adapted from Netemeyer et al. (1996), who define it as

an interrole conflict in which general demands of time devoted to and strain created in the originating domain interfere with discharging responsibilities in the other domain.

Table 4-4: Measurement scale items for daily work-to-nonwork negative spillover

Please indicate your level of agreement with the following statements.
(Measurement anchors: 1- Strongly Disagree to 5- Strongly Agree)
1) The demands of my work interfered with my personal life today
2) Today, the amount of time my job took up made it difficult to fulfill other responsibilities that I have
3) Things I wanted to do today, outside of work, did not get done because of the demands my job put on me
4) My job produced strain that made it difficult to fulfill personal duties today
5) Due to work-related duties, I had to make changes to my plans for personal activities today

4.1.5 Organizational Citizenship Behavior (OCB)

OCB was originally defined as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (Organ, 1994, p. 4), and later modified to "performance that supports the social and psychological environment in which task performance takes place" (Organ, 1997, p. 95). These fall under two categories: (a) OCBI – behaviors that benefit specific individuals in the organization, and (b) OCBO – behaviors that benefit the organization (Larry J Williams & Anderson, 1991). Since the focus of this study is individuals' workplace behavior with respect to other individuals, we only measure OCBI, and not OCBO. This study adapts the scales (Larry J Williams & Anderson, 1991) for daily OCBI. The items that would not change daily have been omitted.

Table 4-5: Measurement scale items for OCBI

To what extent did you engage in the following behaviors at work today?
(Measurement anchors: 1- Strongly Disagree to 5- Strongly Agree)
1) Helped others who had work related problems
2) Assisted others with their duties, without being asked
3) Took time to listen to co-workers' problems and worries
4) Went out of the way to help others

4.1.6 Job Satisfaction

The Brayfield-Rothe index of job satisfaction, which is construed as an individual's attitude toward their work (Brayfield & Rothe, 1951), is typically adapted for use in experience sampling methodology (Judge, Scott, & Ilies, 2006). It is adapted here to suit the research design of this study.

Table 4-6: Measurement scale items for job satisfaction

Please indicate your level of agreement with the following statements.
(Measurement anchors: 1- Strongly Disagree to 5- Strongly Agree)
Today, I found real enjoyment in my work. (1)
During most of the day today I felt enthusiastic about my work. (2)
I felt fairly satisfied with my job today. (3)

4.1.7 Life Satisfaction

Diener, Emmons, Larsen, & Griffin (1985) define life satisfaction as the cognitive-judgmental aspect of subject well-being (the other two aspects are positive and negative affect). This study adapts the bipolar adjective items from Quinn & Shepard, 1974 to measure life satisfaction daily (Adams, King, & King, 1996).

Table 4-7: Measurement scale items for life satisfaction

How do you feel about your life when you consider your day today?
(Measurement anchors: 1- Strongly Disagree to 5- Strongly Agree)
1) My day today was close to ideal
2) Conditions of my life were excellent today
3) Thinking about my day today, I feel satisfied with my life

4.1.8 Segmentation Preference

Segmentation preference is defined as the preference of the degree to which workers prefer to blend, physically, cognitively or behaviorally, one domain with another (Kossek et al., 1999; Kreiner, 2006; Powell & Greenhaus, 2010). It is directional in nature; preference of work blending into nonwork is independent of preference of nonwork blending into work (Kreiner et al., 2009). Rather than use a global indicator (Ilies et al., 2009), this study adapts directional scale items (Kreiner, 2006) with nonwork as the originating and work as the receiving domain. Segmentation preference was measured at the initial stage where participants were recruited, along with other demographic data, since it is a stable construct, and is not expected to change within-person over a period of three weeks (Kreiner, 2006).

Table 4-8: Measurement scale items for segmentation preference

Please indicate your level of agreement with the following statements.
(Measurement anchors: 1- Strongly Disagree to 5- Strongly Agree)
I don't like to have to think about personal issues while I'm at work (1)
I prefer to keep my personal life separate from work (2)
I don't like issues outside of work creeping into my work life (3)
I like to be able to leave personal issues behind when I go to work (4)

4.1.9 Demographics

While control variables are not needed in experience sampling methodology since each individual acts as their own control (Dimotakis, Ilies, & Judge, 2013a; Judge, Ilies, & Scott, 2006; Zhang, Zyphur, & Preacher, 2009), we collected demographic information about the participants. Consistent with work-family literature, this study collected information about age, gender, partner status, number of children, whether partner works for pay, hours worked per week and household income (Wayne, Casper, Matthews, & Allen, 2013). The demographic variables were collected before the daily surveys began, at the time of recruiting participants for the daily surveys.

4.2 Scale Development

To measure social media use at work, a new psychometric scale was developed. The subsequent sections discuss translation validity and development of the new measurement scale.

The items for the measurement instrument were operationalized from recommendations to find the right online presence by Dutta (2010). This theoretical framework is independent of the platform and technology, and consistent with work-family literature in characterizing various interpersonal relationships. It does not focus on the features or use of the features of the platform, unlike many other categorizations (Kaplan & Haenlein, 2010; Kietzmann et al., 2011; Tandoc et al., 2015). While there are frameworks that focus on interpersonal relationships (Scheepers et al., 2014), Dutta (2010) articulates the dimensions in a way that is consistent with domains identified by work-family literature, based on role theory (Kirchmeyer, 1992; Kossek & Lautsch, 2012).

4.2.1 Face Validity and Content Validity

Two rounds of Q sort or card sort were conducted to assess face and content validity and to refine the instrument for social media use at work (Dong, Wang, & Benbasat, 2016; Moore, G.C., and Benbasat, 1991). nine judges, five in the first round and four in the second, categorized the list of items into based on similarity (open sorting where judges create and name their own categories, as opposed to closed or hybrid). The sorting activity was hosted online (www.optimalworkshop.com). Items were modified based on feedback received from the judges. Judges in both rounds created three to five groups, indicating an underlying factor structure consistent with the a priori view. There was an overall distinction among three main dimensions, with some judges creating up to five groups, but none less than three.

A co-occurrence matrix was created based on items that were placed together in the same group. The similarity matrices from both card sorting rounds were factor analyzed in R, using maximum likelihood factor analysis method "factanal()" from the "stats" package (varimax rotation). Factor analysis was chosen over other methods because this was an open card sort activity, where judges chose how many categories to create, and computing kappa statistic was not possible (Block, 1961; Capra, 2005; Krystal M Lewis & Hepburn, 2010; Nawaz, 2012). To perform factor analysis, the diagonal elements were set to 9, since the original similarity matrix was computationally singular. Table 4-9 lists factor loadings from exploratory factor analysis on co-occurrence matrix (varimax rotation) from first round of card sorting.

Table 4-9: EFA of social media use items from on co-occurrence matrix of Q sort

	Loadings:		
	Factor1	**Factor2**	**Factor3**
1		0.42	
2		0.75	
3		0.57	
4		0.75	
5			0.74
6			0.55
7			0.48
8			0.61
9	0.30		
10	0.50		
11	0.58		
12	0.60		
13	0.56		
14	0.47		
15	0.53		
16	0.58		
17	0.62		
18	0.53		
	Factor1	**Factor2**	**Factor3**
Ssloadings	3.21	1.75	1.47
Proportion Variance	0.17	0.09	0.08
Cumulative Variance	0.017	0.26	0.34
*Loadings below 0.30 are suppressed for clarity			

There was not enough evidence to support the existence of distinct professional-private and professional-public factors (Hair, Anderson, Babin, & Black, 2010; Kline, 2015). The factor analysis and comments from the judges confirmed the presence of three factors underlying the social media use items – personal-private, personal-public, and professional. The dimensions found are consistent with work, family, and community dimensions from work-nonwork literature (Kirchmeyer, 1992; Kossek & Lautsch, 2012).

Ambiguous and low-loading items were reworded at the end of the card sort, based on feedback from the judges.

4.2.2 Pilot Setting

After refining the items from the card sort for word choice and clarity, they were used in a pilot study. The aim of the pilot was to conduct an exploratory factor analysis on items of new measurement scale and assess reliability of established measures. The pilot was conducted as a cross-sectional study, using Qualtrics' panel, with survey uploaded to uta.qualtrics.com, and resulted in 155 valid responses. The respondents were compensated by Qualtrics. The pilot was cross-sectional and no identifying information about respondents was recorded. Procedural remedies to further minimize common method bias (Table 4-30) were also applied. Within each section of the psychologically separated sections of questions, a randomly chosen attention check was included. Responses that were incorrect on the attention check questions were deemed invalid.

Table 4-10: Attention check questions

Question	Measurement Anchors
Do you like oranges? (Please select "Neither like nor dislike" for this one.)	(1) Like a great deal
	(2) Like somewhat
	(3) Neither like nor dislike
	(4) Dislike somewhat
	(5) Dislike a great deal
Please indicate your level of agreement with the statement "Washington D.C. is the capital of United States of America."	(1) Strongly agree
	(2) Somewhat agree
	(3) Neither agree nor disagree
	(4) Somewhat disagree
	(5) Strongly disagree
Please indicate your level of agreement with the statement "There are seven days in a week."	(1) Strongly agree
	(2) Somewhat agree
	(3) Neither agree nor disagree
	(4) Somewhat disagree
	(5) Strongly disagree
How was your day today? (Please select option 'delightful', whether or not your day today was delightful or not, though we hope it was!)	(1) Delightful
	(2) Good
	(3) Average
	(4) Poor
	(5) Terrible
Although we hope you are feeling far from it, please select option 'extremely unhappy'.	(1) Extremely happy
	(2) Somewhat happy
	(3) Neither happy nor unhappy
	(4) Somewhat unhappy
	(5) Extremely unhappy

4.2.3 Descriptive Statistics

The pilot data was collected via Qualtrics' panel, and was restricted to Americans who had a full time job where they had access to social media. They also had to have gone to work and accessed social media while at work, on the day that they took the survey. Of the 155 valid responses, 84 (54.2%) were women, the median age was 34 (18 to 66), 96 (62%) were married or cohabiting, 117 (75.5%) identified as White racially, and

88 (56.8%) respondents had one or more children living at home with them. Of these, 30 (19.4%) had one or more children under 5 years of age. All respondents had at least a high school degree or equivalent, with 98 (63.2%) having a Bachelor's degree or higher. Also, 101 (65.1%) reported average annual household income to be in the range of $50,000 to $175,000 USD, and 43 (27.8%) reported an average annual household income of less than $50,000 USD. Table 4-11 contains descriptive statistics of all study variables on which data was collected in the pilot.

Table 4-11: Descriptive statistics – all variables

Description	**Variable Name**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Private Social Media Use at Work	Pvt	1	5	3.31	1.15
Public Social Media Use at Work	Pub	1	5	3.06	1.18
Professional Social Media Use at Work	Prof	1	5	2.88	1.33
Workplace Interpersonal Trust	Trust	1.25	5	3.10	0.90
Job Stress	Stress	1	5	2.79	0.99
Segmentation Preference	SegPref	2	5	4.02	0.78
Work-to-Nonwork Negative Spillover	WLC	1	5	2.75	1.26
Organizational Citizenship Behavior-Individual	OCBI	1	5	3.51	1.05
Job Satisfaction	JobSat	1	5	3.54	0.82
Life Satisfaction	LifeSat	1	5	3.66	0.95
Gender	Gender	1	2	1.54	0.50
Age	Age	18	66	35.65	9.04
Whether respondent has a family-unit partner	Partner	1	4	1.65	0.86
Whether respondent has children at living at home	Kids	1	2	1.43	0.50
Whether respondent has children younger than 5 years of age	Young Kids	0	2	0.94	0.90
Education level	Education	12	17	14.55	1.36
Racial Identity	Race	11	17	11.63	1.29
Income level	Income	11	99	14.87	9.84
	N=155				

Table 4-12: Frequency distribution of categorical variables

Variable	Category	Description	Frequency	Percent
Gender	1	Male	71	45.81
	2	Female	84	54.19
Partner	1	Married	84	54.19
	2	Single	50	32.26
	3	Cohabiting	12	7.74
	4	Divorced	9	5.81
Kids	1	Yes (children living at home)	88	56.77
	2	No (children living at home)	67	43.23
Young Kids	1	Yes, children below 5 years of age	30	19.35
	2	No children below 5 years of age	58	37.42
Education	11	Less than high school degree	0	0.00
	12	High school degree or equivalent	17	10.97
	13	Some college	23	14.84
	14	Associate degree	17	10.97
	15	Bachelor's degree	58	37.42
	16	Graduate degree	35	22.58
	17	Doctoral degree	5	3.23
Race	11	White	117	75.48
	12	Black or African American	13	8.39
	13	American Indian or Alaska Native	1	0.65
	14	Asian	19	12.26
	15	Native Hawaiian or Pacific Islander	1	0.65
	16	Other (All three Mexican)	3	1.94
	17	Do not wish to answer	1	0.65
Income	11	Less than $24,999	6	3.87
	12	$25,000 - $49,999	37	23.87
	13	$50,000 - $74,999	40	25.81
	14	$75,000 - $99,999	33	21.29
	15	$100,000 - $124,999	9	5.81
	16	$125,000 - $149,999	12	7.74
	17	$150,000 - $174,999	7	4.52
	18	$175,000 - $199,999	2	1.29
	19	$200,000 and up	7	4.52
	99	Do not wish to answer	2	1.29

Table 4-13: Correlations among main variables

	Pvt	Pub	Prof	Seg Pref	Trust	Stress	WLC	OCBI	Job Sat	Life Sat
Pvt	1.00	.76**	.61**	0.05	-0.06	-0.03	.26**	.35**	0.12	.38**
Pub	.76**	1.00	.83**	0.14	-.19*	0.00	.38**	.49**	0.11	.39**
Prof	.606**	.83**	1.00	.22**	-.17*	-0.07	.32**	.43**	0.12	.42**
SegPref	0.05	0.14	.22**	1.00	-0.03	-.16*	-0.04	.19*	0.05	0.01
Trust	-0.06	-.19*	-.17*	-0.03	1.00	-.53**	-.47**	-0.07	.51**	.20*
Stress	-0.03	0.00	-0.07	-.16*	-.53**	1.00	.47**	0.08	-.44**	-.35**
WLC	.26**	.38**	.32**	-0.04	-.47**	.47**	1.00	.32**	-.28**	0.04
OCBI	.35**	.41**	.43**	.17*	-0.07	0.08	.32**	1.00	.22**	.41**
Job Sat	0.12	0.11	0.12	0.05	.51**	-.44**	-.28**	.22**	1.00	.50**
Life Sat	.38**	.39**	.42**	0.01	.20*	-.35**	0.04	.41**	.50**	1.00

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
N=155

Table 4-14: Correlations of main variables with demographic variables

	Pvt	Pub	Prof	Seg Pref	Trust	Stress	WLC	OCBI	Job Sat	Life Sat
Gender	-0.12	-0.03	-0.07	0.05	-0.05	0.03	-0.14	0.02	0.06	-0.08
Age	-.17*	-0.11	-0.02	-0.01	.16*	-0.06	-0.15	-0.13	0.02	0.02
Partner	-0.09	-0.06	-0.13	-0.01	-0.12	0.07	-0.09	-.21**	-0.13	-0.13
Kids	-0.09	-.21**	-.25**	-0.02	-0.04	0.05	-0.13	-.30**	-0.15	-.24**
Young Kids	0.04	.17*	.22**	0.03	0.07	-0.08	0.05	.26**	0.15	.24**
Educ-ation	-0.12	-0.07	-0.05	-.23**	-0.07	0.01	0.06	-0.01	-0.03	-0.06
Race	0.09	-0.01	-0.02	0.02	-.16*	0.01	-0.01	-0.04	0.00	0.00
Income	-0.07	-0.02	0.01	-0.06	-0.09	-0.04	-0.02	-0.06	-0.02	-0.05

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
N=155

4.2.4 Convergent and Discriminant Validity

Exploratory factor analysis (EFA) was conducted in SPSS on data from the 155 valid responses. Principal axis factoring with Oblimin rotation was used to assess convergent and discriminant validity. Two items from the personal-private dimension and

one from the personal-public dimension did not load properly on the a priori factors. These are indicated by an asterisk (*) in Table 4-15. They were reworded, in consultation with subject experts, to read “Stay informed of happenings in lives of people close to me”, “Connect with friends and relatives”, and “Share my opinions and experiences with society”. The stem for all items was “Out of all the time that you spent on social media at work today, how much time did you spend towards the following activities?” Factor loadings of all of the other items were above 0.5, an acceptable, low threshold (Bagozzi & Yi, 1988), though the recommended threshold is 0.707 (Barclay, Higgins, & Thompson, 1995).

Table 4-15: EFA of social media use items from pilot data in SPSS

	Pattern Matrix			
	1	**2**	**3**	**Item text**
i01*	.078	.485	-.366	Showing commitment to your personal and private relationships
i02	.082	.902	.033	Strengthening ties with your family and friends
i03*	.116	.254	-.499	Keeping abreast of changes in your personal social network
i04	-.053	.868	-.005	Keeping in touch with family and friends
i05*	.473	.177	-.258	Becoming known for your ideas in society
i06	.168	.258	-.506	Engaging with society by expressing your views and opinions
i07	.041	-.093	-.928	Learning ideas and viewpoints of other people in society
i08	.012	.019	-.861	Following ideas and viewpoints expressed by other members of society
i09	.735	.119	-.111	Enhancing your image at work
i10	.882	.000	-.014	Boosting your productivity and effectiveness at work
i11	.824	-.048	-.088	Boosting your industry knowledge
i12	.911	-.030	.021	Collaborating with others at work
i13	.962	.016	.071	Establishing yourself as a team player at work
i14	.869	.018	-.008	Expressing willingness to collaborate with colleagues
i15	.908	.095	.068	Building strong working relationships with colleagues
i16	.714	.075	-.137	Building professional peer recognition
i17	.982	-.105	.051	Showing commitment to your profession
i18	.894	-.049	-.018	Developing yourself professionally
i19	.848	.004	-.021	Demonstrating competence in your profession
Eigen Value	**12.57**	**1.88**	**.68**	
% of Variance	**66.15**	**9.88**	**3.59**	
*Items do not load cleanly on a priori factor Extraction Method: Principal Axis Factoring				

4.2.5 Construct Reliability

Cronbach's alpha was used as measure of scale reliabilities. It was found to be 0.874, 0.900 and 0.975 for personal-private, personal-public, and professional

dimensions, respectively, indicating high reliability of these scales. The cross-sectional pilot data was also used to verify internal consistency of all the other scales (Table 4-16). All Cronbach's alphas were higher than the recommended threshold of 0.70 (Nunnally & Bernstein, 1994).

Table 4-16: Single level scale reliabilities from pilot data

Private Social Media Use	Pvt	0.874
Public Social Media Use	Pub	0.900
Professional Social Media Use	Prof	0.975
Segmentation Preference	SegPref	0.843
Workplace Interpersonal Trust	Trust	0.860
Job Stress	Stress	0.705
Work-to-Nonwork Negative Spillover	WLC	0.936
Organizational Citizenship Behavior - Individual	OCBI	0.984
Job Satisfaction	JobSat	0.736
Life Satisfaction	LifeSat	0.869

4.3 Primary Data Sample

4.3.1 Collection Design

A primary data sample was collected using experience sampling methodology, also called daily diary method, which involved repeated measurements taken from individuals. The study adopted an interval contingent design, with levels approach. This section briefly explains aspects of this methodology.

4.3.1.1Within-Subject versus Between-Subject Design

In a within-subject design, also called repeated measures design, measures are collected repeatedly on the same subjects (Maertz & Boyar, 2011). The traditional, non-repeated studies, also called between-subject design, compare the same measure on different subjects. A within-subject design avoids some of the biases associated with

common rater effects that may affect traditional between-subjects design, such as consistency motif, implicit theories, social desirability, leniency biases and acquiescence biases (Maertz & Boyar, 2011; Philip M Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). A combination of between- and within-subjects analysis explains more variance than either approach by itself (Dimotakis, Ilies, & Judge, 2013b). However, the true advantage of a within-person design is "not in the average amount of variance explained, but the increased understanding of individual behavior it offers" (Hackett, Bycio, & Guion, 1989, p. 450; Tennen, Affleck, Armeli, & Carney, 2000).

Common Method Biases

The following tables (Table 4-17 and Table 4-18) by Philip M Podsakoff et al. (2003) provide a summary of potential sources of common method bias, and possible influences of common method biases on question response process.

Table 4-17: Method biases and question response process (Philip M Podsakoff et al., 2003)

Stages of the response process	Activities involved in each stage	Potential method biases
Comprehension	Attend to questions and instructions, represent logical form of question, identify information sought, and link key terms to relevant concepts	Item ambiguity
Retrieval	Generate retrieval strategy and cues, retrieve specific and generic memories, and fill in missing details	Measurement context, question context, item embeddedness, item intermixing, scale size, priming effects, transient mood states, and item social desirability
Judgment	Assess completeness and accuracy of memories, draw inferences based on accessibility, inferences that fill in gaps of what is recalled, integrate material retrieved, and make estimate based on partial retrieval	Consistency motif (when it is an attempt to increase accuracy in the face of uncertainty), implicit theories, priming effects, item demand characteristics, and item context-induced mood states
Response selection	Map judgment onto response category	Common scale anchors and formats and item context-induced anchoring effects
Response reporting	Editing response for consistency, acceptability, or other criteria	Consistency motif (when it is an attempt to appear rational), leniency bias, acquiescence bias, demand characteristics, and social desirability

Table 4-18: Potential common method bias sources (Philip M Podsakoff et al., 2003)

Potential Cause		Definition
Common rater effects		Refer to any artifactual covariance between the predictor and criterion variable produced by the fact that the respondent providing the measure of these variables is the same.
	Consistency motif	Refers to the propensity of respondents to try to maintain consistency in their responses to questions.
	Implicit theories (and illusory correlations)	Refer to respondents' beliefs about the covariation among particular traits, behaviors, and/or outcomes.
	Social desirability	Refers to the tendency of some people to respond to items more as a result of their social acceptability than their true feelings.
	Leniency biases	Refer to the propensity of respondents to attribute socially desirable traits, attitudes, and/or behaviors to someone they know and like than to someone they dislike.
	Acquiescence biases (yea-saying and nay-saying)	Refer to the propensity of respondents to agree (or disagree) with questionnaire items independent of their content.
	Mood state (positive or negative affectivity; positive or negative emotionality)	Refers to the propensity of respondents to view themselves and the world around them in generally negative terms (negative affectivity) or the propensity of respondents to view themselves and the world around them in generally positive terms (positive affectivity).
	Transient mood state	Refers to the impact of relatively recent mood-inducing events to influence the manner in which respondents view themselves and the world around them.
Item characteristic effects		Refer to any artifactual covariance that is caused by the influence or interpretation that a respondent might ascribe to an item solely because of specific properties or characteristics the item possesses.
	Item social desirability	Refers to the fact that items may be written in such a way as to reflect more socially desirable attitudes, behaviors, or perceptions.
	Item demand characteristics	Refer to the fact that items may convey hidden cues as to how to respond to them.
	Item ambiguity	Refers to the fact that items that are ambiguous allow respondents to respond to them systematically using their own heuristic or respond to them randomly.
	Common scale formats	Refer to artifactual covariation produced by the use of the same scale format (e.g., Likert scales, semantic differential scales, "faces" scales) on a questionnaire.
	Common scale anchors	Refer to the repeated use of the same anchor points (e.g., extremely, always, never) on a questionnaire.
	Positive and negative item wording	Refers to the fact that the use of positively (negatively) worded items may produce artifactual relationships on the questionnaire.

Table 4-18 - *Continued*

Item context effects		Refer to any influence or interpretation that a respondent might ascribe to an item solely because of its relation to the other items making up an instrument (Wainer & Kiely, 1987).
	Item priming effects	Refer to the fact that the positioning of the predictor (or criterion) variable on the questionnaire can make that variable more salient to the respondent and imply a causal relationship with other variables.
	Item embeddedness	Refers to the fact that neutral items embedded in the context of either positively or negatively worded items will take on the evaluative properties of those items.
	Context-induced mood	Refers to when the first question (or set of questions) encountered on the questionnaire induces a mood for responding to the remainder of the questionnaire.
	Scale length	Refers to the fact that if scales have fewer items, responses to previous items are more likely to be accessible in short-term memory and to be recalled when responding to other items.
	Intermixing (or grouping) of items or constructs on the questionnaire	Refers to the fact that items from different constructs that are grouped together may decrease intraconstruct correlations and increase interconstruct correlations.
Measurement context effects		Refer to any artifactual covariation produced from the context in which the measures are obtained.
	Predictor and criterion variables measured at the same point in time	Refers to the fact that measures of different constructs measured at the same point in time may produce artifactual covariance independent of the content of the constructs themselves.
	Predictor and criterion variables measured in the same location	Refers to the fact that measures of different constructs measured in the same location may produce artifactual covariance independent of the content of the constructs themselves.
	Predictor and criterion variables measured using the same medium	Refers to the fact that measures of different constructs measured with the same medium may produce artifactual covariance independent of the content of the constructs themselves.

4.3.1.2 ESM Research Designs

Levels Approach versus Episodes Approach

The levels approach of variable measurement asks people to retrospectively report their emotions over a period of time (Robinson & Clore, 2002). In the episodic approach, variable measurement is triggered by the occurrence of a relevant event

(Maertz & Boyar, 2011). A levels approach is susceptible to retrospective biases due to semantic retrieval of emotion (Robinson & Clore, 2002). However, that does not imply that either approach is always biased or always veridical (Robinson & Clore, 2002). While there is the possibility that the beliefs people have about themselves may be disassociated with their everyday behavior and experiences, semantic emotion knowledge is often quite valid (Robinson & Clore, 2002). Though an episodic approach of measurement provides a more accurate reflection of emotional states, a levels approach is more useful for examining relationships between constructs (Maertz & Boyar, 2011).

Interval-contingent, Signal-contingent and Event-contingent Designs

Based on the above distinction between the levels and episodes approaches, experience sampling procedures may be categorized as interval-contingent, signal-contingent or event-contingent (Dimotakis et al., 2013b). An interval-contingent study is designed around a fixed time or specific daily occurrences, such as the end of the work day. Signal-contingent studies have participants fill out surveys at a preselected random or semi-random schedule determined by researchers. Event-contingent studies have the participants fill out the survey when they experience an event. Interval--contingent design was determined to be best suited to this study, so that participants can recount and summarize their daily activities and feelings.

4.3.1.3 Data Collection Period

Though 5-day design is sometimes long enough to gather sufficient data, and is short enough to minimize participant attrition, data collection over a longer period is recommended in ESM (Dimotakis et al., 2013b). In this study, data was collected over working days of two and a half weeks, for a total of 13 working days. Of the 160

participants recruited before the daily surveys started, 91 participants completed three or more daily surveys.

4.3.1.4 Methods for Data Analysis

Multilevel Modeling (MLM), which is essentially multiple regression with clustered data, was best suited to analyze the gathered data (Tennen et al., 2000). MLM is also known as hierarchical linear modeling (HLM), nested modeling, and mixed or random effects modeling. MLM is an extension of multiple linear regression in which the intercept and slope(s) are potentially random (Goldstein & McDonald, 1988). These coefficients are assumed to be normally distributed, and the means, variances and covariances of their joint distribution are estimated as parameters. In MLM, unlike multilevel structural equation modeling (MSEM), indicators are aggregated to form the construct, leaving no variance in items unexplained. However, the MSEM statistical technique was not applicable since the level 1 variables (repeated measures) are dependent on the individual, and therefore not independent (Preacher, Zhang, & Zyphur, 2011; Preacher, Zyphur, & Zhang, 2010).

Equation of a single-level regression model, which assumes that all cases come from a population with same intercept, is given in Figure 4-1, and represented diagrammatically in Figure 4-2. A multi-level model with random intercepts and fixed slopes is given by equations in Figure 4-3 and represented diagrammatically in Figure 4-4. Next, a multi-level model with two-predictor regression with random intercept and random slopes is given by equations in Figure 4-5 and represented diagrammatically in Figure 4-6. Finally, Figure 4-7 presents equations for a multilevel model with both level-1 and level-2 predictors, represented diagrammatically in Figure 4-8.

$$y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + r_i$$

where y is the outcome measured on individual i; β_0, β_1, and β_2 are fixed regression parameters relating the two predictor variables x_{1i} and x_{2i} to the response variable; and r_i is a random residual term with a mean of zero and variance σ^2 (i.e., $r_i \sim N[0, \sigma^2]$).

Figure 4-1: Equation of a single-level regression model (Curran & Bauer, 2007, p. 285)

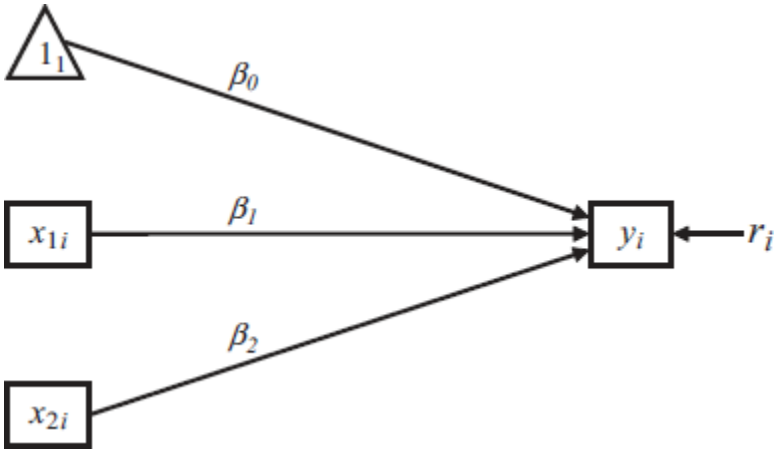


Figure 4-2: Diagram of two-predictor fixed-effects regression with one intercept and two slopes (Curran & Bauer, 2007, p. 285)

$$y_{ij} = \beta_{0j} + \beta_1 x_{1ij} + \beta_2 x_{2ij} + r_{ij},$$

where i represents individual and j represents group

$$\beta_{0j} = \gamma_{00} + u_{0j}.$$

The random intercept (denoted β_{0j}) is thus expressed as an additive function of a grand mean (γ_{00}) and a group-level deviation from this mean (u_{0j}). The within-group residual variance is denoted σ^2 (i.e., $r_{ij} \sim N[0, \sigma^2]$), and the between-group variance is denoted τ_{00} (i.e., $u_{0j} \sim N[0, \tau_{00}]$).

Figure 4-3: Equations of a two-predictor multi-level regression with random intercepts and fixed slopes (Curran & Bauer, 2007, p. 286)

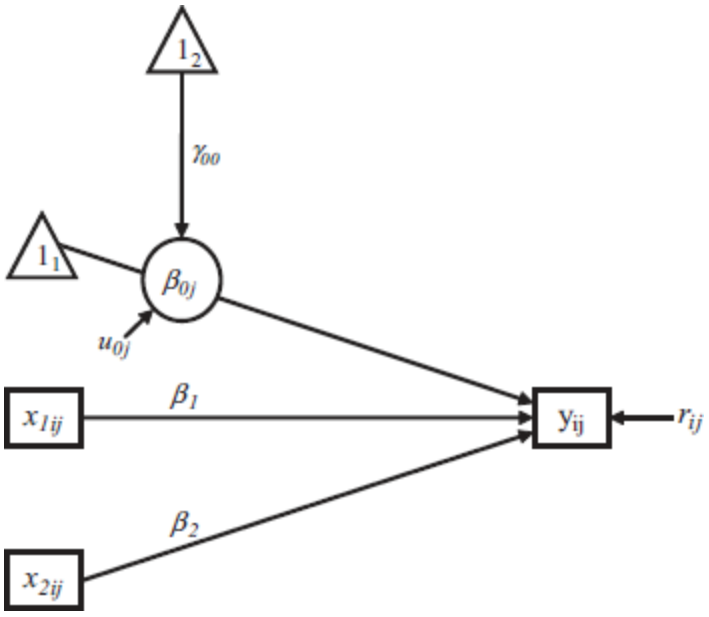


Figure 4-4: Diagram of a two-predictor multi-level regression with random intercepts and fixed slopes (Curran & Bauer, 2007, p. 286)

$$y_{ij} = \beta_{0j} + \beta_{1j}x_{1ij} + \beta_{2j}x_{2ij} + r_{ij}$$

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + u_{2j}$$

The random intercept (β_{0j}) and the two random slopes (β_{1j} and β_{2j}) are expressed as additive functions of their grand means (the γ's) and group-level deviations from these means (the u's). The multivariate distribution of the vector of group-level deviations is assumed multivariate normal (e.g., $\mathbf{u}_j \sim N[0, \mathbf{T}]$), where $\mathbf{T}$ is the covariance matrix of the Level-2 deviations.

Figure 4-5: Equations of a two-predictor multi-level regression with random intercept and random slopes (Curran & Bauer, 2007, p. 286)

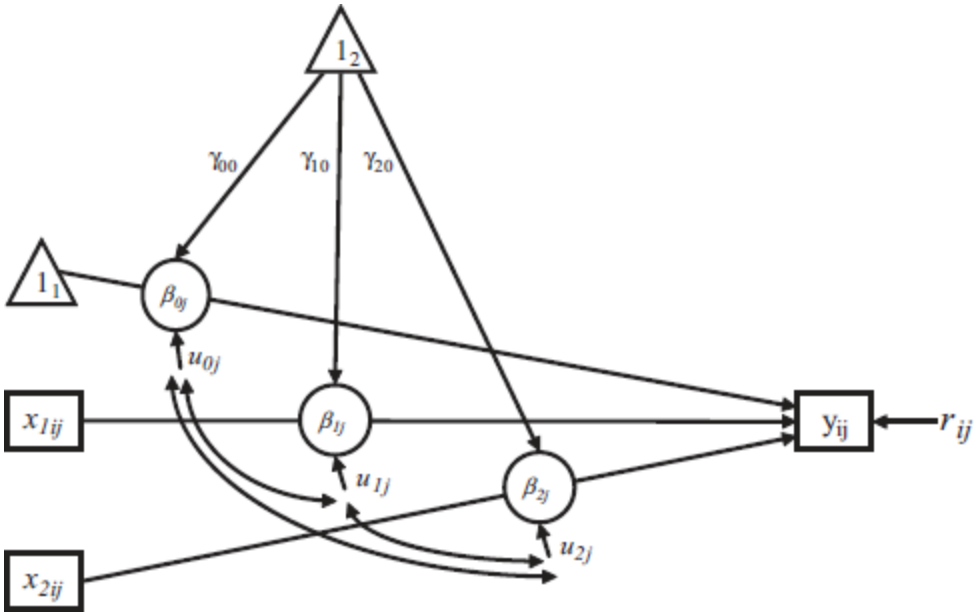


Figure 4-6: Diagram of a two-predictor multi-level regression with random intercept and random slopes (Curran & Bauer, 2007, p. 286)

$$y_{ij} = \beta_{0j} + \beta_{1j}x_{1ij} + \beta_{2j}x_{2ij} + r_{ij}$$

$$\beta_{0j} = \gamma_{00} + \gamma_{01}w_{1j} + \gamma_{02}w_{2j} + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}w_{1j} + \gamma_{12}w_{2j} + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + \gamma_{21}w_{1j} + \gamma_{22}w_{2j} + u_{2j}$$

w_{1j} and w_{2j} are the two group-level predictors

Figure 4-7: Equations of multi-level regression with random intercept and random slopes, two level-1 predictors and two level-2 predictors (Curran & Bauer, 2007, p. 286)

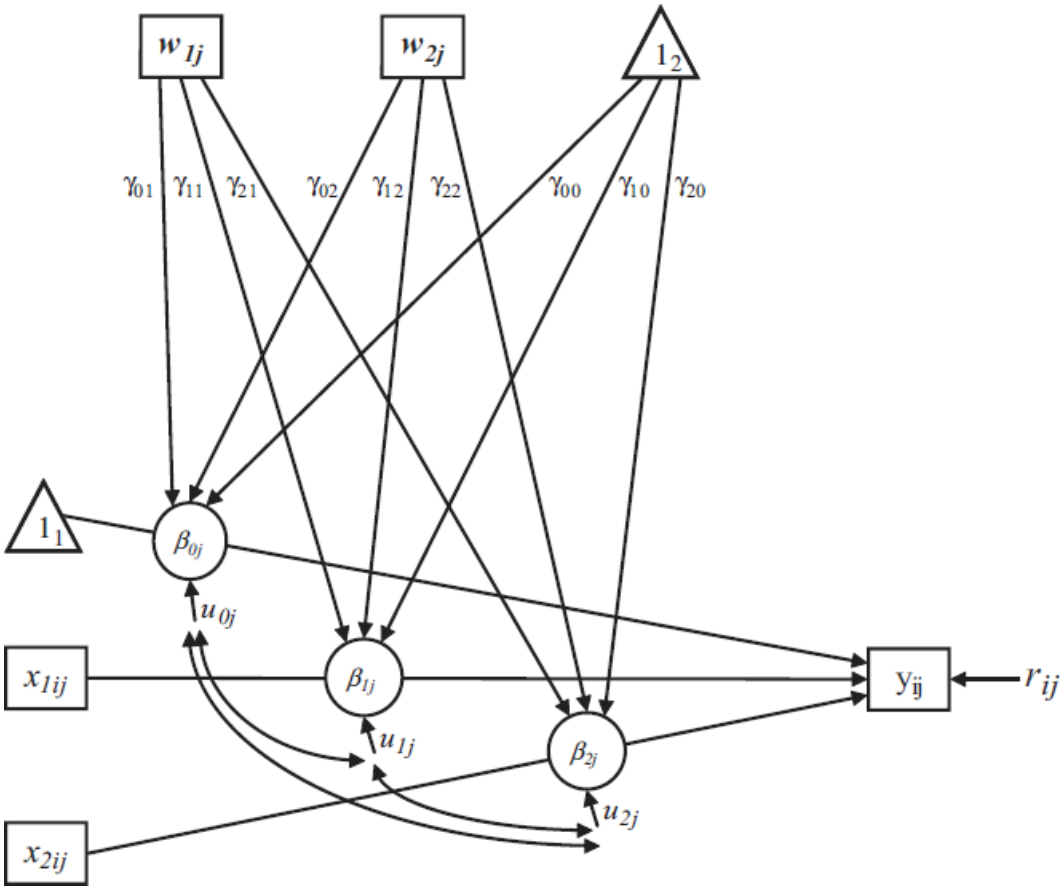


Figure 4-8: Diagram of a multi-level regression with random intercept and random slopes, two level-1 predictors and two level-2 predictors (Curran & Bauer, 2007, p. 287)

4.3.2 Descriptive Statistics

The primary data collection followed a within-subjects design, with a levels approach methodology, called experience sampling methodology (ESM) (Dimotakis et al., 2013a). We used Qualtrics Panel to recruit participants for the study. The participants were then surveyed each working day over the next three weeks. Of the 335 people who responded to the recruitment survey, 160 qualified to be included. Participation was restricted to Americans who have access to social media while they are at work. Participants resided in different cities across USA, with various job descriptions. Over the

following three weeks (October 10, 2016 to October 28, 2016) these participants were prompted every day at 3 p.m. Central Time to take the daily survey. A total of 91 participants, out of the 160 recruited, took three or more daily surveys, for a total of 516 valid daily survey responses (average of 5.67 surveys per person, and 24.81% response rate). Cluster sizes, that is, the number of daily surveys, included in the final primary dataset, ranged from 3 to 10, with an average of 5.67. All surveys were hosted online at uta.qualtrics.com. Participants were screened to limit the survey to those who went to work and accessed social media at work on the day that they took the survey. Participants were compensated by Qualtrics with cash equivalent awards (merchant points) of $3.00 for successfully signing up, $2.50 for the first four daily surveys, and $5.00 for each survey completed thereafter. Researchers are increasingly turning to online agencies, such as Amazon's Mechanical Turk and Qualtrics' Panels, to facilitate data collection. Research shows that psychometric properties hold, and there are no statistically significant differences in data collected from these sources and data from student and consumer panels (Steelman, Hammer, & Limayem, 2014). It is cautioned that non-U.S. based participants be avoided if the study is to be generalized to the U.S.

Demographic data was collected during recruitment but not used as a control, since this is a within-person nested study, where each person acts as their own control (Gelman & Hill, 2006). Of the 91 respondents whose data was valid and used in this study, 51 (56%) were women, the median age was 43 (23 to 73), 71 (78%) were married or cohabiting, and 84 (92.3%) identified their race as White. Fifty-two (57.1%) respondents had one or more children living at home with them. Twenty-two (22%) had one or more children under 5 years of age. All respondents had at least a high school degree or equivalent, with 56 (61.6%) having a Bachelor's degree or higher. Sixty-nine (75.9%) reported their average annual household income to be in the range of $50,000 to

$175,000 USD, and 15 (16.5%) in the range $25,000 to $50,000 USD. Ninety-one of 160 recruited respondents completed at least three (on average 5.67) daily surveys, for a total of 516 total valid daily responses. The descriptive statistics and various correlations of primary data variables are listed in Table 4-19 through Table 4-25.

Table 4-19: Demographic variables – Descriptive statistics

	Min	**Max**	**Mean**	**Std. Deviation**	**Median**	**Mode**
Gender	1	2	1.560	0.499	2	2
Age	23	73	46.154	12.733	43	32.0[a]
Partner	1	4	2.824	0.769	3	3
Kids	1	2	1.571	0.498	2	2
Young Kids	0	2	0.791	0.782	1	0
Education	2	7	4.626	1.305	5	5
Race	11	14	11.143	0.569	11	11
Income	12	99	15.967	12.620	14	14
N=91						
a. Multiple modes exist. The smallest value is shown						

Table 4-20: Frequency distribution of categorical variables of valid respondents

		Description	Frequency	Percent	Cumulative Percentage
Gender	1	Male	40	44	44
	2	Female	51	56	100
Partner	1	Single	9	9.9	9.9
	2	Cohabiting	9	9.9	19.8
	3	Married	62	68.1	87.9
	4	Divorced	11	12.1	100
Kids	1	No (children living at home)	39	42.9	42.9
	2	Yes (children living at home)	52	57.1	100
Young Kids	1	No children below 5 years of age	32	35.2	35.2
	2	Yes, children below 5 years of age	20	22	57.2
Educ-ation	2	High school degree or equivalent	6	6.6	6.6
	3	Some college	16	17.6	24.2
	4	Associate degree	13	14.3	38.5
	5	Bachelor's degree	30	33	71.4
	6	Graduate degree	23	25.3	96.7
	7	Doctoral degree	3	3.3	100
Race	11	White	84	92.3	92.3
	12	Black or African American	4	4.4	96.7
	14	Asian	3	3.3	100
Income	12	$25,000 - $49,999	15	16.5	16.5
	13	$50,000 - $74,999	19	20.9	37.4
	14	$75,000 - $99,999	26	28.6	65.9
	15	$100,000 - $124,999	14	15.4	81.3
	16	$125,000 - $149,999	7	7.7	89
	17	$150,000 - $174,999	3	3.3	92.3
	18	$175,000 - $199,999	4	4.4	96.7
	19	$200,000 and above	1	1.1	97.8
	99	Do not wish to answer	2	2.2	100

Table 4-21: Frequency distribution of categorical variables of recruited participants

		Description	**Frequency**	**Percent**	**Cumulative Percentage**
Gender	1	Male	70	43.75	43.75
	2	Female	90	56.25	100.00
Partner	1	Single	9	9.89	9.89
	2	Cohabiting	9	9.89	19.78
	3	Married	62	68.13	87.91
	4	Divorced	11	12.09	100.00
Kids	1	No (children living at home)	39	42.86	42.86
	2	Yes (children living at home)	52	57.14	100.00
Young Kids	1	No children below 5 years of age	32	42.86	42.86
	2	Yes, children below 5 years of age	20	35.16	78.02
Educ-ation	2	High school degree or equivalent	6	21.98	100.00
	3	Some college	16	6.59	6.59
	4	Associate degree	13	17.58	24.18
	5	Bachelor's degree	30	14.29	38.46
	6	Graduate degree	23	32.97	71.43
	7	Doctoral degree	3	25.27	96.70
Race	11	White	84	3.30	100.00
	12	Black or African American	4	92.31	92.31
	14	Asian	3	4.40	96.70
Income	12	$25,000 - $49,999	15	3.30	100.00
	13	$50,000 - $74,999	19	16.48	16.48
	14	$75,000 - $99,999	26	20.88	37.36
	15	$100,000 - $124,999	14	28.57	65.93
	16	$125,000 - $149,999	7	15.38	81.32
	17	$150,000 - $174,999	3	7.69	89.01
	18	$175,000 - $199,999	4	3.30	92.31
	19	$200,000 and above	1	4.40	96.70
	99	Do not wish to answer	2	1.10	97.80

Table 4-22: Descriptive statistics of continuous variables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pvt	516	1	5	2.929	1.229
Pub	516	1	5	2.536	1.239
Prof	516	1	5	2.305	1.310
Trust	516	1	5	3.626	1.342
Stress	516	1	5	2.384	1.301
WLC	516	1	5	2.221	1.295
OCBI	516	1	5	3.160	1.116
JobSat	516	1	5	3.910	0.855
LifeSat	516	1	5	3.768	0.913
SegPref	91	1	5	4.080	0.711

Table 4-23: Within-level variable correlations

Within-level Correlations					
	STRESS	WLC	OCBI	JOBSAT	LIFESAT
STRESS	1				
WLC	0.411	1			
OCBI	0.03	0.15	1		
JOBSAT	-0.212	-0.12	0.124	1	
LIFESAT	-0.304	-0.175	0.111	0.431	1
TRUST	-0.379	-0.247	-0.106	-0.059	0.032
PVT	0.045	0.042	0.134	0.086	0.027
PUB	-0.018	-0.024	0.113	0.141	0.138
PROF	0.023	0.003	0.154	0.074	0.086
	TRUST	PVT	PUB	PROF	SEGPREF
TRUST	1				
PVT	0.014	1			
PUB	-0.047	0.379	1		
PROF	-0.05	0.113	0.355	1	

Table 4-24: Between-level variable correlations

Between-level Correlations					
	STRESS	WLC	OCBI	JOBSAT	LIFESAT
STRESS	1				
WLC	0.877	1			
OCBI	0.533	0.575	1		
JOBSAT	-0.034	0.032	0.563	1	
LIFESAT	-0.127	0.059	0.484	0.841	1
TRUST	-0.795	-0.873	-0.525	0.039	-0.001
SEGPREF	0.202	0.179	-0.021	0.048	0.005
	TRUST	PVT	PUB	PROF	SEGPREF
TRUST	1				
SEGPREF	-0.149	0	0	0	1

Table 4-25: Correlation of main variables with demographic variables

	Pvt	Pub	Prof	Trust	Stress	WLC	JobSat	LifeSat	SegPref
Gender	-0.05	-.28**	-.36**	0.05	-0.07	-0.07	-.11*	-.11*	.09*
Age	-.30**	-.37**	-.33**	.37**	-.32**	-.46**	.15**	0.04	-0.07
Partner	0.00	0.05	.12**	-.09*	.15**	0.02	.14**	0.06	0.00
Kids	.41**	.48**	.41**	-.28**	.25**	.28**	.16**	.16**	-0.05
Young Kids	.42**	.50**	.44**	-.33**	.31**	.37**	.11*	.13**	0.04
Education	-0.04	.10*	.11*	-0.07	.13**	.10*	-.14**	-.11*	-.12**
Race	0.04	0.06	0.08	-.17**	.20**	.22**	-.17**	-.10*	-.10*
Income	-0.04	-0.01	0.01	0.01	0.06	0.05	-0.08	-0.04	-0.09

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
N=516

4.3.3 Validity Assessment

4.3.3.1 Construct Validity

Confirmatory factor analysis on primary data was conducted in MPlus. Results confirm a three-factor structure in the items measuring social media use at work. All latent variables were allowed to covary with each other at both levels. All measurement

scale items load on a priori factors with standardized factor loadings of greater than 0.7 (Table 4-26), confirming convergent validity (Kline, 2015; Ryu & West, 2009). Some standardized factor loadings are greater than 1, which may not necessarily indicate presence of Heywood cases. This can also occur when error variance is extremely small (Jöreskog, 1999). The absolute value of estimated correlations between factors is less than 0.9 (Table 4-27), indicating discriminant validity (Kline, 2015). CFA suggests the model is an adequate fit to the data (Chi-square test p-value=0.000, RMSEA= 0.052, CFI= 0.841, TLI= 0.828) (Kline, 2015).

Table 4-26: Standardized factor loadings of variables from CFA

Within level						Between Level				
PVTW BY			TRUSTW BY			SEGPREFB BY			OCBIB BY	
Q5	0.913		TRUST1	0.719		SEGPREF1	0.825		OCBI1	0.903
Q6	0.908		TRUST2	0.828		SEGPREF2	0.738		OCBI2	0.981
Q7	0.942		TRUST3	0.824		SEGPREF3	0.832		OCBI3	0.903
Q8	0.938					SEGPREF4	0.838		OCBI4	0.998
			STRESSW BY							
PUBW BY			STRESS1	0.843		TRUSTB BY			JOBSATB BY	
Q9	0.931		STRESS2	0.845		TRUST1	0.959		JOBSAT1	0.997
Q10	0.936		STRESS3	0.815		TRUST2	0.997		JOBSAT2	1.001
Q11	0.882		STRESS4	0.796		TRUST3	0.974		JOBSAT3	0.959
Q12	0.896									
			OCBIW BY			STRESSB BY			LIFESATB BY	
PROW BY			OCBI1	0.827		STRESS1	0.997		LIFESAT1	0.922
Q13	0.926		OCBI2	0.789		STRESS2	1		LIFESAT2	0.991
Q14	0.943		OCBI3	0.763		STRESS3	0.999		LIFESAT3	0.977
Q15	0.936		OCBI4	0.791		STRESS4	0.924			
Q16	0.932									
Q17	0.935		JOBSATW BY			WLCB BY				
Q18	0.921		JOBSAT1	0.839		WLC1	0.989			
Q19	0.94		JOBSAT2	0.782		WLC2	1.001			
Q20	0.93		JOBSAT3	0.718		WLC3	0.986			
Q21	0.92					WLC4	0.987			
Q22	0.927		LIFESATW BY			WLC5	0.997			
			LIFESAT1	0.805						
			LIFESAT2	0.831						
			LIFESAT3	0.759						

Table 4-27: Factor correlations from CFA

Within-Level Correlations								
	PVTW	PUBW	PROW	TRUSTW	STRESSW	WLCW	OCBIW	JOBSATW
PUBW	0.78							
PROW	0.531	0.83						
TRUSTW	-0.37	-0.504	-0.518					
STRESSW	0.27	0.358	0.401	-0.574				
WLCW	0.317	0.398	0.452	-0.477	0.57			
OCBIW	0.593	0.715	0.75	-0.489	0.332	0.465		
JOBSATW	0.429	0.582	0.598	-0.387	0.065	0.192	0.554	
LIFESATW	0.406	0.547	0.531	-0.265	-0.051	0.106	0.501	0.701
Between-Level Correlations								
	TRUSTB	STRESSB	WLCB	OCBIB	JOBSATB	LIFESATB		
STRESSB	-0.779							
WLCB	-0.844	0.868						
OCBIB	-0.233	0.289	0.263					
JOBSATB	0.386	-0.374	-0.358	0.383				
LIFESATB	0.389	-0.487	-0.351	0.216	0.832			
SEGPREFB	-0.145	0.221	0.205	-0.067	0.006	-0.035		

4.3.3.2 Construct Reliability

In assessing multilevel reliability, it is recommended that reliability estimates such as Cronbach's alpha and McDonald's omega be level-specific, when intra-class correlation (ICC) is nontrivial (>0.05) (Geldhof, Preacher, & Zyphur, 2014). Since within-level variation is the focus in this study, within-level variance as fraction of total variance was computed and found to be nontrivial for all variables (Table 4-28).

Table 4-28: Percentage within-level variance in variables

	Variable Name	Within-level Variance Percentage	Between-level Variance Percentage
Private Social Media Use At Work	Pvt	22.7	77.3
Public Social Media Use At Work	Pub	17.9	82.1
Professional Social Media Use At Work	Prof	8.1	91.9
Workplace Interpersonal Trust	Trust	26.0	74.0
Job Stress	Stress	19.5	80.5
Work-To-Nonwork Negative Spillover	WLC	26.1	73.9
Organizational Citizenship Behavior-Individual	OCBI	24.3	75.7
Job Satisfaction	JobSat	34.1	65.9
Life Satisfaction	LifeSat	40.4	59.6

Between the two reliability measures, alpha and omega, within-level omega is preferred over within-level alpha (Geldhof et al., 2014). Within- and between-level omega reliabilities for the three dimensions of the new social media use measure were found to be above the threshold of .707 and therefore acceptable (Barclay et al., 1995; Fornell & Larcker, 1981; Nunnally & Bernstein, 1994). Measurement scales of all other constructs were similarly assessed and verified to be acceptably above .707.

Table 4-29: Within and between level reliabilities from primary data

		Omega-Within	Omega-Between
Private Social Media Use At Work	Pvt	0.832	0.994
Public Social Media Use At Work	Pub	0.751	0.987
Professional Social Media Use At Work	Prof	0.826	0.997
Workplace Interpersonal Trust	Trust	0.781	0.988
Job Stress	Stress	0.876	0.992
Work-to-Nonwork Negative Spillover	WLC	0.867	0.964
Organizational Citizenship Behavior - Individual	OCBI	0.736	0.987
Job Satisfaction	JobSat	0.754	0.991
Life Satisfaction	LifeSat	0.791	0.977
Segmentation Preference	SegPref		0.890

4.3.3.3 Method Bias Remedies

Within-person design avoids several biases, like self-serving attributions, memory error, and measurement error (Maertz & Boyar, 2011). It reduces common method bias, since each person acts as their own control for analyses performed at the within-person level (Heck & Thomas, 2015). However, all constructs were measured using surveys, with all responses collected together at the same time, and items were worded in the same direction (whether positive or negative), which are still a potential threat to external validity of the results (Philip M Podsakoff et al., 2003). Implementation of procedural remedies undertaken to control for these biases (Ayyagari et al., 2002; Bala & Venkatesh, 2013) during primary data collection are listed in Table 4-30.

Table 4-30: Bias remedies implemented in primary data collection

Techniques	Actions Taken
Temporal, proximal, psychological, or methodological separation of measurement	Psychologically separated measurements of criterion and predictor variables by including cover stories between measures of social media use and predicted variables (e.g., "Did you know? Elephants are the only mammals that can't jump!" and "Did you know? Identical twins do not have identical fingerprints!").
Protecting respondent anonymity and reducing evaluation apprehension	Participants were informed that their responses were confidential and assured that there were no right or wrong answers.
Counterbalancing question order	Questions were randomized within each block and block orders was randomized within sections (first section included predictor variables, second included predicted variables).
Improving scale items	Pre-validated reliable items were used wherever possible. New scales were reviewed by experts for ambiguity, vagueness and compoundedness ("double-barreled").

4.3.3.4 Nonresponse Bias

Of the 160 participants recruited, only 91 took three or more daily surveys, and only their responses were included in the final analyses. Thus the study was possibly subject to nonresponse bias (Armstrong & Overton, 1977). The respondents and nonrespondents were compared on their demographic variables to test for significant differences, using tests in MS Excel. First, F-tests were carried out to compare variances of control variables in the two groups — respondents and nonrespondents. Results of the test are in Table 4-31. Next, two-sample t-tests were carried out to test difference in sample means between the two groups, on each of the control variables. The appropriate t-test was applied, depending on whether F-test supported assumption of unequal variance or not. Results are in Table 4-32. Absolute values of all computed t-statistics are less than absolute values of the critical t-values. This suggests that the nonrespondent group of participants was not significantly different from the respondent group (Armstrong & Overton, 1977).

Table 4-31: Results of two-sample F-tests for comparison of variances

Age		*Group 1*	*Group 2*
(Assume equal variance)	Mean	46.15385	44.10145
	Variance	162.1316	161.1807
	Observations	91	69
	df	90	68
	F	1.0059	
	P(F<=f) one-tail	0.493923	
	F Critical one-tail	1.464922	
Partner		*Group 1*	*Group 2*
(Assume unequal variance)	Mean	2.73913	2.824176
	Variance	1.136829	0.590965
	Observations	69	91
	df	68	90
	F	1.923683	
	P(F<=f) one-tail	0.001872	
	F Critical one-tail	1.448317	
Kids		*Group 1*	*Group 2*
(Assume equal variance)	Mean	1.507246	1.571429
	Variance	0.253623	0.247619
	Observations	69	91
	df	68	90
	F	1.024247	
	P(F<=f) one-tail	0.453936	
	F Critical one-tail	1.448317	
Young Kids		*Group 1*	*Group 2*
(Assume equal variance)	Mean	1.384615	1.371429
	Variance	0.241327	0.240336
	Observations	52	35
	df	51	34
	F	1.004124	
	P(F<=f) one-tail	0.503145	
	F Critical one-tail	1.710811	

Table 4-31 - *Continued*

Education		*Group 1*	*Group 2*
(Assume equal variance)	Mean	4.376812	4.626374
	Variance	2.297101	1.703297
	Observations	69	91
	df	68	90
	F	1.348621	
	P(F<=f) one-tail	0.091876	
	F Critical one-tail	1.448317	
Race		*Group 1*	*Group 2*
(Assume unequal variance)	Mean	11.3913	11.14286
	Variance	1.653453	0.32381
	Observations	69	91
	df	68	90
	F	5.106251	
	P(F<=f) one-tail	8.55E-13	
	F Critical one-tail	1.448317	
Income		*Group 1*	*Group 2*
(Assume unequal variance)	Mean	17.23188	15.53846
	Variance	311.769	161.4513
	Observations	69	91
	df	68	90
	F	1.931041	
	P(F<=f) one-tail	0.001774	
	F Critical one-tail	1.448317	
Gender		*Group 1*	*Group 2*
(Assume equal variance)	Mean	1.565217	1.56044
	Variance	0.249361	0.249084
	Observations	69	91
	df	68	90
	F	1.00111	
	P(F<=f) one-tail	0.493844	
	F Critical one-tail	1.448317	
Rule: If F > F Critical one tail, then reject H0 (H0: equal variance assumption)			

Table 4-32: Results of two-sample t-tests for comparison of means

Age		*Group 1*	*Group 2*
(Assume equal variance)	Mean	44.10145	46.15385
	Variance	161.1807	162.1316
	Observations	69	91
	Pooled Variance	161.7224	
	Hypothesized Mean Difference	0	
	df	158	
	t Stat	-1.01102	
	P(T<=t) one-tail	0.156775	
	t Critical one-tail	1.654555	
	P(T<=t) two-tail	0.313551	
	t Critical two-tail	1.975092	
Partner	Mean	2.73913	2.824176
(Assume unequal variance)	Variance	1.136829	0.590965
	Observations	69	91
	Hypothesized Mean Difference	0	
	df	118	
	t Stat	-0.56114	
	P(T<=t) one-tail	0.287883	
	t Critical one-tail	1.65787	
	P(T<=t) two-tail	0.575766	
	t Critical two-tail	1.980272	
Kids	Mean	1.507246	1.571429
(Assume equal variance)	Variance	0.253623	0.247619
	Observations	69	91
	Pooled Variance	0.250203	
	Hypothesized Mean Difference	0	
	df	158	
	t Stat	-0.80381	
	P(T<=t) one-tail	0.211357	
	t Critical one-tail	1.654555	
	P(T<=t) two-tail	0.422714	
	t Critical two-tail	1.975092	

Table 4-32 - *Continued*

Young Kids	Mean	1.371429	1.384615
(Assume equal variance)	Variance	0.240336	0.241327
	Observations	35	52
	Pooled Variance	0.240931	
	Hypothesized Mean Difference	0	
	df	85	
	t Stat	-0.12288	
	P(T<=t) one-tail	0.451247	
	t Critical one-tail	1.662978	
	P(T<=t) two-tail	0.902495	
	t Critical two-tail	1.988268	
Education	Mean	4.376812	4.626374
(Assume equal variance)	Variance	2.297101	1.703297
	Observations	69	91
	Pooled Variance	1.958858	
	Hypothesized Mean Difference	0	
	df	158	
	t Stat	-1.11702	
	P(T<=t) one-tail	0.13284	
	t Critical one-tail	1.654555	
	P(T<=t) two-tail	0.26568	
	t Critical two-tail	1.975092	
Race	Mean	11.3913	11.14286
(Assume unequal variance)	Variance	1.653453	0.32381
	Observations	69	91
	Hypothesized Mean	0	

	Difference		
	df	88	
	t Stat	1.49761	
	P(T<=t) one-tail	0.068907	
	t Critical one-tail	1.662354	
	P(T<=t) two-tail	0.137813	
	t Critical two-tail	1.98729	

Table 4-32 - *Continued*

Income	Mean	17.23188	15.53846
(Assume unequal variance)	Variance	311.769	161.4513
	Observations	69	91
	Hypothesized Mean Difference	0	
	df	118	
	t Stat	0.675073	
	P(T<=t) one-tail	0.250475	
	t Critical one-tail	1.65787	
	P(T<=t) two-tail	0.50095	
	t Critical two-tail	1.980272	
Gender		*Group 1*	*Group 2*
(Assume equal variance)	Mean	1.565217	1.56044
	Variance	0.249361	0.249084
	Observations	69	91
	Pooled Variance	0.249203	
	Hypothesized Mean Difference	0	
	df	158	
	t Stat	0.059957	
	P(T<=t) one-tail	0.476133	
	t Critical one-tail	1.654555	
	P(T<=t) two-tail	0.952266	
	t Critical two-tail	1.975092	
Rule: If t Stat < -t Critical two-tail or t Stat > t Critical two-tail, then reject H0 (H0: same population average assumption)			

Chapter 5

Research Results

This chapter presents the hypothesis tests carried out using multilevel modeling technique on the primary data, which were collected using the measurement scales and collection procedure described in Chapter 4.

5.1 Overview of Model Testing

Model testing was carried out in MPlus using Multilevel Models (MLM), also called hierarchical linear models (HLM) and nested data models. This is appropriate because data collection was repeated measures within individuals, with each individual acting as their own control (Bickel, 2007; Gelman & Hill, 2006; Heck & Thomas, 2015; Hox, Moerbeek, & van de Schoot, 2010; Snijders & Bosker, 2012). Observations were clustered using respondent identifying number. The predictors were then centered within-group so that each respondent's average on the predictor variables was zero, and the between-level variance of the predictors was also zero. Thus the variance remaining in the predictor variables is solely due to the variation of the respondent from their average response (Aiken, West, & Reno, 1991; Preacher et al., 2010). Level 1 variables were dependent on the respondent, and therefore not independent of each other. Predictor and predicted variables were measured as continuous variables. Composite scores of measurement scales were used to perform MLM (Mehta & Neale, 2005). Maximum likelihood (MLR) estimator was used, which is robust to non-normality of data (Muthen & Muthen, 2012). The complete hypothesized model to test is show in Figure 5-1, with a list of variable names and the construct they represent in Table 5-1.

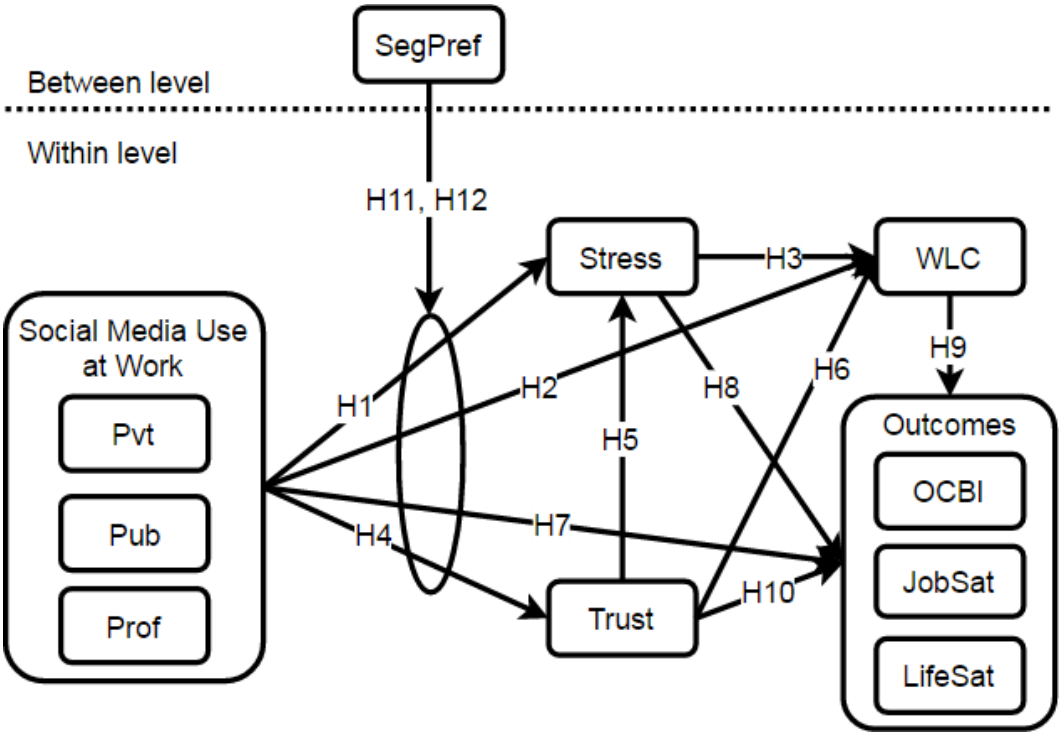


Figure 5-1: Full hypothesized model to test

Table 5-1: Variable names of constructs in analysis

Variable Name	Construct
Pvt	Private Social Media Use At Work
Pub	Public Social Media Use At Work
Prof	Professional Social Media Use At Work
Trust	Workplace Interpersonal Trust
Stress	Job Stress
WLC	Work-to-Nonwork Negative Spillover
OCBI	Organizational Citizenship Behavior - Individual
JobSat	Job Satisfaction
LifeSat	Life Satisfaction
SegPref	Segmentation Preference

Analysis was performed in five stages because of the complexity of the model (Kline, 2015; Yuan & Bentler, 2007). The stages followed are summarized in Figure 5-1. This stage-wise process is also called a build-up or step-up model building strategy

(Sweet & Grace-Martin, 1999). Fixed effects modeling was performed in preliminary models. That is, regression slopes were not allowed to vary at between-level, though variables were allowed to. Within-person variance is of primary importance in this study, compared to variance in variables between people (Muthén, 1991). Once the significant relationships were identified, a random effects model was assessed in MPlus. Indirect effects were assessed separately, using Monte Carlo bootstrapping (20,000 simulations) to construct 90% confidence intervals (CI) to determine significance (Lanaj, Johnson, & Lee, 2016; Preacher & Selig, 2010; Preacher et al., 2010; Raudenbush & Sampson, 1999; Selig & Preacher, 2008). Results of each stage are presented in the sections below, with result table(s) and a corresponding diagram that includes only the relationships that were found to be statistically significant.

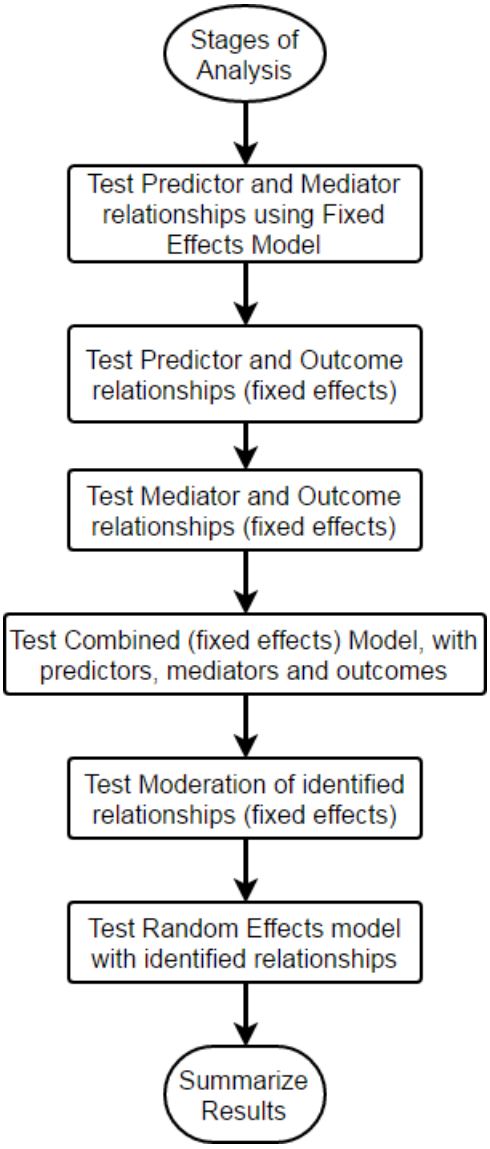


Figure 5-2: Analysis steps followed in this study

5.1.1 Multiple Comparisons

Performing multiple, statistically independent tests on the same data sample inflates the type I error rate or significance level, alpha. For example, tossing a coin ten times is highly unlikely to result in heads nine or more times. But the probability of

witnessing nine or more heads when one hundred coins are tossed, ten times each, is much higher (Abdi, 2007). However, adjustments to account for multiple comparisons (such as Bonferroni correction, controlling for familywise error rate or false discovery rate, and others) may or may not be necessary, and might even be misleading (Feise, 2002; Rothman, 1990), especially when the statistical tests are not independent. In the case of multilevel modeling, adjustments are not required as "multilevel models perform partial pooling ..., address the multiple comparisons problem and also yield more efficient estimates, especially in settings with low group-level variation, which is where multiple comparisons are a particular concern" (Gelman, Hill, & Yajima, 2012, p. 189).

5.1.2 Statistical Power

Statistical power analyses using sample data – on which statistical tests have been performed – have been criticized because the strength of the power analysis test itself is questionable (Hoenig & Heisey, 2001). This study reports confidence intervals, since "breadth of the interval tells us how confident we can be of the true state of nature being close to null" (Hoenig & Heisey, 2001, p. 22).

5.2 Predictors and Mediators (H1-H6)

First, within-person analysis of predictor and mediator variables (Figure 5-3) in the primary data was conducted in MPlus.

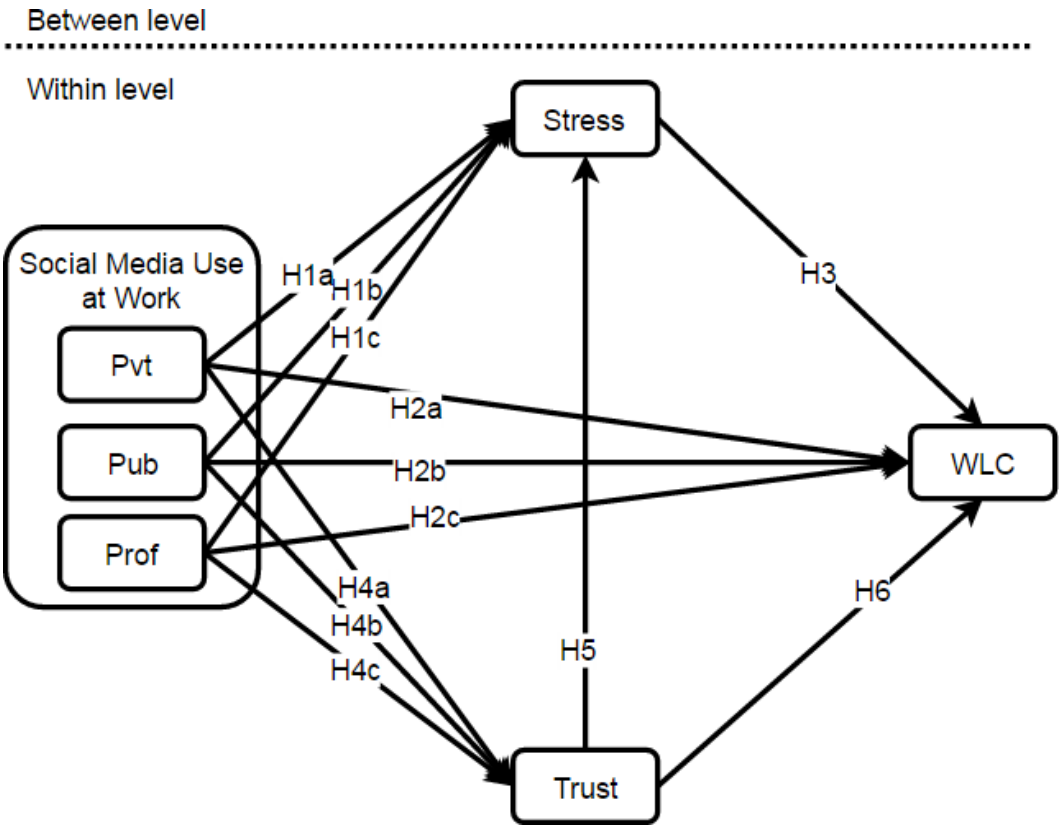


Figure 5-3: Relationships to test between predictors and mediators

Lower and upper limits of 99%, 95% and 90% confidence intervals for effect sizes are listed in Table 5-2 and visualized in Figure 5-4. Results suggest significant relationship between job stress and personal-public social media use at work, but opposite of the hypothesized direction. H1 was therefore not supported. Relationships between personal-private, personal-public and professional social media use at work and workplace trust were not found to be significant. H2 was therefore not supported. Relationships between the three types of social media use at work and work-to-nonwork negative spillover were also not found to be significant (H4 not supported).

There was evidence to support significance of hypothesized relationship between job stress and work-to-nonwork negative spillover (H3 supported). Job stress and trust

were found to be positively related (H5 supported). The relationship between workplace trust and work-to-nonwork negative spillover was also significant in the hypothesized direction (H6 supported).

Table 5-2: Confidence intervals of predictors and mediators model results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Within Level								
STRESS ON								
PVT	-0.091	-0.046	-0.024	0.094	0.212	0.235	0.279	
PUB	-0.253	-0.217	-0.198	-0.100	-0.002	0.016	0.053	*
PROF	-0.219	-0.157	-0.125	0.040	0.204	0.236	0.298	
TRUST	-0.671	-0.617	-0.590	-0.445	-0.301	-0.274	-0.220	***
TRUST ON								
PVT	-0.100	-0.067	-0.050	0.040	0.130	0.147	0.181	
PUB	-0.196	-0.163	-0.146	-0.059	0.029	0.046	0.078	
PROF	-0.337	-0.272	-0.239	-0.066	0.108	0.141	0.206	
WLC ON								
PVT	-0.069	-0.041	-0.026	0.051	0.128	0.143	0.172	
PUB	-0.251	-0.203	-0.179	-0.052	0.075	0.099	0.147	
PROF	-0.288	-0.221	-0.186	-0.006	0.174	0.208	0.275	
STRESS	0.187	0.233	0.257	0.380	0.503	0.526	0.573	***
TRUST	-0.318	-0.273	-0.251	-0.132	-0.013	0.010	0.054	*

*** significant at 99% confidence level
** significant at 95% confidence level
* significant at 90% confidence level

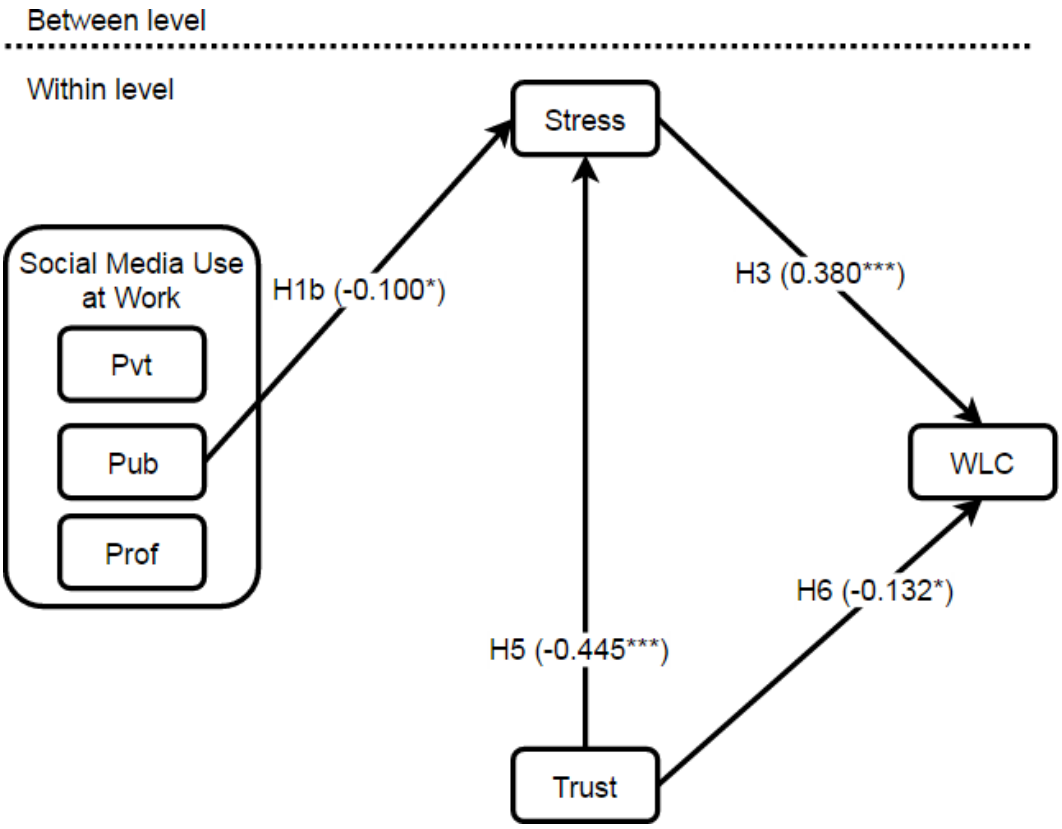


Figure 5-4: Predictors and mediators, test results

5.3 Predictors and Outcomes (H7)

Next, within-person analysis of predictor and outcome variables in the primary data was conducted (Figure 5-5).

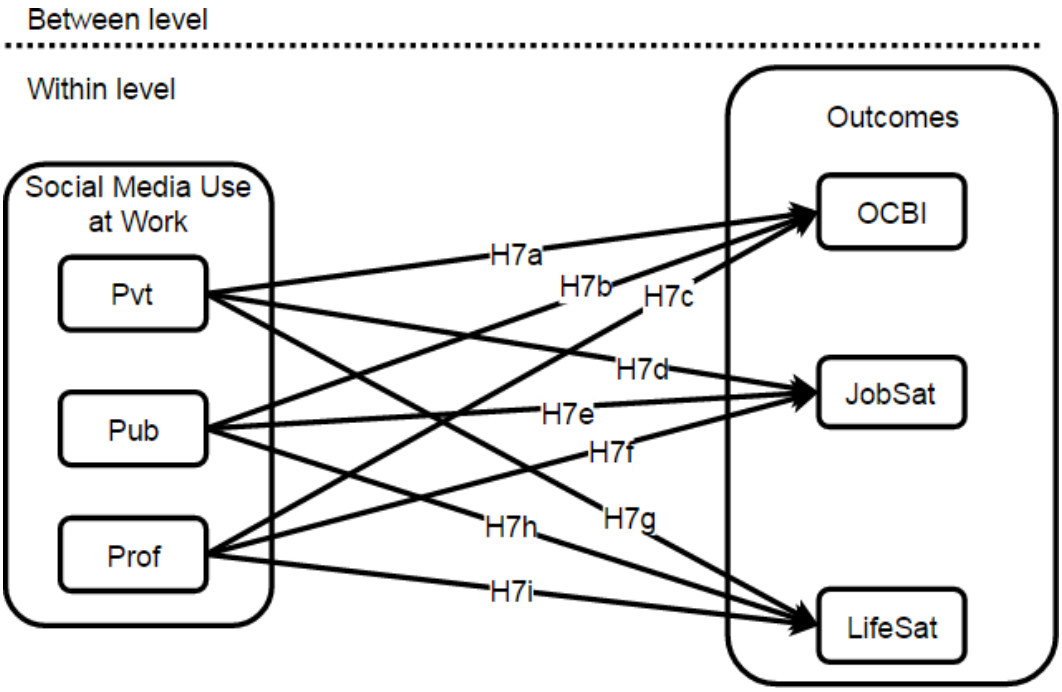


Figure 5-5: Relationships to test between predictors and outcomes

Lower and upper limits of 99%, 95% and 90% confidence intervals for effect sizes are listed in Table 5-3. Results show partial support for H7. Relationships between daily personal-private and professional social media use at work were found to be significantly associated with daily OCBI. Daily personal-public social media use at work was found to be significantly related to job and life satisfaction as well.

Table 5-3: Confidence intervals of predictors and outcomes model results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Within Level								
JOBSATON								
PVT	-0.083	-0.054	-0.04	0.036	0.111	0.126	0.154	
PUB	-0.026	0.009	0.027	0.12	0.214	0.232	0.267	**
PROF	-0.204	-0.145	-0.115	0.041	0.197	0.227	0.285	
LIFESATON								
PVT	-0.149	-0.12	-0.106	-0.031	0.045	0.059	0.087	
PUB	0.012	0.047	0.065	0.159	0.252	0.27	0.305	***
PROF	-0.155	-0.101	-0.074	0.069	0.211	0.238	0.292	
OCBION								
PVT	-0.017	0.015	0.031	0.115	0.2	0.216	0.248	**
PUB	-0.139	-0.099	-0.078	0.028	0.135	0.155	0.195	
PROF	0.005	0.055	0.081	0.215	0.35	0.376	0.426	***

*** significant at 99% confidence level

** significant at 95% confidence level

* significant at 90% confidence level

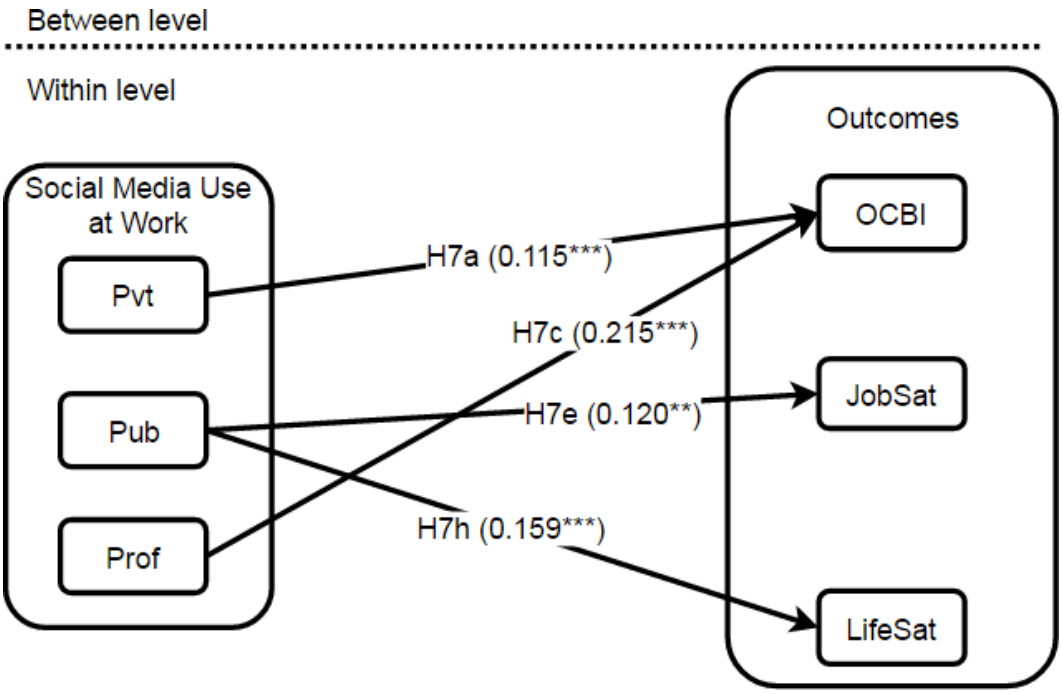


Figure 5-6: Predictors and outcomes, test results

5.4 Mediators and Outcomes (H8-H10)

Within-person analysis of mediator and outcome variables in the primary data was conducted next, before testing the combined model (Figure 5-7).

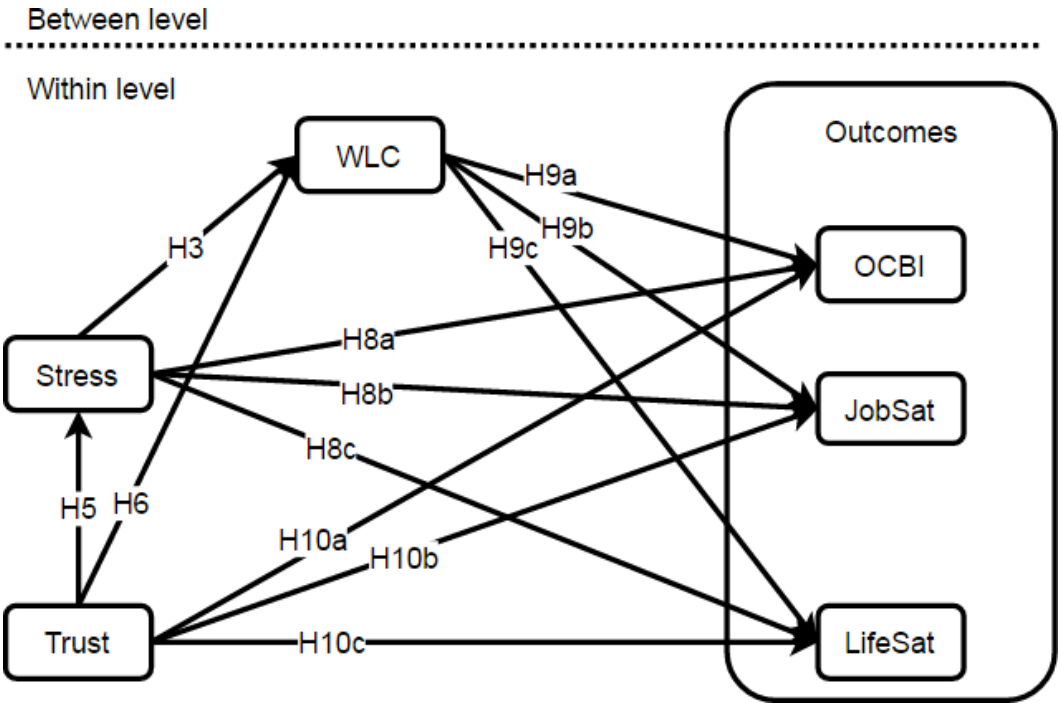


Figure 5-7: Relationships to test between mediators and outcomes

Confidence interval limits for direct effects were produced by MPlus. These are listed in Table 5-4. Confidence interval limits for indirect effects, listed in Table 5-5, were computed using MPlus output and an online tool (Selig & Preacher, 2008).

Direct relationships between job stress and job and life satisfaction were found to be significant, but indirect effect on OBI was significant in opposite direction to hypothesized (H8 partially supported). Work-to-nonwork negative spillover was significantly related to OCBI, but not to job satisfaction or life satisfaction (H9 partially supported). H10 hypothesized for positive relationships between workplace trust and

outcomes. Workplace trust was not directly related to OCBI and life satisfaction. The indirect effect of workplace trust on OCBI, through work-to-nonwork negative spillover, was found to be significant, opposite to the hypothesized direction. The indirect effect of trust on life satisfaction, through job stress, was significant, in the hypothesized direction. The direct relationship between workplace trust and job satisfaction was significant, but opposite to the hypothesized direction. Thus, H10 was only partially supported.

Several relationships in this model were found to be significant in the opposite direction of what was hypothesized. The direct relationships between workplace trust and job satisfaction, and between work-to-nonwork negative spillover and OCBI, were found to be significant, but opposite to the hypothesized direction. The indirect relationships between job stress and OCBI, and workplace interpersonal trust and OCBI, both through work-to-nonwork negative spillover, were also found to be significant but in opposite direction to that hypothesized. In all, four relationships were found to be significant in the opposite direction to that hypothesized.

A possible explanation for the negative relationships between workplace interpersonal trust and job satisfaction and OBI comes from literature on the dark side of trust (Dirks & Ferrin, 2001; Gargiulo & Ertug, 2006; Guinot, Chiva, & Roca-Puig, 2014; Mayer et al., 1995; Mayer & Gavin, 2005; Molina-Morales, Martinez-Fernández, & Torlò, 2011; Rafferty & Griffin, 2006; Rousseau, Sitkin, Burt, & Camerer, 1998; Ulleberg & Rundmo, 1997; Zahra, Yavuz, & Ucbasaran, 2006). These suggest that extreme levels of trust can have negative outcomes such as reduced job satisfaction and OCBI, due to an increase in the risk of opportunistic behavior and overreliance on others (Dirks & Ferrin, 2001; Guinot et al., 2014; Zahra et al., 2006).

Individual initiative at the workplace has mostly been associated with favorable antecedents and outcomes. However, OCBI can potentially be associated with higher

employee stress, overload and work-to-nonwork negative spillover (Bolino & Turnley, 2005; Organ & Ryan, 1995). This could possibly explain the significant negative relationship between work-to-nonwork negative spillover and OCBI, and the indirect significant positive relationship between job stress and OCBI.

Table 5-4: Confidence intervals of mediators and outcomes model results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Within Level								
JOBSAT ON								
STRESS	-0.364	-0.323	-0.302	-0.193	-0.083	-0.063	-0.022	***
TRUST	-0.273	-0.243	-0.227	-0.147	-0.067	-0.052	-0.022	***
WLC	-0.156	-0.129	-0.115	-0.042	0.031	0.045	0.072	
LIFESAT ON								
STRESS	-0.436	-0.398	-0.379	-0.277	-0.176	-0.156	-0.118	***
TRUST	-0.313	-0.265	-0.24	-0.11	0.019	0.044	0.093	
WLC	-0.224	-0.184	-0.164	-0.057	0.051	0.071	0.111	
OCBI ON								
STRESS	-0.177	-0.148	-0.133	-0.055	0.022	0.037	0.066	
TRUST	-0.269	-0.228	-0.207	-0.097	0.014	0.035	0.076	
WLC	0.015	0.044	0.059	0.137	0.215	0.23	0.259	***
WLC ON								
STRESS	0.197	0.242	0.265	0.385	0.505	0.528	0.573	***
TRUST	-0.312	-0.268	-0.246	-0.129	-0.013	0.01	0.053	*
STRESS ON								
TRUST	-0.662	-0.609	-0.582	-0.441	-0.299	-0.272	-0.219	***

*** significant at 99% confidence level
** significant at 95% confidence level
* significant at 90% confidence level

Table 5-5: Indirect effects in mediators and outcomes fixed effects model

	Lower90%	Effect	Upper90%	
Stress->WLC->OCBI	0.025	0.051	0.077	*
Trust->Stress->LifeSat	0.070	0.113	0.157	*
Trust->WLC->OCBI	-0.037	-0.019	-0.001	*
Trust->Stress->WLC->OCBI	-0.044	-0.013	0.019	
Trust->Stress->JobSat	0.035	0.087	0.138	*
* significant at 90% confidence level				

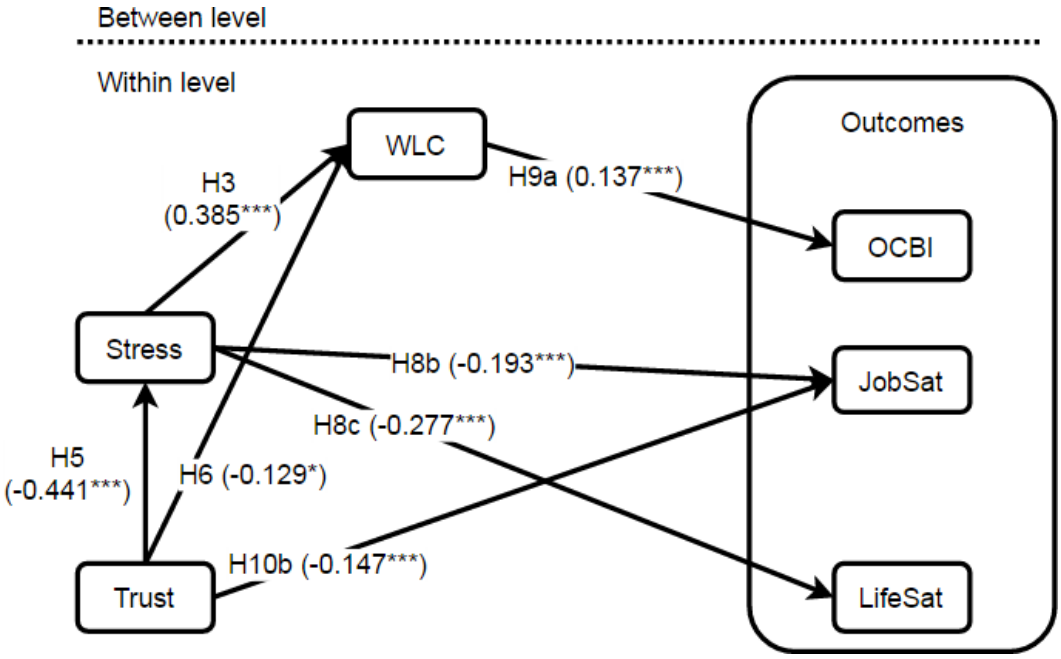


Figure 5-8: Mediators and outcomes, test results

5.5 Combined Model

The effect size estimates for a combined within-person model, combining the significant relationships found in the first three models, are listed in **Table 5-6**. All the previously significant relationships were significant, except for relationship between personal-public social media use at work and stress, which is now insignificant. A possible reason, according to role theory, could be nonwork-to-work positive spillover,

which could be related to reduced job stress and increased job and life satisfaction, which in turn might be affected by the predictor here, social media use for personal-public reasons (Hanson et al., 2006).

Table 5-6: Confidence intervals of combined within-level model results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Within Level								
STRESS ON								
PUB	-0.187	-0.155	-0.138	-0.051	0.037	0.053	0.086	
TRUST	-0.666	-0.613	-0.586	-0.444	-0.302	-0.275	-0.222	***
WLC ON								
STRESS	0.197	0.242	0.265	0.385	0.505	0.528	0.573	***
TRUST	-0.311	-0.267	-0.245	-0.128	-0.012	0.011	0.054	*
JOBSAT ON								
PUB	0.019	0.046	0.06	0.132	0.204	0.218	0.245	***
STRESS	-0.336	-0.3	-0.282	-0.186	-0.09	-0.071	-0.036	***
TRUST	-0.21	-0.182	-0.168	-0.093	-0.019	-0.005	0.023	**
LIFESAT ON								
PUB	0.025	0.055	0.071	0.152	0.234	0.249	0.28	***
STRESS	-0.402	-0.367	-0.349	-0.256	-0.162	-0.144	-0.109	***
OCBI ON								
PVT	-0.007	0.022	0.036	0.114	0.191	0.206	0.235	**
PROF	0.034	0.078	0.1	0.217	0.334	0.357	0.401	***
WLC	0.031	0.057	0.07	0.138	0.206	0.219	0.244	***

*** significant at 99% confidence level
** significant at 95% confidence level
* significant at 90% confidence level

5.6 Moderated Model (H11-H12)

Segmentation preference was hypothesized to be a between-person level moderator influencing the slope of the relationship between nonwork domain activities (personal-private and personal-public social media use at work) and work domain outcomes. Two such relationships from the previous model, which were significant, were tested. Segmentation preference variable was grand mean centered to facilitate interpretation. Confidence interval limits of effect sizes from analysis are listed in Table 5-7. Segmentation preference was found to be a significant moderator to the relationship between personal-private social media use at work and OCBI. H11 was partially supported, while H12 was not supported. Figure 5-9 illustrates the moderation effect at one standard deviation away from mean for predictor and moderator.

Table 5-7: Confidence intervals of moderated two-level model results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Within Level								
STRESS ON								
TRUST	-0.669	-0.616	-0.588	-0.445	-0.302	-0.274	-0.221	***
WLC ON								
STRESS	0.2	0.245	0.268	0.388	0.508	0.531	0.576	***
TRUST	-0.311	-0.267	-0.245	-0.128	-0.011	0.011	0.055	*
JOBSAT ON								
STRESS	-0.365	-0.325	-0.304	-0.196	-0.088	-0.068	-0.027	***
TRUST	-0.233	-0.199	-0.182	-0.092	-0.002	0.015	0.048	*
LIFESAT ON								
PUB	0.024	0.055	0.07	0.153	0.235	0.25	0.281	***
STRESS	-0.405	-0.37	-0.353	-0.259	-0.166	-0.148	-0.114	***
OCBI ON								
WLC	0.032	0.057	0.069	0.136	0.202	0.215	0.24	***
PROF	0.043	0.086	0.108	0.224	0.34	0.362	0.405	***
Between Level								
S1 ON								
SEGPREF	-0.497	-0.393	-0.339	-0.061	0.218	0.272	0.376	
S2 ON								
SEGPREF	-0.292	-0.257	-0.238	-0.143	-0.048	-0.03	0.006	**
JOBSAT ON								
SEGPREF	-0.266	-0.191	-0.152	0.049	0.25	0.289	0.364	
OCBI ON								
SEGPREF	-0.454	-0.353	-0.301	-0.03	0.24	0.292	0.393	
Intercepts								
S1	0.023	0.05	0.064	0.136	0.208	0.222	0.248	***
S2	0.006	0.037	0.052	0.134	0.216	0.232	0.262	***

Note: s1|JobSat ON pub; s2|OCBI ON pvt;

*** significant at 99% confidence level
** significant at 95% confidence level
* significant at 90% confidence level

Table 5-8: Fixed effects slopes at mean and mean +/- 1 SD segmentation preference

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
SS1	0.077	0.114	0.134	0.234	0.333	0.353	0.39	***
SS2	0.014	0.043	0.057	0.134	0.21	0.225	0.253	***
SS3	-0.123	-0.085	-0.066	0.034	0.134	0.153	0.19	

*** significant at 99% confidence level
** significant at 95% confidence level
* significant at 90% confidence level

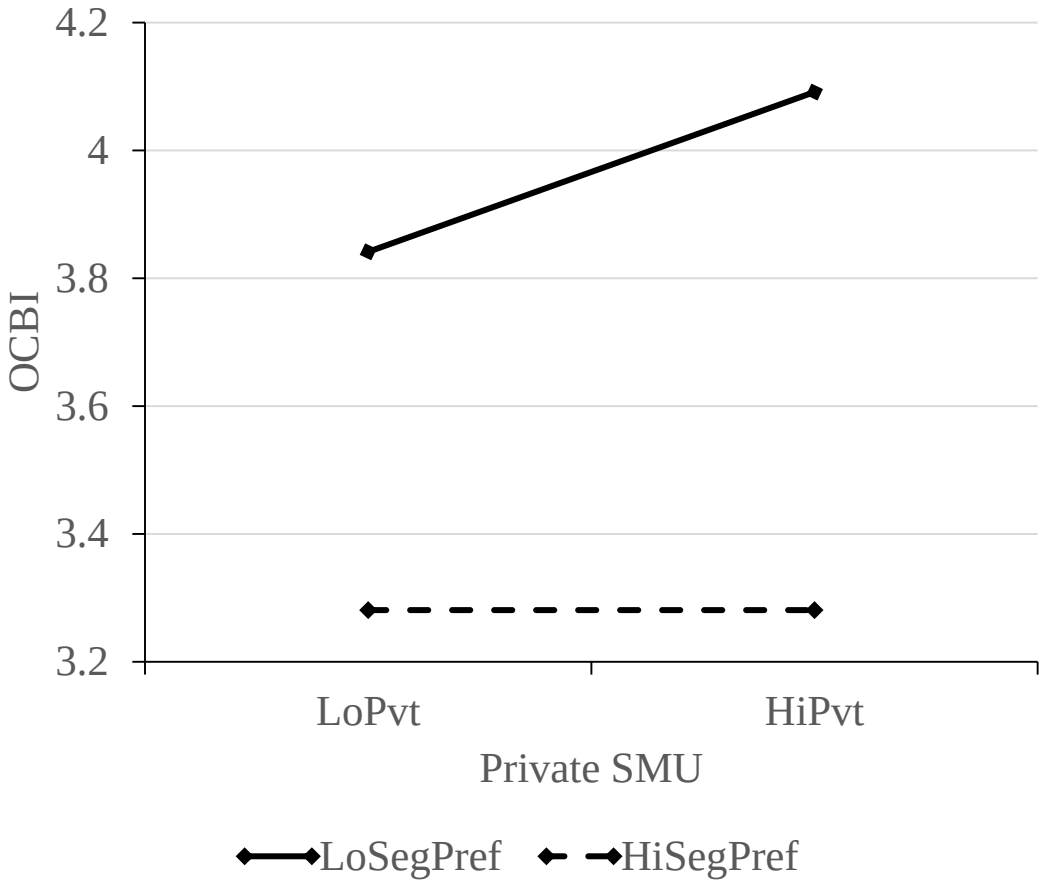


Figure 5-9: Moderation of private SMU and OCBI by segmentation preference, fixed effects model

5.7 Random Effects Model

Once the structure of the relationships was identified, a random effects model was run, and it confirms all significant relationships detected by fixed effects modeling. Table 5-9 summarizes the results, and includes slope estimates at mean, and mean +/- 1 standard deviation of segmentation preference variable. The moderation effect at segmentation preference of one standard deviation away from mean on predictor and outcome is illustrated in Figure 5-11. 90% confidence interval limits of indirect effects, listed in Table 5-10, were computed using MPlus results and an online tool for assessing multilevel mediation (Preacher & Selig, 2010).

Table 5-9: Confidence intervals of random effects model

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Between Level								
S2 ON								
SEGPREF	-0.273	-0.24	-0.223	-0.134	-0.045	-0.027	0.006	**
Means								
S1	0.01	0.041	0.056	0.138	0.22	0.235	0.266	***
S3	-0.705	-0.662	-0.64	-0.525	-0.41	-0.388	-0.345	***
S4	0.314	0.347	0.364	0.454	0.544	0.562	0.595	***
S5	-0.417	-0.381	-0.362	-0.265	-0.167	-0.149	-0.112	***
S6	-0.275	-0.244	-0.229	-0.147	-0.065	-0.049	-0.019	***
S7	-0.157	-0.135	-0.124	-0.066	-0.009	0.003	0.024	*
S8	0.015	0.048	0.065	0.152	0.238	0.255	0.288	***
S9	-0.353	-0.322	-0.306	-0.223	-0.139	-0.123	-0.092	***
S10	0.089	0.114	0.127	0.194	0.26	0.273	0.298	***
S11	0.035	0.081	0.104	0.225	0.346	0.369	0.415	***
Intercepts								
S2	0	0.03	0.045	0.126	0.206	0.221	0.251	**
New/Additional Parameters								
SS1	0.059	0.097	0.117	0.221	0.324	0.344	0.382	***
SS2	0	0.03	0.045	0.126	0.206	0.221	0.251	**
SS3	-0.128	-0.09	-0.071	0.031	0.132	0.151	0.189	

s1|JobSat ON pub; s2|OCBI ON pvt; s3|Stress ON Trust; s4|WLC ON Stress; s5|WLC ON Trust; s6|JobSat ON Stress; s7|JobSat ON Trust; s8|Lifesat ON pub; s9|LifeSat ON Stress; s10|OCBI ON WLC; s11|OCBI ON prof;

*** significant at 99% confidence level

** significant at 95% confidence level

* significant at 90% confidence level

Table 5-10: Indirect effects in random effects model

	Lower90%	Effect	Upper90%	
Stress->WLC->OCBI	0.04	0.081	0.123	*
Trust->Stress->LifeSat	0.053	0.104	0.156	*
Trust->WLC->OCBI	-0.069	-0.042	-0.015	*
Trust->Stress->(WLC)->OCBI	-0.100	-0.052	-0.005	*
Trust->Stress->JobSat	-0.016	0.064	0.144	
* significant at 90% confidence level				

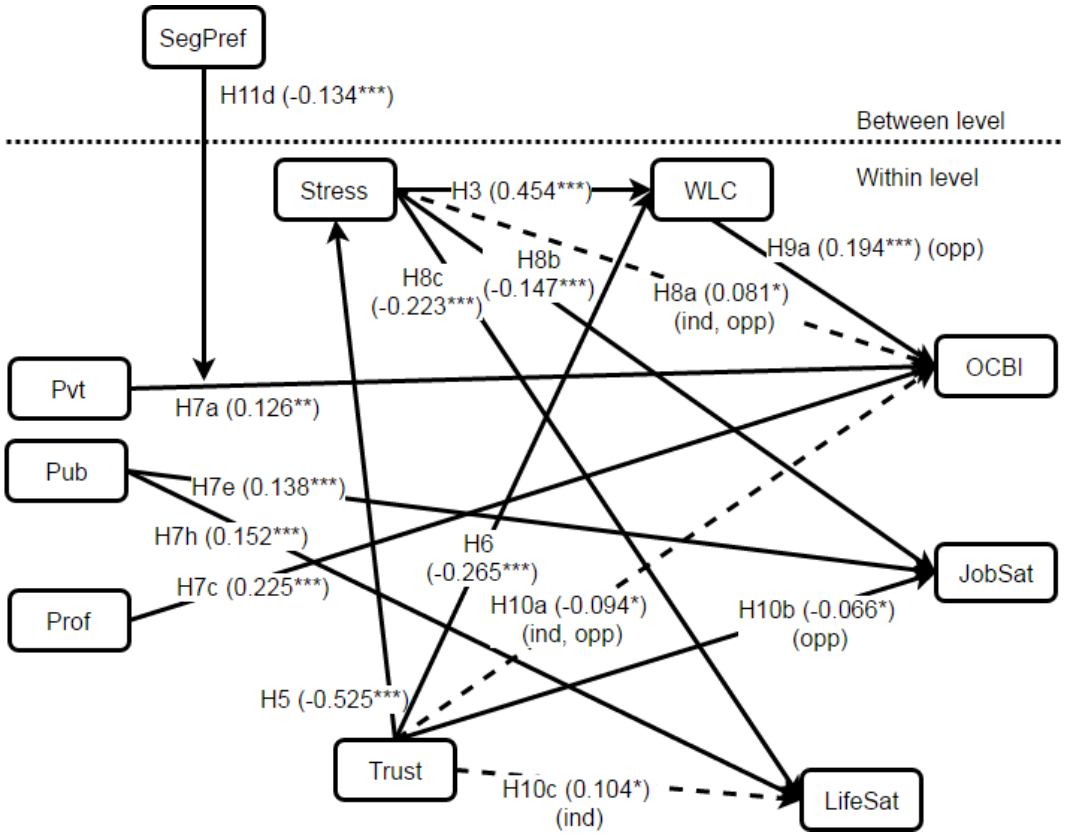


Figure 5-10: Random effects model results

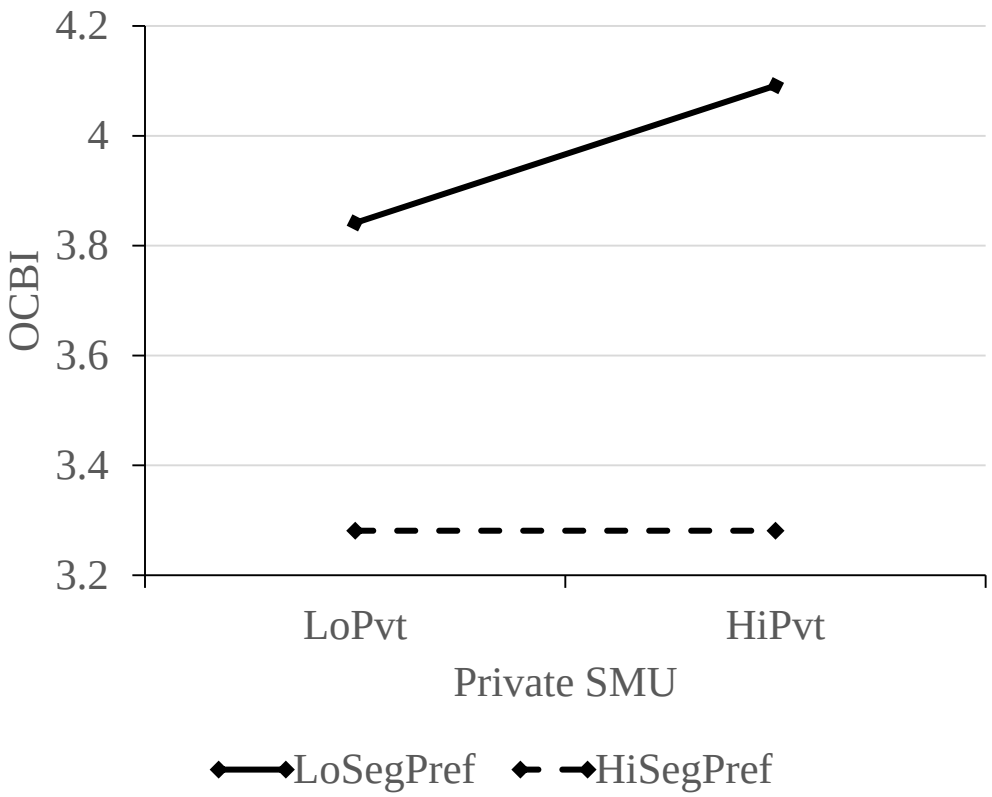


Figure 5-11: Moderation of private SMU and OCBI by segmentation preference, random effects model

5.7.1 Segmentation Preference in Sample

Segmentation preference was measured using four items (listed in Section 4.1.8), on a scale of 1 (strongly disagree) to 5 (strongly agree). Respondent values could therefore range from 1 to 5 in increments of 0.25. The actual distribution of segmentation preference in the primary data sample is in Figure 5-12. All values, except 1, lie between 2.25 and 5.00. There is one outlier with an extremely low segmentation preference value of 1.0. The current model was evaluated again on the primary data without this participant's data. As can be seen from the results in Table 5-11, removing this participant's data did not change the significance of the relationships. The change in

parameters is also negligible; largest percentage change in parameters is 5.56% (intercept of OCBI regressed on private social media use).

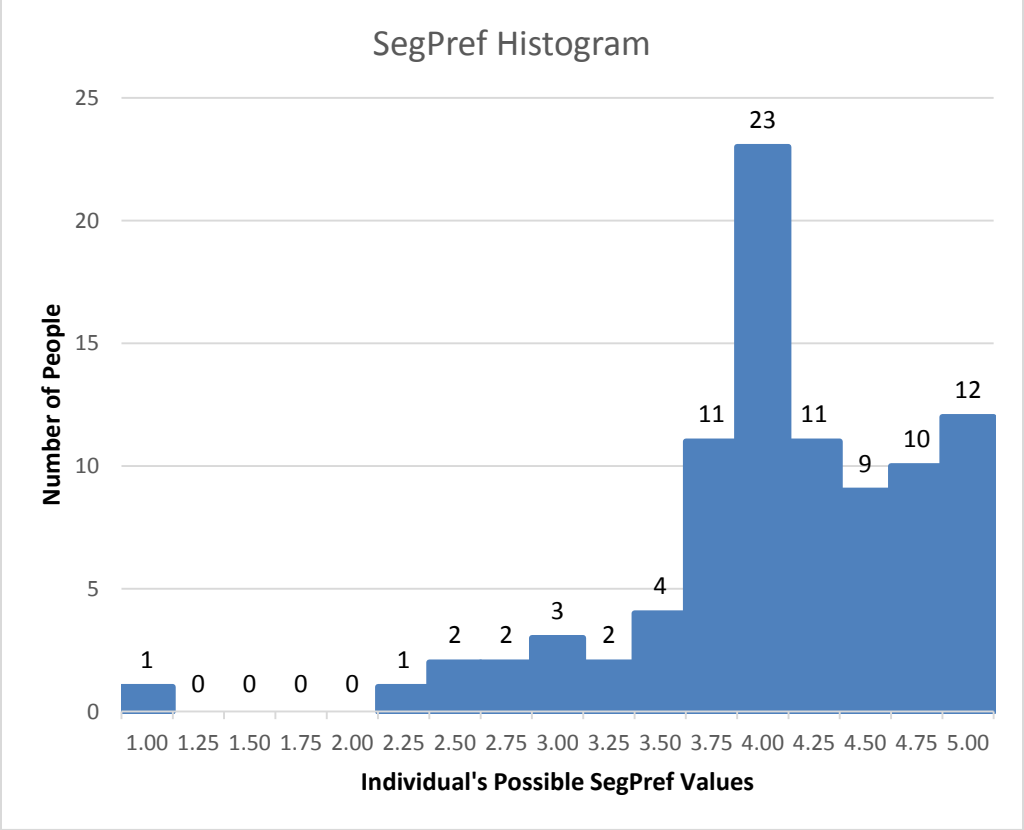


Figure 5-12: Histogram of segmentation preference in primary data sample

Table 5-11: Confidence intervals from data without outlier

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Between Level								
S2 ON								
SEGPREF	-0.282	-0.246	-0.228	-0.134	-0.039	-0.021	0.015	**
Means								
S1	0.01	0.04	0.056	0.139	0.221	0.237	0.268	***
S3	-0.711	-0.668	-0.646	-0.531	-0.417	-0.395	-0.352	***
S4	0.309	0.343	0.36	0.451	0.541	0.558	0.592	***
S5	-0.423	-0.386	-0.368	-0.269	-0.171	-0.152	-0.115	***
S6	-0.273	-0.242	-0.227	-0.144	-0.062	-0.046	-0.015	***
S7	-0.16	-0.138	-0.127	-0.068	-0.009	0.002	0.024	*
S8	0.016	0.049	0.066	0.153	0.241	0.257	0.29	***
S9	-0.35	-0.319	-0.303	-0.219	-0.136	-0.12	-0.088	***
S10	0.091	0.116	0.129	0.197	0.264	0.277	0.303	***
S11	0.044	0.09	0.114	0.237	0.36	0.383	0.429	***
Intercepts								
S2	-0.007	0.023	0.039	0.119	0.2	0.215	0.245	**
New/Additional Parameters								
SS1	0.049	0.088	0.108	0.214	0.32	0.34	0.379	***
SS2	-0.007	0.023	0.039	0.119	0.2	0.215	0.245	**
SS3	-0.139	-0.1	-0.08	0.024	0.128	0.148	0.188	

s1|JobSat ON pub; s2|OCBI ON pvt; s3|Stress ON Trust; s4|WLC ON Stress; s5|WLC ON Trust; s6|JobSat ON Stress; s7|JobSat ON Trust; s8|Lifesat ON pub; s9|LifeSat ON Stress; s10|OCBI ON WLC; s11|OCBI ON prof;

*** significant at 99% confidence level
** significant at 95% confidence level
* significant at 90% confidence level

5.8 Research Findings

None of the three types of social media use at work were found to be significantly related to daily stress in the within-person analysis (H1 not supported). Neither were any of the three types of social media use at work related to daily work-to-nonwork negative

spillover (H2 not supported). The three social media uses (at work) were not significantly related to daily workplace interpersonal trust either (H4 not supported).

Daily stress was found to be positively related to work-to-nonwork negative spillover (H3 supported). Daily levels of workplace interpersonal trust were negatively related to stress (H5 supported). Daily workplace interpersonal trust was also negatively related to work-to-nonwork negative spillover (H6 supported).

Daily OCBI was found to be positively related to private and professional social media use at work, but not public social media use at work. Job and life satisfaction were positively related to public social media use at work, but not private or professional social media use at work (H7 partially supported).

Daily job stress was found to be negatively related to daily job and life satisfaction, as hypothesized. But it was positively related to OCBI, opposite to hypothesized direction (H8 partially supported).

Daily work-to-nonwork negative spillover was found to be positively related to OCBI, opposite to hypothesized direction. It was not related to daily job nor life satisfaction (H9 not supported).

Daily workplace interpersonal trust positively related to life satisfaction, as hypothesized. It was negatively related to job satisfaction and OCBI, opposite to hypothesized (H10 partially supported).

Segmentation preference was found to moderate the relationship between daily private social media use at work and OCBI (H11 partially supported). Since the three types of social media use were not found to be related to the mediators (job stress, workplace interpersonal trust and OCBI), there were no relationships for segmentation preference to moderate (H12 not supported).

Table 5-13 lists all the hypotheses and whether they were supported by the data analysis. The supported relationships are depicted in Figure 5-13 (dashed lines represent indirect effects, and asterisks indicate confidence level), with effect sizes in Table 2-1.

Table 5-12: List of hypotheses

	Hypothesis	**Result**
H1	Within individuals job stress is negatively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.	Not Supported
H2	Within individuals, work-to-nonwork negative spillover is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.	Not Supported
H3	Within individuals, daily job stress is positively associated with daily work-to-nonwork negative spillover.	Supported
H4	Within individuals, workplace trust is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.	Not Supported
H5	Within individuals, workplace trust is negatively associated with job stress.	Supported
H6	Within individuals, workplace trust is negatively associated with work-to-nonwork negative spillover.	Supported
H7 (a, b, c)	Within individuals, OCBI is positively associated with (a) personal-private, (b) personal-public, and (c) professional social media use at work.	Partially supported
H7 (d, e, f)	Within individuals, job satisfaction is positively associated with (d) personal-private, (e) personal-public, and (f) professional social media use at work.	Partially supported
H7 (g, h, i)	Within individuals, life satisfaction is positively associated with (g) personal-private, (h) personal-public, and (i) professional social media use at work.	Partially supported
H8	Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are negatively associated with job stress.	Partially supported
H9	Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are negatively associated with work-to-nonwork negative spillover.	Not supported
H10	Within individuals, (a) OCBI, (b) job satisfaction, and (c) life satisfaction are positively associated with workplace trust.	Partially supported
H11	High personal-private social media use at work is associated with (a) high job stress, (b) low workplace trust, (c) high work-to-nonwork negative spillover, (d) low OCBI, and (e) low job satisfaction for people with high segmentation preference.	Partially supported
H12	High personal-public social media use at work is associated with (a) high job stress, (b) low workplace trust, (c) high work-to-nonwork negative spillover, (d) low OCBI, and (e) low job satisfaction for people with high segmentation preference.	Not supported

Table 5-13: List of results

		Predictor	**Predicted**	**Result**
H1	a, c	PVT, PROF	STRESS	
	b	PUB	STRESS	
H2	a, b, c	PVT, PUB, PROF	WLC	
H3		STRESS	WLC	Supported
H4	a, b, c	PVT, PUB, PROF	TRUST	
H5		TRUST	STRESS	Supported
H6		TRUST	WLC	Supported
H7	a	PVT	OCBI	Supported
	b	PUB	OCBI	
	c	PROF	OCBI	Supported
	d, g	PVT	JOBSAT, LIFESAT	
	e	PUB	JOBSAT	Supported
	f, i	PROF	JOBSAT, LIFESAT	
	h	PUB	LIFESAT	Supported
H8	a	STRESS	OCBI	Not supported (opposite)
	b	STRESS	JOBSAT	Supported
	c	STRESS	LIFESAT	Supported
H9	a	WLC	OCBI	Not Supported (opposite)
	b, c	WLC	JOBSAT, LIFESAT	
H10	a	TRUST	OCBI	Not supported (opposite)
	b	TRUST	JOBSAT	Not supported (opposite)
	c	TRUST	LIFESAT	Supported
H11	a, b, c, e	SEGPREF	PVT-STRESS, PVT-TRUST, PVT-WLC, PVT-JOBSAT	
	d	SEGPREF	PVT-OCBI	Supported
H12	a, b, c, d, e	SEGPREF	PUB-STRESS, PUB-TRUST, PUB-WLC, PUB-OCBI, PUB-JOBSAT	

*Blank cells in the result column indicate that the relationship was not found to be statistically significant.

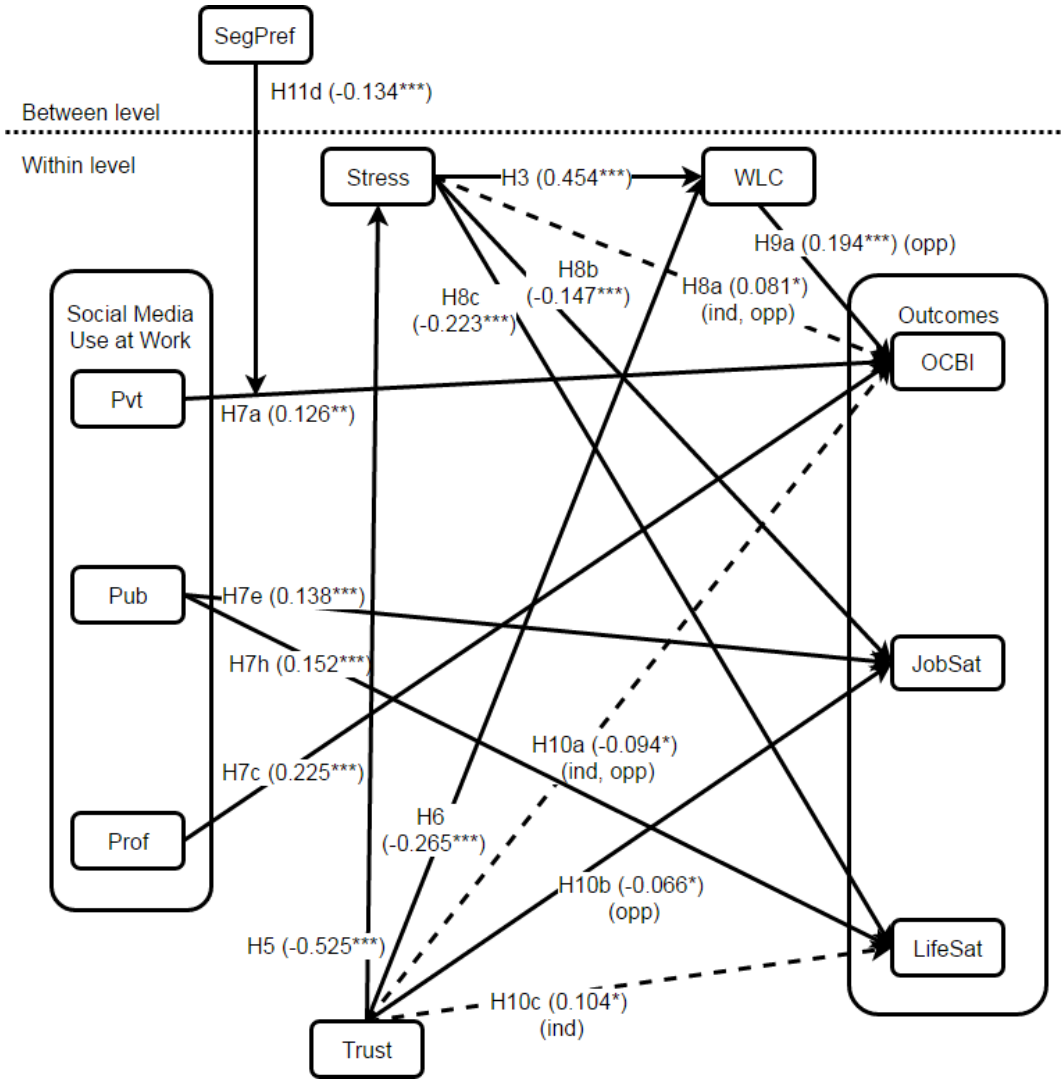


Figure 5-13: Significant relationships in random effects model

Table 5-14: Estimates of mean effect sizes in random effects model

Effect sizes (estimate of mean)			
H3	s4|WLC ON Stress;	0.454	
H5	s3|Stress ON Trust;	-0.525	
H6	s5|WLC ON Trust;	-0.265	
H7a	s2|OCBI ON pvt;	0.125	(intercept)
H7c	s11|OCBI ON prof;	0.225	
H7e	s1|JobSat ON pub;	0.144	
H7h	s8|Lifesat ON pub;	0.152	
H8a	OCBI ON Stress (indirect)	0.081	(opposite)
H8b	s6|JobSat ON Stress;	-0.119	
H8c	s9|LifeSat ON Stress;	-0.221	
H9a	s10|OCBI ON WLC;	0.193	
H10a	OCBI ON Trust (indirect)	-0.094	(opposite)
H10b	s7|JobSat ON Trust;	-0.066	(opposite)
H10c	LifeSat ON Trust (indirect)	0.104	
H11d	s2 ON SegPref	-0.134	

5.9 Post-Hoc Test

The within-person analysis did not find evidence of a relationship between daily social media use at work and either daily stress or work-to-nonwork negative spillover, which is surprising given the findings in social media, work-family and ICT literature streams (Charoensukmongkol, 2014; Ellison et al., 2014; Kane et al., 2014; Moqbel et al., 2013; Tandoc et al., 2015). While the study did find that social media use at work was related to daily outcomes (OCBI, job satisfaction and life satisfaction), the hypothesized mechanism was not supported by the data analysis. Therefore, it was necessary to examine this relationship at the between level.

5.9.1 Validity and Reliability

Confirmatory factor analysis was conducted for the measurement model. Factor loadings are presented in Table 5-15. While factor loadings above 0.707 are

recommended (Barclay et al., 1995; Fornell & Larcker, 1981), lower factor loadings (loadings>0.5) may be considered acceptable if the overall model fit and fit of internal structure of model are acceptable (Bagozzi & Yi, 1988). The CFA for the current measurement model (Chi-square test p-value=0.000, RMSEA= 0.033, CFI= 0.939, TLI= 0.933, SRMR-within= 0.039, SRMR-between= 0.056) suggests that the model is acceptable. The low factor loadings of professional social media use at within-level, due to low within-person variation (Table 4-28), could be because employees less frequently use social media professionally, than publicly and privately (Table 4-22).

Table 5-15: Standardized factor loadings from post-hoc measurement model CFA

Within Level						Between Level					
PVTW BY			TRUSTW BY			PVTB BY			TRUSTB BY		
Q5	0.678		TRUST1	0.661		Q5	0.98		TRUST1	0.967	
Q6	0.727		TRUST2	0.764		Q6	0.986		TRUST2	0.998	
Q7	0.796		TRUST3	0.789		Q7	0.991		TRUST3	0.979	
Q8	0.779		STRESSW BY			Q8	0.999		STRESSB BY		
PUBW BY			STRESS1	0.826		PUBB BY			STRESS1	0.997	
Q9	0.648		STRESS2	0.807		Q9	1		STRESS2	1	
Q10	0.666		STRESS3	0.788		Q10	0.999		STRESS3	1	
Q11	0.638		STRESS4	0.78		Q11	0.964		STRESS4	0.936	
Q12	0.691		WLCW BY			Q12	0.927		WLCB BY		
PROW BY			WLC1	0.818		PROB BY			WLC1	0.992	
Q13	0.513		WLC2	0.778		Q13	0.978		WLC2	1.001	
Q14	0.622		WLC3	0.791		Q14	0.969		WLC3	0.99	
Q15	0.56		WLC4	0.821		Q15	0.976		WLC4	0.991	
Q16	0.588		WLC5	0.761		Q16	0.991		WLC5	0.998	
Q17	0.582		OCBIW BY			Q17	0.985		OCBIB BY		
Q18	0.501		OCBI1	0.695		Q18	0.983		OCBI1	0.957	
Q19	0.634		OCBI2	0.612		Q19	0.982		OCBI2	0.992	
Q20	0.563		OCBI3	0.616		Q20	0.98		OCBI3	0.958	
Q21	0.56		OCBI4	0.638		Q21	0.992		OCBI4	0.993	
Q22	0.544		JOBSATW BY			Q22	0.996		JOBSATB BY		
			JOBSAT1	0.754		SEGPREFB BY			JOBSAT1	0.996	
			JOBSAT2	0.703		SEGPREF1	0.822		JOBSAT2	1.002	
			JOBSAT3	0.673		SEGPREF2	0.742		JOBSAT3	0.956	
			LIFESATW BY			SEGPREF3	0.834		LIFESATB BY		
			LIFESAT1	0.708		SEGPREF4	0.836		LIFESAT1	0.953	
			LIFESAT2	0.784					LIFESAT2	0.997	
			LIFESAT3	0.75					LIFESAT3	0.958	

Table 5-16: Factor correlations from post-hoc CFA

Within Level Correlations									
	PVTW	PUBW	PROW	TRUSTW	STRESSW	WLCW	OCBIW	JOBSATW	
PUBW	0.465								
PROW	0.121	0.447							
TRUSTW	0.016	-0.068	-0.074						
STRESSW	0.055	-0.016	0.025	-0.454					
WLCW	0.046	-0.047	-0.01	-0.298	0.466				
OCBIW	0.171	0.157	0.221	-0.144	0.038	0.184			
JOBSATW	0.098	0.196	0.109	-0.087	-0.259	-0.142	0.178		
LIFESATW	0.036	0.196	0.116	0.035	-0.352	-0.212	0.151	0.566	
Between Level Correlations									
	PVTB	PUBB	PROB	TRUSTB	STRESSB	WLCB	OCBIB	JOBSATB	LIFESATB
PUBB	0.837								
PROB	0.593	0.87							
TRUSTB	-0.587	-0.641	-0.543						
STRESSB	0.425	0.612	0.541	-0.833					
WLCB	0.516	0.667	0.605	-0.888	0.898				
OCBIB	0.619	0.718	0.714	-0.542	0.544	0.572			
JOBSATB	0.266	0.357	0.468	0.003	-0.011	0.045	0.579		
LIFESATB	0.351	0.366	0.444	-0.008	-0.091	0.072	0.492	0.852	
SEGPREF	0.06	0.118	0.055	-0.144	0.215	0.194	-0.011	0.037	-0.001

The reliability of all latent constructs, at both within and between levels, can be found in Table 4-29. Valid sample size at the between level (number of people measured) was only 91. While this might potentially be a reason for low statistical power, which leads to failure in rejecting false null hypothesis of no effect when an effect actually

exists, the variables and relationships have been kept to a minimum to minimize type II error (Hoenig & Heisey, 2001).

5.9.2 Between Level Analysis

A two-level fixed effects model with stress, work-to-nonwork negative spillover and the three types of social media use was tested. Because we now examined between-person relationships, control variables (gender, partner, age, children and children under 5 years of age) were also included (Figure 5-14). The variable couplehood was a dichotomous variable created from the demographic variable partner, such that value of 1 indicated that the person was single or divorced, and 2 indicated that the person was cohabiting or married. This is in accordance with current work-family literature that views cohabiting individuals as family (Rothbard et al., 2005). The variable "small kids" was a dichotomous variable created from the variable named "young kids", which ranged from 0 to 2, so that "small kids" was 2 if the respondent had children less than 5 years of age, and 1 otherwise.

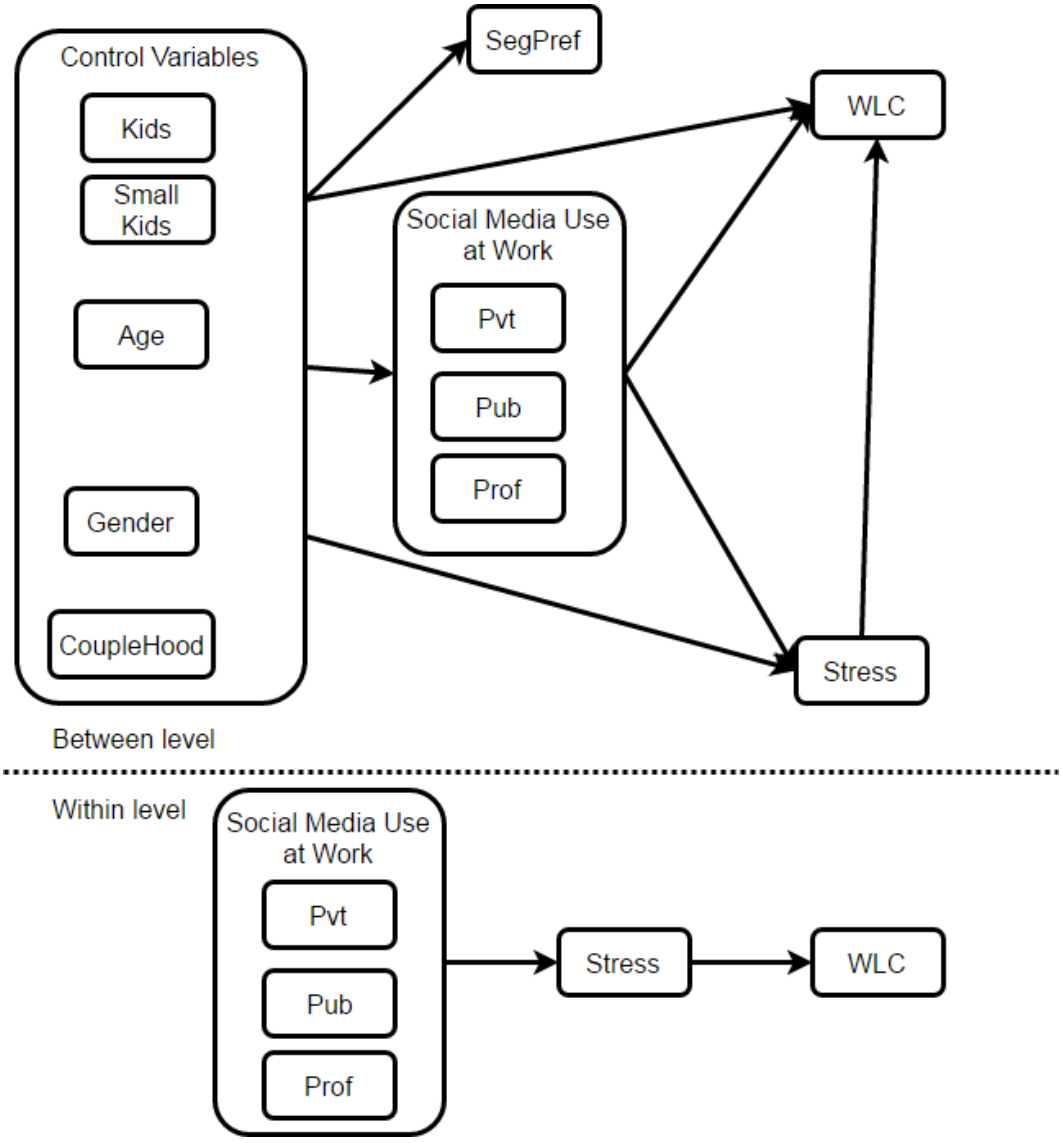


Figure 5-14: Post-hoc model tested

5.9.3 Post-Hoc Findings

The significant relationships and their estimates are summarized and visualized in Table 5-19 and Figure 5-15. At the within level, work-to-nonwork negative spillover was found to be positively related to stress. At the between level also, they were positively related. Between people, private and public use of social media (at work) were found to

be related to stress. Daily job stress was positively related to public social media use and negatively related to private social media use at work. All three types of social media use (at work) were related to work-to-nonwork negative spillover, with private and professional use being positively related, and public use negatively related.

Age was found to be negatively related to public and professional of social media use at work, and work-to-nonwork negative spillover. The effect sizes might seem small, but age ranges from 23 to 73 in the sample set, and most variables scales are on a 5-point Likert scale. Gender was related to public and professional social media use as well, with women using less of both. People who were married or cohabiting were found to have higher job stress, and use more professional social media use (at work). Whether participants had children, or whether they were young (<5 years) had no relationship with variables other than segmentation preference.

Table 5-17: Post-hoc analysis confidence intervals of original model results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Within Level								
WLC ON								
STRESS	0.224	0.269	0.292	0.413	0.533	0.556	0.602	***
Between Level								
WLC ON								
STRESS	0.57	0.613	0.636	0.752	0.869	0.891	0.935	***
PVT	0.004	0.077	0.115	0.31	0.505	0.542	0.615	***
PUB	-0.881	-0.756	-0.692	-0.357	-0.023	0.041	0.167	*
PROF	-0.086	-0.009	0.03	0.234	0.439	0.478	0.555	*
SEGPREF	-0.141	-0.1	-0.079	0.03	0.139	0.16	0.201	
GENDER	-0.37	-0.298	-0.26	-0.066	0.128	0.165	0.237	
COUPLEHD	-0.365	-0.264	-0.213	0.054	0.322	0.373	0.473	
AGE	-0.03	-0.027	-0.026	-0.018	-0.01	-0.008	-0.005	***
KIDS	-0.458	-0.373	-0.33	-0.105	0.12	0.163	0.248	
SMLKIDS	-0.388	-0.282	-0.228	0.055	0.338	0.392	0.498	
STRESS ON								
PVT	-0.878	-0.752	-0.687	-0.35	-0.012	0.052	0.179	*
PUB	0.054	0.248	0.347	0.864	1.381	1.48	1.673	***
PROF	-0.499	-0.399	-0.348	-0.081	0.187	0.238	0.338	
SEGPREF	-0.28	-0.179	-0.127	0.142	0.412	0.463	0.564	
GENDER	-0.389	-0.252	-0.181	0.187	0.555	0.626	0.764	
COUPLEHD	-0.159	-0.033	0.031	0.367	0.704	0.768	0.894	*
AGE	-0.032	-0.027	-0.025	-0.012	0.001	0.004	0.008	
KIDS	-0.64	-0.494	-0.419	-0.028	0.362	0.437	0.584	
SMLKIDS	-0.862	-0.653	-0.546	0.011	0.568	0.674	0.883	

*** significant at 99% confidence level

** significant at 95% confidence level

* significant at 90% confidence level

Table 5-18: Post-hoc analysis confidence intervals of original model results (contd.)

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
PVT ON								
SEGPREF	-0.361	-0.255	-0.201	0.082	0.364	0.418	0.524	
GENDER	-0.645	-0.513	-0.445	-0.091	0.263	0.331	0.463	
COUPLEHD	-0.603	-0.437	-0.353	0.089	0.531	0.615	0.781	
AGE	-0.038	-0.032	-0.029	-0.013	0.002	0.005	0.011	
KIDS	0.107	0.267	0.349	0.775	1.202	1.283	1.443	***
SMLKIDS	-0.527	-0.326	-0.223	0.313	0.849	0.952	1.153	
PUB ON								
SEGPREF	-0.23	-0.125	-0.071	0.209	0.489	0.542	0.647	
GENDER	-1.15	-1.021	-0.954	-0.608	-0.262	-0.195	-0.066	***
COUPLEHD	-0.35	-0.221	-0.155	0.188	0.532	0.597	0.726	
AGE	-0.044	-0.039	-0.036	-0.022	-0.008	-0.006	0	**
KIDS	0.197	0.34	0.413	0.797	1.18	1.253	1.397	***
SMLKIDS	-0.536	-0.347	-0.25	0.255	0.76	0.857	1.046	
PROF ON								
SEGPREF	-0.456	-0.329	-0.264	0.074	0.412	0.477	0.604	
GENDER	-1.378	-1.233	-1.158	-0.769	-0.379	-0.305	-0.159	***
COUPLEHD	0.119	0.233	0.291	0.594	0.898	0.956	1.07	***
AGE	-0.047	-0.041	-0.038	-0.022	-0.006	-0.003	0.003	**
KIDS	-0.097	0.057	0.136	0.547	0.957	1.036	1.19	**
SMLKIDS	-0.586	-0.359	-0.244	0.361	0.966	1.081	1.308	
SEGPREF ON								
GENDER	-0.272	-0.175	-0.125	0.135	0.396	0.446	0.543	
COUPLEHD	-0.499	-0.394	-0.341	-0.062	0.217	0.271	0.375	
AGE	-0.02	-0.016	-0.014	-0.002	0.009	0.012	0.016	
KIDS	-0.632	-0.52	-0.462	-0.161	0.139	0.197	0.309	
SMLKIDS	-0.151	-0.023	0.043	0.386	0.729	0.794	0.923	*

*** significant at 99% confidence level

** significant at 95% confidence level

* significant at 90% confidence level

Table 5-19: Post-hoc analysis confidence intervals of reduced model results

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%	
Within Level								
WLC ON								
STRESS	0.224	0.269	0.292	0.413	0.533	0.556	0.601	***
Between Level								
WLC ON								
STRESS	0.566	0.61	0.632	0.749	0.867	0.889	0.933	***
PVT	0.01	0.077	0.111	0.29	0.469	0.503	0.57	***
PUB	-0.853	-0.734	-0.673	-0.354	-0.036	0.025	0.144	*
PROF	-0.06	0.013	0.05	0.245	0.44	0.477	0.55	**
AGE	-0.03	-0.027	-0.026	-0.019	-0.011	-0.01	-0.007	***
STRESS ON								
PVT	-0.673	-0.577	-0.527	-0.27	-0.013	0.036	0.133	*
PUB	0.336	0.436	0.487	0.755	1.023	1.074	1.174	***
COUPLEHD	-0.102	0.012	0.071	0.376	0.681	0.739	0.853	**
PVT ON								
KIDS	0.503	0.629	0.694	1.032	1.369	1.434	1.56	***
PUB ON								
GENDER	-0.853	-0.774	-0.734	-0.522	-0.31	-0.269	-0.19	***
AGE	-0.031	-0.027	-0.025	-0.015	-0.005	-0.003	0	**
KIDS	0.47	0.597	0.661	0.999	1.337	1.402	1.528	***
PROF ON								
GENDER	-1.265	-1.139	-1.074	-0.738	-0.401	-0.337	-0.211	***
AGE	-0.041	-0.036	-0.034	-0.02	-0.006	-0.003	0.002	**
COUPLEHD	0.028	0.125	0.175	0.435	0.695	0.744	0.842	***
KIDS	0.109	0.259	0.336	0.737	1.138	1.215	1.365	***
SEGPREF ON								
SMLKIDS	-0.121	-0.021	0.03	0.297	0.564	0.615	0.715	*

*** significant at 99% confidence level

** significant at 95% confidence level

* significant at 90% confidence level

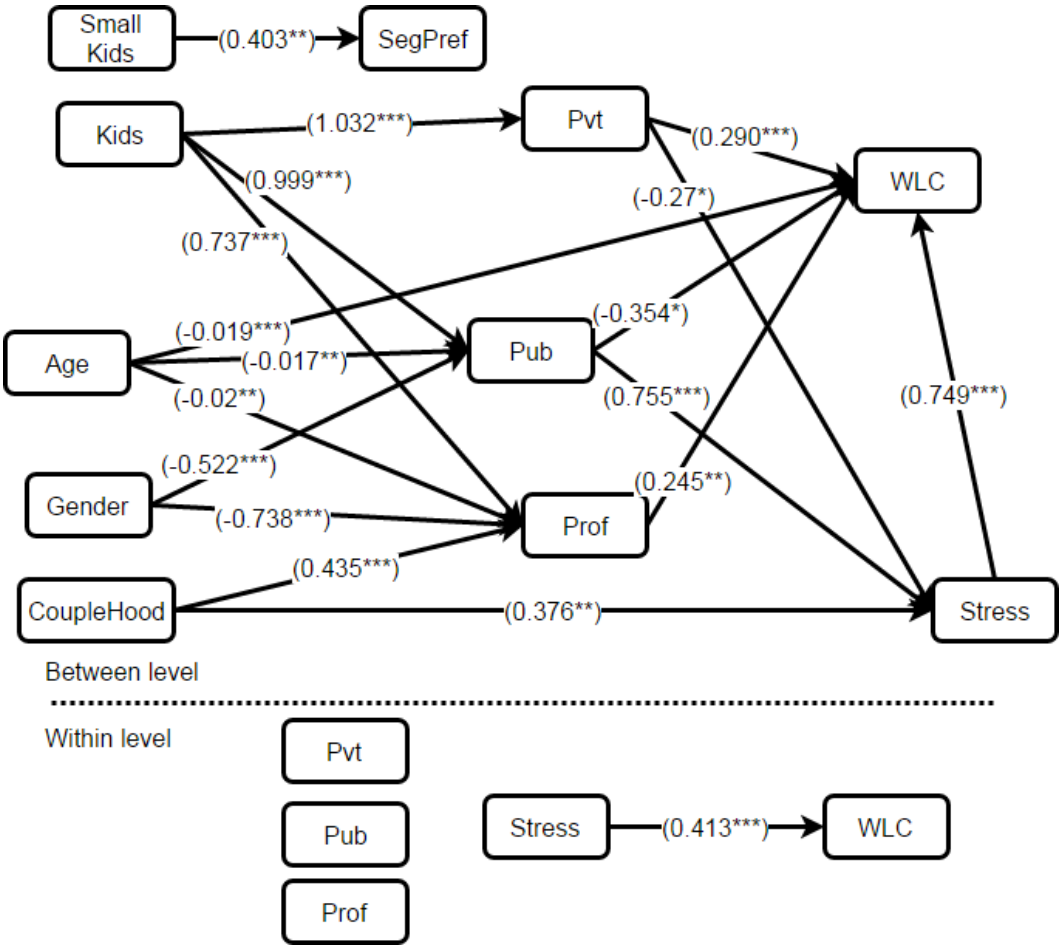


Figure 5-15: Post hoc test results

Chapter 6

Discussion and Conclusion

This chapter discusses the implications of the findings presented in Chapter 5.

6.1 Summary of Research Findings

The study found private and professional use of social media at work to be positively related to organizational citizenship behavior towards individuals (OCBI) at the within-person level. On days that the respondents used more social media for private and professional reasons, compared to their own average use, they exhibited higher OCBI. Segmentation preference was found to moderate the relationship between OCBI and personal-private social media use at work. People with higher than average preference for keeping their work and nonwork lives separate did not exhibit a relationship between OCBI and private social media use at work. But there was a statistically significant, positive relationship between private social media use at work and OCBI, for those with higher preference for integration.

The study also found daily public social media use to be positively related to daily job and life satisfaction. On the days that respondents used more social media for personal-public interaction, compared to their own average, they experienced higher job and life satisfaction.

Relationships between job stress, workplace trust and work-to-nonwork negative spillover (also called work-to-life conflict) were confirmed at the within-person level. Daily workplace interpersonal trust was negatively related to daily job stress and work-to-nonwork negative spillover. Daily job stress was positively related to daily work-to-nonwork negative spillover. This confirms the central tenets of role theory at the within-individual level.

The study found four relationships contrary to expected direction. Daily workplace interpersonal trust was negatively related to both job satisfaction and OCBI. It appears that excessive interpersonal trust could be detrimental to employees. A possible explanation could be that when people engage in higher than their average individual initiative behavior, they are more likely to feel disappointment. Literature on the dark side of trust explores some of the negative outcomes of excessive trust (Guinot et al., 2014). The other two relationships that were contrary to hypothesized direction were the relationships between daily OCBI and job stress, and between daily OCBI and work-to-nonwork negative spillover. They were both found to be positive relationships. Literature on OCBI does provide an explanation, in that individual initiative comes at a cost to the individual (Bolino & Turnley, 2005).

Daily workplace interpersonal trust, job stress, and work-to-nonwork negative spillover were not found to be related to any of the three types of daily social media uses at the within-individual level. However, the between-level post-hoc analysis showed that between people these relationships do exist. Daily stress was positively related to public social media use and negatively related to private social media use. In other words, people with higher public social media use at work experienced higher stress, and those with higher private social media use at work experienced lower stress. Work-to-nonwork negative spillover was positively related to both professional and private social media use, and negatively to public social media use, between people. The absence of significant relationships at the within-individual level suggests that the significant relationships at the between level might be driven by covariates other than the control variables that were included (gender, age, partner status and number and age of children).

The post-hoc analysis also revealed significant relationships between control variables and study variables. Older participants used public and professional social media (at work) less than their younger cohorts in the study. They also experienced less work-to-life conflict. Those with children used higher social media at work (all three types). Those with children younger than 5 years of age responded with a higher inclination to keep their work and nonwork lives separate. Women participants used less public and professional social media use (at work) than the men in the study. Gender was not associated with private social media use at work. Living with a partner (married or cohabiting) was associated with higher professional social media use (at work) and higher stress.

The following sections highlight the theoretical and practical implications of the findings of this study.

6.2 Implications for Theory

This study makes a contribution to theory by developing scales to measure technology-independent aspects of social media use. Social media is primarily used for supporting interpersonal relationships. Hence, the three dimensions of social media use in the measure developed are private, public, and professional types of social media use. The measurement scale was operationalized using a conceptual framework (Dutta, 2010). The original framework was proposed as a practitioner's guide to managing online presence. This study adapted the framework and mapped the dimensions in the context of role theory. The three dimensions were found to closely map people's intuitive categorization of online social media activities, as demonstrated by the psychometric development and testing. The measure was then used to empirically test hypotheses grounded in role theory. Thus the scales are rooted in practice and in theory. While this

study used the scales for measuring social media only at work, the scales are applicable to other contexts as well.

Few studies have applied role theory to investigate social media use and workplace behaviors and outcomes. Results of this study supported the enhancement view over the conflict view within role theory, as all the relationships between daily social media uses and daily outcomes of OCBI, job satisfaction and life satisfaction, which were significant, were positive. This is a theoretical contribution of this study, as this has not previously been explored in the literature at the within-person level.

A multilevel, nested methodology, such as the one implemented here, goes beyond simply explaining variance at the two levels of investigation, and gives more insight than either level by itself. This study investigated stress and work-to-nonwork negative spillover as a possible mechanism explaining relationships between social media use and outcomes of OCBI, job satisfaction, and life satisfaction. The hypothesized mechanism of stress and work-to-nonwork negative spillover was not supported at the within-person level. However, the relationships between social media uses and stress and work-to-nonwork negative spillover were found to be significant in the between-level analysis. The fact that the variables were related at the between level, but not at the individual level, indicates that there may be covariates, other than the control variables, that drive these relationships. This opens an avenue for research into constructs, such as coworker support and supervisor support (Charoensukmongkol, 2014) or employee self-regulation (Bandura, 1991), that might be related to social media uses on the one hand, and stress and work-life conflict on the other.

Lastly, the negative aspects of trust and OCBI are relatively less explored in literature (Bolino & Turnley, 2005; Dirks & Ferrin, 2001; Guinot et al., 2014; Zahra et al., 2006). This study found trust to be negatively related to job satisfaction and OCBI, and

OCBI to be positively related to stress and work-life conflict. This provides empirical evidence in support of the dysfunctional view of these relationships.

6.3 Implications for Practice

This study examined the mechanism by which social media use in the workplace affects outcomes, which is important from an organizational perspective. Managers and employees alike need to have an understanding of the consequences of social media use at work, and this study is a step towards providing that understanding.

This study found that citizenship behavior was positively related to private and professional social media use, while job and life satisfaction were not. Daily job and life satisfaction were related to public social media use, but not private or professional social media use at work. The study makes no assertions to causality, and it is possible that OCBI, job satisfaction and life satisfaction are, in fact, the drivers of social media use. However, the results do show that positive outcomes are associated with social media use. These positive outcomes have been found to be related to other workplace outcomes such as productivity, turnover intentions and actual turnover (Porter et al., 1974), which in turn impact organizational costs and goals.

The study found that none of the three types of social media use were related to daily workplace trust, job stress, and work-to-nonwork negative spillover at the within-person level. Significant relationships are present at the between-person level. Job stress is positively related to public social media use and negatively to private social media use. Work-to-nonwork negative spillover, on the other hand, is negatively related to public social media use, positively to private social media use, and positively to professional social media use at work. Thus, the type of social media used makes a difference on whether job stress is higher or lower. And while work-to-nonwork negative spillover and

stress are positively related to each other, private and public social media uses are related in opposite ways to them.

The underlying mechanisms for the relationships observed in this study require further investigation. Thus, this study does not unequivocally support encouraging social media use. However, the results do suggest that discouragement may not necessarily lead to better outcomes.

The absence of significant relationships at the within-person level, between the three types of social media use and job stress and work-to-nonwork negative spillover, could also possibly be due to unexplored constructs, such as employee self-regulation. The absence of within-person relationships but presence of between-person relationships indicates existence of a mechanism not explored in this study. The subjects in this study were gainfully employed individuals, who have some experience managing their daily work lives. It is therefore plausible that they mitigate negative consequences through self-regulation (Bandura, 1991).

6.4 Limitations

The measures were all self-reported, and worded in the same direction. While attention check filters were used, the possibility of common method bias remains, even though it was minimized procedurally.

Selection bias is a possible threat to external validity, especially since data was collected using Qualtrics' Panels. For instance, people with higher integration preference might be more likely to be part of a panel for a survey-conducting organization. However, with more researchers choosing online survey facilitators to collect data, the question of whether data gathered from such sources is comparable to test samples such as recruited student and consumer panels, has been addressed (Steelman et al., 2014).

The percentage of within-level variance of professional dimension was rather low (0.08), and might be cause for concern to external validity. However, the low percentage of within-level variance, in overall variance, is above the minimum threshold of 0.05 (Geldhof et al., 2014), and is, therefore, acceptable.

The post-hoc analysis conducted at the between level had a limited number of observations, since the total number of people from whom we had valid daily responses was only 91, and its power might be a concern. To reduce the risk of type II error, a minimum number of variables were included in the post-hoc analysis.

People's perception and recall of the emotions they experience differ with the passage of time. Respondents tend to fill in any gaps in their memory with the situational knowledge that they have (Robinson & Clore, 2002). Therefore, an episodic approach of data collection would give greater insight into socio-psychological research. This study measured social media use, but not details of each interaction, such as whether each online interaction was positive or negative, the screen size of the device used for online interaction, or actual content of communication. Also, the study measured predictors, mediators, and outcomes in the same survey questionnaire. Even though they were psychometrically separated, they were measured at the same point in time. Still, the drawbacks of levels approach of data collection are not calamitous. The overall impression that people have of their emotional states is quite often very much valid (Robinson & Clore, 2002). A levels approach of data collection is, therefore, not inappropriate to examine relationships within a nomological network (Maertz & Boyar, 2011).

Because the respondents were restricted to U.S. employees who went to work on the day they took the survey, the results of the analysis are generalizable to the working American population, but not the population in general. For instance, there might

indeed be a significant negative relationship in the general population between social media uses and outcomes (Tandoc et al., 2015). It is possible that for the population of gainfully employed professionals, this relationship is not significant due to other reasons, such as self-regulation. This is a restriction on the generalizability of the study.

A limitation of multilevel modeling (MLM) is that the measurement scale items are averaged to get the score on the latent variable. Composite scores do not allow the measurement items to have unexplained variance, apart from that of the latent construct. The obvious solution is to use Structural Equation Modeling (SEM), which does allow such specification. While there is a Multilevel SEM technique for data analysis to accommodate a multilevel study, it is not applicable in the case of repeated measures within individuals, since it requires the observations in each cluster to be independent. Thus, MLM is the most appropriate analysis methodology.

Lastly, the data for this study were collected in October 2016, and the U.S. presidential election of 2016 was held on November 8th, less than two weeks after data collection ended. Considering that the election was a major topic of discussion online in the time period leading up to the election, it is possible that it was one of the external factors driving social media use and interaction. However, since the same participants were measured over the same three week period, it does not compromise the internal validity of the study.

6.5 Future Research

The current study did not find significant relationships between the predictors (the three types of social media uses) and role theory mechanisms (job stress and work-to-life conflict) within individuals. The post-hoc analysis shows that significant relationships do exist at the between-individual level. It is also possible that some other mechanism

altogether drives the variances in the variables involved in the study. Coworker support and supervisor support have been identified in literature as predictors of social media use (Charoensukmongkol, 2014). These are closely related to the workplace interpersonal trust variable (both of which are related to social capital) that was included in the study. Employee self-regulation (Bandura, 1991) and routinization (Saga & Zmud, 1994) are other mechanisms which might explain these results. A future study explicitly measuring these constructs could explore the relationships between these variables and social media use. Furthermore, within-level relationships may be moderated by demographic variables such as age, gender, partner status, and children, and other individual-specific constructs such as negative affectivity. This is an issue that future studies may consider investigating.

The current study investigated social media use and outcomes within the framework of role theory. However, out of the four work-nonwork interface variables, only work-to-nonwork negative spillover (work-to-life conflict) was explicitly included, due to the ensuing complexity of the model. Future work can seek to incorporate the other interface variables — work-to-nonwork positive spillover, nonwork-to-work negative spillover, and nonwork-to-work positive spillover — together into a study with the other variables. Since the nonwork-to-work spillovers are antecedents to stress, they might explain the (non-significant) relationships between stress and the three types of social media uses.

This study uncovered negative effect of trust on job satisfaction and OCBI, and positive relationships of OCBI and work-to-life conflict and OCBI and stress, within-person. A study where both the within and between levels are considered would help shed light on the dysfunctional nature of these relationships. Whether the negative

relationship between trust and job satisfaction holds at the between level is an interesting question that remains to be investigated.

The current study recruited participants randomly from various industries. It would be useful to gather and analyze data from a daily diary (experience sampling) data collection on social media behavior of employees of one or more organizations within a specific domain. While results from such a study will not be generalizable over all employees in the U.S., it can provide insight into industry-specific behaviors.

An episodic data collection design, where the respondent is measured when the event occurs, can be more useful to theory building. For instance, if respondents record their use and their emotional states right after using social media, when they are at work, and record their aggregated levels of stress, work-life conflict and outcome variables at the end of the day, that would provide us a clearer explanation of the mechanism by which social media use affects employees. Whether each online interaction was positive or negative is an important consideration this would help us record. Furthermore, the actual content of social media exchange might have a bearing on the daily emotional constructs. If the content of the social media interaction is available to researchers, the interaction can be objectively coded by judges and included in the analysis, lending greater understanding into online behavior and user outcomes.

Appendix A

Card Sort Instructions

"Social Media Use" Scale Development
Thank you for agreeing to participate!

What are we doing today? A sorting activity hosted on optimalworkshop.com.

How will your data be used?
Based on your categorization and feedback, the measurement items of the new scale will be modified to maximize convergent and discriminant validity.

We'll do a warm up task first. The task is on **http://tinyurl.com/sort01**.

Individual sorting
Done with the warm up task? Please go to **http://tinyurl.com/sort02**, enter your email, and follow the instructions onscreen.

Group sorting
Please go to **http://tinyurl.com/sort02**, enter the email **group2@mail.com** and repeat the sorting exercise as a group. The aim is for all of you to come to a categorization that everyone agrees with.

Background
Why are we doing this? Towards establishing construct validity of psychometric measure / measurement scale / instrument / operationalization of a construct (in this case, social media use).
What is a psychometric measure? Practical test/questionnaire developed from theory.
Example: Rate your agreement on a scale of 1 (strongly disagree) to 5 (strongly agree)

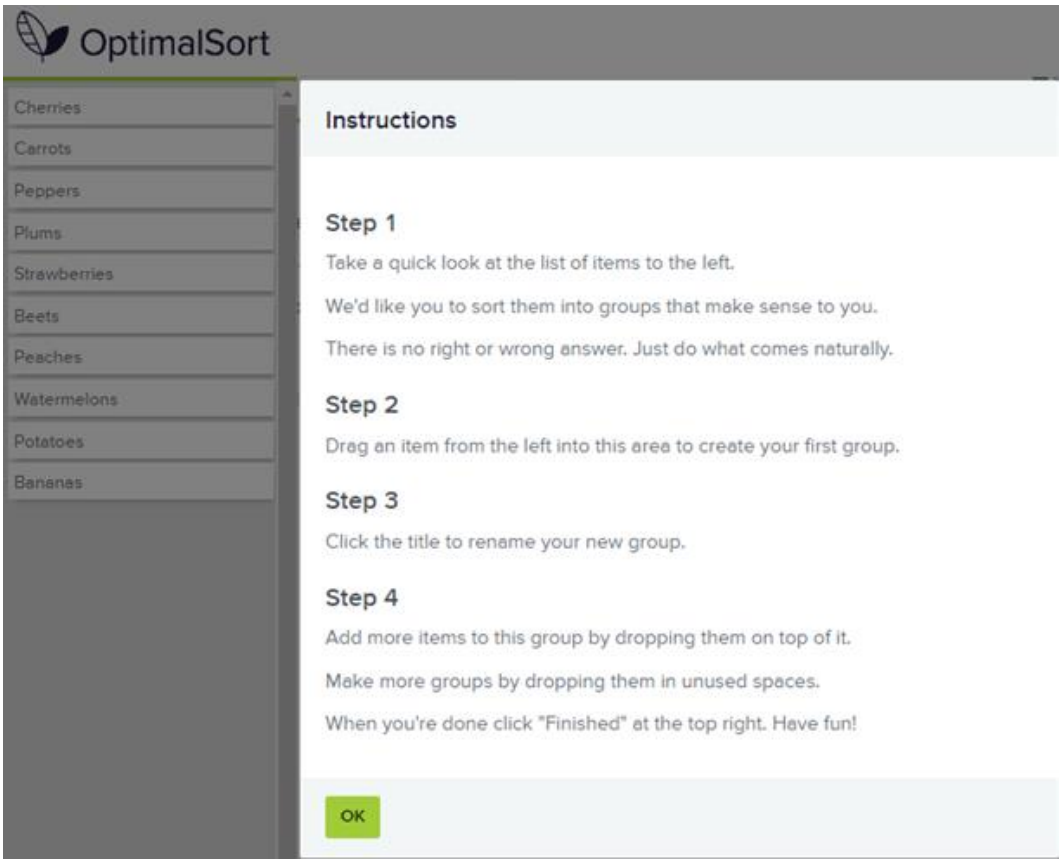
I felt a great deal of stress today because of my job Very few stressful things happened to me at work today My work today was extremely stressful I did not feel any stress at work today
Today, I found real enjoyment in my work During most of day today I felt enthusiastic about my work I felt fairly satisfied with my job today

These are validated measures of job stress (Motowidlo, Packard, & Manning, 1986) and job satisfaction (Judge, Scott, & Ilies, 2006) adapted to measure daily manifestations.
(Interested in "instrument development"? Look up Moore & Benbasat ISR1991)
What is construct validity? Extent to which operationalization of a construct measures a construct as defined by a theory; basically, ***does it measure what we think it measures.***
Subsumes all other types of validity, such as:

- Convergent validity (items within a category tend to be grouped together)
- Discriminant validity (items in one category are different from those of other categories)

Appendix B

Card Sort Warm Up Task


OptimalSort
Cherries
Carrots
Peppers
Plums
Strawberries
Beets
Peaches
Watermelons
Potatoes
Bananas
Instructions
Step 1
Take a quick look at the list of items to the left.
We'd like you to sort them into groups that make sense to you.
There is no right or wrong answer. Just do what comes naturally.
Step 2
Drag an item from the left into this area to create your first group.
Step 3
Click the title to rename your new group.
Step 4
Add more items to this group by dropping them on top of it.
Make more groups by dropping them in unused spaces.
When you're done click "Finished" at the top right. Have fun!
OK

References

Abdi, H. (2007). Bonferroni and Sidak corrections for multiple comparisons. *Encyclopedia of Measurement and Statistics*, *3*, 103–107.

Adams, G. a., King, L. a., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology*, *81*(4), 411–420. http://doi.org/10.1037/0021-9010.81.4.411

Adler, P. S., & Kwon, S. (2002). Prospects for a New Concept. *The Academy of Management Review*, *27*(1), 17–40. http://doi.org/10.5465/AMR.2002.5922314

Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.

Anandarajan, M., & Simmers, C. a. (2005). Developing human capital through personal web use in the workplace: Mapping employee perceptions. *Cais*, *15*, 776–791.

Anandarajan, M., Simmers, C. a., & D'Ovidio, R. (2011). Exploring the underlying sturucture of personal web usage in the workplace . *Cyberpsychology, Behavior, and Social Networking*, *14*(10), 577–583. http://doi.org/10.1089/cyber.2010.0136

Appel, L., Dadlani, P., Dwyer, M., Hampton, K. N., Kitzie, V., Matni, Z. A., … Teodoro, R. (2014). Testing the Validity of Social Capital Measures in the Study of Information and Communication Technologies., *17*(4).

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 396–402.

Aseltine, R. H., Gore, S., & Colten, M. E. (1994). Depression and the social developmental context of adolescence. *Journal of Personality and Social Psychology*, *67*(2), 252–263. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/7932062

Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a Day's Work: Boundaries and Micro Role Transitions. *Academy of Management Review*, *25*(3), 472–491. http://doi.org/10.2307/259305

Ayyagari, R., Grover, V., & Purvis, R. (2002). Technostress: Technological Antecedents and Implications. *MIS Quarterly*, *35*(4), 329–358.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 74–94.

Bala, H., & Venkatesh, V. (2013). Changes in Employees' Job Characteristics During an Enterprise System Implementation: A Latent Growth Modeling Perspective. *MIS Quarterly*, *37*(4), 1113–1140.

Bandura, A. (1971). Social learning theory. *Social Learning Theory*. http://doi.org/10.1111/j.1460-2466.1978.tb01621.x

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*(2), 248–287.

Barclay, D., Higgins, C., & Thompson, R. (1995). The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, *2*(2), 285–309.

Barczyk, C. C., & Duncan, D. G. (2011). Social Networking Media as a Tool for Teaching Business Administration Courses, *1*(17), 267–276.

Bélanger, F., Watson-Manheim, M. B., & Swan, B. R. (2013). A multi-level socio-technical systems telecommuting framework. *Behaviour & Information Technology*, *32*(12), 1257–1279. http://doi.org/10.1080/0144929X.2012.705894

Bickel, R. (2007). *Multilevel analysis for applied research: It's just regression!* Guilford Press.

Block, J. (1961). The Q-sort method in personality assessment and psychiatric research.

Bolino, M. C., & Turnley, W. H. (2005). The personal costs of citizenship behavior: the relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of Applied Psychology*, *90*(4), 740.

Borgatti, S. P., Mehra, a, Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. *Science*, *323*(5916), 892–895. http://doi.org/10.1126/science.1165821

Boswell, W. R., & Olson-Buchanan, J. B. (2007). The Use of Communication Technologies After Hours: The Role of Work Attitudes and Work-Life Conflict. *Journal of Management*, *33*(4), 592–610. http://doi.org/10.1177/0149206307302552

Boyd, D. M., & Ellison, N. B. (2008). Social Network Sites: Definition, History, and Scholarship. *International Review of Research in Open and Distance Learning*, *13*(1), 210–230. http://doi.org/10.1111/j.1083-6101.2007.00393.x

Brayfield, A. H., & Rothe, H. F. (1951). An Index of Job Satisfaction. *Journal of Applied Psychology*, *35*(5), 307–311. http://doi.org/10.1097/00006199-195402000-00016

Brehm, J., & Rahn, W. (1997). Individual-level evidence for the causes and consequences of social capital. *American Journal of Political Science*, 999–1023.

Bruck, C. S., Allen, T. D., & Spector, P. E. (2002). The Relation between Work–Family Conflict and Job Satisfaction: A Finer-Grained Analysis. *Journal of Vocational Behavior*, *60*(3), 336–353. http://doi.org/10.1006/jvbe.2001.1836

Brzozowski, M. J. (2009). WaterCooler: Exploring an Organization Through Enterprise Social Media. *Proceedings of the ACM 2009 International Conference on Supporting Group Work*, 219–228. http://doi.org/10.1145/1531674.1531706

Burke, M., Marlow, C., & Lento, T. (2010). Social network activity and social well-being. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 1909–1912. http://doi.org/10.1145/1753326.1753613

Burt, R. S. (2001). Structural holes versus network closure as social capital. *Social Capital: Theory and Research*.

Butts, M. M., Becker, W. J., & Boswell, W. R. (2015). Hot buttons and time sinks: The effects of electronic communication during nonwork time on emotions and work-

nonwork conflict. *Academy of Management Journal*, *58*(3), 1–26. http://doi.org/10.5465/amj.2014.0170

Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, *67*(2), 169–198. http://doi.org/10.1016/j.jvb.2004.08.009

Calabrese, A., & Borchert, M. (1996). Prospects for electronic democracy in the United States: rethinking communication and social policy. *Media, Culture & Society*, *18*(2), 249–268. http://doi.org/10.1177/016344396018002005

Capra, M. G. (2005). Factor analysis of card sort data: an alternative to hierarchical cluster analysis. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 49, pp. 691–695).

CareerBuilder. (2014). CareerBuilder Study Reveals Top Ten Productivity Killers at Work. Retrieved from http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?sd=6/12/2014&id=pr827&ed=12/31/2014

Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, *68*(1), 131–164. http://doi.org/10.1016/j.jvb.2005.02.002

Charoensukmongkol, P. (2014). Effects of support and job demands on social media use and work outcomes. *Computers in Human Behavior*, *36*, 340–349. http://doi.org/10.1016/j.chb.2014.03.061

Ciabattari, T. (2007). Single mothers, social capital, and work--family conflict. *Journal of Family Issues*, *28*(1), 34–60.

Clark, S. C. (2000). Work/Family Border Theory: A New Theory of Work/Family Balance. *Human Relations*, *53*(6), 747–770. http://doi.org/10.1177/0018726700536001

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, *94*(1988), S95.

Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: a meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, *92*(4), 909.

Curran, P. J., & Bauer, D. J. (2007). Building path diagrams for multilevel models. *Psychological Methods*, *12*(3), 283.

Deci, E. E. L., & Ryan, R. M. R. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, *49*(3), 182–185. http://doi.org/10.1037/a0012801

Delhey, J., & Newton, K. (2005). Predicting cross-national levels of social trust: Global pattern or Nordic exceptionalism? *European Sociological Review*, *21*(4), 311–327. http://doi.org/10.1093/esr/jci022

DeLone, W., & McLean, E. (1992). The Quest for the Dependent Variable. *Information Systems Research*, *3*(1), 60–65. http://doi.org/10.1287/isre.3.1.60

Denyer, D., Parry, E., & Flowers, P. (2011). “Social”,“Open” and “Participative”? Exploring Personal Experiences and Organisational Effects of Enterprise2. 0 Use. *Long Range Planning*. Retrieved from http://www.sciencedirect.com/science/article/pii/S0024630111000483

Devaraj, S., & Kohli, R. (2003). Performance Impacts of Information Technology: Is Actual Usage the Missing Link? *Management Science*, *49*(3), 273–289. http://doi.org/10.1287/mnsc.49.3.273.12736

Diener, E., Emmons, R., Larsen, J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessmemt*, *49*(1), 71–75. http://doi.org/10.1207/s15327752jpa4901_13

Dimotakis, N., Ilies, R., & Judge, T. (2013a). Experience sampling methodology. *Research Methods for the Study …*. Retrieved from https://books.google.com/books?hl=en&lr=&id=_FBUIXuZaB0C&oi=fnd&pg=PA319&dq=dimotakis+ilies+judge+experience+sampling+methodology&ots=XgVW5bcEs0&sig=qUbZRmS36RR2NWv0LKaKCz4mem4

Dimotakis, N., Ilies, R., & Judge, T. A. (2013b). Experience Sampling Methodology. In J. M. Cortina & R. S. Landis (Eds.), *Modern Research Methods for the Study of Behavior in Organizations* (pp. 319–348). Routledge. http://doi.org/10.4324/9780203585146

Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science*, *12*(4), 450–467.

Doll, W., & Torkzadeh, G. (1998). Developing a multidimensional measure of system-use in an organizational context. *Information & Management*. Retrieved from http://www.sciencedirect.com/science/article/pii/S0378720698000287

Dong, X., Wang, T., & Benbasat, I. (2016). IT Affordances in Online Social Commerce : Conceptualization Validation and Scale Development Full papers. In *AMCIS* (pp. 1–10).

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). Social media update 2014. *Pew Research Center*, (January), 18. http://doi.org/10.1111/j.1083-6101.2007.00393.x

Dutta, S. (2010). What’s Your Personal Social Media Strategy? *Harvard Business Review*.

Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980-2002). *Journal of Vocational Behavior*, *66*(1), 124–197. http://doi.org/10.1016/j.jvb.2003.11.003

Edwards, J., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs Work Home. *Academy of Management Review*, *25*(1), 178–199. Retrieved from /citations?view_op=view_citation&continue=/scholar?hl=en&start=20&as_sdt=0,5&scilib=1026&scioq=Career+Development+models&citilm=1&citation_for_view=PWHE6awAAAAJ:ZHo1McVdvXMC&hl=en&oi=p

Ellison, N. B., Gray, R., Lampe, C., & Fiori, A. T. (2014). Social capital and resource requests on Facebook. *New Media & Society*, (July), 1461444814543998-. http://doi.org/10.1177/1461444814543998

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, *12*(4), 1143–1168. http://doi.org/10.1111/j.1083-6101.2007.00367.x

Ellison, N. B., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. *New Media & Society*, *13*(6), 873–892. http://doi.org/10.1177/1461444810385389

Feise, R. J. (2002). Do multiple outcome measures require p-value adjustment? *BMC Medical Research Methodology*, *2*(1), 8.

Fisher, S. (1988). Leaving home: Homesickness and the psychological effects of change and transition. (S. F. J. Reason, Ed.)*Handbook of Life Stress, Cognition and Health*. John Wiley & Sons.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 39–50.

Friedman, S., & Greenhaus, J. (2000). *Work and family--allies or enemies?: what happens when business professionals confront life choices*. Retrieved from https://books.google.com/books?hl=en&lr=&id=-MnhBwAAQBAJ&oi=fnd&pg=PT8&dq=Work+and+Family+–+Allies+or+Enemies%3F:+What+Happens+When+Business+Professionals+Confront+Life+Choices&ots=NLaYM8SEUY&sig=oUUzrbzpISqhCh46lOMYLryOSLM

Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetric (Eds.), *Handbook of occupational helath psychology* (pp. 143–162). American Psychological Association. http://doi.org/10.1037/10474-007

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: testing a model of the work-family interface. *Journal of Applied Psychology*, *77*(1), 65–78. Retrieved from http://psycnet.apa.org/journals/apl/77/1/65/

Fukuyama, F. (1996). *Trust: The Social Virtues and The Creation of Prosperity*.

Gargiulo, M., & Ertug, G. (2006). The dark side of trust. *Handbook of Trust Research*, *165*.

Garrett, R. K., & Danziger, J. N. (2008). On Cyberslacking : Workplace Status and Personal Internet Use at Work, *11*(3), 287–292. http://doi.org/10.1089/cpb.2007.0146

Garson, D. G. (1998). Social Capital Theory. Retrieved May 1, 2015, from http://www.hks.harvard.edu/saguaro/web docs/GarsonSK06syllabus.htm

Garson, D. G. (2006). *Public Information Technology and E-governance: Managing the Virtual State*. Jones & Bartlett Learning.

Geldhof, G. J., Preacher, K. J., & Zyphur, M. J. (2014). Reliability estimation in a multilevel confirmatory factor analysis framework. *Psychological Methods*, *19*(1), 72–91. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/23646988

Gelman, A., & Hill, J. (2006). *Data analysis using regression and multilevel/hierarchical models*. Cambridge university press.

Gelman, A., Hill, J., & Yajima, M. (2012). Why we (usually) don't have to worry about multiple comparisons. *Journal of Research on Educational Effectiveness*, *5*(2), 189–211.

Glaeser, E. L., Laibson, D. I., Scheinkman, J. A., & Soutter, C. L. (2000). Measuring Trust. *The Quarterly Journal of Economics*, *115*(3), 811–846.

Goh, J., Pfeffer, J., A., Z. S., & Zenios, S. (2015). The Relationship Between Workplace Stressors and Mortality and Health Costs in the United States. *Management Science*, *62*(1), 608–628. Retrieved from http://pubsonline.informs.org/doi/abs/10.1287/mnsc.2014.2115

Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: is there no place like home? *The Journal of Applied Psychology*, *91*(6), 1340–1350. http://doi.org/10.1037/0021-9010.91.6.1340

Goldstein, H., & McDonald, R. P. (1988). A general model for the analysis of multilevel data. *Psychometrika*, *53*(4), 455–467.

Goode, W. J. (1960). American Sociological Review, *25*(4), 483–496.

Gouveia, A. (2014). 2014 Wasting Time at Work Survey. Retrieved from http://www.salary.com/2014-wasting-time-at-work/

Govier, T. (1994). Is it a jungle out there? Trust, distrust and the construction of social reality. *Dialogue*, *33*(2), 237–252.

Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, *91*(3), 481–510. http://doi.org/10.1086/228311

Greenhaus, J. H., & Beutell, N. (1985). Sources of Conflict Between Work and Family Roles. *Academy of Management Review*, *10*(1), 76–88. http://doi.org/10.5465/AMR.1985.4277352

Greenhaus, J. H., & Kossek, E. E. (2014). The Contemporary Career: A Work–Home Perspective. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(MARCH), 361–388. http://doi.org/10.1146/annurev-orgpsych-031413-091324

Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, *31*(1), 72–92. http://doi.org/10.5465/AMR.2006.19379625

Griggs, T. L., Casper, W. J., & Eby, L. T. (2013). Work, family and community support as predictors of work-family conflict: A study of low-income workers. *Journal of Vocational Behavior*, *82*(1), 59–68. http://doi.org/10.1016/j.jvb.2012.11.006

Grzywacz, J. G., Almeida, D., & McDonald, D. (2002). Work-Family Spillover and Daily Reports of Work and Family Stress in the Adult Labor Force. *Family Relations*, *51*(1), 28–36.

Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: an ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, *5*(1), 111–126. http://doi.org/10.1037/1076-8998.5.1.111

Guinot, J., Chiva, R., & Roca-Puig, V. (2014). Interpersonal trust, stress and satisfaction at work: An empirical study. *Personnel Review*, *43*(1), 96–115.

Hackett, R. D., Bycio, P., & Guion, R. M. (1989). Absenteeism among hospital nurses: An idiographic-longitudinal analysis. *Academy of Management Journal*, *32*(2), 424–453.

Hackman, J., & Oldham, G. R. (1980). Work redesign. Retrieved from http://scholar.harvard.edu/rhackman/publications/work-redesign

Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7). Pearson Upper Saddle River, NJ.

Han, J., & Hovav, A. (2013). To bridge or to bond ? Diverse social connections in an IS project team. *JPMA*, *31*(3), 378–390. http://doi.org/10.1016/j.ijproman.2012.09.001

Hanson, G. C., Hammer, L. B., & Colton, C. L. (2006). Development and validation of a multidimensional scale of perceived work-family positive spillover. *Journal of Occupational Health Psychology*, *11*(3), 249–265. http://doi.org/10.1037/1076-8998.11.3.249

Harris, M. M., & Fennell, M. L. (2014). A MULTIVARIATE MODEL OF JOB STRESS AND ALCOHOL CONSUMPTION. *The Sociological Quarterly*, *29*(3), 391–406. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1533-8525.1988.tb01260.x/abstract

Haun, S., Steinmetz, H., & Dormann, C. (2011). Objective work-nonwork conflict: From incompatible demands to decreased work role performance. *Journal of Vocational Behavior*, *79*(2), 578–587. http://doi.org/10.1016/j.jvb.2011.05.001

Hecht, T. D., & Allen, N. J. (2009). A longitudinal examination of the work – nonwork boundary strength construct. *Journal of Organizational Behavior*, *30*(November 2012), 839–862. http://doi.org/10.1002/job

Heck, R. H., & Thomas, S. L. (2015). *An introduction to multilevel modeling techniques: MLM and SEM approaches using Mplus*. Routledge.

Hindin, M. F. (2007). Role Theory. In *Blackwell Encyclopedia of Sociology* (pp. 3959–3962).

Hinduja, S., & Patchin, J. W. (2010). Bullying, Cyberbullying, and Suicide. *Archives of Suicide Research*, 206–221. http://doi.org/10.1080/13811118.2010.494133

Hoenig, J. M., & Heisey, D. M. (2001). The abuse of power: the pervasive fallacy of power calculations for data analysis. *The American Statistician*, *55*(1), 19–24.

Hox, J. J., Moerbeek, M., & van de Schoot, R. (2010). *Multilevel analysis: Techniques and applications*. Routledge.

Ilies, R., Wilson, K. S., & Wagner, D. T. (2009). The Spillover of Daily Job Satisfaction Onto Employees' Family Lives: the Facilitating Role of Work-Family Integration. *Academy of Management Journal*, *52*(1), 87–102. http://doi.org/10.5465/AMJ.2009.36461938

ITU. (2014). *Measuring the information society* (Vol. 8). http://doi.org/10.3359/oz0303157

Jelenchick, L. A., Eickhoff, J. C., & Moreno, M. A. (2013). Facebook depression? social networking site use and depression in older adolescents. *The Journal of Adolescent Health*, *52*(1), 128–30. http://doi.org/10.1016/j.jadohealth.2012.05.008

Jöreskog, K. G. (1999). How large can a standardized coefficient be. *Unpublished Technical Report. Retrieved from: Http://www. Ssicentral. com/lisrel/techdocs/HowLargeCanaStandardizedCoefficientbe. Pdf*.

Judge, T. a., Ilies, R., & Scott, B. a. (2006). Work-family conflict and emotions: Effects at work and at home. *Personnel Psychology*, *59*(4), 779–814. http://doi.org/10.1111/j.1744-6570.2006.00054.x

Judge, T. a., Scott, B. a, & Ilies, R. (2006). Hostility, job attitudes, and workplace deviance: test of a multilevel model. *The Journal of Applied Psychology*, *91*(1), 126–138. http://doi.org/10.1037/0021-9010.91.1.126

Jue, A., Marr, J., & Kassotakis, M. (2009). *Social media at work: How networking tools propel organizational performance*. Retrieved from https://books.google.com/books?hl=en&lr=&id=jsnzrblYY9wC&oi=fnd&pg=PR9&dq=jue+marr+and+kassotakis&ots=yw_s1uEiNq&sig=9CxeI3YV9-UBd6lh47aM77Q-GAs

Junco, R. (2013). Comparing actual and self-reported measures of Facebook use. *Computers in Human Behavior*, *29*(3), 626–631. http://doi.org/10.1016/j.chb.2012.11.007

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational Stress: Studies in Role Conflict and Ambiguity*. *International Journal of Stress Management* (Vol. 1). Wiley. http://doi.org/10.1007/BF01857999

Kane, G. (2015). Enterprise social media: Current capabilities and future possibilities. *MIS Quarterly Executive*, *14*(1), 1–16.

Kane, G., Alavi, M., Labianca, G., & Borgatti, S. P. (2014). What's Different About Social Media Networks? A Framework and Research Agenda. *MIS Quarterly*, *X*(X), 1–30.

Kane, G., Majchrzak, A., & Ives, B. (2010). Special Issue on Enterprise and Industry Applications of Social Media. *MIS Quaterly (MISQ)*, *9*(4), iii–iv.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*(1), 59–68. http://doi.org/10.1016/j.bushor.2009.09.003

Karasek, R. A. (1979). Job Demands, Job Decision Latitude , and Mental Strain : Implications for Job Redesign. *Administrative Science Quarterly*, *24*(2), 285–308.

Katz, D., & Kahn, R. L. (1978). The Social Psychology of Organizations (Chapter 13). In *The Social Psychology of Organizations* (pp. 397–425). John Wiley and Sons.

Keen, P., & Morton, M. (1978). Decision support systems: an organizational perspective. Retrieved from http://www.sidalc.net/cgi-bin/wxis.exe/?IsisScript=COLPOS.xis&method=post&formato=2&cantidad=1&expresion=mfn=006228

Kelly, E. L., Kossek, E. E., Hammer, L. B., Durham, M., Bray, J., & Chermack, K. (2008). Getting There from Here: Research on the Effects of Work–Family Initiatives on Work–Family Conflict and Business Outcomes. *The Academy of Management Annals1*, *2*(1), 305–349. http://doi.org/10.1080/19416520802211610.Getting

Kelly, E. L., Moen, P., Oakes, J. M., Fan, W., Okechukwu, C., Davis, K. D., … Casper, L. M. (2014). Changing Work and Work-Family Conflict: Evidence from the Work, Family, and Health Network. *American Sociological Review*, *79*(3), 485–516. http://doi.org/10.1177/0003122414531435

Kiesler, S., Siegel, J., & McGuire, T. W. (1984). Social psychological aspects of computermediated. *American Psychologist, 39(10)*, 1123–1134. http://doi.org/10.1037/0003-066X.39.10.1123

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, *54*(3), 241–251. http://doi.org/10.1016/j.bushor.2011.01.005

Kim, J., & Lee, J.-E. R. (2011). The Facebook Paths to Happiness: Effects of the Number of Facebook Friends and Self-Presentation on Subjective Well-Being. *Cyberpsychology, Behavior, and Social Networking*, *14*(6), 359–364. Retrieved from http://www.liebertonline.com/doi/abs/10.1089/cyber.2010.0374

Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology*, *47*(2), 149–162. http://doi.org/10.1111/j.1467-9450.2006.00502.x

Kirchmeyer, C. (1992). Perceptions of Nonwork-to-Work Spillover: Challenging the Common View of Conflict-Ridden Domain Relationships. *Basic and Applied Social Psychology*, *13*(2), 231–249. http://doi.org/10.1207/s15324834basp1302_7

Kirchmeyer, C. (1993). Nonwork-to-work spillover: a more balanced view of the experiences and coping of professional women and men. *Sex Roles*.

Kirchmeyer, C., & Cohen, A. (1999). Different strategies for managing the work non-work interface: A test for unique pathways to work outcomes. *Work & Stress*, *13*(1), 59–73. http://doi.org/10.1080/026783799296192

Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.

König, C. J., & Caner De La Guardia, M. E. (2014). Exploring the positive side of personal internet use at work: Does it help in managing the border between work

and nonwork? *Computers in Human Behavior*, *30*, 355–360. http://doi.org/10.1016/j.chb.2013.09.021

Kossek, E. E., & Lautsch, B. A. (2012). Work-family boundary management styles in organizations: A cross-level model. *Organizational Psychology Review*, *2*(2), 152–171. http://doi.org/10.1177/2041386611436264

Kossek, E. E., Lautsch, B. A., & Eaton, S. C. (2006). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work-family effectiveness. *Journal of Vocational Behavior*, *68*(2), 347–367. http://doi.org/10.1016/j.jvb.2005.07.002

Kossek, E. E., Noe, R. a., & DeMarr, B. J. (1999). *Work-family role synthesis: Individual and organizational determinants*. *International Journal of Conflict Management* (Vol. 10). http://doi.org/10.1086/250095

Kossek, E. E., & Ozeki, C. (1998). Work-Family Conflict, Policies, and the Job-Life Satisfaction Relationship: A Review and Directions for Organizational Behavior-Human Resources Research. *Journal of Applied Psychology*, *83*(2), 139–149.

Krasnova, H., Wenninger, H., Widjaja, T., & Buxmann, P. (2013). Envy on Facebook: A Hidden Threat to Users' Life Satisfaction? *11th International Conference on Wirtschaftsinformatik*, (March), 1–16.

Kreiner, G. E. (2006). Consequences of work-home segmentation or integration: A person-environment fit perspective. *Journal of Organizational Behavior*, *27*(4), 485–507. http://doi.org/10.1002/job.386

Kreiner, G. E., Hollensbe, E. C., & Sheep, M. L. (2009). Balancing Borders and Bridges: Negotiating the Work-Home Interface Via Boundary Work Tactics. *Academy of Management Journal*, *52*(4), 704–730.

Kuegler, M., Smolnik, S., & Kane, G. (2015). What's in IT for employees? Understanding the relationship between use and performance in enterprise social software. *The Journal of Strategic Information Systems*, *24*(2), 90–112. http://doi.org/10.1016/j.jsis.2015.04.001

Labianca, G., & Brass, D. J. (2006). Exploring the social ledger: Negative relationships and negative asymmetry in social networks in organizations. *Academy of Management Review*. http://doi.org/10.5465/AMR.2006.21318920

Lambert, S. J. (2000). Added Benefits : the Link Between Work-Life Binefits and Organizational Citizenship Behavior. *Academy of Management Journal*, *43*(5), 801–816. http://doi.org/10.2307/1556411

Lanaj, K., Johnson, R. E., & Lee, S. M. (2016). Benefits of transformational behaviors for leaders: A daily investigation of leader behaviors and need fulfillment. *Journal of Applied Psychology*, *101*(2), 237.

Leidner, D., Koch, H., & Gonzalez, E. (2010). Assimilating Generation Y IT New Hires into USAA's Workforce: The role of an Enterprise 2.0 System. *MIS Quarterly Executive*, *9*(4).

Leonardi, P. M. (2013). Theoretical foundations for the study of sociomateriality. *Information and Organization*, *23*(2), 59–76. http://doi.org/10.1016/j.infoandorg.2013.02.002

Leonardi, P. M., Huysman, M., & Steinfield, C. (2013). Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations. *Journal of Computer-Mediated Communication*, *19*(1), 1–19. http://doi.org/10.1111/jcc4.12029

Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review*, *23*(3), 438–458.

Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, *63*(4), 967–985.

Lewis, K. M., & Hepburn, P. (2010). Open card sorting and factor analysis: a usability case study. *The Electronic Library*, *28*(3), 401–416.

Lillbacka, R. (2006). Measuring Social Capital: Assessing Construct Stability of Various Operationalizations of Social Capital in a Finnish Sample. *Acta Sociologica*, *49*(2), 201–220. http://doi.org/10.1177/0001699306064774

Lin, N. (1999). Building a Network Theory of Social Capital. *Connections*, *22*(1), 28–51. http://doi.org/10.1108/14691930410550381

Loch, K. D., & Conger, S. (1996). Evaluating Ethical Decision Making and Computer Use. *Communications of the ACM*, *39*(7), 74–83.

Maertz, C. P. J., & Boyar, S. L. (2011). Work-Family Conflict, Enrichment, and Balance under "Levels" and "Episodes" approaches. http://doi.org/10.1177/0149206310382455

Mander, J. (2015). Daily time spent on social networks rises to 1.72 hours. Retrieved April 4, 2016, from http://www.globalwebindex.net/blog/daily-time-spent-on-social-networks-rises-to-1-72-hours

Marks, S. R. (1977). Multiple Roles and Role Strain: Some Notes on Human Energy, Time and Commitment. *American Sociological Review*, *42*(6), 921–936.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, *20*(3), 709–734.

Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal*, *48*(5), 874–888.

McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, *38*(1), 24–59.

McCauley, D. P., & Kuhnert, K. W. (1992). A theoretical review and empirical investigatiomn of employee trust in management. *Public Administration Quarterly*, 265–284.

Mehta, P. D., & Neale, M. C. (2005). People are variables too: Multilevel structural equations modeling. *Psychological Methods*, *10*(3), 259.

Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Convergence between measures of work-to-family and family-to-work conflict: A meta-analytic examination. *Journal of Vocational Behavior*, *67*(2), 215–232. http://doi.org/10.1016/j.jvb.2004.05.004

Michel, J. S., & Hargis, M. B. (2008). Linking mechanisms of work-family conflict and segmentation. *Journal of Vocational Behavior*, *73*(3), 509–522. http://doi.org/10.1016/j.jvb.2008.09.005

Mishra, A. K. (1996). Organizational Responses to Crisis. *Trust in Organizations: Frontiers of Theory and Research*. Retrieved from https://books.google.com/books?hl=en&lr=&id=ddpyAwAAQBAJ&oi=fnd&pg=PA261&dq=Organizational+responses+to+crisis.+The+centrality+of+trust.&ots=cpU8_o-Hal&sig=LDF24apDH0J7MjxcFcWO_BZHiEU

Molina-Morales, F. X., Martinez-Fernández, M. T., & Torlò, V. J. (2011). The dark side of trust: The benefits, costs and optimal levels of trust for innovation performance. *Long Range Planning*, *44*(2), 118–133.

Moore, G.C., and Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, *2*(3), 192–222. Retrieved from http://pubsonline.informs.org/doi/abs/10.1287/isre.2.3.192

Moqbel, M., Nevo, S., & Kock, N. (2013). Organizational members ' use of social networking sites and job performance An exploratory study. http://doi.org/10.1108/ITP-10-2012-0110

Moreno, M. a, Jelenchick, L., Koff, R., & Eickhoff, J. (2012). Depression and internet use among older adolescents: An experience sampling approach. *Psychology*, *3*(9A), 743–748. http://doi.org/10.4236/psych.2012.329112

Motowidlo, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational stress: its causes and consequences for job performance. *The Journal of Applied Psychology*, *71*(4), 618–629. http://doi.org/10.1037/0021-9010.71.4.618

Murthy, D. (2011). Twitter: Microphone for the masses? *Media, Culture & Society*, *33*(5), 779–789. http://doi.org/10.1177/0163443711404744

Murthy, D. (2012). Towards a Sociological Understanding of Social Media: theorizing Twitter. *Sociology*, *46*(6), 1059–1073. http://doi.org/10.1177/0038038511422553

Muthén, B. O. (1991). Multilevel factor analysis of class and student achievement components. *Journal of Educational Measurement*, *28*(4), 338–354.

Muthen, L., & Muthen, B. (2012). *Mplus User's Guide: Version 7*. Muthen & Muthen. Retrieved from https://books.google.com/books?id=twO_DAEACAAJ

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review*, *23*(2), 242–266.

Nawaz, A. (2012). A comparison of card-sorting analysis methods. In *10th Asia Pacific Conference on Computer Human Interaction (Apchi 2012). Matsue-city, Shimane, Japan* (pp. 28–31).

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, *81*(4), 400–410. http://doi.org/10.1037/0021-9010.81.4.400

Nielsen NetView. (2010). What Americans do online: Social media and games dominate activity. Retrieved from http://www.nielsen.com/us/en/insights/news/2010/what-americans-do-online-social-media-and-games-dominate-activity.html

Nippert-Eng, C. (1995). The home/work nexus: Boundary work in everyday life. *Dissertation Abstracts International. A, The Humanities and Social Sciences*.

Nippert-Eng, C. (1996). Calendars and keys: The classification of “home” and “work.” *Sociological Forum*, *11*(3), 563–582. Retrieved from http://link.springer.com/article/10.1007/BF02408393

Nohe, C., & Sonntag, K. (2014). Work-family conflict, social support, and turnover intentions: A longitudinal study. *Journal of Vocational Behavior*, *85*(1), 1–12. http://doi.org/10.1016/j.jvb.2014.03.007

North, M. A. (2010). AN EVALUATION OF EMPLOYEES’ ATTITUDES TOWARD SOCIAL NETWORKING IN THE WORKPLACE. *Issues in Information Systems*, *XI*(1), 192–197. Retrieved from http://iacis.org/iis/2010/192-197_LV2010_1399.pdf

Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric Theory*, *3*(1), 248–292.

O’Driscoll, M. P., Ilgen, D. R., & Hildreth, K. (1992). Time Devoted to Job and Off-Job Activities, Interrole Conflict, and Affective Experiences. *Journal of Applied Psychology*, *77*(3), 272–279. http://doi.org/10.1037/0021-9010.77.3.272

O’Keeffe, G. S. G., & Clarke-Pearson, K. (2011). The impact of social media on children, adolescents, and families. *American Academy of Pediatrics*, *127*(4), 800–804. http://doi.org/10.1542/peds.2011-0054

Oh, H. J., Ozkaya, E., & Larose, R. (2014). How does online social networking enhance life satisfaction? the relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. *Computers in Human Behavior*, *30*, 69–78. http://doi.org/10.1016/j.chb.2013.07.053

Olson-Buchanan, J. B., & Boswell, W. R. (2006). Blurring boundaries: Correlates of integration and segmentation between work and nonwork. *Journal of Vocational Behavior*, *68*(3), 432–445. http://doi.org/10.1016/j.jvb.2005.10.006

Organ, D. W. (1994). Organizational citizenship behavior and the good soldier. In *Personnel Selection and Classification* (p. 483). Retrieved from http://doi.apa.org/psycinfo/1988-97376-000

Organ, D. W. (1997). Organizational citizenship behavior: It’s construct clean-up time. *Human Performance*, *10*(2), 85–97.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, *48*(4), 775–802.

Papacharissi, Z., & Mendelson, A. (2010). Chapter 12 Toward a New(er) Sociability: Uses, Gratifications, and Social Capital on Facebook.

Parasuraman, S., & Greenhaus, J. H. (2002). Toward reducing some critical gaps in work–family research. *Human Resource Management Review*, *12*, 299–312. http://doi.org/10.1016/S1053-4822(02)00062-1

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual-and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. American Psychological Association.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, *88*(5), 879–903. http://doi.org/10.1037/0021-9010.88.5.879

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, *59*(5), 603.

Powell, G. N., & Greenhaus, J. H. (2006). Is the opposite of positive negative?: Untangling the complex relationship between work-family enrichment and conflict. *Career Development International*, *11*(7), 650–659. http://doi.org/10.1108/13620430610713508

Powell, G. N., & Greenhaus, J. H. (2010). Sex, Gender, and the Work-To-Family Interface: Exploring Negative and Positive Interdependencies. *Academy of Management Journal*, *53*(3), 513–534. http://doi.org/10.5465/AMJ.2010.51468647

Preacher, K. J., & Selig, J. P. (2010). Monte Carlo method for assessing multilevel Mediation: An interactive tool for creating confidence intervals for indirect effects in 1-1-1 multilevel models [Computer software].

Preacher, K. J., Zhang, Z., & Zyphur, M. J. (2011). Alternative methods for assessing mediation in multilevel data: The advantages of multilevel SEM. *Structural Equation Modeling*, *18*(2), 161–182.

Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, *15*(3), 209.

Putnam, R. D. (1993). The Prosperous Community: Social Capital and Public Life. *The American Prospect*, *13*(13), 35–42. Retrieved from http://www.citeulike.org/group/1702/article/1032759

Putnam, R. D. (2001). Social capital: Measurement and consequences. *Canadian Journal of Policy Research*, *2*(1), 41–51. http://doi.org/10.1017/S1474746403001052

Quinn, R., & Shepard, L. (1974). The 1972-73 Quality of Employment Survey. Descriptive Statistics, with Comparison Data from the 1969-70 Survey of Working Conditions. Retrieved from http://eric.ed.gov/?id=ED117414

Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychology & Behavior : The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, *11*(2), 169–74.

Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: a stress and coping perspective. *Journal of Applied Psychology*, *91*(5), 1154.

Ragu-Nathan, T. S., Tarafdar, M., Ragu-Nathan, B. S., & Tu, Q. (2008). Consequences of Technostress for End Users in Organizatios: Conceptual Development and Empirical Validation. *Information Systems Research*, *19*(4), 417–433. http://doi.org/10.1287/isre.l070.0165

Rantanen, J., Kinnunen, U., Feldt, T., & Pulkkinen, L. (2008). Work-family conflict and psychological well-being: Stability and cross-lagged relations within one- and six-year follow-ups. *Journal of Vocational Behavior*, *73*(1), 37–51. http://doi.org/10.1016/j.jvb.2008.01.001

Raudenbush, S. W., & Sampson, R. (1999). Assessing direct and indirect effects in multilevel designs with latent variables. *Sociological Methods & Research*, *28*(2), 123–153.

Riemer, K., Finke, J., & Hovorka, D. S. (2015). Bridging or Bonding : Do Individuals gain Social Capital from Participation in Enterprise Social Networks ? In *Thirty Sixth International Conference on Information Systems* (pp. 1–20). Fort Worth.

Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, *128*(6), 934.

Rooksby, J., Baxter, G., Cliff, D., Greenwood, D., Harvey, N., Kahn, A. W., … Sommerville, I. (2009). Social networking and the workplace: Making the most of web 2.0 technologies. *Strategic Direction*, *25*(October), 20–23. http://doi.org/10.1108/02580540910968535

Rothausen, T. J. (1999). “Family” in organizational research: A review and comparison of definitions and measures. *Journal of Organizational Behavior*, *20*, 817–836.

Rothbard, N. P., Phillips, K. W., & Dumas, T. L. (2005). Managing Multiple Roles: Work-Family Policies and Individuals? Desires for Segmentation. *Organization Science*, *16*(3), 243–258. http://doi.org/10.1287/orsc.1050.0124

Rothman, K. J. (1990). No adjustments are needed for multiple comparisons. *Epidemiology*, *1*(1), 43–46.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, *23*(3), 393–404.

Ryu, E., & West, S. G. (2009). Level-specific evaluation of model fit in multilevel structural equation modeling. *Structural Equation Modeling*, *16*(4), 583–601.

Saga, V., & Zmud, R. W. (1994). The nature and determinants of IT acceptance, routinization, and infusion. In *Diffusion, transfer and implementation of information technology* (pp. 67–86). Retrieved from http://dl.acm.org/citation.cfm?id=686655

Sagioglou, C., & Greitemeyer, T. (2014). Facebook’s emotional consequences: Why Facebook causes a decrease in mood and why people still use it. *Computers in Human Behavior*, *35*, 359–363. http://doi.org/10.1016/j.chb.2014.03.003

Scheepers, H., Scheepers, R., Stockdale, R., & Nurdin, N. (2014). The Dependent Variable in Social Media Use. *Journal of Computer Information Systems*. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=08874417&AN=94768994&h=tDP2l87hp4soPq2XRUi/ZEE4TBvwMeRX8CECSsXrjIES+bXMjBoHpu27QKtoJL6OcsL5ITDX0FOuN5LY2GSy+w==&crl=c

Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, *32*(2), 344–354.

Schreurs, B. H. J., Hetty van Emmerik, I. J., Gunter, H., & Germeys, F. (2012). A weekly diary study on the buffering role of social support in the relationship between job insecurity and employee performance. (A.-S. Armstrong-Stassen Ashford, Babrow, Bakker, Bakker, Beal, Beehr, Behrman, Binnewies, Binyamin, Bolino, Borg, Bowler, Brashers, Brewster, Bryk, Cavenaugh, Cervone, Cheng, Cohen, Cohen, Conway, De Cuyper, De Cuyper, De Cuyper, De Witte, De Witte, De Witte, Ed.)*Human Resource Management*. John Wiley & Sons. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc9&NEWS=N&AN=2012-08679-006

Selig, J. P., & Preacher, K. J. (2008). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects. *Computer Software]. Retrieved from Http://quantpsy. Org*.

Seppänen, R., Blomqvist, K., & Sundqvist, S. (2007). Measuring inter-organizational trust-- a critical review of the empirical research in 1990--2003. *Industrial Marketing Management*, *36*(2), 249–265.

Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, *39*(4), 567–578.

Skeels, M. M., & Grudin, J. (2009). When Social Networks Cross Boundaries : A Case Study of Workplace Use of Facebook and LinkedIn. *Group*, *10*(3), 95–103. http://doi.org/10.1145/1531674.1531689

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, *68*(4), 653–663. http://doi.org/10.1037/0021-9010.68.4.653

Smock, A. D., Ellison, N. B., Lampe, C., & Wohn, D. Y. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers in Human Behavior*, *27*(6), 2322–2329. http://doi.org/10.1016/j.chb.2011.07.011

Snijders, T. A. B., & Bosker, R. J. (2012). Multilevel analysis. JSTOR.

Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: a new look at the interface between nonwork and work. *The Journal of Applied Psychology*, *88*(3), 518–528. http://doi.org/10.1037/0021-9010.88.3.518

Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. (2001). Social Networks and the Performance of Individuals and Groups. *Academy of Management Journal*, *44*(2), 316–325. http://doi.org/10.2307/3069458

Staines, G. L. (1980). Staines HR1980 Spillover vs compensation_ a review of the litt on the relationship betn work and nonwork.pdf. *Human Relations*, *33*(2), 111–129.

Steelman, Z. R., Hammer, B. I., & Limayem, M. (2014). Data Collection in the Digital Age: Innovative Alterantives to Student Samples. *Mis Quarterly*, *38*(2), 355–378.

Steinfield, C., DiMicco, J. M., Ellison, N. B., & Lampe, C. (2009). Bowling Online : Social Networking and Social Capital within the Organization. *Distribution*, 245–254. http://doi.org/10.1145/1556460.1556496

Subramaniam, N., Nandhakumar, J., & Baptista, J. (2013). Exploring social network interactions in enterprise systems: The role of virtual co-presence. *Information Systems Journal*, *23*(6), 475–499. http://doi.org/10.1111/isj.12019

Sweet, S. A., & Grace-Martin, K. (1999). *Data analysis with SPSS* (Vol. 1). Allyn & Bacon Boston, MA.

Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing? *Computers in Human Behavior*, *43*, 139–146. http://doi.org/10.1016/j.chb.2014.10.053

Tarafdar, M., Tu, Q., Ragu-Nathan, B., & Ragu-Nathan, T. (2007). The Impact of Technostress on Role Stress and Productivity. *Journal of Management Information Systems*, *24*(1), 301–328. http://doi.org/10.2753/MIS0742-1222240109

Tennen, H., Affleck, G., Armeli, S., & Carney, M. A. (2000). A daily process approach to coping: Linking theory, research, and practice. *American Psychologist*, *55*(6), 626.

Tifferet, S., & Vilnai-Yavetz, I. (2014). Gender differences in Facebook self-presentation: An international randomized study. *Computers in Human Behavior*, *35*, 388–399. http://doi.org/10.1016/j.chb.2014.03.016

Ting, Y. (1997). Determinants of job satisfaction of federal government employees. *Personnel Administration*, *26*(3), 313–334.

Tonn, B., Zambrano, P., & Moore, S. (2001). Community networks or networked communities? *Social Science Computer*. Retrieved from http://ssc.sagepub.com/content/19/2/201.short

Tsai, W., & Ghoshal, S. (1998). Social Capital and Value Creation: The Role of Intrafirm Networks. *Academy of Management Journal*, *41*(4), 464–476.

Turner, R. H. (2001). Handbook of Sociological Theory. In *Handbook of Sociological Theory* (Vol. 32, pp. 233–254). http://doi.org/10.2307/3089147

Ulleberg, P., & Rundmo, T. (1997). Job stress, social support, job satisfaction and absenteeism among offshore oil personnel. *Work & Stress*, *11*(3), 215–228.

Vitak, J., Lampe, C., Gray, R., & Ellison, N. B. (2012). “Why Won’t You Be My Facebook Friend?”: Strategies for Managing Context Collapse in the Workplace, 12–13.

Voydanoff, P. (1988). Work Role Characteristics , Family Structure Demands , and Work / Family Conflict. *Journal of Marriage and Family*, *50*(3), 749–761. http://doi.org/10.2307/352644

Voydanoff, P. (2005). Toward a Conceptualization of Perceived Work-Family Fit and Balance : A Demands and Resources Approach Author (s): Patricia Voydanoff Source : Journal of Marriage and Family , Vol . 67 , No . 4 (Nov ., 2005), pp . 822-836 Published by : National Counc. *Journal of Marriage and Family*, *67*(4), 822–836.

Wayne, J. H., Casper, W. J., Matthews, R. a., & Allen, T. D. (2013). Family-supportive organization perceptions and organizational commitment: the mediating role of work-family conflict and enrichment and partner attitudes. *The Journal of Applied Psychology*, *98*(4), 606–22. http://doi.org/10.1037/a0032491

Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, *17*(1), 63–76. http://doi.org/10.1016/j.hrmr.2007.01.002

Weinberg, A., Cooper, C., Sutherland, V., & Bond, F. (2010). *Organizational stress management: A strategic approach*. Palgrave Macmillan.

Williams, D. C. (2006). On and Off the 'Net: Scales for Social Capital in an Online Era. *Journal of Computer-Mediated Communication*, *11*(2), 593–628. http://doi.org/10.1111/j.1083-6101.2006.00029.x

Williams, L. J., & Anderson, S. E. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. *Journal of Management*, *17*(3), 601–617.

Wright, K. B., Abendschein, B., Wombacher, K., O'Connor, M., Hoffman, M., Dempsey, M., … Shelton, a. (2014). Work-Related Communication Technology Use Outside of Regular Work Hours and Work Life Conflict: The Influence of Communication Technologies on Perceived Work Life Conflict, Burnout, Job Satisfaction, and Turnover Intentions. *Management Communication Quarterly*, 0893318914533332-. http://doi.org/10.1177/0893318914533332

Wright, K. B., Rosenberg, J., & Egbert, N. (2013). Communication competence, social support, and depression among college students: a model of facebook and face-to-face support network influence. *Journal of Health*. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/10810730.2012.688250

Yuan, K.-H., & Bentler, P. M. (2007). MULTILEVEL COVARIANCE STRUCTURE ANALYSIS BY FITTING MULTIPLE SINGLE-LEVEL MODELS. *Sociological Methodology*, *37*(1), 53–82.

Zahra, S. A., Yavuz, R. I., & Ucbasaran, D. (2006). How much do you trust me? The dark side of relational trust in new business creation in established companies. *Entrepreneurship Theory and Practice*, *30*(4), 541–559.

Zhang, Z., Zyphur, M. J., & Preacher, K. J. (2009). Testing multilevel mediation using hierarchical linear models problems and solutions. *Organizational Research Methods*, *12*(4), 695–719.

Biographical Information

Kriti Chauhan received her doctorate in Business Administration from the University of Texas at Arlington, with a major in Information Systems and a minor in Operations Management. She holds a Master of Science in Computer Science from the University of Texas at Arlington, and a Bachelor of Engineering in Computer Engineering from Mumbai University, India. Her current research interests, other than social media, are cybersecurity, behavioral game theory, and online word of mouth. She has published peer-reviewed research papers, and has taught Information Systems undergraduates and graduates for the last four years. She hopes to continue contributing to both academic and practitioner communities with her research and teaching.