

ARE SOCIAL MEDIA BAD FOR YOUR EMPLOYEES?  
EFFECTS OF AT-WORK BREAK ACTIVITIES ON RECOVERY EXPERIENCES,  
JOB SATISFACTION, AND LIFE SATISFACTION

---

A Dissertation  
presented to  
the Faculty of the Graduate School  
at the University of Missouri-Columbia

---

In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

---

by

YI-SUNG CHENG

Dr. Seonghee Cho, Dissertation Supervisor

May 2019

The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

ARE SOCIAL MEDIA BAD FOR YOUR EMPLOYEES?

EFFECTS OF AT-WORK BREAK ACTIVITIES ON RECOVERY EXPERIENCES,

JOB SATISFACTION, AND LIFE SATISFACTION

presented by Yi-Sung Cheng,

a candidate for the degree of doctor of philosophy,

and hereby certify that, in their opinion, it is worthy of acceptance.

---

Seonghee Cho, Ph.D.,  
Department of Hospitality Management

---

Dae-Young Kim, Ph.D.,  
Department of Hospitality Management

---

Pei Liu, Ph.D.,  
Department of Hospitality Management

---

KangJae Lee, Ph.D.,  
Department of Parks, Recreation & Tourism Management

## **ACKNOWLEDGEMENTS**

I would first like to express the deepest appreciation to my committee chair Dr. Seonghee Cho, for the patient guidance, support and encouragement she has provided throughout my time as her doctoral student. I have been very lucky to have a supervisor who cared so much about my work and life. As my advisor and mentor, she has shaped who I am as a researcher and instructor.

I would also like to thank my committee members, Dr. Dae-Young Kim, Dr. Pei Liu, and Dr. KangJae Lee, for the valuable comments and suggestions they made on my dissertation to help me get results of better quality.

In addition, I must express my gratitude to Szu-Hsuan Tseng, my lovely wife, for her continuous support and encouragement. More importantly, I would like to thank my parents for supporting me to pursue a doctoral degree in the United States. You are always there for me.

Finally, I am grateful to my other family members, colleagues and friends who have supported me along the way. This dissertation would not have been done without the support and assistance of the above individuals. Thank you very much, everyone!

# TABLES OF CONTENTS

ACKNOWLEDGEMENTS .....	ii
LIST OF TABLES .....	v
LIST OF FIGURES .....	vii
ABSTRACT.....	viii
1 INTRODUCTION .....	1
1.1 Research Background.....	1
1.2 Research Questions .....	11
1.3 Purpose of the Study.....	12
1.4 Significance of the Study.....	13
1.5 Outline of Subsequent Chapters .....	17
2 LITERATURE REVIEW .....	18
2.1 Introduction .....	18
2.2 At-Work Break Activities.....	18
2.2.1 Non-Social Media Break Activities.....	18
2.2.2 Social Media Break Activities .....	22
2.3 Job Characteristics.....	59
2.3.1 Job Demands.....	60
2.3.2 The Application of JD-R Model to the Hospitality Industry.....	61
2.3.3 Job Characteristics Model .....	63
2.3.4 Hospitality Job Characteristics .....	65
2.4 Job Demands and At-Work Break Activities .....	72
2.5 Effort-Recovery Model .....	74
2.6 Job Satisfaction.....	78
2.7 Life Satisfaction.....	81
3 METHODOLOGY .....	84
3.1 Introduction .....	84
3.2 Research Model and Hypotheses.....	84
3.3 Measurement .....	86
3.4 Pilot Study .....	89
3.5 Sample and Data Collection .....	93
3.6 Data Analysis.....	95
4 RESULTS .....	97
4.1 Descriptive Analysis.....	97
4.2 Exploratory Factor Analysis .....	101

4.3 Confirmatory Factor Analysis .....	103
4.4 T-Test .....	105
4.5 Analysis of Variance .....	111
4.6 Structural Equation Model and Hypotheses Testing.....	115
4.7 Multigroup Analysis.....	117
4.8 Mediating Effects .....	123
5 CONCLUSIONS.....	127
5.1 Introduction .....	127
5.2 Discussion.....	128
5.3 Theoretical Implications .....	137
5.4 Practical Implications .....	142
5.5 Limitations and Directions for Future Research .....	145
APPENDIX I: Questionnaire.....	146
APPENDIX II: Item-Sorting Procedure .....	153
REFERENCES .....	162
VITA.....	198

## LIST OF TABLES

Table	Page
1. Common micro-break activities (Kim et al., 2018, p. 779) .....	21
2. Previous studies on impacts of social media use on mental health, emotions, and well-being .....	28
3. Previous studies on social media use at work for professional purposes .....	37
4. Previous studies on social media use at work for personal purposes .....	44
5. Summary of prior U&G studies .....	55
6. Summary of prior HJCs studies. ....	69
7. Results of item-sorting procedure. ....	91
8. Profile of respondents (n = 413).....	98
9. Preference and time spent on at-work break activities per workday (n = 413). .....	101
10. Factor analysis results of social media break activities.....	102
11. Factor analysis results of non-social media break activities .....	103
12. Reliability and validity of the measures .....	105
13. Results of t-test.....	107
14. Results of ANOVA .....	113
15. Fit indices for the structural model.....	115
16. Results of SEM analysis.....	116
17. Results of multigroup analysis for the gender.....	119
18. Results of multigroup analysis for the job position .....	120
19. Results of multigroup analysis for the minutes spent on social media for personal purposes per day .....	121
20. Results of multigroup analysis for the frequencies of interacting with customers per day .....	122
21. Regression results for the mediating effects of non-social media break activities, social media break activities, recovery experience, and job satisfaction ....	124
22. Results of hypothesis testing .....	127

23. Results of further analysis ..... 128

# LIST OF FIGURES

Figure	Page
1. Research framework.....	85
2. Results of SEM analysis.....	117



## **ABSTRACT**

Despite the alleged importance of work breaks, little is known about antecedents and consequences of social media break activities besides non-social media break activities. Since individuals use social media to contact friends and families, find information, and be entertained, this study theorized that engaging in social media break activities while at work can help employees to experience psychological detachment and relaxation during work hours. The purpose of this study was to explore this growingly popular topic of social media use at work by focusing on job demands that may explain why employees perceive social media are vital for them at work. Further, this study seeks to understand when and how employees use social media at work to experience recovery, which, in turn, increases their job satisfaction and life satisfaction. Questionnaires were collected from current hospitality non-managerial and managerial employees in the United States. Structural equation modeling was employed to analyze data. Results of the study confirm that at-work break activities including social and non-social media break activities can be a channel for employees to experience recovery and deal with job demands. Moreover, the results suggest that when employees reported their perceptions of recovery experiences, positive perceptions had a positive impact on job satisfaction and life satisfaction. The findings also indicate that employees who are happy at work have a high life satisfaction. The results fill an empirical gap in the theoretical literature on at-work break activities and recovery. This study offers further insight and empirical evidence about the positive outcomes of both social and non-social media break activities to researchers, practitioners, and human resource professionals.

# 1 INTRODUCTION

## 1.1 Research Background

Ethan eats a snack and watches a short video on social media. Next to Ethan's desk, Elsa drinks a cup of coffee and chats with her colleague about online shopping. Derrick stretches around the office, while Jennifer reads a book. Unfortunately, organizations commonly ignored these general at-work break activities of employees' nonwork behaviors between job tasks (Kim, Park, & Niu, 2017). Should managers consider such at-work break activities counterproductive and harmful to employees' work outcomes? In fact, nonwork behaviors during work breaks may help employees temporarily recover from job stress, and thus their human functional systems return to prestress levels (Kim, Park, & Headrick, 2018; Trougakos & Hideg, 2009). Even employees who are highly skilled, knowledgeable, and motivated are not sufficient to successfully deal with job demands and still have good job performance (Kim, Park, & Headrick, 2015; Ployhart & Moliterno, 2011). At-work break activities offer employees an opportunity for recovery because they are no longer focused on job demands but enjoy selected activities of their interests.

Since employees spend about half of their waking time at work, and job stress is an inevitable issue of diverse occupational groups, a key mechanism to alleviate the negative impact of these unfavorable working conditions is to reach sufficient recovery (De Bloom et al., 2017; De Bloom, Kinnunen, & Korpela, 2015). Recovery enables employees to relax and step away from their stressful work situations through breaks from work. Breaks from work include several forms such as vacations, weekends, evenings, and breaks at work, and these are a range from many days off work to short breaks lasting only an hour or less (Fritz, Ellis, Demsky, Lin, & Guros, 2013). Activities during breaks from work can be classified into two forms, at-work

and off-work break activities. Break activities during work such as park walks and relaxation exercises are highly encouraged because it helps employees experience detachment, relaxation, and enjoyment (De Bloom et al., 2017). On the other hand, break activities after work such as weekends and vacations have positive effects on mood, well-being, and performance (Pereira, Hächler, & Achim, 2017; Ryan, Bernstein, & Brown, 2010). The necessity of an individual's recovery experience thus has drawn attention from organizations and researchers to restore employees' energy and performance at work (Lee, Choo, & Hyun, 2016; Sonnentag & Fritz, 2007).

Previous studies have frequently found that employees recover their energy levels at home by involving in off-the-job activities related to experiences of relaxation, detachment, and mastery (Sonnentag & Fritz, 2007; Sonnentag, Kuttler, & Fritz, 2010). However, these off-work recovery activities may not be sufficient for supporting energy throughout the work day (Zacher, Brailsford, Parker, 2014). Therefore, there is a need of at-work break activities to strengthen and maximize employees' recovery experiences. Despite the alleged importance of recovery experiences, little research investigates effects of at-work recovery experiences on employees' psychological and behavioral outcomes. More importantly, few studies in organization psychology/behavior have only focused on investigating relationships between four common types of at-work break activity, relaxation activity (e.g., stroll around the office), nutrition-intake activity (e.g., drink a cup of coffee), social activity (e.g., chat with coworkers), and cognitive activity (e.g., read a magazine), and job-related outcomes such as recovery experiences, work engagement, and occupational well-being (Fritz, Lam, & Spreitzer, 2011; Kim et al., 2017; Kühnel, Zacher, De Bloom, & Bledow, 2017; Zacher et al., 2014). A good example of non-social media break activities during non-work time is that employees are more likely to recover

momentarily when they selected relaxation and social activities during short breaks at work (Kim et al., 2017, 2018). Activities such as stretching around the office and chatting with colleagues on non-job related subjects are associated with increased positive feeling at work, which, in turn, generate better work behavior at work. To determine when, where and, how break activities were most beneficial, Hunter and Wu (2016) found two important break characteristics that help experience recovery: activities should be self-initiated or preferred and taken earlier in the work shift. Recovery of employee energy was often replenished by temporarily removing job demands through the four types of break activities and eventually led employees to have higher job satisfaction and lower emotional exhaustion. Accordingly, there is a lack of evidence on the significance of different types of non-work behavior and its relative contribution to recovery from job stress and demands (Demerouti, Bakker, Geurts, & Taris, 2009). Furthermore, even less research offers suggestions for better at-work break activities (Hunter & Wu, 2016) such as technology use.

Although a positive impact of technology use such as smartphones and the Internet on recovery experiences at work or after work has been found in recent studies (Quinones & Griffiths, 2017; Rhee & Kim, 2016), the relationship between social media break activities and at-work recovery experiences is still not clear. More specifically, based on the measurement of four types of break activities (Kim et al, 2017, 2018), there is only one item in social activity related to social media use, which is checking personal social networking sites such as Facebook and Twitter. Without any specific and clear definition of use context and behavior, it is hard to comprehensively indicate that social media is a good at-work break activity. The use of social media is not only limited to social use, but also hedonic and cognitive use such as playing games and searching for information they are interested in. Therefore,

this study argues that various use contexts and behaviors should be examined separately as different at-work break activities and the separation of social media and non-social media break activities may generate different effects on employees' work recovery and work outcomes.

Is social media use a good at-work break activity? Are social media able to help individuals cope better with the demands of work and experience recovery? The Internet is everywhere. Internet-based technology such as social media is pervasive in today's society and has become a fundamental part of the daily activities of people. Individuals around the globe spend almost two hours (118 minutes) a day on social media (Statista, 2017a). A recent survey (Statista, 2017b) found that the number of social media users worldwide is expected to be about 2.62 billion in 2018, up from 2.46 billion in 2017. The use of social media has grown continually and become a major communication tool (Luchman, Bergstrom, & Krulikowski, 2014). Social media have become an essential communication platform/virtual society for making new relationships, maintaining relationships, and sharing exciting news. With the popularity of social media use, researchers have started studying the impacts of social media use on individuals' health (Ceglarek & Ward, 2016; Ellison, Steinfield, & Lampe, 2007; Karikari, Osei-Frimpong, & Owusu-Frimpong, 2017; Luqman, Cao, Ali, Masood, & Yu, 2017).

As the popularity of social media has grown, side-effects of social media use garnered attention from researchers. Some researchers believed that excessive use of social media leads to health problems (Frost & Rickwood, 2017), while other scholars believe that social media brings a new way of communication that leads to positive effects on health (Good, Sambhanthan, & Panjganj, 2013). It was found that people with mental health issues are those who benefit from social media. When looking at

photos and wall posts on Facebook, the well-being of people with mental health issues tends to improve more than those who did not have a history of mental health problems. The authors argued that Facebook use is not a cure for mental health problems, but a tool to enable self-soothing in times of low mood (Good et al., 2013). Burke and Kraut (2016) pointed out that specific uses of social media, such as receiving a more personalized online communication (not easy-to-produce or one-click interactions), have positive impacts on individuals' psychological well-being. It is also argued that people experience positive outcomes because social media use can improve social support from online communication with close friends and family (Kraut & Burke, 2015; Li, Chen, & Popiel, 2015).

While research on social media use has shown positive impacts on people's well-being, it has also been argued to show negative effects. Bevan, Gomez, and Sparks (2014) found that the more time spent on social media, the higher stress and lower quality of life. Moreover, users who shared negative important health news on Facebook had higher stress and lower life satisfaction than those who did not. In addition, individuals who view posts of negative life events from other social media users would experience negative emotional states and disclosure behaviors (Cho, 2017). Shakya and Christakis (2017) found the more people click "likes" on someone else's post, click a link to another site or update their own Facebook status, the more negatives they experience in mental health and life satisfaction. It is theorized that because people tend to show the positive side of themselves to others on social media, it is possible for a user to believe that his or her own life compares negatively to the carefully framed positive lives that friends reveal on social media. Therefore, their mental health and life satisfaction are affected by unfavorable social comparisons via social media use (Appel, Gerlach, & Crusius, 2015; Vogel, Rose, Okdie, Eckles, &

Franz, 2015). Other researchers also support that using social media harms people by engaging in excessive interactions with the content and other users, comparing themselves negatively to their friends, becoming addicted to social media use, and thus causing envy, depression, or stress with negative consequences such as low life satisfaction (Gerson, Plagnol, & Corr, 2016; Lin & Utz, 2015; Longstreet & Brooks, 2017; Tandoc, Ferrucci, & Duffy, 2015). In other words, the more a person consumes other users' personal information such as viewing their profiles, news, and photos on social media, the more likely the person is to feel envious and depressed and to perceive a negative sense of well-being.

In summary, it is believed that increased social media use might be harmful to user well-being because the content consumption of positive or negative life events leads to negative emotions such as unhappiness and envy. Comparatively, using social media can yield social support through social interactions and generate positive affections after such online communications, and thus improve mental health. Hence, currently there is no consistent conclusion regarding the positive and negative effects of social media use on psychological and behavioral outcomes.

Social media, which has become very popular in all aspects of our daily lives, has also infiltrated the workplace and transformed how employees communicate at work (Yeshambel, Belete, & Mulualem, 2016). With the ease of the Internet connection and access in the workplace, social media use at work can be for personal or professional purposes, or both (El Ouiridi, El Ouiridi, Segers, & Henderickx, 2015). Positive impacts of social media use at work for professional purposes have been established. Wickramasinghe and Nisaf (2013) found social media are effective for seeking work-related information and collaborating on work-related problems, which eventually contribute to increased employee productivity and performance. Common

reasons for using social media for work-related purposes are to share knowledge with coworkers, to monitor the market/competitors, and to stay in touch with customers (Leftheriotis & Giannakos, 2014).

Although social media use for work-related purposes increases organizational performance, personal use of social media at work has been discouraged because it is thought to distract employees from job tasks by engaging in unproductive activities (Ferreira & Du Plessis, 2009). Brooks (2015) indicated that higher amounts of personal social media use resulted in lower task performance, as well as higher levels of technostress and lower happiness. Ali-Hassan, Nevo, and Wade (2015) also found that employees using social media for fun, passing time, relaxing, escaping and entertainment while at work tend to perform less on required job tasks and responsibilities.

However, a few researchers have started noticing benefits of social media personal use at work. Moqbel, Nevo, and Kock (2013) and Charoensukmongkol (2014) found significant impacts of social media use intensity at work on employee satisfaction, productivity, and performance. The researchers argued that employees experience positive outcomes at work because social media can relieve work-related stress, which results in making them more satisfied with their job. Accordingly, understanding the positive or negative consequence of social media use at work is still an important issue for companies because much research on social media is unclear if personal use of social media at work indeed has a positive impact on job satisfaction and job performance.

Personal use of social media is not only limited to access at home, but also in the workplace. Nevertheless, motivations and outcomes of personal use of social media at work are not the same as at home. Generally, social media use at work is



motivated by a specific need and the need can be gratified by a particular social media application (Ali-Hassan et al., 2015). Employees believe that social media are important at work because they can meet certain needs based on various job characteristics (Charoensukmongkol, 2014).

One example is the hospitality industry, which includes hotels that operate 24 hours a day, seven days a week (24/7). This industry's specific characteristics create unique job demands for hospitality workers such as "face time" between employees and customers. Such interactions require employees to follow a company's expectations and norms of appropriate emotional expression, such as keeping calm and reacting with understanding to customers and suppressing their own emotions when dealing with service failures from upset and angry customers (Quinones & Griffiths, 2017). To interact with customers in an effective way, employees need to alter how they feel and what feelings they show (Grandey, 2000). Therefore, employees often need to hide their own feelings such as frustration with customers' complaints whilst expressing feelings of sympathy and friendly emotions to relieve customers' anger. This emotion regulation is desirable to companies so that customers always see the emotional expressions that are authorized. However, this unique job demand creates stressful experiences for employees and an emotionally stressful work environment (O'Neill & Xiao, 2010).

More importantly, job demands created by job characteristics cause significant negative consequences on employee performance. Specifically, employees who fail to deal with the negative effect of job demands are less dedicated to their work and less likely to engage in the performance of their jobs (Bakker & Demerouti, 2017). Employees will feel frustrated and burned out from their work if they experience high job demands (Bakker, Demerouti, & Euwema, 2005; Schaufeli & Bakker, 2004).

Employees who experience a high level of job burnout and stress due to job demands are prone to find some type of support to assist them cope with external stressors (Charoensukmongkol, 2014; Hausser, Mojzisch, Niesel, & Schulz-Hardt, 2010). Engaging in relaxation and social activities can be a solution to decrease the impacts of job demands on end-of-workday negative affect and increase job performance (Kim et al., 2017, 2018). Instead of participating in non-social media at-work break activities, accessing social media at work may be an effective at-work break activity to help employees relax and get a break from the high demands of work (Charoensukmongkol, 2014). Hence, a job demand that derives from job characteristics functions as a key driver to determine the level of social media use at work. Therefore, this research postulates that job demands are one of the major determining factors behind involving in at-work break activities. In other words, employees who experience unfavorable working conditions tend to perceive relaxation activity, nutrition-intake activity, social activity, cognitive activity, and social media to be important for them at work.

Since the negative consequences of job demands such as job stress and job burnout have become a serious issue, and work breaks received attention from researchers and practitioners to experience recovery from work (Demerouti et al., 2009), there is a need to understand the causal relationships between work breaks, recovery experiences, and employee well-being (De Bloom et al., 2017) and in particular on the roles of social or non-social media break activities and experiences. Expending psychological and physical effort at work drains employees' energy and causes strain from work. Short break activities could be a good way to experience recovery and reduce work strain (Fritz et al., 2013). Specifically, recovery occurs after engaging in break activities when the stressor is no longer present and helps an

individual's functioning returns to its pre-stressor level and in which strain is decreased (Sonnetag & Natter, 2004). At-work break activities were found to be related to not only positive recovery from job stress, but also increased well-being (De Bloom et al., 2017; Hunter & Wu, 2016; Kim et al., 2017; Kühnel et al., 2017; Zacher et al., 2014). Engaging in non-social media break activities such as relaxation exercises have so far attracted considerable attention because they may help organizations to develop a better work culture and environment. Developing a work culture and environment of well-being throughout a company is essential because if employees feel happy and satisfied in their roles, they will, in turn, make maximum effort and be more loyal and productive employees (New Economics Foundation, 2014; Wright & Cropanzano, 2000). Moreover, employees who are satisfied with their jobs are more likely to have high life satisfaction (Zhao, Ghiselli, Law, & Ma, 2016). Hence, this study aims to better verify and explain the effects of non-social media break activities on at-work recovery experiences and work-related outcomes. Examining the relationships will advance recovery theory and assist companies to identify potential benefits of non-social media break activities at work.

The ubiquity of social media in modern life also drives the investigation of its effects on well-being at work. Moreover, little knowledge has been acquired about the effect of social media break activities on employees' work-related outcomes. Since social media have become a major communication tool and research on social media in the workplace has gained considerable attention from scholars and practitioners, the current study proposes that social media break activities may help employees experience recovery such as temporary detachment and relaxation through chatting with friends, watching videos, and viewing friends' posts on social media to better handle job demands. Moreover, the recovery experience occurred after using social

media at work could affect their job and life satisfaction. Instead of regular break activities at work (non-social media break activities), this study aims to verify whether personal use of social media at work can be seen as an effective at-work break activity and whether social media break activities have a similar or even greater impact on recovery experiences than non-social media break activities.

## **1.2 Research Questions**

Based on the research background, the following research questions are presented.

RQ1: Do job demands lead to engage in at-work break activities?

RQ1a: Do job demands result in engaging in non-social media break activities at work?

RQ1b: Do job demands result in engaging in social media break activities at work?

RQ2: Do employees experience recovery after involving in at-work break activities?

RQ2a: Do employees experience recovery after engaging in non-social media break activities?

RQ2b: Do employees experience recovery after engaging in social media break activities?

RQ3: Do social media break activities have a greater impact on recovery experiences than non-social media at-work break activities?

RQ4: Do the recovery experiences affect employees' job satisfaction?

RQ5: Do the recovery experiences affect employees' life satisfaction?

RQ6: Does employees' job satisfaction influence their life satisfaction?

### **1.3 Purpose of the Study**

High effort expended at work is not harmful to employee health or well-being as long as employees have the opportunity to recover from job demands built up during the working day (Geurts & Sonnentag, 2006). To enhance employees' recovery from job demands, within-day work breaks are a key factor in experiencing momentary at-work recovery (Demerouti et al., 2009). However, organizations usually ignore the importance of work breaks and treat break activities as counterproductive work behaviors (Kim et al., 2017). Despite organizations recently are aware that job demands creating by effort expended at work can be reduced through recovery experiences, the effectiveness of at-work break activities including non-social and social media break activities is not clear so far. Different types of at-work break activities may lead employees in a variety of industries to receive either positive or negative recovery experiences. As hospitality employees often have high job demands and stress (Zhao & Ghiselli, 2016), this study aims to verify the application of non-social media break activities to the hospitality industry and understand which specific types of break activities support for at-work recovery.

In addition, even though recent research has found beneficial influences of work breaks on recovery experiences and job performance (Kim et al., 2017, 2018), no study has examined and compared the impact of social media break activities on work-related outcomes with non-social media break activities. Given the prior studies in social media break activities, it is surprising that there is no research examining this issue in human resource management and hospitality industry. Therefore, in light of this conflicting and complex relationship, the current gaps in the literature, as well as the lack of understanding with regard to the relationship between job demands and social media break activities and the psychological and behavioral consequences of

social media break activities on employees, further investigation was needed. To be more specific, the purpose of this study was to give attention to this growingly popular topic of social media use by focusing on the investigation of job demands that may explain why employees perceive social media as essential for them at work and the influence of social media break activities on recovery experiences, job satisfaction, and life satisfaction. Furthermore, this study aims to compare the different impacts of social media break activities to typical at-work break activities to understand employees' preference of choosing respite activities at work and the effectiveness of at-work break activities.

#### **1.4 Significance of the Study**

This study is motivated by the lack of empirical studies and consistent findings investigating impacts of at-work break activities including social media and non-social media break activities on job outcomes. Although non-social media break activities have been found to positively influence employees' psychological and behavioral outcomes in prior studies (Kühnel et al., 2017; Kim et al., 2018), the consequences of social media use at work is being debated by academics and practitioners. There is an ongoing argument about personal use of social media in the workplace since such use is often regarded as a waste of time and distraction by managers. There is a tendency to think that accessing social media at work is counterproductive and that workers' time can be better utilized to improve their job performance. As a negative consequence of this concern, several organizations have discouraged or banned social media applications from the workplace.

However, if we do not know reasons behind using social media at work, it is unfair to say social media are harmful to employees and organizations. Although

several studies have explored the consequences of social media use at work (Ashraf & Javed, 2014; Moqbel et al., 2013), little knowledge has been acquired about antecedents of personal use of social media during work breaks. This study believes that using social media will not be a waste of time and distraction at work. Instead, it helps employees deal with job demands, feel relaxed, detach from work, restore their energy spent at work, and eventually perform better. In response to these restrictions and gaps, this study aims to examine relationships between job demands, at-work break activities, recovery experiences, job satisfaction, and life satisfaction. A further understanding of the antecedents and consequences of at-work break activities will be developed through this empirical study.

Studying antecedents and consequences of at-work break activities are vital for several reasons. First, this study can provide further insight about why employees use social media for personal purposes while at work. Antecedents such as high job demands may be regarded as a motivation for using social media at work. A good example is a unique hospitality job characteristic such as long working hours. The “face time” culture of hospitality work makes employees feel the work of serving and interacting with customers is long and thus leads to high workload and emotional demands. To deal with this job demand, employees may use social media to connect with friends to receive social support or play games and watch videos to acquire enjoyable experiences to forget about the stressful moments that occurred at work. Such use of social media at work eventually results in positive consequences such as recovery experiences, high job satisfaction, and high life satisfaction.

Second, previous studies have indicated that recovery after work associates with the next workday’s positive job outcomes (Sonnentag, 2003; Ten Brummelhuis & Bakker, 2012). Yet, we have rare evidence with regard to whether at-work recovery

through social and non-social media break activities leads to similar positive job outcomes. Since people spend most of their time at work, the focus of investigating the relationship between at-work break activities and at-work recovery could assist organizations recognize the importance and benefit of work breaks. Moreover, the comparison between impacts of social and non-social media break activities on work-related outcomes can help organizations and researchers better understand the pros and cons of nonwork behaviors at work.

Third, human resource professionals will benefit from understanding the relationships examined by this research. Results can help reveal the underlying rationale for organizations to either encourage or discourage at-work break activities and allow or disallow the personal use of social media at work. Organizations are searching for effective means to increase employee satisfaction and productivity. If the use of social media is one of these means, organizations will be able to add the use of social media in the workplace to their arsenal of practices to improve organizational performance.

Fourth, this study contributes to social media and human resource management literature. This study centers on the “how” of social media use instead of only investigating social media use intensity at work, as has been seen in previous research (Charoensukmongkol, 2014). Specifically, the author primarily measured perceptions employees have with regard to their personal levels of attachment to social media at work and found that employees who have a greater attachment to social media at work have a higher job satisfaction and job performance. Since personal use of social media at work is studied only based on the degree of attachment rather than actual use, the present study argues that the effect of social media on job-related outcomes is different depending on how the technology is used. Single



measures, such as social media use intensity at work, are not able to comprehensively and successfully capture a complex construct of social media use. When a single measure of social media use intensity is employed, it is difficult to understand why social media use is important at work, how social media use positively affects job outcomes, and which social media use contexts are beneficial or harmful to employees. A more appropriate measure of social media use behavior would be not only whether employees use social media, but also how they use them. Therefore, three social media use contexts—social, hedonic, and cognitive—can help researchers and practitioners better measure and understand the practice of social media break activities.

The use context of social media matters a great deal in job-related outcomes because employees with a goal to satisfy specific needs that derive from a certain job demand will choose a specific use context to recover and release job stress, and thus perceive social media are important for them at work. In other words, different use contexts such as social use, hedonic use, and cognitive use can meet different needs, which in turn generate different performance influences. The findings of this study will indicate whether the belief that employees recovered from job demands feel satisfied with their job and life holds in the context of social media and non-social media break activities. More importantly, this paper takes a critical look at the hedonic use of social media break activities and recovery experiences. In particular, this study seeks to understand whether the disagreement of hedonic use of social media at work may prevent firms from achieving positive work-related outcomes.

Finally, this study contributes to work breaks and recovery literature. Specifically, this study divides at-work break activities into social and non-social media break activities. This study proposes that personal use of social media at work

should be seen as one of essential at-work break activities since social media has become a fundamental part of the daily activities of people. People use social media not only at home but also in the workplace. Therefore, social media break activities may be regarded as another effective tool to deal with job demands and experience recovery in addition to typical at-work recovery activities (non-social media break activities).

### **1.5 Outline of Subsequent Chapters**

The following chapters include the Literature Review, Methodology, Results, and Conclusions. The Literature Review, Chapter 2, summarizes the previous studies and literature on job demands, at-work break activities, recovery experiences, job satisfaction, life satisfaction, and interrelationships. The methodology adopted in this study is discussed in detail in Chapter 3. The analysis and results of this study are presented and interpreted in Chapter 4. The Conclusions, Chapter 5, provides summary and discussion of the findings of this study, with the theoretical and practical implications as well as directions for future research.

## **2 LITERATURE REVIEW**

### **2.1 Introduction**

This chapter reviews the extant literature on job demands and at-work break activities. Specifically, the review of literature describes how high job demands lead employees to engage more in social media and non-social media break activities. It also demonstrates how social media and non-social media break activities affect at-work recovery and influences employees' job satisfaction and life satisfaction. The antecedents and consequences of at-work break activities are outlined, and the definition and measure of each variable is described.

### **2.2 At-Work Break Activities**

To understand whether social media use can be an effective at-work recovery activity and have a positive impact on recovery experiences as normal at-work break activities, at-work break activities in this study were divided into two types: non-social media break activities and social media break activities. This section defines and discusses types of non-social media break activities and different use contexts of social media break activities. The measure of non-social media break activities and social media break activities are presented as well.

#### **2.2.1 Non-Social Media Break Activities**

Employees often need to accomplish a variety of tasks during the workday. The completion of most of these tasks is in need of human energy and effort. However, this energetic resource is not unlimited and can be depleted over time due to job demands. As a result, employees need to find ways to restore their energy on a regular basis (Fritz et al., 2011). In particular, employees in service industry, such as

hotels and restaurants considered as emotional laborers (Grandey, 2000, 2003), are required to retain a certain level of mental resources to deal with their customers for their work performance such as customer service, service delivery, or service encounter (Kim, Park, & Headrick, 2015). As employees spend about half of their waking time at work, work breaks are primary opportunities to replenish resources, improve mental and physical health, and promote job performance (De Bloom et al., 2015; Kim, Park, & Headrick, 2018).

An effective and common way for employees to increase energy at work is via micro-break activities (Hunter & Wu, 2016; Kim, Park, & Niu, 2017). Micro-break activities are defined as informal and short respite activities taken voluntarily between tasks (Kim et al., 2017, 2018; Trougakos & Hideg, 2009). Generally, the length of micro-breaks lasts from a few seconds to several minutes. The concept of micro-breaks is different from formally scheduled breaks. “As individuals take micro-breaks as needed amid task activities, they are less structured compared to formally prescheduled breaks (Kim et al., 2018, p. 774).” Aside from formally scheduled breaks, numerous employees take informal and short breaks while at work (Fritz et al., 2011; Trougakos & Hideg, 2009). Taking formally scheduled breaks may be difficult because employees are required, especially during busy time, to ensure customers are taken care of (Oliver, 2016). In other words, employees do not take officially scheduled breaks when they are busy. Therefore, self-initiated and voluntary micro-breaks offer employees to select “most optimal timing and preferred activities for their momentary respites and accommodate their idiosyncratic recovery needs and daily rhythms” (Kim et al., 2018, p. 774). Recent research has found that micro-breaks at work play a key role in employees’ recovery process that benefits their emotion regulation and performance, particularly in the context of service job setting

(Kim et al., 2015, 2018). There are four types of micro-break activities: relaxation, nutrition-intake, social, and cognitive activities (Fritz et al., 2011; Trougakos, Beal, Green, & Weiss, 2008; Trougakos, Hideg, Cheng, & Beal, 2014).

Relaxation activities refer to physical and psychological activities that can relax one's mind and body. Common relaxation activities are low effort or effortless activities, including strolling or stretching around the office, taking short naps or walks, listening to music, and daydreaming (Sianoja, Syrek, De Bloom, Korpela, & Kinnunen, 2018; Trougakos & Hideg, 2009). Effort-recovery model shows that relaxation activities help individuals' physical and psychological systems return to pre-stressor levels (Meijman & Mulder, 1998). Thus, relaxation is regarded as one of the major recovery experiences to restore depleted resources (Sonnentag & Fritz, 2007).

Nutrition-intake activities focus on the consumption of foods and beverages such as snacking and drinking at work. Although employees may take regular lunches, they often need irregular nutrient intakes between tasks to maintain vigorous throughout the rest of the workday (Trougakos & Hideg, 2009). Previous studies have found positive impacts of caffeine intake at work such as coffee and tea breaks (Kim et al., 2017; Welsh, Ellis, Christian, & Mai, 2014). To be more specific, caffeine consumption weakened sleep deprivation impacts on feelings of energy depletion and reduced negative impacts of job demands on negative affect at the end of workday. In addition, feelings of frustration and fatigue can be minimized when employees eat more snacks at work (Sonntag, Pundt, & Venz, 2017).

Social activities refer to interpersonal interactions at work. Specifically, employees voluntarily use break time to interact with others, obtain social support, and detach from work psychologically. These activities take place through calling,

texting, face-to-face interaction, or online social networking sites. These social interactions can be with colleagues/supervisors or with people outside of the workplace, such as friends or family members. Zacher et al. (2014) demonstrated that social contacts and interactions during work breaks, such as chatting with friends on common interests like sports or hobbies, enhanced feelings of vitality at work. Furthermore, Kim et al. (2017) indicated that non-work social activities decreased the impacts of daily job demands on negative affect at work. To distinguish social use of social media from social activities and compare the effectiveness of social activities with social media use, the measure of social activities in this study excludes the item/example of using social networking sites for socializing at work.

According to Kim et al. (2018, p. 775), “cognitive microbreak activities refer to any activities that facilitate a mental break from work demands although they may still require some cognitive attention and effort.” That is to say, cognitive activities are activities that need some level of cognitive attention and effort, but still provide employees a chance for recovery to create a mental distance from job demands. Employees thus will no longer focus on job demands but enjoy a chosen activity of their interest. Examples include causal reading (e.g., reading a newspaper or magazine), personal planning, or surfing the Internet for entertainment or personal learning. To distinguish Internet use from social media use, the example/item of surfing the Internet for entertainment or personal learning will be modified to focus on navigating websites such as shopping online, getting sports’ scores and info, getting travel info, or making a reservation for travel. Table 1 summarizes the nine items of micro-break activities and their categories.

Table 1. Common micro-break activities (Kim et al., 2018, p. 779).

Category	Examples
Relaxation activities	Stretching, walking around the office, or relaxing briefly Daydreaming, gazing out the office windows, taking a quick nap, or any other psychological relaxation
Nutrition-intake activities	Drinking caffeinated beverages (e.g., energy drinks, coffee, black or green tea) Snacking (e.g., cookies) or drinking non-caffeinated beverages (e.g., juice, water, vitamin water)
Social activities	Chatting with coworkers on non-work related topics Texting, using instant messenger, or calling to friends or family members Checking personal social networking sites (e.g., Facebook, Twitter, or personal blogs)
Cognitive activities	Reading books, newspapers, or magazines for personal learning or entertainment Surfing the Web for entertainment (e.g., watching short video clips, playing a game)

## 2.2.2 Social Media Break Activities

This section will define social media and review the history of social media research. This section will also introduce two theories, uses and gratification (U&G) and social presence, to explain and understand the importance of social media break activities, the motivation of social media use during work breaks, and the measure of social media break activities. These two theories can also be used to explain the popularity of social media use behavior. Finally, the theoretical underpinning of the study is formed based on the two theories.

### 2.2.2.1 Social Media

Social media is defined by Kaplan and Haenlein (2010, p. 61) as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User Generated Content.” Within this common definition, there are various types of social media that need to be distinguished further. Examples contain 1) wikis (Wikipedia), 2) blogs (Blogger), 3)

social networking sites (Facebook), and 4) file sharing sites (YouTube) (De Zubieta, Fryges, & Jones, 2018). Specifically, wikis are websites that users collaboratively create, add, change, and remove text-based content from the web browser. Next, blogs are informational websites published on World Wide Web consisting of text-based communication. Moreover, blogs are usually operated by one person only, but provide the opportunity of interaction with others. Third, social networking sites are applications that enable not only text-based communication, but also the sharing of videos, pictures, and other forms of media. Finally, file sharing sites are content communities that enable users to share media content (text, photos, videos, and presentations) with each other.

Using social media has become the most popular activity on the Internet (Socialnomics.net, 2012) because it not only allows users to unite together with family and friends no matter where they are located but also offers them with opportunities to build new social relationships (Charoensukmongkol, 2018; Raacke & Bonds-Raacke, 2008). In addition to accessing social media for social purpose, users use social media for other purposes, such as entertainment and information seeking (Park, Kee, & Valenzuela, 2009). Furthermore, social media has been applied for sales and marketing purposes to promote and advertise products and services online (Kaplan & Haenlein, 2010). Despite these current findings, it is still necessary to acquire additional evidence in a different context. For instance, there are various research streams in the context of social media in the workplace (Berger, Klier, Klier, & Probst, 2014). More recently, social media has also been applied for professional and human resource purposes to help employees collaborate and communicate with colleagues (Wickramasinghe & Nisaf, 2013). However, to date, some of the work-related factors that lead employees to believe that social media use for personal



purposes is vital for them at work remain undefined. Accordingly, the next section will review and discuss the history and trend of social media research in the context of general use, professional use in the workplace, and personal use in the workplace.

### **2.2.2.2 The History and Trend of Social Media Research**

This section demonstrates the literature review for the history of and trends of social media research. It is classified into three discussions to focus on social media research for (1) general use, (2) professional use at work, and (3) personal use at work. With regard to the discussion of general use of social media, it focuses on research trends and outcomes of social media use. Next, an application of social media use in workplace and impacts of social media use for professional purposes are presented. Finally, a major focus of this section is to discuss personal use of social media at work. In short, this section can help this study to understand previous research focuses and findings and clarify the current research gap and need for further research.

#### **2.2.2.2.1 An Overview of Social Media Research for General Use**

The emergence of social media has changed the way people communicate with each other. People everywhere can connect with one another through this online platform anytime. Because of the high and rising social media use in our daily lives, in the beginning of social media research, Kaplan and Haenlein (2010) started discussing what social media is. The research focus later moved from defining social media to users of social media. Once the research community defined social media and identified users of social media, its members moved on to study why and how

people use social media (Whiting & Williams, 2013). The current major focus is to understand the impacts of social media use (Frost & Rickwood, 2017).

Typically, the general use of social media significantly affects mental health, emotions, and well-being. Indeed, systematic reviews (Frost & Rickwood, 2017; Hayes, Van Stolk-Cooke, & Muench, 2015; Vogel et al., 2015) revealed six major mental health outcomes affected by social media: (1) addiction, (2) anxiety, (3) depression, (4) body image and eating disorder, (5) drinking cognitions and alcohol use, and (6) other mental health problems. Social comparison has a negative effect on happiness (De Vries, Moller, Wieringa, Eigenraam, & Hamelink, 2018; Gerson et al., 2016; Johnson & Knobloch-Westerwick, 2014) because social comparison is a key trigger to negative emotions such as envy and depression (Appel et al., 2015; Charoensukmongkol, 2018; Lee, 2014; Lim & Yang, 2015; Tandoc et al., 2015). That is, the more a person views others' positive posts on social media, the more the person experiences envy and depression after comparing him or herself with others.

However, individual differences in social comparison orientation have been recognized as a moderator on the relationship between social media use and emotional outcomes. If individuals tend to not engage in social comparison, they will report higher positive affect after consuming others' positive posts on social media. Stress is another common negative consequence of social media use (Bevan et al., 2014). Frequent use of social media can cause high stress because of excessive communication overload and reduced self-esteem (Chen & Lee, 2013). In addition, users experience a lower level of well-being after frequent content consumption on social media or become addicted to social media use (Choi & Lim, 2016; Shakya & Christakis, 2017).

Positive outcomes of social media use have also been found in previous studies. Some researchers believed that social media use can positively affect individuals' well-being (Good et al., 2013; Kim & Lee, 2011). The positive outcomes are explained by several reasons. First, users can receive social support through social interactions on social media (Li et al., 2015). People receive social support from others and thus improve their perceptions of life satisfaction when they share their negative life events on social media (Zhang, 2017). Second, using social media can strengthen individuals' relationships with close friends (Burke & Kraut, 2016; Lin & Utz, 2015). Receiving more personalized communication from close friends such as comments, messages, or wall posts on social media leads to improvements in belonging, relationship maintenance, and happiness. Third, Lin, Li, and Qu (2017) believed social media can be an effective tool to deal with social exclusion and social anxiety. Results revealed that using social media can help the highly socially anxious group recover from disconnection. Individuals feel less socially anxious when interacting with others online than communicating face-to-face. Thus, social media help highly socially anxious individuals who have difficulties in establishing and maintaining social bonds to facilitate social skills and lessen the level of social anxiety.

Furthermore, Oh, Ozkaya, and LaRose (2014) revealed positive relationships among the number of social media friends, online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. Specifically, the number of social media friends is positively correlated with the amount of supportive interaction on social media. Positive affect serves as a mediator in the relationship between supportive interaction and perceived social support. Namely, the number of social media friends is positively associated with psychological outcomes, but only

when it is accompanied with the amount of actual supportive interaction (a user engages with another user) and positive feelings after the interaction. Ultimately, positive feelings felt by users after interacting with others on social media lead to improvements in perceived social support and life satisfaction.

In sum, there is no consistent conclusion in terms of general social media use. Some researchers argued that the higher level of social media use caused the higher social comparison, envy, depression, stress, and lower quality of life, while some found that the positive outcomes of social media use were happiness, perceived social support, positive affect, and life satisfaction. A review of extent literature for impacts of general social media use is shown in Table 2.

Table 2. Previous studies on impacts of social media use on mental health, emotions, and well-being.

Study	Independent Variable	Mediator Moderator	Dependent Variable	Sample	Major Findings
Kim and Lee (2011)	Number of Facebook friends; self-presentation		Subjective well-being	College students	The number of Facebook friends and positive self-presentation may improve users' subjective well-being.
Chen and Lee (2013)	Facebook interaction	Communication overload and self-esteem	Psychological distress	College students	Frequent Facebook interaction is associated with larger distress directly and indirectly through the mediators of increased communication overload and decreased self-esteem.
Good et al. (2013)	Facebook use; Facebook activities		Positive reminiscing; self-soothing	Facebook users including young people of University age, as well as friends and friends of friends of the researchers	Looking back on Facebook photos and wall posts has a positive effect on wellbeing. People who have mental health problems can encounter a positive effect on their wellbeing after looking at photos and wall posts on Facebook.
Bevan et al. (2014)	Social media usage		Stress; quality of life	Facebook users at a small, private university in the western United States	The more social media accounts and the more time spent on social media, the higher stress and lower life satisfaction. User well-being may be affected by the increase in social media use.

Johnson and Knobloch-Westerwick (2014)	Mood management		Social comparison	College students at a university in the Midwestern United States	A negative mood stimulates self-enhancing social comparisons to social media profiles.
Lee (2014)	Facebook use intensity; personality characteristics		Social comparison; negative feeling	College students in two communication classes at Michigan State University	A positive association between Facebook use intensity and social comparison frequency on Facebook is confirmed. A positive relationship between social comparison frequency and the frequency of experiencing a negative feeling from comparison on Facebook is found.
Oh et al. (2014)	Supportive interaction: number of social media friends and frequency of social media use	Positive affect; sense of community; perceived social support	Life satisfaction	Undergraduate students, their peers and family	A positive relationship between supportive interaction and positive affect after the interaction on social media. Results showed positive relationships among the number of social media friends, supportive interactions, affect, perceived social support, sense of community, and life satisfaction.
Appel, Crusius, and Gerlach (2015)	Depression	Social comparison	Envy	Germans	Low self-esteem depressed individuals were more envious after viewing the attractive profile on Facebook. Envy was correlated to greater self-reported inferiority and lower self-esteem.
Hayes et al. 2015	Facebook use		Well-being	Individuals aged 18-70+ years used Facebook	Younger and older adults have significant differences in the ways of using Facebook. Younger adults use Facebook more often and are more emotionally affected by the site than older adults.

Li et al. (2015)	Facebook interaction		Social support	College students enrolled in two introductory courses at a big public university in the United States	Facebook interaction is positively associated with receiving and giving social support on Facebook.
Lim and Yang (2015)	Social comparison	Envy; shame	Switch intention; burnout	University students who are current users of Facebook, Twitter, and Kakao talk	Social comparison to media figures is associated with emotional responses as well as behavioral intention and psychological responses. Envy was related to switch intention as a behavioral intention compared to shame. Shame was correlated with burnout as a psychological response.
Lin and Ut (2015)	Content of the post; individual-related factors (overall mood, self-esteem)	Tie strength	Emotional outcomes of browsing Facebook	Americans and Germans	Positive emotions are more widespread than negative emotions while browsing Facebook. Moreover, tie strength is positively related to the feeling of happiness and benign envy.
Liu, Tov, Kosinski, Stillwell and, Qiu (2015)	Emotional expression on Facebook		Subjective well-being	Facebook users	Positive emotional expressions on Facebook did not affect life satisfaction, whereas negative emotional expressions within the past 9 to 10 months had a negative impact on life satisfaction.
Tandoc et al. (2015)	Facebook use	Facebook envy	Depression	College students recruited from	The impact of Facebook use on depression is mediated by envy. However, Facebook use can reduce depression when envy is controlled for.

Vogel et al. (2015)	Social comparison orientation		Social media use; negative affect	a large Midwestern university Undergraduates	Users high in social comparison orientation had higher amounts of Facebook use. They also had poor self-perceptions, low self-esteem, and more negative affect after engaging in social comparisons on Facebook.
Burke and Kraut (2016)	Facebook communication; tie strength		Psychological well-being	Facebook users	Specific uses of social media such as receiving targeted online communication from strong ties not one-click feedback were associated with positive well-being.
Choi and Lim (2016)	Social and information technology overload	Social network service addiction;	Psychological well-being	Social media users who are Korean college students and employees in their 20s and 30s	Social and information technology overload did not have a direct effect on psychological well-being. Social network service addiction served as a mediator in the association between these variables.
Gerson, Plagnol, and Corr (2016)	Social comparison	Personality traits	Subjective well-being	Facebook users	Facebook social comparison was negatively related to subjective well-being. Personality traits moderated the relationship between these variables.
De Vries et al. (2017)	Social comparison	Individual differences: social	Emotional consequences: positive or negative affect	College students in the University of Amsterdam	Viewers' emotions were negatively affected by strangers' positive posts on social media. Individuals experienced a lower positive affect if they compared themselves to others' positive posts.



Frost and Rickwood (2017)	Facebook use	comparison orientation	Mental health	A total of 65 articles was reviewed.	Facebook use was correlated with six important mental health outcomes: Facebook addiction, anxiety, depression, body image and disordered eating, drinking cognitions and alcohol use, and other mental health problems.
Lin, Li and, Qu (2017)	Social network sites	Social anxiety	Social exclusion	Participants were recruited from South China Normal University.	Social anxiety moderated the relationship between social network sites and responses to social exclusion. Social media benefited high social anxiety individuals after social exclusion, but obstructed the recovery of low social anxiety individuals.
Shakya and Christakis (2017)	Facebook use		Well-being	Web-based members of the Gallup Panel	Using Facebook such as likes clicked, links clicked and status updates was negatively associated with mental health.
Zhang (2017)	Stressful life events	Self-disclosure	Mental health: social support; depression and life satisfaction	College students in Hong Kong	People tend to open up on Facebook when facing stress and that self-disclosure on Facebook moderates the relationship between stressful life events and mental health. Self-disclosure was positively related to perceived social support, life satisfaction and reduced depression.
Charoensukmongkol (2018)	Social media use intensity		Social comparison; envy	Teenagers	The positive relationship between social media use intensity and envy was higher in teenagers who are in a high parent comparison and in-

Parent  
comparing  
children; in-  
group  
competition  
among friends

---

group competition. However, the positive relationship between social media use intensity and social comparison was higher only in teenagers who are in a high in-group competition.

#### **2.2.2.2.2 An Overview of Social Media Research for Professional Use at Work**

Previously, the focus of social media research was about the general use. Recently, many studies have begun to expand the understanding of social media use by focusing on different usage purposes such as personal, professional, or both (El Ouiridi et al., 2015) because different usage purposes and environments may lead to different outcomes. In fact, organizations are facing the impact of social media use in the workplace (Herlle & Astray-Caneda, 2012). Social media offer organizations an opportunity to improve employee communication and business operations. Employees use social media to create and share content, collaborate with each other, and establish networks and communities with customers and professionals (El Ouiridi, El Ouiridi, Segers, & Henderickx, 2014). To date, social media use at work has been seen as a major research topic because it has significant impacts on work-related outcomes (Moqbel et al., 2013; Park, Im, & Sung, 2017; Yeshambel et al., 2016).

Ferreira and Du Plessis (2009) and Van Zyl (2009) believed online social networking can be regarded as a knowledge management tool. A major reason for the implementation of social media is that social media platforms can increase employee productivity, workflow efficiency, staff motivation and sense of community, and improve customer relationships, viral marketing and innovation via collaborations with co-workers. Wickramasinghe and Nisaf (2013) indicated that employees engaged in social media at work experienced advantages such as gaining knowledge from others, solving problems collaboratively, acquiring assistance from colleagues, and improving employee morale and satisfaction. However, at the same time, they may suffer from some disadvantages such as getting distracted from work because of non-work-related information and affecting office network speed when undergoing virus,

spyware or spam attacks, which could interfere with job tasks and the workplace, and eventually affect employee performance.

Van Puijenbroek, Poell, Kroon, and Timmerman (2014) suggested that organizations could consider stimulating the use of social media among employees to enhance dialogue and inquiry and learning engagement in the workplace. Kishokumar (2016) confirmed the use of social networking sites in the workplace is positively associated with job performance. Employees can perform effectively in the workplace because social media act as a key role in enhancing knowledge sharing, morale, collaboration, and relationship formation/maintenance. Robertson and Kee (2017) examined relationships between time spent on Facebook interacting with colleagues, employment status, and job satisfaction. Results showed that employees' job satisfaction is positively related to the amount of time they spend on Facebook interacting with colleagues. However, part-time employees who spent more time on Facebook than full-time employees did not experience the highest degree of job satisfaction at work.

Leftheriotis and Giannakos (2014) stated that motivations for using social media for work purposes are positively related to employee performance. Employees make use of social media for work such as gathering information and strengthening ties. The results of their study are consistent with Cao, Vogel, Guo, Liu, and Gu (2012). Ashraf and Javed (2014) also found support for using social media at work to increase employee skills, abilities, knowledge, productivity, and motivation. They suggested companies can design training programs and use social media for training purposes. Social media can be an effective tool to update company policies and motivate employees. De Zubielqui et al. (2018) addressed that using social media at work to access knowledge from others can facilitate the innovation process and firm

performance. Furthermore, the impact of external knowledge seeking on firm innovativeness is stronger through the mediator of social media use. In conclusion, the general consensus is that work-related social media use leads to positive organizational performance. A summary of social media research regarding professional use at work is presented in Table 3.

Table 3. Previous studies on social media use at work for professional purposes.

Study	Independent Variable	Mediator Moderator	Dependent Variable	Subject/ Industry	Major Findings
Ferreira and Du Plessis (2009)	Online social networking		Employee productivity	Faculty of Management employees	Social media can be used to increase collaboration. Increased collaboration will promote knowledge sharing between employees, with a positive effect on their productivity.
Van Zyl (2009)	Online social networking		Impacts of online social networking	A review of academic peer-reviewed research	Using social networking 2.0 can increase productivity, workflow efficiency, staff motivation and innovation through collaborating with co-workers.
Wickramasinghe and Nisaf (2013)	Online social networking for work	Organizational policy	job performance	IT professionals	Employees engaged in social media at work receive benefits such as solving work-related problems collaboratively. Social media use has significant impacts on job performance; organizational policy moderates the relationship between social media use and job performance.
Ashraf and Javed (2014)	Social networks		Employee skills or abilities; employee knowledge; employee productivity; employee motivation level	Employees from The Bank of Punjab Pakistan, National Bank of Pakistan and Habib Bank Limited Pakistan	Using social networking sites have positive effects on employee productivity, skills, knowledge, and motivational level of employees of banks.

Leftheriotis and Giannakos (2014)	Social media use for your work: utilitarian value and hedonic value		Job performance	Employees in the insurance industry	Both utilitarian and hedonic values affect employees to use more social media for their work. There is a positive relationship between social media use for work and employee performance.
Van Puijenbroek et al. (2014)	Social media use	Dialogue; inquiry	Workplace learning	Employees of three multinationals based in the Netherlands	Results indicated that the more often employees used social media in their job, the more often they involved in learning activities.
Kishokumar (2016)	Social media use: usefulness, ease of use and subjective norms		Job performance	Employees working in the financial sector in Batticaloa district from 60 branches of Banking, Insurance and other financial Institutions	The use of social media at work helped employees improve their performance. Social media can promote knowledge sharing and strengthen network ties, thus enhancing employee productivity.
Park et al. (2017)	Social media use		Job performance	Employees in IT venture companies	Knowledge quality obtained from social media has a significant effect on both creativity and productivity of job performance in the workplace.
Robertson and Kee (2017)	Social media use		Job satisfaction	Employees from local organizations and	Employee satisfaction at work is positively associated with the amount of time employees spend on Facebook interacting with colleagues.

De Zubielqui et al. (2018)	Social media use	Innovativeness  Human resource management	Firm performance	companies within a metropolitan area in Southern California, USA. Firms in in Tasmania, Australia	A positive relationship between knowledge flows via social media and firm innovativeness is found; and the relationship is moderated by human resource management practices.
----------------------------	------------------	---	------------------	--	--

---



### **2.2.2.2.3 An Overview of Social Media Research for Personal Use at Work**

Although there are several studies that found using social media at work for professional purposes can improve work-related outcomes (Park et al., 2017; Robertson & Kee, 2017; Wickramasinghe & Nisaf, 2013), the impacts of social media use for personal purposes while at work on organizational performance are still controversial (Ali-Hassan et al., 2015). Generally, personal purposes of using social media at work are to stay in touch with old friends or meet new people (social use), play games or watch videos (hedonic use), and seek, share, or create information (cognitive use). A major concern of social media for organizations is the time employees spend with social media at work (Herlle & Astray-Caneda, 2012). An example of this concern can be taken from the hedonic use. The hedonic use of social media such as watching videos and playing games is not encouraged and recommended in the workplace because it may be a waste of time and an employee distraction (Ali-Hassan et al., 2015). In other words, the more employees use social media for entertainment, the less time they have to perform tasks and duties.

Yeshambel et al. (2016) revealed a positive relationship between social media participation and employee productivity when employees use social media at work for seeking and viewing work-related information. Yet, a negative relationship between social media participation and employee productivity exists when employees use social media at work for personal purposes such as spending most of their office hours on social media to enhance personal networks. The problem of social media distraction in the workplace has a significant impact on employee performance. Brooks (2015) found that higher amounts of personal social media use led to poor task performance. Brooks and Califf (2017) pointed out that social media-induced technostress was a negative outcome of social media use at work for non-work-related

reasons, as it had a negative effect on job performance. In addition, the negative effect of social media-induced technostress on job performance is worse for employees with lower levels of job characteristics such as autonomy, job feedback, task identity, task significance, and task variety. For instance, employees who perceive their tasks as being of low significance and experience low variety in their work may have a lower job fit, and thus feel more inclined to interact with social media for personal use and are more susceptible to technostress and its negative effect on job performance.

However, a few studies have argued that the non-work-related social media use such as sharing life experiences and posting leisure-related information (Luo, Guo, Lu, & Chen, 2018), and strong social media use intensity at work (Charoensukmongkol, 2014; Moqbel et al., 2013) may have a positive side and benefit employees and organizations. Even though hedonic use is negatively associated with routine job performance, it is positively related to innovative job performance through social interactions and familiarity with others (Ali-Hassan et al., 2015). Social media use for entertainment and fun can be important drivers of employees' creativity and innovation in the workplace. Charoensukmongkol (2015) demonstrated that using social media at work is not losing time but improving work. In particular, the benefit is higher when social media use is allowed in the workplace and employees experience high job demands. Furthermore, Charoensukmongkol (2016) found that social media use intensity at work was associated with lower job burnout when employees had a higher level of mindfulness. However, another interesting finding was that employees experienced higher emotional exhaustion and depersonalization if they had a lower level of mindfulness for social media use at work (increased social media use intensity). Previous studies on social media use at work for personal purposes are summarized in Table 4.

In addition to understanding positive and negative consequences of personal use of social media at work, it is important to know how researchers measure personal use of social media at work. Moqbel et al. (2013) used social networking site use intensity to predict job satisfaction, organizational commitment, and job performance. Basically, the measure of social media use at work only focused on the degree to which employees were attached/addicted to social media during work. Following the study by Moqbel et al. (2013), Charoensukmongkol (2014) also adopted use intensity to measure personal use of social media at work and investigated relationships between social media use intensity, cognitive absorption, job satisfaction, and job performance. Despite both finding positive outcomes of social media use intensity at work, Oh et al. (2014) argued that the measure of use intensity may overlook the possibility that different elements of social media use and may not reveal the true effects of social media use. They further suggested that the frequency of social media use and the quality of interaction should be considered when predicting outcomes of social media use because the general measure of social media use intensity (e.g., Charoensukmongkol, 2014; Ellison et al., 2007; Moqbel et al., 2013) might not be the only key indicator of work-related outcomes.

Ellison, Steinfield, and Lampe, (2011) claimed that not all uses of social media are social. Since social media sites now have diverse functions such as watching videos, listening to music, playing games, and photo editing, users can engage with the sites without interacting with other users. Accordingly, Ali-Hassan et al. (2015) indicated that three categories of social media use, social, hedonic, and cognitive, are sufficient to explain social media actual use behavior and understand the impact of various use contexts of social media on employees and organizations. Following the study of Ali-Hassan et al. (2015), this study believes that researchers will benefit from

combining the general social media use measure with more specific measures capturing what users actually do on social media sites and how users interact with others to truly understand the effects of personal use of social media at work on work-related outcomes.

In sum, this study reviewed the trend of social media research. The effects of social media use are still inconclusive. Although effects of social media use for professional purposes in the workplace are almost consistent, impacts of social media use for personal purposes on individuals' mental health outcomes are controversial since they can be either positive or negative. While social media use is studied in terms of professional and personal purposes, non-work-related use of social media at work is still a novel idea in scholarly community. More importantly, the outcomes of social media use may be different depending on how researchers measure personal use of social media at work. Little is known about what makes employees access social media at work. Moreover, it is not known how social media use affects their work. This study assumes using social media at work for personal purposes will not only help employees experience recovery, such as relaxation and detachment, from job demands, but also influence their attitudes toward their jobs and evaluations of life in general.

Table 4. Previous studies on social media use at work for personal purposes.

Study	Independent Variable	Mediator Moderator	Dependent Variable	Subject/ Industry	Major Findings
Moqbel et al. (2013)	Social media use intensity at work	Job satisfaction; organizational commitment	Job performance	Employees from different industries and states in the USA	Social networking site use intensity has a positive impact on job performance through the mediation of job satisfaction. Job satisfaction functions as a mediator between social media use intensity and organizational commitment.
Charoensukmongkol (2014)	Coworker support; supervisor support; job demands	Social media use intensity at work	Job satisfaction; job performance	Employees from different types of organization including manufacturing and service sectors in Thailand	Coworker support and job demands are positively related to social media use intensity. The results indicated a positive relationship between social media use at work, job satisfaction and job performance.
Ali-Hassan et al. (2015)	Social media use	Social capital	Job performance	Employees of a large multinational Information Technology company	Social and cognitive uses of social media have positive and indirect impacts on employees' routine and innovative job performance. Hedonic use of the social media has a negative effect on routine performance. However, it was positively related to the development of social ties, resulting in a positive impact on innovative performance.

Brooks (2015)	Social media usage	Technostress  Attentional control; multitasking computer self-efficacy	Task performance; happiness	Undergraduate students enrolled in an information systems course in a large Western US university	Higher amounts of personal social media use led to poor task performance, as well as higher levels of technostress and lower happiness.
Charoensukmongkol (2015)	Social media use intensity	Workplace factors	Job performance	Employees from different types of organization in Thailand	Although the social media use intensity at work positively influences job performance, the benefit is largely higher when employees experience high job demands, and social media access during work is allowed.
Charoensukmongkol (2016)	Social media use intensity	Mindfulness	Burnout	Employees who work for companies in Bangkok, Thailand	The higher social media use intensity leads to greater emotional exhaustion. Mindfulness significantly moderates the relationship between the social media use intensity at work and emotional exhaustion as well as lack of personal accomplishment.
Yeshambel et al. (2016)	Social media participation		Employee productivity	Employees in University of Gondar in Ethiopia	There are both positive and negative relationship between social media participation and employee productivity. The negative relationship exists when employees spend most of their time on social media to improve personal networks and use office hours to access online social networks.
Brooks and Califf (2017)	Social media-induced technostress	Job characteristics	Job performance	Both IT professionals and social media users	Social media-induced technostress is negatively associated with job performance and the negative impact is boosted when the job characteristics are low.

Luo et al. (2018)	Non-work-related social media use	Organizational commitment	Employees from three branches of a mobile telecommunications service provider in China	Non-work-related social media use such as content contribution and information acquisition has positive effects on the affective organizational commitment of employees.
-------------------	-----------------------------------	---------------------------	--	--

---

### **2.2.2.3 Uses and Gratification Theory**

U&G theory first developed in radio communication research and has been widely used in the field of mass communication (Gan & Li, 2018). It aims to identify the social and psychological desires that motivate an individual's use of a certain medium (Leung & Wei, 2000), concentrating on why an individual selects one medium over others to satisfy a variety of needs (Katz, Blumer, & Gurevitch, 1974). According to Jiménez, López, and Pisionero (2012, p. 232), U&G theory has a clear guiding principle:

“different people can use the media for different objectives. Therefore, the choice and the use of media has a specific intention and arises from both personal and social motivations. Communication is characterised by the active nature of its audiences, as well as by social and psychological factors as mediators in communicative behaviour, and with certain media competing with other forms of communication to meet the needs of human beings, given that these media can come to have more influence than certain interpersonal processes.”

U&G theory explains not only which social and psychological motives drive individuals to choose particular media channels and contents, but also the attitudinal and behavioral outcomes (Ruggiero, 2000).

U&G theory has been widely used to examine user motivations to choose a certain type of mediated communication (Ayyad, 2011). U&G theory has assisted researchers to understand different needs of users in media adoption (Huang, Hsieh, & Wu, 2014). Much of the previous research on U&G has focused on traditional media such as television and telephone (Bantz, 1982; O'Keefe & Sulanowski, 1995). The research focus of media types shifted from traditional media to new media such as the Internet and social media after 2000 (Quan-Haase & Young, 2010; Stafford, Stafford,



& Schkade, 2004). The key difference of new media is interactivity, which illustrates the ability of users to create content in response to other users (Ha & James, 1998). Technology helps users seek gratifications from a certain media according to their own needs and motivations (Stafford et al., 2004). If individual needs are gratified, then individuals are likely to repeat this positive experience in the future (Okazaki, 2006).

Unlike traditional offline media, in which individuals might be unwillingly exposed to media, in social media, the individuals' own will is required for media use (Xu, Ryan, Prybutok, & Wen, 2012). For instance, in traditional media, individuals using public transportation such as buses, trains, or subways may be exposed to a radio program without their consent. In social media, individuals can use this media only when they willingly access the application on their devices (Shin, 2011). As a result, social media fulfill the three assumptions of U&G theory: (1) individuals who are utilizing a media are active users, (2) users choose a medium based on their intentional purpose and goal-oriented behavior, and (3) users are aware of their interests and motives for choosing a certain media (Ha & Fang, 2012; Katz, Haas, & Gurevitch, 1973).

U&G theory has been applied to identify how individuals use media in various contexts. As the popularity of social media such as Facebook, Twitter, and Instagram continues to grow at work, social media offers employees great opportunities to interact through social networks (Skiera, Hinz, & Spann, 2015; Wickramasinghe & Nisaf, 2013). Employees are happy to use these opportunities by spending significant time on social media (Charoensukmongkol, 2014). The U&G theory (Katz et al., 1973) is a common approach for studying user motivation and behavior—essentially, the why and how—of media use. According to Hayes, Carr, and Wohn (2016, p. 174),

“social media tools are utilized in different ways to meet the differing needs of users and as such, to truly understand the motivations for use of social media, researchers should be focusing on specific features in the toolkit of affordances a social medium provides.”

Since users actively choose social media to gratify their specific needs rather than passively receive information from social media (Gao & Feng, 2016), users are inclined to continue using social media for entertainment, contacting friends, and seeking information (Hur, Kim, Karatepe, & Lee, 2017).

According to U&G theory, there are three major dimensions—social, hedonic, and cognitive—in the needs of using social media (Ali-Hassan et al., 2015; Katz et al., 1973; Lometti, Reeves, & Bybee, 1977). The three factors have been supported to measure and understand social media use behavior (Ali-Hassan & Nevo, 2009; Papacharissi & Mendelson, 2011; Quan-Haase & Young, 2010; Raacke & Bonds-Raacke, 2008; Shao, 2009; Whiting & Williams, 2013). Social needs refer to a need to contact friends and family. Hedonic needs are defined as a need for a delightful and enjoyable experience. Cognitive needs represent a need to seek, create, and share experiences, knowledge, and information. Applying U&G theory to social media use at work can help this study to understand how and why employees actively look for social media to meet their specific needs. Since the theory supplies a connection between cause (i.e., needs) and effect (i.e., needs gratification), it is proper to apply this theoretical framework for understanding employees’ motivation for using social media at work and its effects (Stafford et al., 2004). Based on the previous findings, this study adopts U&G theory as the theoretical background to investigate employees’ social media use behavior during work. Building on U&G theory, this study proposes that the gratifications gained from the personal use of social media at work will meet

individuals' different needs, and the three use contexts (social use, hedonic use, and cognitive use) are suggested for exploring the extent of user behavior.

Previous studies have successfully used U&G theory to identify motives to use social media. Shao (2009) investigated how and why people use social media, and what factors make social media appealing through a viewpoint of uses and gratification. Shao (2009) stated that people use social media in different ways for different purposes. There are three usages: people consume content for satisfying their entertainment and information needs; they engage through interacting with other users and content for increasing social connections and virtual communities; and they create their own content for self-expression and self-actualization. Moreover, people receive gratification from their social media use because two usability elements of social media—ability to control and ease of use—enable users to efficiently carry out the aforementioned activities.

Quan-Haase and Young (2010) examined what motivates college students to use Facebook. Six factors were identified based on the results of factor analysis. They were: pastime, affection, fashion, sharing problems, sociability, and social information. Students obtained these six gratifications from Facebook use. Papacharissi and Mendelson (2011) focused on exploring motives for using Facebook. Nine factors were found according to the factor analysis. They were: expressive information sharing, habitual pass time, relaxing entertainment, cool and new trend, companionship, professional advancement, escape, social interaction, and new friendships. Xu et al. (2012) established a model based on U&G theory to explain why people use social media. They found that goal-oriented gratifications of immediate access and coordination, pleasure-oriented gratifications of affection and leisure, and social presence were the primary indicators of social media use.

Whiting and Williams (2013) aimed to understand why consumers use social media by applying U&G theory. They found ten important uses and gratifications for using social media: social interaction, information seeking, passing time, entertainment, relaxation, communicatory utility, convenience utility, expression of opinion, information sharing, and surveillance/knowledge about others. Quinn (2016) found nine uses and gratifications that social media experiences produce. They were: habitual passing time, relaxing entertainment, expressive information sharing, escapism, social interaction, professional advancement, social information gathering, companionship, and inclusiveness. The results were consistent with other U&G studies of social media (Papacharissi & Mendelson, 2011).

After researchers understood users' motivation to use social media, the trend moved to investigate consequences of gratifications. Li, Liu, Xu, Heikkilä, and Van Der Heijden (2015) pointed out that social network games provide three types of gratification for players to increase their continued intentions to use: hedonic gratification (enjoyment, fantasy, and escapism); social gratification (social interaction and social presence); and utilitarian gratification (achievement and self-presentation). Gan and Li (2018) explored the different impacts of gratifications on the continued intention to use WeChat in China. Four types of gratification were identified to significantly affect continued usage: hedonic gratification, social gratification, utilitarian gratification, and technology gratification. That is to say, using WeChat is perceived to be enjoyable and easy to use, used to pass the time, and create a self-image, used as a communication tool to interact and establish connections with others, used to share information with others, and used to document lives.

Next, researchers started exploring how to strengthen the relationship between gratifications and behavioral intentions. To be more specific, the gratifications of

social media use affect users' attitudes toward social media, and the attitudes therefore affect the actual use behavior of social media (Ha, Kim, Libaque-Saenz, Chang, & Park, 2015). Cognitive, hedonic, and social gratifications positively influence attitudes toward social media. Positive attitudes toward social media then enhance the amount of time spent on social media. An attitude toward social media thus becomes an important mediator to strengthen the relationship between gratifications obtained from social media use and actual use.

Recently, applying U&G theory to social media use has been extended from predicting use behavior to work-related behavior. According to Ali-Hassan et al. (2015), applying U&G theory to measure social media use is an appropriate measure because researchers can understand how employees use social media rather than whether they use social media. Understanding individuals' motives of social media use can more accurately predict outcomes of social media use at work. Ali-Hassan et al. (2015) focused on examining the relationships between social media use at work, social capital, and job performance. The results showed that social use and cognitive use directly and positively affect employees' innovative and routine performance. However, hedonic use has a negative effect on routine performance, but a positive effect on innovative performance. Moreover, when social capital was introduced in the relationships between different uses of social media and job performance, these relationships either fully disappeared or their power was decreased, indicating full or partial mediating effects. Employees' different uses of social media—to have more friendships and emotional and social support from other users on social media or higher levels of cooperation, trust, and reciprocity between users—are positively associated with the formation of social capital and improvement of job performance.

Table 5 summarizes the prior studies that applied U&G theory to investigate the use of social media.

In sum, user behavior is motivated by an individual's own needs and his/her expectation that needs can be satisfied via certain types of media (Ali-Hassan et al., 2015; Ruggiero, 2000). To understand the nature of social media use at work, this study adopts U&G theory. U&G theory explains why employees choose to use social media at work. What is unique about the theory is the focus on what individuals do with the media rather than the effect of the media on individuals (Katz et al., 1974). U&G theory is associated with the social and psychological origins of needs, which establish expectations of a certain media and result in various patterns of media engagement, leading to needs gratification. Since the theory offers a correlation between choices and their outcomes, it is a proper framework for exploring social media use motivations and its effects at work. This study conceptualizes three dimensions of social media use at work that are in line with the above needs: social use, hedonic use, and cognitive use.

#### **2.2.2.3.1 Social Use**

Social use is defined as using social media to meet new people and keep in touch with existing friends and family (Gan & Li, 2018; Li et al., 2015). It includes two important constructs: social interaction and social presence. Social interaction refers to using social media to interact and communicate with others. It is a vital feature of social media as users often use social media to connect with others anytime and anywhere. Social presence is defined as a person's psychological sense of building personal connections with others via media (Biocca, Harms, & Burgoon, 2003). When people feel closely connected with or are accepted by others in the

virtual world, they are motivated to keep using social media with a high-level social presence.

#### **2.2.2.3.2 Hedonic Use**

Unlike social use, hedonic use aims to provide entertainment, enjoyment, and relaxation such as watching videos, listening to music, and playing games (Papacharissi & Rubin, 2000; Whiting & Williams, 2013). Relaxation refers to using social media to relieve day-to-day stress, while entertainment focuses on enjoyable and pleasant experiences (Quinn, 2016).

#### **2.2.2.3.3 Cognitive Use**

This type of social media usage is defined as using social media to seek and share information (Papacharissi & Mendelson, 2011; Raacke & Bonds-Raacke, 2008; Shao, 2009). Information-seeking refers to using social media to search for content that is created by others and self-education (Ali-Hassan & Nevo, 2009; Whiting & Williams, 2013). Information-sharing refers to using social media to present information about individual interests or concerns and share information with others including sharing stories, ratings, opinions, arguments, personal photos, and videos (Gan & Li, 2018; Papacharissi & Mendelson, 2011).

Table 5. Summary of prior U&G studies.

Study	Factor	Description
Shao (2009)	Consumption	For information and entertainment
	Participation	For social interaction and community development
	Production	For self-expression and self-actualization
Quan-Haase and Young (2010)	Pastime	Entertainment and escaping
	Affection	Expressing concern and friendship toward others
	Fashion	Showing fashionable and stylish to others
	Sharing problems	Talking to others about my concerns
	Sociability	Making new friends
Papacharissi and Mendelson (2011)	Social information	The peer network
	Expressive information sharing	Information sharing and self-expression
	Habitual pass time	Habit and pass time
	Relaxing entertainment	Relaxation and entertainment
	Cool and new trend	Popularity and the thing to do
	Companionship	Reducing loneliness
	Professional advancement	Professional contact
	Escape	Escaping from tasks or individuals
	Social interaction	Social connection
	New friendships	Meeting new people
Xu et al. (2012)	Utilitarian gratification	Immediate access and coordination
	Hedonic gratification	Affection and leisure
	Social presence	The encouragement of social
Whiting and Williams (2013)	Social interaction	Connecting and staying in touch with family and friends
	Information seeking	Seeking out information
	Pass time	Using when people feel bored at work or school
	Entertainment	Playing games, listening to music, and watching videos
	Relaxation	Relaxing and escaping



Ali-Hassan et al. (2015)	<ul style="list-style-type: none"> <li>Expression of opinions</li> <li>Communicatory utility</li> <li>Convenience utility</li> <li>Information sharing</li> <li>Surveillance/knowledge about others</li> <li>Social use</li> </ul>	<ul style="list-style-type: none"> <li>Expressing thoughts and opinions</li> <li>Giving users things to talk about with others</li> <li>The convenience of being able to use anytime and anywhere</li> <li>Sharing information about you with others</li> <li>Watching what others are doing</li> <li>Building new social relations and keeping in touch with existing friends</li> </ul>
Li et al. (2015)	<ul style="list-style-type: none"> <li>Hedonic use</li> <li>Cognitive use</li> <li>Utilitarian gratification</li> <li>Social gratification</li> <li>Hedonic gratification</li> </ul>	<ul style="list-style-type: none"> <li>For fun, passing time, relaxing and escaping, and entertainment</li> <li>Creating and sharing content</li> <li>Achievement</li> <li>Social presence and social interaction</li> <li>Fantasy, escapism and enjoyment</li> </ul>
Quinn (2016)	<ul style="list-style-type: none"> <li>Affect</li> <li>Companionship</li> <li>Voyeur</li> <li>Information sharing</li> <li>Habit</li> <li>Entertainment</li> <li>Communication</li> <li>Professional use</li> <li>Escape</li> </ul>	<ul style="list-style-type: none"> <li>Showing care or concern for others</li> <li>Decreasing loneliness</li> <li>Finding information about others</li> <li>Posting useful information or telling others about oneself</li> <li>Passing time</li> <li>Enjoyment, pleasure and relaxation</li> <li>Keeping in touch with friends and family</li> <li>Career advancement</li> <li>Getting away from everyday concerns or task at hand</li> </ul>
Gan and Li (2018)	<ul style="list-style-type: none"> <li>Hedonic gratification</li> <li>Social gratification</li> <li>Utilitarian gratification</li> <li>Technology gratification</li> </ul>	<ul style="list-style-type: none"> <li>Enjoyment and passing time</li> <li>Social interaction and social presence</li> <li>Self-presentation, information documentation and information sharing</li> <li>Media appeal</li> </ul>

---

#### **2.2.2.4 Social Presence Theory**

People are social creatures (Brown & Duguid, 2002; Read & Miller, 1995). The theory of social presence is often used to describe and understand how people socially interact in real and virtual environments (Lowenthal, 2009). Social presence theory was originally proposed by Short, Williams, and Charistie (1976) and defined as “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (p. 65). Put differently, the degree of social presence is equal to the degree of awareness of the other person in a communication interaction. They postulated that communication media vary in their degree of social presence and these differences play a vital role in how people interact. Social presence is a quality of communication media that can determine the way people communicate and interact. From their viewpoint, face-to-face communication is considered to have the most social presence, whereas written, text-based communication has the least. Communication is effective if communication media have the proper social presence required for the level of interpersonal involvement required for a task.

A more contemporary definition of social presence theory refers to “the degree to which a person is perceived as a ‘real person’ in mediated communication” (Gunawardena, 1995, p. 151). The concept of social presence is used to evaluate how social context influences media choice (Osei-Frimpong & McLean, 2017). In other words, the social presence of a medium has a significant impact on recipients’ understanding of content created from senders, which, in turn, increases their involvement in social interactions and user behaviors (Chang & Hsu, 2016; Dunlap & Lowenthal, 2009; Karikari et al., 2017). Two concepts, intimacy (Argyle & Dean, 1965) and immediacy (Wiener & Mehrabian, 1968), were mainly used to explain and measure social presence. Intimacy is defined as a function of physical distance, topics

of conversation, and eye contact. Immediacy refers to a measure of psychological distance between sender and recipient.

The levels of social presence differ based on the communication media types (Short et al., 1976). In general, face-to-face communication is seen as a higher level of social presence than computer-mediated communication (Kim, Kwon, & Cho, 2011). Websites and emails that exist in the computer-mediated environment have limitations in providing cues and signals such as immediate responses, body language, and voice intonations. However, some studies have suggested that social-virtual environments, such as social media, can supply a higher level of social presence than the face-to-face environment because they allow immediate interactions between users and the inclusion of photos and videos (Chung, Han, & Koo, 2015; Kaplan & Haenlein, 2010). Thus, the theory developed from the use of telecommunications and was extended to mediated communication, which has been applied in social media research to explain the concept of social presence (Cui, Lockee, & Meng, 2013; Tu, 2000).

Social media is defined as a group of Internet applications where people can create and share user-generated content (Kaplan & Haenlein, 2010). Social media has become part of our daily lives because it not only allows people to maintain their relationships with family, friends, and colleagues, but also provides people with places where they can make new social connections (Brooks, 2015). As explained by social presence theory (Short et al., 1976), social media enhances people's lives because they allow people to communicate at higher level of social presence where communication partners have more influence on each other's behavior (Kaplan & Haenlein, 2010).

Social presence is one of the primary motivators for using social media.

Frankly speaking, employees use social media at work because social media are able to replace face-to-face communications with family, friends, colleagues, or customers.

Even though social media users are far away from each other, they can send and receive messages instantly and see each other directly. Both parties are perceived as being present, there, and real on social media. Therefore, an online environment's physical and psychological distance is similar to a face-to-face environment.

Sometimes the use of social media as a communication tool is even more convenient than face-to-face communication as individuals can talk and meet with each other anytime and anywhere. For this reason, this study assumes that the effect of social media on communication can be used to handle job demands. More simply, after dealing with demanding and unreasonable customers, employees may release stress by connecting with friends on social media (social use).

### **2.3 Job Characteristics**

Job characteristics are regarded as critical elements in understanding what tasks/challenges employees will need to perform/face and how well the job provides employees with an opportunity for creating productivity. When characteristics of a job cannot meet an individual's expectations, these characteristics are turned into job demands. Employees feel less motivation and satisfaction when they have high job demands. A good example can be taken from hospitality job characteristics. A common hospitality job characteristic such as excessive face-to-face interactions with customers makes employees feel emotionally strained from demanding duties and may promote an intent to leave (O'Neill & Xiao, 2010). Thus, job characteristics are key drivers of work-related outcomes.

Well-defined and developed characteristics of job positions enable employees to better perform their jobs and thereby increase job satisfaction (Kim & Jogaratnam, 2010; Ozturk, Hancer, & Im, 2014). Moreover, customer satisfaction has been confirmed to be associated with job satisfaction (Spinelli & Canavos, 2000). Hence, characteristics of a job are expected to reflect upon employee satisfaction with more favorable job characteristics leading to more positive employee attitudes, lower turnover intention, and better customer attitudes (Cohrs, Abele, & Dette, 2006; Kim & Jogaratnam, 2010).

With the unique nature of hospitality jobs, this study proposes negative job characteristics are a major motivation of using social media for personal purposes at work and such use can help employees experience recovery, and eventually improve their job and life satisfaction. This section will then review three models/theories: the job demands-resources (JD-R) model, the job characteristics model (JCM), and the hospitality job characteristics (HJCs) model, to explain the importance of job demands in the hospitality industry.

### **2.3.1 Job Demands**

Job characteristics can be divided into job demands and job resources, as postulated in the job demands-resources (JD-R) model (Baka, 2015). Job demands are physical, psychological, social, or organizational aspects of a job that require substantial physical and psychological effort and energy from workers. For example, high job demands such as high-volume workload, and role stress and conflict lead to mental strain and health impairment such as energy depletion and health problems. Thus, job demands can be regarded as negative job characteristics of a given job. Comparatively, job resources refer to any physical, psychological, social and

organizational characteristics of a job that may: reduce job demands, aid in achieving work goals, and advance personal growth and development. For instance, high job resources such as supervisor support and performance feedback result in strong motivation and high productivity.

The JD-R model was developed and first published by Demerouti, Bakker, Nachreiner, and Schaufeli (2001) in psychology literature. This model believes that employees in different organizations may encounter distinct working environments and each workplace has its own set of job characteristics that determine employees' health and well-being (Bakker, Demerouti, De Boer, & Schaufeli, 2003). It was originally established to understand antecedents of job burnout. That is, job demands are studied to explain how employees are burned out at work. Typically, long-term excessive job demands and a lack of job resources result in a high level of job burnout. The JD-R model assumes that employees' health and well-being come from a balance between negative (demands) and positive (resources) job characteristics (Schaufeli & Taris, 2014). In sum, according to the JD-R model, job demands are associated with negative mental and physical health, whereas job resources are connected with positive work attitudes.

### **2.3.2 The Application of JD-R Model to the Hospitality Industry**

The scope of the JD-R model is much broader than other job characteristics models because it is not limited to any specific job demands and resources. It is more flexible to use in a variety of work settings. Thus, the model is highly popular and appealing among researchers and practitioners. For instance, it is commonly used to examine hospitality jobs (Chen & Chen, 2014; Karatepe, 2012; Lin, Wong, & Ho, 2015). The symbol of the hospitality industry is warmth and friendship, where

employees aim to show their openness and goodwill to customers (Zhao & Ghiselli, 2016). The success of hospitality organizations depends mainly on the success of the service delivery and interaction between consumers and employees (Ford, Sturman, & Heaton, 2012; Kong, Wong, & Fu, 2015). Unfortunately, employees are not always happy and, sometimes, unhappy employees do not want to stay long in the “smile factory” (Dawson, Abbott, & Shoemaker, 2011). According to Bureau of Labor Statistics (2017), the turnover rate of the leisure and hospitality industry was the second highest among all industry sectors in the United States in the past five years and has gradually increased from 62.8 (2012) to 73.8 (2016). Because of the 24/7 nature, “face-time,” and “smiling factory” culture of the hospitality industry, hospitality work has been extensively regarded as a highly stressful work with high levels of employee turnover and job burnout.

Applying the JD-R model to the hospitality industry, employees’ job demands may result from excessive work overtime, irregular work schedules, split-shifts, employee-customer interactions (Chiang, Birtch, & Cai, 2014). These negative job characteristics cause physical and mental exhaustion such as high levels of burnout, stress, and depression for front-line hospitality employees (Chiang, Birtch, & Kwan, 2010; Kim, Shin, & Umbreit, 2007; Noone, 2008; O’Neill & Davis, 2011; Shani & Pizam, 2009), which, in turn, lead to low work engagement, poor performance, and increased absenteeism and turnover (Hoonakker, Carayon, & Korunka, 2013; Karatepe, 2012). Examples of job resources (positive job characteristics) for the hospitality work are organizational support and job autonomy, which are used to decrease role conflict and job burnout (Karatepe, 2011). Hence, both positive and negative job characteristics in the JD-R model function as the key role to influence affective states and work-related outcomes such as job satisfaction, job performance,

turnover intention, job burnout, job stress, and work-family conflict (Choi & Kim, 2012; Ghiselli, La Lopa, & Bai, 2001; Kim, Knight, & Crutsinger, 2009; Kuruüzüm, Anafarta, & Irmak, 2008; Tromp & Blomme, 2012; Zhao, Qu, & Ghiselli, 2011; Wan & Chan, 2013).

As the above discussion shows, if employees have high job demands without sufficient job resources to deal with the job stressors, they will seek ways to recover from job demands. This study attempts to explore whether at-work break activities including non-social media break activities and social media break activities can be an effective means to supplement the lack of job resources and thus cope with unfavorable demanding working conditions.

### **2.3.3 Job Characteristics Model**

In addition to applying the JD-R model to understand positive and negative characteristics of a given job, job design can also be explained by the JCM proposed by Hackman and Oldham (1975). The JCM is currently one of the most widely used tools for describing a job. According to this model, employees' personal and work outcomes are affected by five core job dimensions including skill variety, task identity, task significance, autonomy, and feedback. According to Hackman and Oldham (1976), skill variety is defined as the degree to which employees can use different personal and professional skills to accomplish their jobs. Task identity is whether the job needs the completion of the entire job from the beginning to end. Task significance refers to the degree to which the job influences the work of others and has a significant effect on the lives of others. The fourth job dimension is autonomy, which refers to the degree to which the job provides substantial independence, discretion, and freedom to employees in performing work assignments.



Finally, when job holders receive direct and clear information about their performance effectiveness, it is known as feedback from the job.

Furthermore, these job dimensions are employed to count the Motivational Potential Score (MPS), which measures the motivating potential of a job. In other words, the features of a job will influence an employee's attitudes and behaviors (Rungtusanatham & Anderson, 1996). To be more specific, the five dimensions generate three psychological states in employees: experience of meaningful work, experience of responsibility for outcomes of the work, and knowledge of the actual results of the work activities. Employees will experience meaningfulness if a job contains task variety, task significance, and task identity. Autonomy affects employees' experience of responsibility. Feedback motivates employees to experience knowledge relating to work activities. Finally, these three psychological states result in employees' personal and work outcomes such as motivation, job involvement, job satisfaction, organizational commitment, job performance, low turnover, and absenteeism (Hackman & Oldham, 1980; Hsu & Liao, 2016; Marchese & Ryan, 2001; Steers, 1977).

The JCM has been largely used to investigate hospitality jobs (Kuruüzüm et al., 2008; Lee-Ross, 2005; Ozturk et al., 2014; Zhao et al., 2016). Researchers believed that examining the role of JCM dimensions and MPS can better describe the hospitality jobs and understand how to effectively motivate employees. Although the JCM was used to explain the nature of hospitality jobs, Zhao and Ghiselli (2016) argued that there were some limitations. First, prior research adopted different models and theories to examine HJCs. Second, the measure of HJCs was varied. Third, because of the use of various models and scales, the empirical findings were not consistent. Finally, the use of JCM cannot show the distinctiveness of hospitality jobs,

and thereby cannot significantly influence employees' attitudes and behaviors. Hence, further investigation and validation of HJCs is needed.

To completely understand the specific characteristics of hospitality jobs, this section summarized and identified the difference between the JD-R model and the JCM and their advantages and disadvantages in measuring job characteristics. Next, a review of HJCs helps this study better determine negative job characteristics in the hospitality industry and a key antecedent of at-work break activities.

#### **2.3.4 Hospitality Job Characteristics**

Prior research has operationalized different dimensions to measure job characteristics depending upon the research purpose and industry or field. As a result, the measurement scales of job characteristics have varied. Most studies followed Hackman and Oldham's (1976) work to develop the measurement scale based on the JCM, whereas others have developed scales with different dimensions (Baral & Bhargava, 2010; Keene & Reynolds, 2005; Sims, Szilagyi, & Keller, 1976). Job characteristics of the hospitality industry have gained considerable attention from scholars and practitioners. This is important to understand because the unique nature of the hospitality work. Zhao and Ghiselli (2016) focused on the hospitality industry and aimed to identify the unique characteristics of hospitality work. The authors argued that the lack of broadly agreed upon HJCs results in a need for researching and developing a more comprehensive model for practitioners. To fill this gap, Zhao and Ghiselli (2016) thus reviewed and examined the existing hospitality and tourism literature to discuss the relevant articles that previously defined HJCs and identified the unique features of hospitality work before establishing the HJCs. After the literature review, the authors found six common, important, and distinct HJCs that

should be used to explain the nature of hospitality work. They are: long working hours, irregular work schedule, frequent job turnover, working on holidays, split-shifts, and relatively low pay. A summary and review of HJCs from past research is shown in Table 6.

Hospitality employees' presence is essential for others to observe because of the "face-time" culture of hospitality work. This phenomenon makes them feel the work is long. More importantly, it is common for hospitality employees to work overtime. Therefore, long working hours has been identified as an intrinsic feature of hospitality work (Dawson et al., 2011; Kim et al., 2007; Lawson, Davis, Crouter, & O'Neill, 2013; O'Neill & Xiao, 2010; Wan & Chan, 2013). Irregular work schedule has been recognized as another inherent characteristic of hospitality work because work schedules are not predictable and stable when compared to other industries. For example, hospitality employees cannot work at the same time every day and sometimes need to work overtime. Next, several previous studies also indicated the difficulty of retaining current hospitality employees (Ghiselli et al., 2001; Karatepe & Bekteshi, 2008). It is common that employees change companies and professions regularly. Another specific characteristic is that employees have to work on holidays. The best business and peak period of the hospitality industry is often related to holidays during which other organizations are not open. In addition, it is common that hospitality workers work two or three shifts and rotate nights often. This is an inevitable and distinctive phenomenon in the hospitality industry. Lastly, labor cost is one of the main expenses of the hospitality industry. Hospitality is a labor-intensive industry. The different work statuses make it hard to predict the wages for employees who are paid on an hourly basis because the fluctuation of pay is influenced by the seasonal business.

Based on the above discussions of the JD-R model, JCM, and HJCs, this study concludes that work overload and emotional demands are commonly seen as hospitality employees' job demands. In other words, job demands usually contain two dimensions, quantitative (i.e., workload) and qualitative (i.e., emotional) demands (Schaufeli & Bakker, 2004; Schaufeli, Bakker, & Rhenen, 2009). Numerous studies have confirmed the negative influences of work overload and emotional demands on employees' job outcomes (Bakker, Demerouti, & Verbeke, 2004; Karatepe, 2013; Schaufeli et al., 2009). As for hospitality employees, they are generally characterized as performing work that may cause emotional exhaustion, since their duty requires long working hours with limited job autonomy to face and serve customers. Hospitality employees are expected to smile and be friendly regardless of personal emotions or feelings during most interactions (Chu, Baker, & Murrmann, 2012). Therefore, hospitality employees are highly vulnerable to the concept of emotional labor because organizations require them to retain a positive, cheerful, friendly, and smiling disposition even in conditions that induce negative emotional reactions to service encounters (Pizam, 2004).

According to Hochschild (1983, p. 7), emotional labor is defined as the "management of feeling to create a publicly observable facial and bodily display." Emotional labor, which is common in the hospitality industry, is comprised of two factors: deep and surface acting (Lawson et al., 2013). Deep acting refers to the modification of actual feelings, whereas surface acting is defined as the modification of emotional expressions (e.g., smiling while interacting with an unpleasant customer). Surface-acting emotional labor is more related to the work environment, particularly among front-line employees in the service industry who often have to modify emotions around customers. A higher level of emotional labor on a job is

associated with more health problems (Panagopoulou, Kersbergen, & Maes, 2002), burnout (Kim, 2008), and work-family interference/conflict (Montgomery, Panagopolou, Wildt, & Meenks, 2006; Seery, Corrigall, & Harpel, 2008). Consequently, emotional labor from excessive interactions with customers and dealing with angry customers can be regarded as general job demands that hospitality employees face, and thus emotional demands are selected as key indicators for at-work break activities examined in the present study. In short, this study only focused on investigating the relationship between emotional demands and at-work break activities including non-social media break activities and social media break activities.

Table 6. Summary of prior HJCs studies.

Dimension	Definition	Study
Long working hours	A job requires long working hours including nights and weekends. A job needs employees to work more hours per week. A job requires long and unsociable working hours with high physical demands. Employees need to face customers all the time and work overtime often. A job requires employees to work on weekends and holidays.	Pavesic and Brymer (1990); O'Neill and Xiao (2010); Ineson et al. (2013); Lin et al. (2013); Lawson et al. (2013); Wan and Chan (2013); Gamor et al. (2014); Zhao and Ghiselli (2016)
Low pay	Employees often receive low payments. A job does not provide an adequate and fair pay. Employee payment is unpredictable and fluctuant with the seasonal business	Pavesic and Brymer (1990); Wan and Chan (2013); Zhao and Ghiselli (2016)
Job stress	Employees often feel stressful from demanding duties and supervisors. A job causes stress from demanding duties and supervisors.	Pavesic and Brymer (1990); O'Neill and Xiao (2010)
Routine	A job is full of frustration over the routine and a lack of advancement, growth or recognition.	Pavesic and Brymer (1990)
Company policies and management	Organizational policies and operation affect employees' performance and career development.	Pavesic and Brymer (1990)
Labor issue	A lack of employees and employee motivation often involved in hospitality jobs.	Pavesic and Brymer (1990)
Skill variety	A job needs employees to use a variety of different skills and talents to perform. A job requires employees to perform wide range of activities in their work.	Jha (2004); Lee-Ross (2005); Jha and Nair (2008); Kim and Jogaratnam (2010); Dawson et al. (2011); Ineson et al. (2013); Ozturk et al. (2014); Zhao et al. (2016)

Task identity	A job needs completion of whole piece of work. A job requires employees to do an entire or whole piece of work and recognize the results of their efforts.	Jha (2004); Lee-Ross (2005); Jha and Nair (2008); Kim and Jogaratnam (2010); Ozturk et al. (2014); Zhao et al. (2016)
Task significance	A job has significant effects on lives or work of others.	Lee-Ross (2005); Kim and Jogaratnam (2010); Zhao et al. (2016)
Autonomy	A job provides a lot of freedom, discretion and independence to employees in carrying out work.	Lee-Ross (2005); Kim et al. (2007); Kim and Jogaratnam (2010); Ozturk et al. (2014); Zhao et al. (2016)
Feedback	Employees receive direct and clear information regarding their performance. Employees receive information about their performance effectiveness. It is the knowledge of employees with regard to job outcomes.	Jha (2004); Lee-Ross (2005); Jha and Nair (2008); Kim and Jogaratnam (2010); Ozturk et al. (2014); Zhao et al. (2016)
Dealing with others	A job requires employees to deal with others to finish the work. A job requires employees to interact with others about work-related or nonwork matters.	Jha (2004); Jha and Nair (2008); Ozturk et al. (2014)
Friendship opportunities	A job requires employees to communicate and build friendships with their co-workers at work.	Jha (2004); Jha and Nair (2008)
Quantitative workload 24/7 nature	A job requires long working hours and shift work schedules. A job requires employees to be ready for the 24/7 nature of the hotel business.	Kim et al. (2007) O'Neill and Xiao (2010)
Management principles	A job requires employees to follow the principles to work.	Dawson et al. (2011)
Customer relationships	A job requires employees to develop relationships with its customers.	Dawson et al. (2011)
Job satisfaction	A job has high turnover and burnout.	Dawson et al. (2011)
Training	A job offers opportunities for trainings.	Ineson et al. (2013)
Skill development	A job offers opportunities for skills' development.	Ineson et al. (2013)

Job security	A job cannot provide the feeling of security.	Ineson et al. (2013)
Non-standard work schedules	A job has irregular work schedules.	Lin et al. (2013); Zhao and Ghiselli (2016)
Rotating shifts	A job has shift work schedules. A job requires employees to work several shifts and rotate nights. The shifts are not same as the typical nine to five routine work.	Lin et al. (2013); Wan and Chan (2013); Zhao and Ghiselli (2016)
Time expectations	The time organizations expect their employees to put in on the work.	Lawson et al. (2013)
Emotional labor	A job needs employees to manage their emotional expressions at work.	Lawson et al. (2013)
Permeable boundaries	It is defined as the lack of segmentation between the domains of work and family.	Lawson et al. (2013)
A lack of employment stability	A job has high turnover. Employees often leave hotels and change occupations.	Wan and Chan (2013); Zhao and Ghiselli (2016)

---



## **2.4 Job Demands and At-Work Break Activities**

In short, the four types of micro-break activities are used to explain and measure non-social media break activities, and help employees experience recovery from work. Research in organizational psychology has further pointed out that recovery is an important mechanism for service job employees to remain their optimal physical and mental conditions for well-being and work (Sonnentag & Fritz, 2007). Considering the aforementioned reasoning, this study specifically examine antecedents and consequences of both non-social media break activities and social media break activities. To be more specific, the investigation of micro-breaks activities can help this study understand and verify the following questions: 1) “do job demands trigger the engagement of non-social media break activities?”, 2) do non-social media break activities enhance recovery experiences?”, and 3) “do non-social media break activities have positive impacts on recovery experiences, job satisfaction, and life satisfaction as much as social media break activities?”.

Since the use of social media is common in the workplace, it is important to further understand the antecedents and consequences of social media break activities. U&G theory and social presence theory form the theoretical foundation of the relationship between job demands and social media break activities. Applying U&G theory and social presence theory to this study, job demands can be seen as a key motivation to use social media during work breaks. It explains why employees choose social media and how they use them to meet their specific needs because the functions of social media, such as chatting with friends, watching videos, and seeking information, can provide social support, joyful experiences, and useful information, and thus gratify their social, hedonic, and cognitive needs that derive from high job demands. Social use, cognitive use, and hedonic use can be seen as outcomes and

needs gratification. Notably, people choose and keep using social media because social media are regarded as a high level of social presence that allow immediate interactions between users like a face-to-face communication (Kaplan & Haenlein, 2010).

With respect to the characteristics of social media, the positive association of job demands and social media use at work is also consistent with a study by Charoensukmongkol (2014). That research revealed that negative job characteristics increased a high intensity of using social media at work and such use resulted in alleviating work-related stress, which, in turn, generated positive impacts on job satisfaction, organizational commitment, and job performance. Quinones and Griffiths (2017) also argued that engaging intensively on the Internet during and after work can help employees with high exposure to emotional demands receive psychological recovery experiences such as psychological detachment and relaxation. Accordingly, this study assumed job demands are one of major triggers of personal use of social media at work. Social use, hedonic use, and cognitive use are considered three of the key gratifications affecting an employee's use of social media during work breaks. A need to deal with high job demands can be satisfied through different social media use contexts. This gives rise to the following hypotheses:

*H1: Job demands are positively related to non-social media break activities.*

*H1a: Job demands are positively related to relaxation activity.*

*H1b: Job demands are positively related to nutrition-intake activity.*

*H1c: Job demands are positively related to social activity.*

*H1d: Job demands are positively related to cognitive activity.*

*H2: Job demands are positively related to social media break activities.*

*H2a: Job demands are positively related to social use.*

*H2b: Job demands are positively related to hedonic use.*

*H2c: Job demands are positively related to cognitive use.*

## **2.5 Effort-Recovery Model**

Recovery from work is necessary for employees to prevent chronic stress (Safstrom & Hartig, 2013). According to Meijman and Mulder's (1998) effort-recovery model, recovery occurs when job demands no longer strain an individual's resources (Meijman & Mulder, 1998). This model posits that effort expended on job demands is associated with short-term psychological and physiological costs (Meijman & Mulder, 1998). Employees who work hard will invest considerable effort over the short-term that involves changes at the subjective, physiological, and behavioral levels (Demerouti et al., 2009; Zoupanou, Cropley, & Rydstedt, 2013). These psychological and physiological costs change individuals' physical and psychological health, but when workers step away from their specific tasks—as occurs during a coffee or lunch break or at the end of the working day—this action of detaching allows their psychobiological systems to return to baseline, thus stimulating and experiencing recovery. If recovery does not take place, then the psychological and physiological costs can cause a decline in health, well-being, and performance. It thus requires more effort and increased need for recovery (Gervais, 2016; Sonnentag, Kuttler, & Fritz, 2010).

Recovery experiences can be regarded as individuals' strategies to restore their energy resources and retain their well-being (Lee et al., 2016). Sonnentag and Fritz (2007) identified four types of experiences as strategies for recovering from job stress: detachment, relaxation, mastery, and control over leisure time. According to the

effort-recovery model, detachment refers to disengaging mentally from work, which leads to recovery from stressful work. Relaxation is defined as activities that relax the body and mind. Both detachment and relaxation facilitate overall recovery as they imply that no further job demands are made on the same human functional systems. Mastery refers to seeking new challenges and learning new things. Mastery experiences are expected to build new internal resources such as skills and competencies (Sonnentag & Fritz, 2007; Sonnentag & Geurts, 2009). Control over leisure time is defined as a person having the ability to decide which activities to pursue during off-job time, and when and how to pursue them. Control experiences are expected to develop new resources such as enhancing self-efficacy and feelings of competence. They can be seen as external resources to satisfy an individual's control of events in life that promote recovery.

Since this study focused on investigating at-work recovery experiences to help employees deal with job demands, psychological detachment from work and relaxation are considered two important mechanisms of recovery experiences. The mastery and control experiences are excluded from this study since they require effort investment and sufficient time to execute during off-job time. Of the four recovery experiences, Sonnentag and Fritz (2015) indicated that psychological detachment is the core recovery experience because it has significant and positive associations with occupational stress and health. Furthermore, relaxation is another essential component of recovery experiences. The important role of relaxation in relieving psychological activation has been found in previous studies (Smith, 2005; Sonnentag & Fritz, 2007).

With regard to benefits of work breaks, previous studies have found that non-social media break activities were associated with high levels of human energy at work and work engagement, increased positive affect at work, and greater job

performance (Kim et al., 2018; Kühnel et al., 2017). Specifically, taking self-initiated short work breaks (only a few minutes) such as making a private phone call, going for a walk or surfing news websites in the afternoon help employees restore energy, experience on-the-job recovery, and thus enhance their daily work engagement. Moreover, examining different types of work breaks, Hunter and Wu (2016) revealed that breaks during which employees sought more activities they liked better enabled employees had the opportunity to improve the level of energy, focus, and motivation after the breaks. Accordingly, research in organizational psychology and related areas has recognized recovery from work as an vital mechanism and consequence of work breaks that explains how employees can remain healthy, energetic, engaged, and even when facing high demands of work (Sonnentag, Binnewies, & Mojza, 2010; Sonnentag & Fritz, 2015; Trougakos et al., 2008).

In addition to non-social media break activities, it is reasonable to predict that social media use could be an effective recovery tactic at or after work because the ease of multiple Internet-based applications unique to smartphones has changed how people work and take breaks (Rhee & Kim, 2016). Collins and Cox (2014) found that digital game use in mobile technologies supports post-work recovery in avoiding work-related strain. Online social support further mediated the relationship between digital game use and recovery because gamers build online friendships and interactions with other gamers through online gaming. Reinecke, Klatt, and Kramer (2011) also showed that the use of entertaining media significantly affects recovery through the perception of enjoyment and well-being. The need for recovery can be satisfied by the enjoyment of entertaining media use such as a video game or a video recording of a game. Overall, media and technology use may be used to improve recovery and lessen job stress.

In sum, non-social media break activities such as stretching, chatting with colleagues directly, snacking, or reading magazines are self-initiated, voluntary, and less effortful. Employees can engage in these at-work break activities when they are not busy. Similarly, this study postulated that engaging in social media break activities is a way of fulfilling a need for recovery because detachment and relaxation may be a result of activities that are felt to be away from work mentally and relaxing such as watching videos, listening to music, and viewing others' posts on social media. Social media use behavior at work does not require any kind of effort of the individual. Everyone can access and stop using social media anytime and anywhere. Once you have a smartphone, laptop, tablet, or desktop with the Internet connection, individuals do not need to invest much effort and time to learn how to use social media to view friends' posts, chat with friends, listen to music, watch videos, play games, and share news. The above activities may help employees detach from work temporarily and experience relaxation. Thus, it decreases job demands and increases positive affect; thereby detachment or relaxation via social media or non-social media break activities is assumed to help recovery. Accordingly, the following hypotheses were made:

*H3: Non-social media break activities are positively related to recovery experiences.*

*H3a: Relaxation activity is positively related to recovery experiences.*

*H3b: Nutrition-intake activity is positively related to recovery experiences.*

*H3c: Social relaxation activity is positively related to recovery experiences.*

*H3d: Cognitive activity is positively related to recovery experiences.*

*H4: Social media break activities are positively related to recovery experiences.*

*H4a: Social use is positively related to recovery experiences.*

*H4b: Hedonic use is positively related to recovery experiences.*

*H4c: Cognitive use is positively related to recovery experiences.*

## **2.6 Job Satisfaction**

The concept of job satisfaction has been well-discussed in prior studies (Dole & Schroeder, 2001; Miao & Kim, 2010; Yang, 2010). Job satisfaction refers to employees' attitudes toward their jobs and they are more likely to achieve organizational goals if they have a positive attitude toward their job (Spector, 1997). Locke (1976) indicated that job satisfaction is an affective state derived from an individual's subjective experience with his or her job. Job satisfaction is commonly defined as "an employee's internal state of some degree of favorable or unfavorable feelings from affectively and/or cognitively evaluating his or her job experience" (Brief, 1998, p. 86).

Although job satisfaction has been operationalized in many different means, the common way of operationalizing job satisfaction is considered to be a work-related attitude (Weiss & Cropanzano, 1996). More specifically, an employee's work-related attitude can usually be measured by cognitive and affective ways. That is, job satisfaction can be seen as what one thinks and what one feels. Yet, the widely used measure of job satisfaction is the affective evaluation and feeling (Brief & Roberson, 1989). For instance, an employee is very pleased with his or her current job.

Job satisfaction is essential in the hospitality industry because satisfied front-line service employees are said to not only increase customer satisfaction but also the profitability of organizations (Chiang et al., 2014). In the hospitality industry, the working environment is characterized by work overload, role pressure, irregular and long working hours (Tsaor & Tang, 2012). When employees experience such stressful

working environment and situations, they become nervous and depressed, which can cause job dissatisfaction and negative emotions toward work, finally decreasing employee well-being. Previous studies have indicated the negative relationship between job stress and job satisfaction or employee well-being (Fortes-Ferreira, Peiro, Gonzalez-Morales, & Martin, 2006; Shani & Pizam, 2009; Tsaur & Tang, 2012).

On the other hand, Charoensukmongkol (2014) found social media use at work can be an effective way to handle high job demands and enhance job satisfaction and performance. In particular, occasionally accessing social networking sites can help employees feel relaxed during work because it allows them to connect to their family and friends and experience recovery. This social interaction is important because it helps employees release job stress. This positive finding of social media is also consistent with a past research by Moqbel et al. (2013), which stated that using social media at work can improve employees' attitudes toward their jobs as it assists them in lowering work-family conflict and achieving work-life balance (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011).

Despite prior studies that reported that social media use intensity at work has a positive and direct impact on job satisfaction, the reasons behind the positive relationship are still unclear. To understand employees' experiences of social media use at work, this study proposes that there is a need to consider whether recovery experiences could affect the direct relationship between personal use of social media at work and job satisfaction. Kinnunen, Feldt, Siltaloppi, and Sonnentag (2011) illustrated that recovery experiences can facilitate more engaged employees and positive attitudes toward their jobs. Siltaloppi, Kinnunen, and Feldt (2009) found that relaxation is negatively related to job exhaustion. In addition, psychological detachment and mastery had direct links to occupational well-being such as low job



exhaustion and high work engagement. More specifically, since stressful work environments may not be avoidable, recent studies have made significant strides toward understanding and identifying the types of recovery during and after work (De Bloom et al., 2015; De Bloom et al., 2017; Fritz et al., 2013). Several studies have shown that unwinding after work can undo the negative effects of job stress and lead to positive mood, performance, and well-being (De Bloom et al., 2015; Hahn & Dormann, 2013; Ryan et al., 2010).

Of recovery during work, a good way to restore energy is to take a break. Breaks during working hours contain more scheduled breaks such as lunch and coffee breaks, as well as breaks between shifts or other types of informal breaks, often called micro-breaks (Trougakos & Hideg, 2009). In fact, recovery during work, especially a lunch break (Brown, Barton, Pretty, & Gladwell, 2014; De Bloom et al., 2017; Krajewski, Wieland, & Sauerland, 2010; Trougakos et al., 2014), has recently gained research attention instead of recovery after work because it is the longest within-day work break. In general, workers spend about half of their waking time at work and most workers are legally entitled to receive a lunch break every workday. However, it is still unclear how the daily lunch break influences recovery from work stress. De Bloom et al. (2017) found that park walks and relaxation exercises during lunch breaks have significant effects on recovery outcomes such as restoration, fatigue, and job satisfaction. Although the break activities are effective to improve employee well-being, the effects are small and short-lived.

Despite the increased research attention of within-workday recovery, there is a lack of understanding and evidence of the impacts of recovery during work on employee well-being and on the role of break-time activities via technology such as social media use, in particular. Since social media may offer employees an

opportunity to experience detachment and relaxation through social use (chatting with friends), hedonic use (watching videos), and cognitive use (viewing others' posts), this study posited that employees who use social media at work to cope with job demands and experience recovery would report higher job satisfaction than those who do not replenish resources via breaks during working hours. Based on these discussions, the following hypothesis is proposed:

*H5: Recovery experiences are positively related to job satisfaction.*

## **2.7 Life Satisfaction**

Life satisfaction is defined as a construct that estimates the overall well-being of a person, which derives from an assessment of life in general (Graves, Ohlott, & Ruderman, 2007; Karatepe & Baddar, 2006). That is to say, life satisfaction is an individual's general evaluation with the overall quality of life and is an indicator of subjective well-being (Horley, 1984), whereas job satisfaction is an indicator of the quality of work life. An important relationship about human resource management is the impact of quality of work life on overall quality of life (Rice, McFarlin, Hunt, & Near, 1985).

Because of the importance of work to individuals (Near, Rice, & Hunt, 1978), research on the positive relationship between job satisfaction and life satisfaction has been supported by the spillover theory, which evaluates job "spillover" onto general affective states (Heller, Judge, & Waston, 2002). Spillover theory and previous studies suggest that job satisfaction can transfer positive feelings and evaluations to life satisfaction, whereas job stress can convey negative moods and assessments to the quality of life (Adams, King, & King, 1996; Ghiselli, La Lopa, & Bai, 2001; Ilies,

Wilson, & Wagner, 2009). In other words, work attitudes will affect the life satisfaction of employees (Lin, Wong, & Ho, 2013; Wan & Chan, 2013). Low life satisfaction, however, has been found to be associated with high role conflict and low job satisfaction (Ghiselli et al., 2001; Higgins, Duxbury, & Irving, 1992). In the hospitality context, employees who have more positive attitudes toward their jobs are more likely to feel satisfied with life (Judge & Watanabe, 1993; Zhao et al., 2011). At the same time, employees who experience stronger stress at work are more likely to have adverse life satisfaction (Karatepe & Baddar, 2006; Lin et al., 2013; Uysal, Sirgy, Woo, & Kim, 2016).

Recovery from job stress has recently acquired growing research attention to enhance life satisfaction (Kinnunen, Feldt, De Bloom, & Korpela, 2015; Sonnentag & Fritz, 2015). Chen, Huang, and Petrick (2016) indicated that holiday recovery experiences have positive effects on job satisfaction and life satisfaction. Tourism experience during vacation should be seen as one of important off-job respite activities. Media use has also been regarded as an effective way to experience recovery (Rieger, Reinecke, Frischlich, & Bente, 2014) and increase life satisfaction (Dogan, 2016). Media-induced recovery such as TV viewing has a positive effect on health satisfaction and life satisfaction among the Chinese elderly (Sun, Zhang, & Fan, 2016). From a hedonic perspective, a positive relationship between the consumption of media entertainment (watching TV, Internet use, and playing video games) and vitality (feelings of arousal or energy) is strengthened through media-induced recovery (detachment and relaxation) (Rieger et al., 2014). Prior research illustrated that the use of entertaining media is positively associated with the satisfaction of recovery needs (Reinecke et al., 2011) and satisfaction with life (Ryan & Deci, 2001). However, research on the processes that lead to media-induced

recovery is limited (Rieger et al., 2014). Since hedonic experience is a common feature of social media, there is a need to consider social media use as a vital media stimulus before experiencing recovery and enhancing life satisfaction. Lee et al. (2016) demonstrated that recovery experiences have positive impacts on hotel employees' organization-based self-esteem, job dedication, career satisfaction, and life satisfaction. To be more specific, off-job activities help employees to experience recovery and perceive a high level of their worth and competence as an organization member. Employees who think they are important and valuable in the workplace are more likely to invest time for a task, overcome difficulties to complete task, and satisfy with their self-assessment of career and life success. Hence, the following hypotheses are proposed:

*H6: Recovery experiences are positively related to life satisfaction.*

*H7: Job satisfaction is positively related to life satisfaction.*

## **3 METHODOLOGY**

### **3.1 Introduction**

This chapter presents the research methodology adopted to investigate the relationships between job demands, at-work break activities (non-social media break activities and social media break activities), recovery experiences, job satisfaction, and life satisfaction. The research model and hypotheses are presented. The measurement and pilot study are introduced in this chapter. Finally, sample, data collection, and data analysis methods are illustrated.

### **3.2 Research Model and Hypotheses**

Based on the literature review, the research framework and hypotheses are presented below.

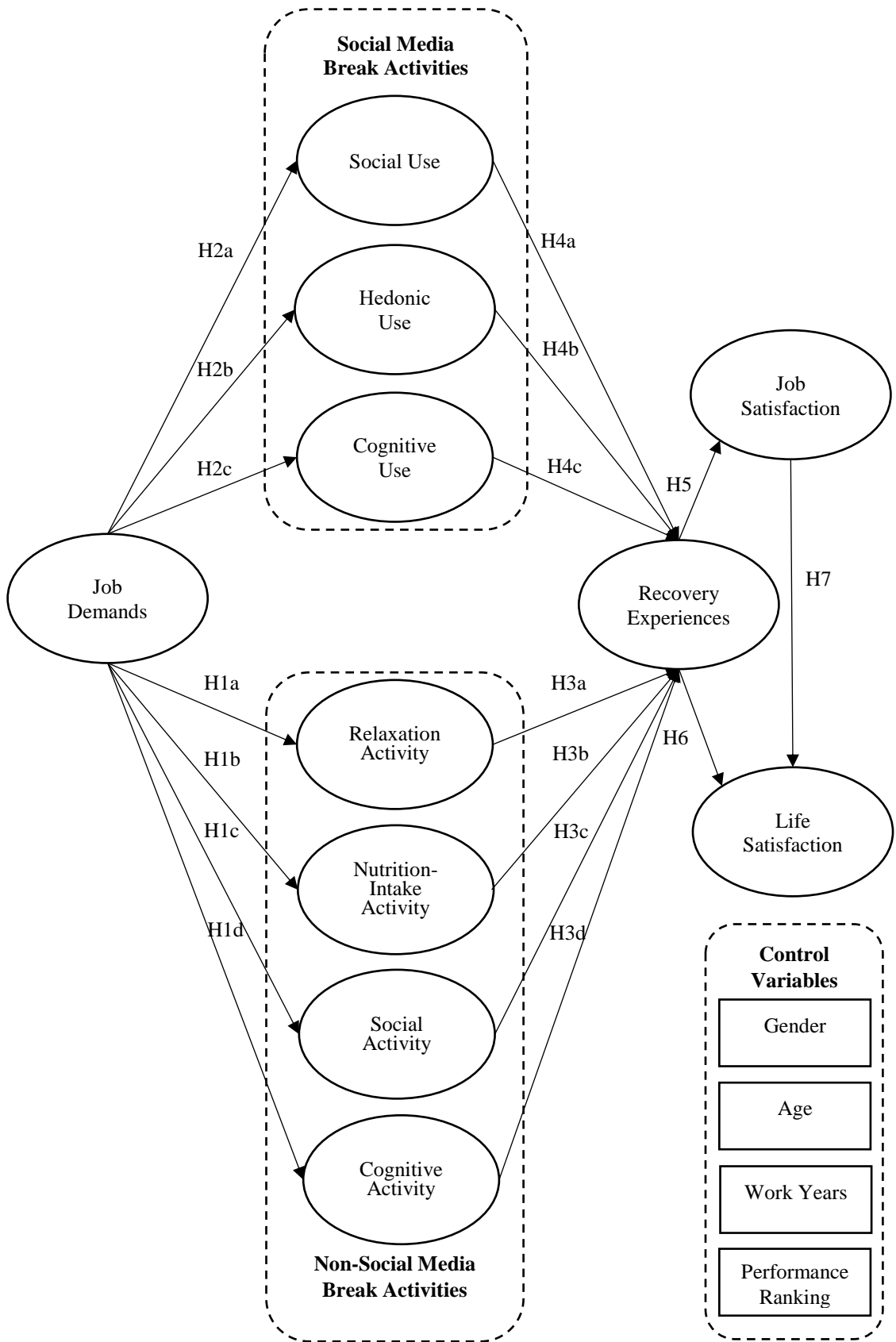


Figure 1. Research framework.

- H1: Job demands are positively related to non-social media break activities.
- H1a: Job demands are positively related to relaxation activity.
  - H1b: Job demands are positively related to nutrition-intake activity.
  - H1c: Job demands are positively related to social activity.
  - H1d: Job demands are positively related to cognitive activity.
- H2: Job demands are positively related to social media break activities.
- H2a: Job demands are positively related to social use.
  - H2b: Job demands are positively related to hedonic use.
  - H2c: Job demands are positively related to cognitive use.
- H3: Non-social media break activities are positively related to recovery experiences.
- H3a: Relaxation activity is positively related to recovery experiences
  - H3b: Nutrition-intake activity is positively related to recovery experiences
  - H3c: Social activity is positively related to recovery experiences
  - H3d: Cognitive activity is positively related to recovery experiences
- H4: Social media break activities are positively related to recovery experiences.
- H4a: Social use is positively related to recovery experiences.
  - H4b: Hedonic use is positively related to recovery experiences.
  - H4c: Cognitive use is positively related to recovery experiences.
- H5: Recovery experiences are positively related to job satisfaction.
- H6: Recovery experiences are positively related to life satisfaction.
- H7: Job satisfaction is positively related to life satisfaction.

### **3.3 Measurement**

The questions to measure the research constructs used in the survey, shown in

Appendix I, were developed based on the existing literature. All items were measured on a 5-point Likert scale from “1 = strongly disagree” to “5 = strongly agree.”

**Job demands.** Job demands were measured using ten items modified from Best, Downey, and Jones (1997), Chen and Chen (2014), Quinones and Griffiths (2017), and Xanthopoulou, Bakker, and Fischbach (2013). A sample item is: “During the past 30 days, I often had to react with understanding to customers with unreasonable behavior.”

**Social media break activities.** Previously established measurement scales for the three dimensions of social media use at work were adopted for this study. They were social use, hedonic use, and cognitive use. Social use was measured using nine items adapted from Ali-Hassan et al. (2015), Hong and Chiu (2016), and Luqman et al. (2017). A sample item is: “During the past 30 days, how often did you use social media at work to chat with others (e.g., talk with friends about my job and life to get social support)?” The four items measuring hedonic use came from Ali-Hassan et al. (2015). A sample item is: “During the past 30 days, how often did you use social media at work to entertain yourself (e.g., watch videos, play games, or listen to music)?” For the cognitive use scale, five items were modified from Hong and Chiu (2016), Kwahk and Park (2016), Ali-Hassan and Nevo (2009), and Ali-Hassan et al. (2015). A sample item is: “During the past 30 days, how often did you use social media at work to gain information (e.g., learn and know something through reading others’ posts)?” Types of social media used for personal purposes listed in the survey were: Facebook, Instagram, Twitter, YouTube, Snapchat, LinkedIn, and others.

**Non-social media break activities.** Non-social media break activities were measured using eight items modified from Kim, Park, and Headrick (2018). This scale measures four dimensions of micro-break activities: relaxation activities (two



items), nutrition-intake activities (two items), social activities (two items), and cognitive activities (two items). A sample item is: “During the past 30 days, how often did you stretch, walk around the office, or relax briefly at work?”

**Recovery experiences.** Recovery experiences were measured using eight items adapted from Sonnentag and Fritz (2007). A sample item is: “During the past 30 days, I didn't think about work temporarily after using social media at work.”

**Job satisfaction.** The three items measuring job satisfaction were modified from Cammann, Fichman, Jenkins, and Klesh (1983). A sample item is: “I am very satisfied with my current job.”

**Life satisfaction.** Life satisfaction was assessed using Diener and Fujita’s (1995) five-item scale. A sample item is: “The conditions of my life are excellent.”

**Demographic information.** The respondent demographic information was collected using 19 items (via a categorical scale) on gender, age, education level, years of using social media, minutes spent on social media at work for personal purposes a day, minutes spent on social media at work for professional purposes a day, types of social media used for personal purposes, types of social media used for professional purposes, time for using social media at work, organizational policy toward social media use at work, approval of using social media at work for personal purposes, the degree of social media usage related to work, purpose of social media use at work, types of hospitality industry, job position, employment status, years of working in the hospitality industry, times of interacting with customers per day, and ranking about your performance at work.

**Control variables.** Some of the respondent demographic information such as gender, age, work years, and performance ranking was used to test the proposed model. The investigation of relationships between independent and dependent

variables may be incomplete if there is no any control variables in a research model (Frank, 2000). Not using control variables can also cause an omitted variable bias. A control variable refers to a confounding variable correlates with both a(n) independent variable and dependent variable (Anderson et al.,1980). Hence, this study proposed that the four potential confounding variables might affect the dependent variables such as social and non-social media break activities, recovery experiences, job satisfaction, and life satisfaction.

### **3.4 Pilot Study**

To reduce the sampling error and improve accuracy, a pre-test was conducted after questionnaire development. Convenience sampling was used during the pre-test process. The pilot study was conducted at the University of Missouri to test the reliability and validity of the survey and determine if changes were needed before conducting the final survey. Participants working or interning in the hospitality industry at the time of surveying were recruited from the undergraduate students enrolled in the hospitality management program at the University of Missouri. The pilot study was administered in May 2018 and data was collected from 20 participants.

An item-sorting procedure was employed as a pre-test to evaluate the content validity of the measures in this study (Anderson & Gerbing, 1991). It is a common content assessment method to develop and validate the measures (Hinkin, Tracey, & Enz, 1997). Definitions of each construct without titles are provided to judges (respondents). Judges are then asked to sort items based on their similarity to construct definitions. Two indices—proportion of content agreement ( $P_{ca}$ ) and content validity coefficient ( $C_{cv}$ )—are produced to verify the validity of items (Anderson &

Gerbing, 1991).  $P_{ca}$  refers to the proportion of respondents who assign a question to its intended construct. The values of  $P_{ca}$  range from 0 to 1 with greater values showing higher content validity.  $C_{cv}$  is defined as the degree to which respondents assigned a measure to its posited construct more than any other construct. The values of  $C_{cv}$  range from -1 to 1 with greater values representing higher content validity. Both  $P_{ca}$  and  $C_{cv}$  of all constructs should exceed the 0.7 cut-off value as recommended by Anderson and Gerbing (1991). The functions of  $P_{ca}$  and  $C_{cv}$  are presented as follows:

$$P_{ca} = n_c / N$$

$$C_{cv} = (n_c - n_o) / N$$

Notes:  $n_c$  = the number of respondents assigning an item to its posited construct;  $n_o$  = the highest number of assignments of the measure to any other unintended construct by respondents;  $N$  = the total number of respondents.

The item-sorting document (see Appendix II) was distributed directly to students in the Department of Hospitality Management at the University of Missouri. The document included a number of measurement items and definitions of each construct. The participants were asked to match the items to a construct after reading definitions of the construct. The results of item-sorting are shown in Table 7. The values of the average of  $P_{ca}$  and  $C_{cv}$  for social use, psychological detachment, job satisfaction, and job satisfaction were greater than .70, which indicates that the content validity was supported (Anderson & Gerbing, 1991). Items with a  $P_{ca}$  or  $C_{cv}$  value below .70 were excluded if the values of the average of  $P_{ca}$  and  $C_{cv}$  for a construct were less than .70. For job demands, the items JD02, JD04, JD07, JD09, and JD10 were excluded because of the low values of  $P_{ca}$  and  $C_{cv}$ . The average of  $P_{ca}$  and  $C_{cv}$  for job demands improved from .71 and .41 to .85 and .70 after the deletion.

Additionally, items SU05, SU06, HU03, CU05, RR01, and RR03 with the values of  $P_{ca}$  and  $C_{cv}$  below .70 were deleted. Finally, the values of the average of  $P_{ca}$  and  $C_{cv}$  for hedonic use (.88 and .77), cognitive use (.93 and .85), and relaxation (.85 and .70) exceeded .70 after item deletion.

Table 7. Results of the item-sorting procedure.

Construct	Item	Question	$P_{ca}$	$C_{cv}$
<b>JD</b>	<b>Average</b>		<b>.71 (.85)</b>	<b>.41 (.70)</b>
	JD01	During the past 30 days, I often had to hide my frustration or anger, when I was dealing with unreasonable customers.	.85	.70
	JD02	During the past 30 days, I often had to hide anger or disapproval about something someone had done.	.50	0
	JD03	During the past 30 days, I often had to express friendly emotions (e.g., smiling, giving compliments, making small talk).	.75	.50
	JD04	During the past 30 days, I often had to express feelings of sympathy (e.g., saying I “understand”, I am sorry to hear about something).	.60	.20
	JD05	During the past 30 days, I often had to react with understanding to customers with unreasonable behavior.	.95	.90
	JD06	During the past 30 days, I dealt with customers who incessantly complained, although I always did everything to help them.	.85	.70
	JD07	During the past 30 days, I often had to hide disgust over something someone had done.	.40	-.20
	JD08	During the past 30 days, I often had to deal with demanding customers.	.85	.70
	JD09	During the past 30 days, my job usually required me to remain calm even when I was astonished.	.65	.30
	JD10	During the past 30 days, my job usually required me to reassure customers who were distressed or upset.	.65	.30
<b>SU</b>	<b>Average</b>		<b>.90 (.93)</b>	<b>.72 (.86)</b>
	SU01	During the past 30 days, how often did you use social media at work to get acquainted with friends who shared your interests (e.g., talk with friends who are familiar with my current job, life and interests)?	.95	.90
	SU02	During the past 30 days, how often did you use social media at work to meet people with your interests (e.g., talk with friends who are familiar with my current job, life and interests)?	.95	.90
	SU03	During the past 30 days, how often did you use social media at work to create new relationships (e.g., add or follow a friend on social media)?	1	1
	SU04	During the past 30 days, how often did you use social media at work to get to know people you would otherwise not meet (e.g., view friends’ posts/updates)?	.95	.90

	SU05	During the past 30 days, how often did you use social media at work to seek relationships with others (e.g., make new friends via social media)?	.80	.60
	SU06	During the past 30 days, how often did you use social media at work to discover friends with interests that were similar to yours (e.g., identify individuals with shared interests)?	.80	.60
	SU07	During the past 30 days, how often did you use social media at work to chat with others (e.g., talk with friends about my job and life to get social support)?	.90	.80
	SU08	During the past 30 days, how often did you use social media at work to keep up with what's going on with friends (e.g., view friends' posts/updates)?	.85	.70
	SU09	During the past 30 days, how often did you use social media at work to maintain close social relationships with people (e.g., chat with friends to update our recent status of life and work)?	.90	.80
<b>HU</b>	<b>Average</b>		<b>.81 (.88)</b>	<b>.63 (.77)</b>
	HU01	During the past 30 days, how often did you use social media at work to enjoy your break (e.g., have a feeling of enjoyment)?	.95	.90
	HU02	During the past 30 days, how often did you use social media at work to relax at work (e.g., use social media for fun)?	.80	.60
	HU03	During the past 30 days, how often did you use social media at work to take a break from work (e.g., use social media to take time for leisure)?	.60	.20
	HU04	During the past 30 days, how often did you use social media at work to entertain yourself (e.g., watch videos, play games, or listen to music)?	.90	.80
<b>CU</b>	<b>Average</b>		<b>.84 (.93)</b>	<b>.68 (.85)</b>
	CU01	During the past 30 days, how often did you use social media at work to gain information (e.g., learn and know something through reading others' posts)?	.95	.90
	CU02	During the past 30 days, how often did you use social media at work to share information (e.g., share others' posts that you feel interested, funny or useful)?	.90	.80
	CU03	During the past 30 days, how often did you use social media at work to seek information (e.g., search for information that you are interested in)?	.95	.90
	CU04	During the past 30 days, how often did you use social media at work to participate in discussions and answer questions (e.g., comment on posts to exchange ideas and interact with others to receive feedback)?	.90	.80
	CU05	During the past 30 days, how often did you use social media at work to create content for personal purposes (e.g., share important life events or personal experiences, opinions or feelings with friends on social media)?	.50	0
<b>DD</b>	<b>Average</b>		<b>.86</b>	<b>.73</b>
	DD01	During the past 30 days, I didn't think about work temporarily after using social media at work.	.80	.60
	DD02	During the past 30 days, I distanced myself from my work temporarily after using social media at work.	.90	.80

	DD03	During the past 30 days, I forgot about work temporarily after using social media at work.	.95	.90
	DD04	During the past 30 days, I got a temporary break from the demands of work after using social media at work.	.80	.60
<b>RR</b>	<b>Average</b>		<b>.76 (.85)</b>	<b>.48 (.70)</b>
	RR01	During the past 30 days, I experienced recovery from job stress because I used social media at work to do relaxing things.	.65	.50
	RR02	During the past 30 days, I kicked back and relaxed temporarily after using social media at work.	.85	.70
	RR03	During the past 30 days, I experienced recovery from job stress because I took time to use social media at work for leisure.	.60	.20
	RR04	During the past 30 days, I experienced recovery from job stress because I used the time to relax and entertain myself after using social media at work.	.85	.70
<b>JS</b>	<b>Average</b>		<b>.97</b>	<b>.93</b>
	JS01	In general, I like working at my organization.	.90	.80
	JS02	In general, I do like my present job.	1	1
	JS03	All in all, I am satisfied with my current job.	1	1
<b>LS</b>	<b>Average</b>		<b>.92</b>	<b>.84</b>
	LS01	So far, I have gotten the important things I want in life.	.95	.90
	LS02	I am satisfied with my life.	.85	.70
	LS03	The conditions of my life are excellent.	1	1
	LS04	If I could live my life over, I would change almost nothing.	.85	.70
	LS05	In most ways my life is close to my ideal.	.95	.90

Notes: JD = job demands; SU = social use; HU = hedonic use; CU = cognitive use; DD = detachment; RR = relaxation; JS = job satisfaction; LS = life satisfaction; numbers in () are updated averages after item deletion.

### 3.5 Sample and Data Collection

The target population of this study is current hospitality employees in the United States. Participants were given an online survey to complete through a web-based survey service of Qualtrics. Respondents were recruited by using social media such as LinkedIn and Facebook. Keywords such as occupation (hotel, restaurant), location (the United States), and job title (front desk agent, front desk supervisor, front desk manager, concierge, guest service, server, waiter/waitress, restaurant supervisor/manager) were used to search, find the target population on LinkedIn and Facebook and establish a data list. Thereafter, the researcher sent a connection invitation with a message of survey invitation to the target sample on LinkedIn. With

regard to Facebook recruitment, the researcher directly sent a private message of survey invitation to the target sample. To maximize high-quality responses, rewards were awarded to respondents who fully completed the survey. Respondents were asked to enter their email address at the end of survey, and a five-dollar Amazon e-gift card per each respondent was given through email delivery.

This study obtained approval by the Institutional Review Board (IRB) of the University of Missouri-Columbia before questionnaire distribution to protect human subjects from any potential risk related to the study. To prevent duplicate responses, this questionnaire can only be taken by invitation. Moreover, checking respondents' IP addresses is another effective way to prevent them from taking the online survey multiple times. To further increase the likelihood of accurate responses, the author informed the employees that only the researchers would see the returned questionnaires.

Confidence interval approach was employed to determine the sample size (Burns & Bush, 1995; Cochran, 1977). The formula for obtaining 95% accuracy at the 95% confidence level is as follows:

$$n = \frac{z^2 (pq)}{e^2} = \frac{1.96^2 (.50 \times .50)}{.05} = 384$$

where n is the sample size; z is the selected critical value of desired level of confidence (95%); p is the estimated variability in the population (50%); q = 1-p; and e is the desired level of precision (95%). The formal questionnaire was distributed from October to November 2018. To reduce the sampling error, a total of 1000 formal questionnaires (500 for hotel employees; 500 for restaurant employees) were distributed with a 41.3% response rate resulting in 413 usable replies (291 from hotel employees; 122 from restaurant employees).

### **3.6 Data Analysis**

Descriptive analysis was conducted to understand profiles of respondents' social media usage behavior. Frequency analysis was used to understand demographic characteristics of the data, such as the gender, age, education, occupation in the hospitality industry, job position, employment status, monthly income, years of using social media, minutes spent on social media at work, types of social media used, organizational policy toward social media use at work, and purpose of using social media at work. After entering the score on a 5-point Likert scale, the averages and standard deviations of each item were used to gain an understanding of the participants' perceptions on different dimensions. Exploratory factor analysis (EFA) was used to extract and categorize constructs and items of social media and non-social media break activities. Confirmatory factor analysis (CFA) was used to examine the reliability and validity using composite reliability, convergent validity, and discriminant validity, and to assess overall measurement reliability and validity. Independent t-test and one-way analysis of variance (ANOVA) were performed to investigate if there were any statistically significant differences between employees' demographic information/social media use behavior and their perceptions of each variable. SPSS 25.0 was used to perform the data analysis.

This study aims to explore the relationships among job demands, social media break activities, non-social media break activities, recovery experiences, job satisfaction, and life satisfaction. Thus, structural equation modeling (SEM) was performed to test and verify the proposed hypotheses. SEM is a tool that helps to estimate, analyze, and test the interactions among variables. It is used to confirm the overall model fit, and to explore the causal relationship and effect path among variables in the proposed model. Moreover, SEM was used in cross-group



comparisons. Multigroup analysis examined whether the hypothesized model was comparable across different demographic characteristics such as gender and job position.

In addition to testing direct paths between variables, this study further employed multiple regression analysis to conduct a mediational analysis. Specifically, this study performed mediational analyses to investigate (1) the mediating effect of non-social media break activities on the relationship between job demands and recovery experiences, (2) the mediating effect of social media break activities on the relationship between job demands and recovery experiences, (3) the mediating effect of recovery experiences on the relationship between non-social media break activities or social media break activities and job satisfaction as well as life satisfaction, and (4) the mediating effect of job satisfaction on the relationship between recovery experiences and life satisfaction.

## 4 RESULTS

### 4.1 Descriptive Analysis

A total of 413 usable responses were included in the sample for analysis. Of the 413 questionnaires, 53.5% were from male respondents and 46.5% were from females. Most of the respondents were between 26 and 30 years of age (31.0%) and 39.0% of them had bachelor's degrees. Of the respondents, 70.5% were working in the hotel industry and 29.5% of them were working in the restaurant industry. More than 86.4% of the respondents were full-time workers and working in the hospitality industry less than five years (35.6%). 52.3% of the respondents were managerial employees, while 47.7% were non-managerial employees. Most employees interacted with customers over 26 times per day (35.1%) and ranked their own job performance in the top 1-10% (29.5%).

The majority of the respondents had been using social media for more than six years (90.8%) and were spending 31-60 minutes on social media at work for personal purposes per day (n = 161, 39.0%), whereas 24.5% (n = 101) of the respondents had less than 30 minutes of social media use for personal purposes at work per day, and 19.9% (n = 82) of them had 61-90 minutes of social media use for personal purposes at work per day. The top three types of social media use for personal purposes while at work were Facebook (90.3%), YouTube (72.4%), and Instagram (63.9%). 3.9% of the respondents used other types of social media at work for personal purposes such as Pinterest, Reddit, Tumblr, WeChat, Skype, Discord, Viber, and Goodreads. The majority of the respondents used social media at work during lunch breaks (74.8%), coffee breaks (67.4%), and free time (65.9%). The major personal purpose for using social media at work was for socialization (71.4%). 49.9% of the respondents' companies had an organizational policy and allowed employees to use social media at

work. Moreover, 57.9% of the respondents reported that their companies allowed employees to use social media at work for personal purposes.

Most of the respondents spent less than 30 minutes on social media at work for professional purposes per day (44.8%). The top three types of social media use for professional purposes while at work were Facebook (62.7%), LinkedIn (41.2%), and YouTube (39.5%). 4.8% of the respondents used other types of social media at work for professional purposes such as Google+ and WhatsApp. More than 38.5% of the respondents indicated that the use of social media at work is a little bit related to work. A detailed profile of the respondents is shown in Table 8.

Table 8. Profile of respondents (n = 413).

Characteristics		n	%	Managerial (n = 216, 52.3%)		Non-managerial (n = 197, 47.7%)	
				n	%	n	%
Gender	Male	221	53.5	124	57.4	97	49.2
	Female	192	46.5	92	42.6	100	50.8
Age	14-20	3	0.7	1	0.5	2	1.0
	21-25	83	20.1	27	12.5	56	28.4
	26-30	128	31.0	69	31.9	59	29.9
	31-35	90	21.8	56	25.9	34	17.3
	36-40	33	8.0	15	7.0	18	9.1
	41-45	29	7.0	21	9.7	8	4.1
	46-50	21	5.1	14	6.5	7	3.6
	51-55	17	4.1	11	5.1	6	3.0
	56-60	6	1.5	2	0.9	4	2.0
	≥ 61	3	0.7	0	0.0	3	1.5
Education level	High school	33	8.0	13	6.0	20	10.2
	Some college experience	53	12.8	14	6.5	39	19.8
	Associate's degree – Currently pursuing	15	3.6	6	2.8	9	4.6
	Associate's degree	38	9.2	8	3.7	30	15.2
	Bachelor's degree – Currently pursuing	27	6.5	14	6.5	13	6.6
	Bachelor's degree	161	39.0	93	43.0	68	34.6
	Master's degree or above – Currently pursuing	44	10.7	35	16.2	9	4.6

	Master's degree or above	42	10.2	33	15.3	9	4.6
Years of using social media	0-5	38	9.2	21	9.7	17	8.6
	6-10	198	47.9	95	44.0	103	52.3
	11-15	131	31.7	62	28.7	69	35.0
	16-20	37	9.0	29	13.4	8	4.1
	> 21	9	2.2	9	4.2	0	0.0
Minutes spent on social media at work for personal purposes a day	0	10	2.4	5	2.3	5	2.5
	1-30	101	24.5	53	24.6	48	24.4
	31-60	161	39.0	83	38.4	78	39.6
	61-90	82	19.9	40	18.5	42	21.3
	91-120	35	8.5	25	11.6	10	5.1
	> 121	24	5.8	10	4.6	14	7.1
Minutes spent on social media at work for professional purposes a day	0	43	10.4	9	4.2	34	17.3
	1-30	185	44.8	91	42.1	94	47.7
	31-60	99	24.0	61	28.2	38	19.3
	61-90	57	13.8	37	17.2	20	10.2
	91-120	18	4.4	13	6.0	5	2.5
	> 121	11	2.7	5	2.3	6	3.0
Types of social media used for personal purposes (multiple answers)	Facebook	373	90.3	196	90.7	177	89.8
	YouTube	299	72.4	154	71.3	145	73.6
	LinkedIn	73	17.7	33	15.3	40	20.3
	Instagram	264	63.9	146	67.6	118	59.9
	Twitter	187	45.3	106	49.1	81	41.1
	Snapchat	117	28.3	58	26.9	59	29.9
	Others	16	3.9	5	2.3	11	5.6
Types of social media used for professional purposes (multiple answers)	Facebook	259	62.7	137	63.4	122	61.9
	YouTube	163	39.5	105	48.6	58	29.4
	LinkedIn	170	41.2	86	39.8	84	42.6
	Instagram	127	30.8	86	39.8	41	20.8
	Twitter	119	28.8	77	35.6	42	21.3
	Snapchat	31	7.5	23	10.6	8	4.1
	Others	20	4.8	4	1.9	16	8.1
Time for using social media at work (multiple answers)	During work	206	49.9	101	46.8	105	53.3
	During coffee breaks	279	67.6	151	69.9	128	65.0
	During lunch breaks	309	74.8	155	71.8	154	78.2
	During free time	272	65.9	131	60.6	141	71.5
	Between shifts	123	29.8	52	24.1	71	36.0
	Others (never)	2	0.5	0	0.0	2	1.0
Organizational policy towards social media use at work	Allowed	206	49.9	124	57.4	82	41.6
	Not allowed	81	19.6	31	14.4	50	25.4
	No policy	92	22.3	47	21.7	45	22.8
	Do not know	34	8.2	14	6.5	20	10.2
Approval of using social media at work	Allowed	239	57.9	147	68.1	92	46.7
	Not allowed	113	27.3	49	22.6	64	32.5
	Do not know	61	14.8	20	9.3	41	20.8

for personal purposes							
The degree of social media usage related to work	Not related	69	16.7	24	11.1	45	22.9
	A little bit related	159	38.5	76	35.2	83	42.1
	Moderately related	123	29.8	75	34.7	48	24.4
	Pretty much related	45	10.9	29	13.4	16	8.1
	Highly related	17	4.1	12	15.6	5	2.5
Purpose of social media use at work (multiple answers)	Professional use	281	68.0	160	74.1	121	61.4
	Socialization	295	71.4	146	67.6	149	75.6
	Entertainment	221	53.5	99	45.8	122	61.9
	Others (never)	2	0.5	0	0.0	2	1.0
Types of hospitality industry	Hotel/motel/Inn	291	70.5	158	73.1	133	67.5
	Restaurant/Bar	122	29.5	58	26.9	64	32.5
Employment status	Full-time	357	86.4	207	95.8	150	76.1
	Part-time	56	13.6	9	4.2	47	23.9
Years of working in the hospitality industry	0-5	147	35.6	54	25.0	93	47.2
	6-10	142	34.4	73	33.8	69	35.0
	11-15	69	16.7	53	24.5	16	8.0
	16-20	33	8.0	20	9.3	13	6.6
	21-25	10	2.4	7	3.2	3	1.5
	26-30	7	1.7	5	2.3	2	1.0
	> 31	5	1.2	4	1.9	1	0.5
Times of interacting with customers per day	1-5	21	5.1	9	4.2	12	6.1
	6-10	79	19.1	54	25.0	25	12.7
	11-15	76	18.4	42	19.4	34	17.3
	16-20	57	13.8	32	14.8	25	12.7
	21-25	35	8.5	17	7.9	18	9.1
	> 26	145	35.1	62	28.7	83	42.1
Ranking about your performance at work	Top 1-10%	122	29.5	60	27.8	62	31.5
	Top 11-20%	114	27.6	58	26.8	56	28.4
	Top 21-30%	82	19.9	38	17.6	44	22.3
	Top 31-40%	37	9.0	19	8.8	18	9.2
	Top 41-50%	55	13.3	39	18.1	16	8.1
	Lower than 49%	3	0.7	2	0.9	1	0.5

Table 9 shows the respondents' preference and daily time consumption of at-work break activities including social media break activities (i.e., social use, hedonic use, and cognitive use) and non-social media break activities (i.e., relaxation activity, nutrition-intake activity, social activity, and cognitive activity). This study asked the respondents to rank the above activities from 1 = the best or the most to 7 = the worst

or the least. Of the 413 responses, the order of preference and daily time consumption on at-work break activities is: 1) social use > 2) hedonic use > 3) cognitive use > 4) relaxation activity > 5) nutrition-intake activity > 6) social activity > 7) cognitive activity.

Table 9. Preference and time spent on at-work break activities per workday (n = 413).

Rank	1		2		3		4		5		6		7	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Preference of at-work break activities														
SU	127	30.8	62	15.0	31	7.5	41	9.9	38	9.2	51	12.3	63	15.3
HU	49	11.9	87	21.1	62	15.0	43	10.4	50	12.1	60	14.5	62	15.0
CU	25	6.1	44	10.7	91	22.0	65	15.7	87	21.1	59	14.3	42	10.2
RA	44	10.7	48	11.6	58	14.0	116	28.1	68	16.5	53	12.8	26	6.3
NA	39	9.4	55	13.3	76	18.4	63	15.3	87	21.1	49	11.9	44	10.7
SA	53	12.8	82	19.9	57	13.8	53	12.8	43	10.4	90	21.8	35	8.5
CA	76	18.4	35	8.5	38	9.2	32	7.7	40	9.7	51	12.3	141	34.1
Time spent on at-work break activities per workday														
SU	126	30.5	69	16.7	35	8.5	32	7.7	38	9.2	36	8.7	77	18.6
HU	56	13.6	97	23.5	51	12.3	50	12.1	40	9.7	70	16.9	49	11.9
CU	43	10.4	48	11.6	94	22.8	55	13.3	74	17.9	55	13.3	44	10.7
RA	36	8.7	52	12.6	67	16.2	119	28.8	59	14.3	48	11.6	32	7.7
NA	35	8.5	51	12.3	80	19.4	61	14.8	97	23.5	56	13.6	33	8.0
SA	53	12.8	60	14.5	50	12.1	49	11.9	64	15.5	100	24.2	37	9.0
CA	64	15.5	36	8.7	36	8.7	47	11.4	41	9.9	48	11.6	141	34.1

Notes: SU = social use; HU = hedonic use; CU = cognitive use; RA = relaxation activity; NA = nutrition-intake activity; SA = social activity; CA = cognitive activity.

#### 4.2 Exploratory Factor Analysis

An exploratory factor analysis (EFA) was carried out on the 24 items of social media break activities and eight non-social media break activities after checking content validity through item-sorting procedure. The eight items (i.e., SU03, SU04, SU08, SU09, CU02, CU04, NS03, and NS07) with a factor loading value below .50 or cross-loaded on two factors with factor loadings greater than .40 were excluded, and four factors with eigenvalues greater than one were extracted. Two factors were extracted (KMO = .95,  $p < .001$ ) for social media break activities, explaining 65.13% of the variance. The two dimensions were: 1) hedonic and cognitive use and 2) social

use. In addition, two factors were extracted ( $KMO = .82, p < .001$ ) for non-social media break activities, explaining 53.37% of the variance. The two dimensions were: 1) nutrition-intake and social activity and 2) relaxation and cognitive activity. The detailed factors identified from the EFA results are shown in Table 10 and Table 11.

Table 10. Factor analysis results of social media break activities.

Dimension	Item	Factor Loading	
		1	2
<b>Hedonic and Cognitive Use</b>			
HU04	During the past 30 days, how often did you use social media at work to entertain yourself (e.g., watch videos, play games, or listen to music)?	<b>.80</b>	.23
HU01	During the past 30 days, how often did you use social media at work to enjoy your break (e.g., have a feeling of enjoyment)?	<b>.79</b>	.13
HU02	During the past 30 days, how often did you use social media at work to relax at work (e.g., use social media for fun)?	<b>.78</b>	.24
CU03	During the past 30 days, how often did you use social media at work to create content for personal purposes (e.g., share important life events or personal experiences, opinions or feelings with friends on social media)?	<b>.78</b>	.26
CU01	During the past 30 days, how often did you use social media at work to gain information (e.g., learn and know something through reading others' posts)?	<b>.67</b>	.35
SU09	During the past 30 days, how often did you use social media at work to keep up with what's going on with friends (e.g., view friends' posts/updates)?	.65	.42
SU03	During the past 30 days, how often did you use social media at work to create new relationships (e.g., add or follow a friend on social media)?	.63	.49
SU08	During the past 30 days, how often did you use social media at work to chat with others (e.g., talk with friends about my job and life to get social support)?	.60	.51
CU02	During the past 30 days, how often did you use social media at work to share information (e.g., share others' posts that you feel interested, funny or useful)?	.59	.54
<b>Social Use</b>			
SU01	During the past 30 days, how often did you use social media at work to create new relationships (e.g., add or follow a friend on social media)?	.16	<b>.82</b>
SU05	During the past 30 days, how often did you use social media at work to meet people with your interests (e.g., talk with friends who are familiar with my current job, life and interests)?	.26	<b>.79</b>
SU02	During the past 30 days, how often did you use social media at work to get to know people you would otherwise not meet (e.g., view friends' posts/updates)?	.21	<b>.79</b>
SU04	During the past 30 days, how often did you use social media at work to get acquainted with friends who shared your interests (e.g., talk with friends who are familiar with my current job, life and interests)?	.46	.65

CU04	During the past 30 days, how often did you use social media at work to seek information (e.g., search for information that you are interested in)?	.48	.63
	Eigenvalues	7.87	1.25
	% of Variance	56.22	8.91
	Cumulative %	56.22	65.13
	Cronbach's $\alpha$	.87	.82
	Kaiser-Meyer-Olkin (KMO)		.95

Notes: HU = hedonic use; CU = cognitive use; SU = social use.

Table 11. Factor analysis results of non-social media break activities.

Dimension	Item	Factor Loading	
		1	2
Nutrition-Intake and Social Activity			
NS05	During the past 30 days, how often did you chat with coworkers at work on non-work related topics?	<b>.82</b>	.01
NS06	During the past 30 days, how often did you text, use instant messenger, or call to friends or family members at work?	<b>.76</b>	.19
NS04	During the past 30 days, how often did you snack (e.g., cookies) or drink non-caffeinated beverages (e.g., juice, water, vitamin water, soda) at work?	<b>.55</b>	.31
NS07	During the past 30 days, how often did you surf the Web for entertainment (e.g., playing a game, shopping online, getting sports' scores and info, getting travel info, making a reservation for travel)?	.55	.52
NS03	During the past 30 days, how often did you drink caffeinated beverages (e.g., energy drinks, coffee, black or green tea) at work?	.49	.24
Relaxation and Cognitive Activity			
RC02	During the past 30 days, how often did you listen to music, daydream, gaze out the office windows, take a quick nap, or any other psychological relaxation?	.11	<b>.83</b>
RC08	During the past 30 days, how often did you read books, newspapers, or magazines at work for personal learning or entertainment?	.15	<b>.81</b>
RC01	During the past 30 days, how often did you stretch, walk around the office, or relax briefly (e.g., deep breathing, muscle tension release) at work?	.34	<b>.56</b>
	Eigenvalues	3.21	1.06
	% of Variance	40.15	13.22
	Cumulative %	40.15	53.37
	Cronbach's $\alpha$	.75	.73
	Kaiser-Meyer-Olkin (KMO)		.82

Notes: NS = nutrition-intake and social activity; RC = relaxation and cognitive activity.

### 4.3 Confirmatory Factor Analysis

This study conducted a CFA after determining the two factors of social media break activities and two factors of non-social media break activities. The CFA showed



an acceptable model fit according to the goodness of fit indexes such as comparative fit index (CFI) = .94, incremental fit index (IFI) = .94, Tucker-Lewis index (TLI) = .93, chi-square/degrees freedom (CMIN/DF) = 1.78, and root mean square error of approximation (RMSEA) = .04). Furthermore, as stated by Fornell and Larcker (1981), three measures—factor loadings of the measures, composite reliability for all constructs, and the average variance extracted (AVE) for each construct—should be performed to verify the reliability and validity of the instrument. The factor loadings for all items measuring were greater than the suggested value of .50 (Hair, Anderson, Tatham, & Black, 1998). The composite reliability for all constructs was greater than the .70 recommended by Hair et al. (1998), and the values of the average variance extracted (AVE) of each construct were greater than .50, which indicated that the convergent validity was supported (Fornell & Larcker 1981) (see Table 12). Table 12 also shows that the square root of AVE for each construct exceeded the correlations between it and other constructs, which revealed adequate discriminant validity (Fornell & Larcker, 1981).

To determine validity and accuracy, reliability analysis was conducted to test the distinctness of items and the consistency and robustness of each dimension. Cronbach's  $\alpha$  was used for final assessment. When the value of Cronbach's  $\alpha$  is less than .35, it indicates poor question consistency, which means that an item is not appropriate for the questionnaire. When the value of Cronbach's  $\alpha$  is greater than .70, it indicates high credibility (Nunnally, 1978). The results of scale reliability are as follows: job demands (Cronbach's  $\alpha$  = .76), social use (Cronbach's  $\alpha$  = .82), hedonic and cognitive use (Cronbach's  $\alpha$  = .87), relaxation and cognitive activity (Cronbach's  $\alpha$  = .73), nutrition-intake and social activity (Cronbach's  $\alpha$  = .75), recovery experiences (Cronbach's  $\alpha$  = .85), job satisfaction (Cronbach's  $\alpha$  = .83), and life

satisfaction (Cronbach's  $\alpha = .86$ ). Hence, the reliability of the survey instrument was deemed adequate. This study also tested the data for the normality and multicollinearity using the skewness and kurtosis values. All items were within the acceptable range (i.e.,  $< \pm 1.96$ ), which means the data are normally distributed (Hair, Black, Babin, & Anderson, 2010). In addition, as the correlation matrix shows, none of items had a multicollinearity problem. This study also tested the linearity between independent and dependent variables, and the results of the linearity test indicated each significant coefficient of deviation from linearity was larger than .05, supporting linear relationships between independent and dependent variables.

Table 12. Reliability and validity of the measures.

	Mean	SD	CR	AVE	JD	SU	HCU	RC	NS	RE	JS	LS
JD	3.79	.83	.84	.51	<b>.71</b>							
SU	2.77	1.03	.82	.61	.11	<b>.78</b>						
HCU	3.10	.97	.87	.57	.24	.69	<b>.76</b>					
RC	2.93	.90	.82	.61	.11	.67	.63	<b>.78</b>				
NS	3.33	.84	.83	.63	.43	.45	.75	.58	<b>.79</b>			
RE	3.46	.82	.85	.53	.46	.18	.30	.29	.25	<b>.73</b>		
JS	3.87	.84	.83	.62	.37	.07	.11	.12	.16	.36	<b>.79</b>	
LS	3.59	.85	.86	.56	.18	.22	.10	.21	.12	.35	.66	<b>.75</b>

Notes: SD = standard deviation; JD = job demands; SU = social use; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition-intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction; CR = composite reliability; AVE = average variance extracted. The square root of AVE is displayed in the diagonal in bold.

#### 4.4 T-Test

An independent sample t-test was carried out on the mean scores of each variable to determine whether significant differences existed between the mean scores assigned to the variables. Specifically, this statistical test helps the study to identify how male and female employees, different occupations in the hospitality industry, different job positions, and different social media use behaviors perceive about each

variable. The male and female, hotel and restaurant, or managerial and non-managerial employees may have different perceptions of job demands, different preferences and levels of engaging in social media break activities and non-social media break activities, which result in different perceptions of recovery experiences, job satisfaction, and life satisfaction. For example, men and women behave differently in the workplace because they have different social and family roles (Kara, Uysal, & Magnini, 2012). The gender differences lead to different levels of work and family stress. Different job responsibilities between managerial and non-managerial employees may also cause different levels of job demands and needs for recovery at work. Furthermore, different types of and times to use social media may meet employees' different needs to deal with job demands and generate distinct influences on their recovery experiences.

Table 13 shows job demands ( $t = -5.01, p = .00$ ), relaxation and cognitive activity ( $t = 2.63, p = .01$ ), nutrition-intake and social activity ( $t = -2.66, p = .01$ ), and job satisfaction ( $t = -2.22, p = .03$ ) were statistically significant between male employees and female employees. The results also reveal that social use ( $t = 3.36, p = .00$ ), hedonic and cognitive use ( $t = 2.14, p = .03$ ) were statistically significant between hotel and restaurant employees. There is another statistically significant difference in the mean scores of non-managerial employees and managerial employees such as social use ( $t = -2.53, p = .01$ ), job satisfaction ( $t = -2.03, p = .04$ ), and life satisfaction ( $t = -3.85, p = .00$ ).

Moreover, there were significant differences existed between the mean scores assigned to the variables such as purposes of using social media at work (socialization and entertainment) and time for using social media at work (during work, coffee breaks, lunch breaks, free time, and between shifts) (see Table 13). Specifically,

employees who used social media at work for socialization and entertainment had high job demands ( $t = 2.26, p = .02$ ;  $t = 3.48, p = .00$ ), high hedonic and cognitive use ( $t = 3.72, p = .00$ ;  $t = 3.79, p = .00$ ), and high engagement of nutrition-intake and social activity ( $t = 4.14, p = .02$ ;  $t = 3.38, p = .00$ ). However, only employees who used social media at work for entertainment experienced high recovery experiences ( $t = 2.46, p = .01$ ) and better job satisfaction ( $t = 2.46, p = .01$ ). In addition, employees who used social media at work during lunch breaks, coffee breaks, free time, and between shifts usually had high job demands, social media break activities (social and/or hedonic and cognitive use), non-social media break activities (relaxation and cognitive activity and/or nutrition-intake and social activity), and recovery experiences.

There were also significant differences between whether the respondents used each type of social media during work breaks. The respondents who used YouTube, Instagram, Twitter, or Snapchat at work had higher social use, hedonic and cognitive use, relaxation and cognitive activity, nutrition-intake and social activity, recovery experience, and/or job satisfaction than the respondents who did not use at work. In addition, the respondents who used YouTube ( $t = 2.35, p = .02$ ) and Twitter ( $t = 2.77, p = .01$ ) experienced a higher recovery than the respondents who did not use at work. Since there are some differences regarding the mean scores of some variables especially social media and non-social media break activities between different demographic characteristics, it enables this study to conduct further analysis such as multigroup analysis.

Table 13. Results of t-tests.

Variable	Group 1	Group 2	<i>t</i> -value	<i>p</i> -value
Gender	Male (221)	Female (192)		

JD	3.61	4.01	-5.01	.00
SU	2.86	2.66	1.93	.06
HCU	3.10	3.10	.01	.99
RC	3.04	2.81	2.63	.01
NS	3.23	3.45	-2.66	.01
RE	3.46	3.50	-.39	.70
JS	3.79	3.97	-2.22	.03
LS	3.60	3.57	.36	.72
Occupation	Hotel (291)	Restaurant (122)		
JD	3.82	3.73	1.06	.29
SU	2.88	2.51	3.36	.00
HCU	3.16	2.94	2.14	.03
RC	2.98	2.81	1.73	.08
NS	3.35	3.30	.61	.54
RE	3.50	3.42	.97	.33
JS	3.89	3.83	.74	.46
LS	3.60	3.56	.37	.71
Position	Non-Managerial (197)	Managerial (216)		
JD	3.83	3.76	.91	.37
SU	2.64	2.89	-2.53	.01
HCU	3.13	3.07	.63	.53
RC	2.88	2.98	-1.17	.24
NS	3.38	3.29	1.11	.27
RE	3.44	3.51	-.83	.41
JS	3.78	3.95	-2.03	.04
LS	3.42	3.74	-3.85	.00
Socialization	Use (295)	Non-Use (118)		
JD	3.85	3.65	2.26	.02
SU	2.84	2.60	2.12	.03
HCU	3.21	2.82	3.72	.00
RC	3.01	2.74	2.81	.01
NS	3.44	3.07	4.14	.00
RE	3.48	3.46	.23	.82
JS	3.90	3.81	.99	.32
LS	3.62	3.50	1.30	.19
Entertainment	Use (221)	Non-Use (192)		
JD	3.93	3.64	3.48	.00
SU	2.71	2.84	-1.23	.22

HCU	3.26	2.94	3.79	.00
RC	2.95	2.92	.33	.74
NS	3.46	3.19	3.38	.00
RE	3.57	3.37	2.46	.01
JS	3.97	3.76	2.46	.01
LS	3.65	3.52	1.49	.14
<hr/>				
During Work (PU)	Use (206)	Non-Use (207)		
JD	3.83	3.76	.79	.43
SU	2.87	2.67	2.01	.04
HCU	3.32	2.87	4.85	.00
RC	3.05	2.81	2.72	.01
NS	3.53	3.14	4.82	.00
RE	3.49	3.47	.21	.84
JS	3.81	3.93	-1.46	.15
LS	3.55	3.63	-.96	.34
<hr/>				
Lunch Breaks (PU)	Use (309)	Non-Use (104)		
JD	3.84	3.67	1.65	.10
SU	2.76	2.82	-.52	.60
HCU	3.13	3.01	1.13	.26
RC	2.93	2.95	-.26	.80
NS	3.37	3.22	1.54	.13
RE	3.54	3.29	2.73	.01
JS	3.91	3.77	1.50	.14
LS	3.64	3.45	1.97	.05
<hr/>				
Coffee Breaks (PU)	Use (279)	Non-Use (134)		
JD	3.85	3.69	1.67	.10
SU	2.87	2.57	2.81	.01
HCU	3.15	2.99	1.58	.11
RC	3.02	2.74	3.02	.00
NS	3.34	3.31	.35	.73
RE	3.55	3.34	2.42	.02
JS	3.91	3.79	1.25	.21
LS	3.65	3.46	2.13	.03
<hr/>				
Free Time (PU)	Use (272)	Non-Use (141)		
JD	3.95	3.50	5.13	.00
SU	2.78	2.76	.21	.83
HCU	3.26	2.79	4.70	.00
RC	2.98	2.84	1.52	.13

NS	3.48	3.06	4.95	.00
RE	3.53	3.37	1.76	.08
JS	3.95	3.72	2.74	.01
LS	3.59	3.59	-.09	.93
Between Shifts (PU)	Use (123)	Non-Use (290)		
JD	3.95	3.73	2.56	.01
SU	2.81	2.75	.53	.60
HCU	3.37	2.98	3.76	.00
RC	3.01	2.90	1.16	.25
NS	3.57	3.23	3.80	.00
RE	3.56	3.44	1.42	.16
JS	3.88	3.87	.05	.96
LS	3.49	3.63	-1.48	.14
YouTube (PU)	Use (299)	Non-Use (114)		
JD	3.82	3.74	.82	.41
SU	2.82	2.65	1.53	.13
HCU	3.17	2.91	2.47	.01
RC	3.02	2.71	3.17	.00
NS	3.36	3.26	1.06	.29
RE	3.54	3.32	2.35	.02
JS	3.92	3.75	1.86	.06
LS	3.62	3.50	1.29	.20
Instagram (PU)	Use (264)	Non-Use (149)		
JD	3.82	3.75	.79	.43
SU	2.87	2.59	2.70	.01
HCU	3.24	2.85	3.92	.00
RC	2.98	2.84	1.55	.22
NS	3.41	3.20	2.50	.01
RE	3.53	3.39	1.73	.08
JS	3.89	3.84	.65	.52
LS	3.62	3.53	1.08	.28
Twitter (PU)	Use (187)	Non-Use (226)		
JD	3.80	3.79	.19	.85
SU	2.91	2.65	2.54	.01
HCU	3.23	2.99	2.57	.01
RC	2.98	2.89	.96	.34
NS	3.39	3.29	1.24	.22
RE	3.60	3.38	2.77	.01

JS	3.97	3.79	2.25	.03
LS	3.62	3.57	.59	.56
Snapchat (PU)	Use (117)	Non-Use (296)		
JD	3.95	3.73	2.38	.02
SU	3.02	2.67	3.07	.00
HCU	3.39	2.98	3.98	.00
RC	3.05	2.89	1.62	.11
NS	3.58	3.24	3.72	.00
RE	3.54	3.45	1.00	.32
JS	3.93	3.85	.90	.37
LS	3.58	3.59	-.08	.94

Notes: JD = job demands; SU = social use; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition-intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction; PU = personal use.

#### 4.5 Analysis of Variance

Compared to employees in other industries, hospitality employees typically face greater psychological pressures (Kusluvan, Kusluvan, Ilhan, & Buyruk, 2010) owing to extensive emotional labor (Pizam, 2004; Chu et al., 2012). Therefore, frequencies of customer interactions per workday may affect an employee's perception of each variable. Time spent on social media for personal purposes per day could play another key factor in affecting and changing employees' perceptions of psychological and behavioral outcomes. Finally, an employee self-evaluation (performance) could reflect employees' different perceptions of and attitudes toward the current job.

Table 14 presents the results of the ANOVA with a post hoc Scheffe test indicating the differences in the seven variables among different demographic characteristics. The results indicated that respondents who spent 91-120 minutes on social media per day at work had the highest social use ( $M = 3.15$ ), followed by > 121 minutes ( $M = 3.04$ ), and 31-60 minutes ( $M = 2.88$ ). The respondents who did not use social media at work for personal purposes were significantly less related to social use



and hedonic and cognitive use. Overall, the respondents who engaged more in social media and non-social media break activities had higher job demands, recovery experiences, job satisfaction, and life satisfaction than who engaged less at work.

In addition, the respondents who interacted with customers more than 25 times per day had the highest job demands ( $M = 4.13$ ) and the highest involvement of nutrition-intake and social break activity ( $M = 3.57$ ). Finally, the respondents who evaluated their own performance in top 1-10% had the highest job demands ( $M = 4.07$ ), hedonic and cognitive use ( $M = 3.18$ ), nutrition-intake and social break activity ( $M = 3.49$ ), and job satisfaction ( $M = 4.11$ ). That is, at-work break activities helped employees with good performance self-ranking to deal with high job demands, and eventually had positive attitudes toward their job. The group 6 of performance ranking < 49% was excluded from the results because there were only three respondents in this group, and thus it may not represent the true mean scores for each variable.

Table 14. Results of ANOVA.

Variable	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	F-value	p-value	Post Hoc Test
<b>Minutes</b>	<b>0</b>	<b>1-30</b>	<b>31-60</b>	<b>61-90</b>	<b>91-120</b>	<b>&gt; 121</b>			
JD	3.38	3.80	3.79	3.77	3.87	3.98	.82	.53	
SU	1.43	2.56	2.88	2.73	3.15	3.04	6.21	.00	6>1; 5>1; 4>1; 3>1; 2>1
HCU	1.70	2.70	3.17	3.30	3.57	3.54	12.70	.00	6>1; 5>1; 4>1; 3>1; 2>1
RC	2.07	2.87	2.98	2.97	3.19	2.72	3.00	.01	5>1
NS	2.73	3.10	3.39	3.40	3.64	3.53	4.22	.00	5>1; 5>2
RE	2.72	3.35	3.55	3.53	3.66	3.43	2.82	.02	3>1; 5>1
JS	3.50	3.75	3.93	3.92	4.03	3.76	1.40	.22	
LS	2.82	3.51	3.72	3.53	3.78	3.29	3.61	.00	3>1; 5>1
<b>Interaction</b>	<b>1-5</b>	<b>6-10</b>	<b>11-15</b>	<b>16-20</b>	<b>21-25</b>	<b>&gt;25</b>			
JD	3.47	3.54	3.53	3.74	3.85	4.13	9.26	.00	6>1; 6>2; 6>3
SU	2.76	2.87	2.89	2.74	2.97	2.61	1.27	.28	
HCU	2.78	3.10	3.05	3.09	3.20	3.14	.63	.68	
RC	2.94	2.98	2.88	2.97	3.28	2.83	1.51	.19	
NS	3.29	3.05	3.08	3.39	3.50	3.57	6.02	.00	6>2; 6>3
RE	3.23	3.47	3.44	3.57	3.63	3.47	.81	.54	
JS	3.86	3.83	3.71	3.94	3.84	3.97	1.09	.37	
LS	3.55	3.74	3.59	3.56	3.61	3.51	.80	.55	
<b>Rank</b>	<b>Top 1-10%</b>	<b>Top 11-20%</b>	<b>Top 21-30%</b>	<b>Top 31-40%</b>	<b>Top 41-50%</b>				
JD	4.07	3.79	3.61	3.64	3.56		4.89	.00	1>3; 1>5
SU	2.69	2.62	2.89	2.86	2.97		2.18	.06	

HCU	3.18	3.10	3.02	3.10	2.95	1.75	.12	
RC	2.92	2.80	3.07	2.96	2.95	1.55	.17	
NS	3.49	3.31	3.18	3.28	3.28	1.53	.18	
RE	3.53	3.43	3.46	3.60	3.39	.76	.58	
JS	4.11	3.73	3.72	3.77	3.89	3.81	.00	1>2; 1>3
LS	3.61	3.49	3.56	3.75	3.64	1.18	.32	

Notes: JD = job demands; SU = social use; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition-intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction.

#### 4.6 Structural Equation Model and Hypotheses Testing

SEM was employed to test the proposed model. Table 15 and Figure 2 show the results of the fit test. The absolute fit measures (GFI = .82, AGFI = .83, CFI = .85, IFI = .85, TLI = .83, RMSEA = .06, and CMIN/DF = 2.64) meet or exceed suggested levels, indicating a good fit with the data. Table 16 presents the descriptive statistics, the standardized path coefficients, and associated t-values for all relationships in the structural model.

The hypotheses were also supported by strong path coefficients. Of the hypothesis of job demands on social media or non-social media break activities, job demands had positive impacts on social use ( $\beta = .33, p < .001$ ), hedonic and cognitive use ( $\beta = .43, p < .001$ ), nutrition-intake and social activity ( $\beta = .56, p < .001$ ), and relaxation and cognitive activity use ( $\beta = .36, p < .001$ ). In addition, the results of SEM analysis indicate that hedonic and cognitive use ( $\beta = .16, p < .05$ ), nutrition-intake and social activity ( $\beta = .14, p < .05$ ), relaxation and cognitive activity use ( $\beta = .25, p < .001$ ) had positive impacts on recovery experiences. Nevertheless, the effect of social use on recovery experience was not significant ( $\beta = .04, p > .05$ ). Further, recovery experiences had positive impacts on job satisfaction ( $\beta = .36, p < .001$ ) and life satisfaction ( $\beta = .14, p < .05$ ). The direct relationship between job satisfaction and life satisfaction was also significant ( $\beta = .63, p < .001$ ). Therefore, the results of SEM analysis demonstrated strong support for the hypothesized relationships.

Table 15. Fit indices for the structural model.

Model fit	Accepted level	Result
GFI	> .80 (Baumgartner & Homburg, 1996)	.82
AGFI	> .80 (Doll, Xia, & Torkzadeh, 1994)	.83
CFI	> .80 (Bentler, 1990)	.85
IFI	> .80 (Bollen, 1989)	.85

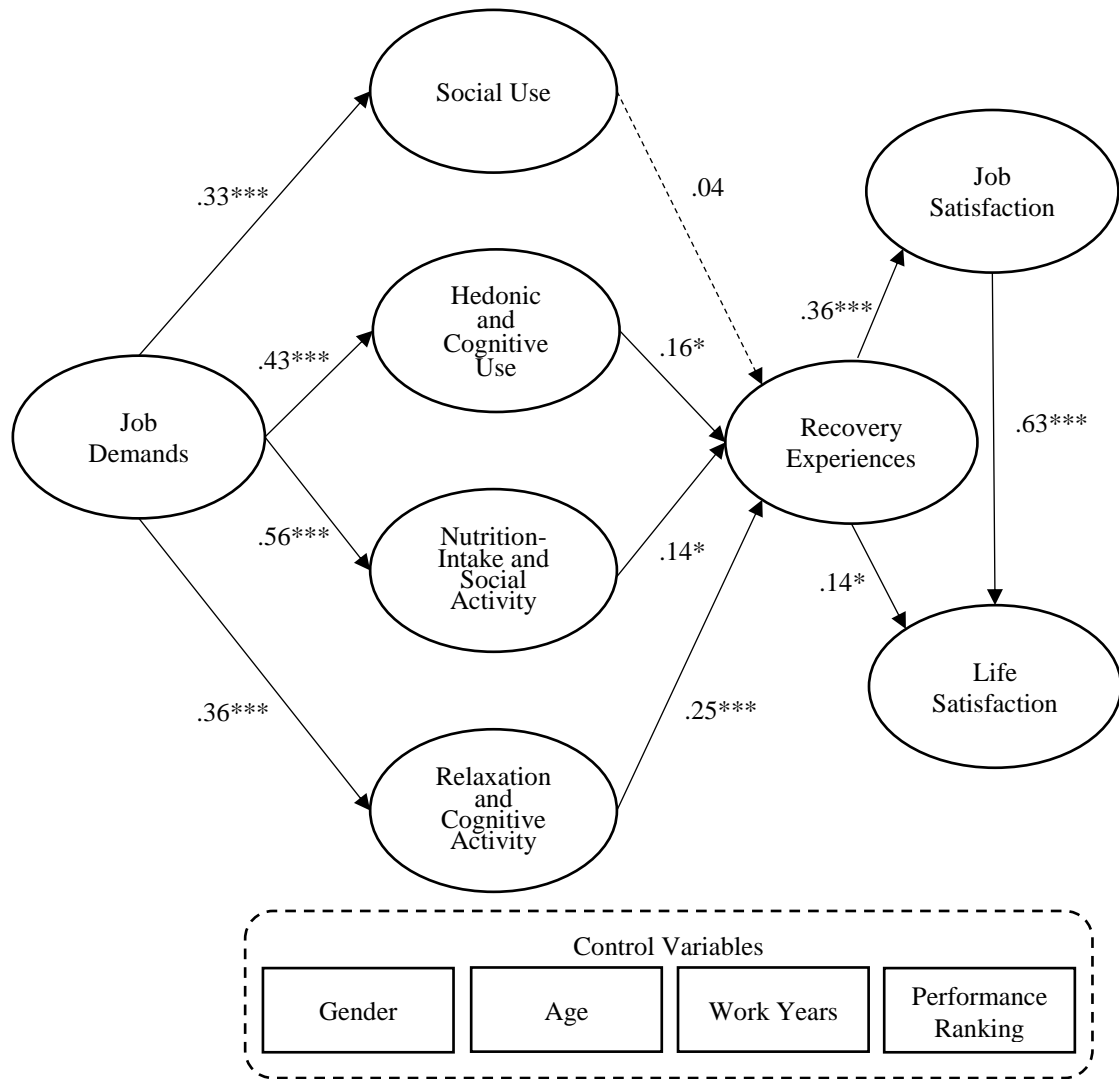
TLI	> .80 (Bentler & Bonett,1980)	.83
RMSEA	< .08 (Hair et al., 1998)	.06
CMIN/DF	< 5.00 (Loo & Thorpe, 2000)	2.64

Notes: GFI = goodness-of-fit index; AGFI = adjusted good-ness-of-fit index; CFI = comparative fit index; IFI = incremental fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; CMIN/DF = chi-square/degrees freedom.

Table 16. Results of SEM analysis.

Path	Path estimate	t-value	p-value
JD → SU	.33	5.08	< .001
JD → HCU	.43	6.12	< .001
JD → NS	.56	5.61	< .001
JD → RC	.36	4.33	< .001
SU → RE	.04	.67	.50
HCU → RE	.16	2.54	.01
NS → RE	.14	1.99	.04
RC → RE	.25	3.23	.001
RE → JS	.36	5.51	< .001
RE → LS	.14	2.43	.02
JS → LS	.63	8.96	< .001
G → SU	.16	3.03	.002
G → HCU	.09	1.70	.08
G → NS	.01	.02	.99
G → RC	.25	3.71	< .001
G → RE	.06	1.11	.27
G → JS	.09	1.77	.08
G → LS	.08	1.86	.06
A → SU	.08	1.44	.15
A → HCU	.10	1.85	.07
A → NS	.06	.96	.34
A → RC	.06	.90	.37
A → RE	.01	.24	.81
A → JS	.01	.10	.93
A → LS	.06	1.29	.20
W → SU	.15	2.63	.01
W → HCU	.05	.93	.35
W → NS	.04	.70	.49
W → RC	.09	1.36	.17
W → RE	.06	.98	.33
W → JS	.03	.57	.57
W → LS	.08	1.59	.11
P → SU	.17	3.22	.001
P → HCU	.03	.59	.56
P → NS	.03	.50	.62
P → RC	.16	2.51	.01
P → RE	.03	.49	.63
P → JS	.07	1.30	.20
P → LS	.09	2.04	.04

Notes: Standardized path estimates are shown; JD = job demands; SU = social use; HCU = hedonic and cognitive use; NS = nutrition-intake and social activity; RC = relaxation and cognitive activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction; G = gender; A = age; W = work years; P = performance ranking.



Notes: \*\*\* =  $p < .001$ ; \* =  $p < .05$ .

Figure 2. Results of SEM analysis.

#### 4.7 Multigroup Analysis

Multigroup analyses examined whether the hypothesized relationships were comparable across different demographic characteristics. SEM can be used in cross-group comparisons when researchers are interested in comparing structural models in different demographic characteristics. The moderation effect based on the respondents' general information such as gender and was tested using AMOS.

Regression weights and critical ratios for group differences were compared using excel statistics (Gaskin, 2016; Hopwood, 2007; Pappachan & Koshy, 2016). When comparing across groups, indicators may have different variances, as may latent variables. Unstandardized comparisons are preferred when groups have different variances. In other words, unstandardized coefficients should be used in comparing models across samples. Furthermore, when a critical ratio exceeds  $|1.96|$  for a regression weight, a path is significant at the .05 level. In AMOS, the critical ratio is a z-value. The z-value for each path linking the independent to the dependent variables is in the Beta Matrix. If the z-value is greater than or equal to  $|1.96|$ , the unstandardized coefficient is significant at the .05 level, which could be regarded as a moderation effect.

In this study, hospitality employees' gender was set as 'male' and 'female' and the relevant models were assessed separately for these categorical groups, compared with their respective regression weights and critical ratios for group differences using excel statistics. As shown in Table 17, a moderating effect due to the variation in gender was tested on all the relevant paths and was found significant at .05 level (z value is greater than  $|1.96|$ ) on the following paths. Specifically, significant differences were found across male and female employees in terms of the unstandardized path coefficients (b) for the relationship between job demands and social use (male:  $b = 1.90$ , female:  $b = .35$ ), job demands and hedonic and cognitive use (male:  $b = 2.03$ , female:  $b = .32$ ), job demands and relaxation and social activity (male:  $b = 1.48$ , female:  $b = .16$ ), job demands and nutrition-intake and cognitive activity (male:  $b = 1.51$ , female:  $b = .28$ ), social use and recovery experiences (male:  $b = .56$ , female:  $b = .04$ ), hedonic and cognitive use and recovery experiences (male:  $b = .82$ , female:  $b = .09$ ) as well as relaxation and social activity and recovery

experiences (male:  $b = 5.85$ , female:  $b = .36$ ). The results indicate that employees' at-work break activities were formed and motivated through high job demands getting amplified due to the variation in their gender. Moreover, the gender of hospitality employees moderates the effect of different at-work break activities including both social and non-social media break activities on recovery experiences.

Table 17. Results of multigroup analysis for the gender.

Path	Male (221)		Female (192)		z-value
	Estimate	p-value	Estimate	p-value	
JD → SU	1.90	.00	.35	.05	-3.60*
JD → HCU	2.03	.00	.16	.12	-3.96*
JD → RC	1.48	.00	.32	.02	-3.84*
JD → NS	1.51	.00	.28	.01	-3.56*
SU → RE	.56	.02	.04	.50	2.22*
HCU → RE	.82	.02	.09	.22	2.54*
RC → RE	5.85	.01	.36	.01	-2.60*
NS → RE	2.63	.07	.07	.64	1.71
RE → JS	.43	.00	.21	.06	-1.61
RE → LS	.05	.52	.24	.03	1.50
JS → LS	.82	.00	.57	.00	-1.55

Notes: Unstandardized path estimates are shown; JD = job demands; SU = social use; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition-intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction; \* =  $p < .05$ .

The validated model was also examined through multigroup analysis to determine the moderating effect of job position. Considering that different job positions may have different perceptions of each variable and non-work behaviors, the sample was thus divided into two groups based on the job position in the hospitality industry. Specifically, this study tested if differences exist across non-managerial employees and managerial employees. The results reflect significant differences across non-managerial and managerial employees in terms of the unstandardized path coefficients for the relationship between job demands and social use (non-managerial:  $b = .19$ , managerial:  $b = .52$ ). Significant differences also emerged in terms of the



relationship between hedonic and cognitive use and recovery experiences across non-managerial ( $b = .05$ ) and managerial employees ( $b = .33$ ). In the hypothesized model, the critical ratios for the relationship between job demands and social use ( $z$ -value = 2.07) as well as hedonic and cognitive use and recovery experiences ( $z$ -value = 2.23) were significantly greater than  $|1.96|$  at the .05 level (see Table 18). Thus, these findings reveal the moderating effects of job position on the model.

Table 18. Results of multigroup analysis for the job position.

Path	Managerial (216)		Non-Managerial (197)		z-value
	Estimate	p-value	Estimate	p-value	
JD → SU	.52	.00	.19	.15	2.07*
JD → HCU	.55	.00	.36	.00	1.13
JD → RC	.23	.03	.15	.01	.71
JD → NS	.35	.00	.43	.00	.59
SU → RE	.02	.79	.13	.02	1.61
HCU → RE	.33	.02	.05	.36	2.23*
RC → RE	.35	.04	.34	.02	.04
NS → RE	.06	.70	.43	.02	-1.56
RE → JS	.44	.00	.22	.03	1.66
RE → LS	.11	.08	.09	.36	.16
JS → LS	.61	.00	.67	.00	.44

Notes: Unstandardized path estimates are shown; JD = job demands; SU = social use; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition-intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction; \* =  $p < .05$ .

Following on, this study examined differences in model across the time spent on social media for personal purposes per day. This study assumed that different levels of social media use behaviors during work breaks may generate different work-related outcomes. Indeed, significant differences found in terms of the relationship between nutrition-intake and social activity and recovery experiences, and recovery experiences and job satisfaction as well as life satisfaction across the time spent on social media for personal purposes per day below 60 minutes ( $b = .68, .44, .23$ ) and above 60 minutes ( $b = .12, .17, -.04$ ). In addition, the critical ratios for the relationship

between nutrition-intake and social activity and recovery experiences (z-value = -3.08) as well as recovery experiences and job satisfaction (z-value = -2.30) or life satisfaction (z-value = -2.27) were significantly greater than  $|1.96|$  at the .05 level (see Table 19). These findings demonstrate the moderating effects of time spent on social media for personal purposes per day on the relationships between job demands, nutrition-intake and social activity, recovery experiences, job satisfaction, and life satisfaction.

Table 19. Results of multigroup analysis for the minutes spent on social media for personal purposes per day.

Path	$\leq 60$ (272)		$\geq 61$ (141)		z-value
	Estimate	p-value	Estimate	p-value	
JD → SU	.14	.17	.57	.01	1.85
JD → HCU	.27	.00	.66	.00	1.96*
JD → RC	.07	.20	.33	.01	1.86
JD → NS	.34	.00	.52	.00	1.03
SU → RE	.04	.51	-.17	.06	-1.95
HCU → RE	.04	.58	.33	.02	1.97*
RC → RE	.15	.29	.57	.01	1.62
NS → RE	.68	.00	.12	.50	-3.08*
RE → JS	.44	.00	.17	.04	-2.30*
RE → LS	.23	.00	.04	.64	-2.27*
JS → LS	.57	.00	.91	.00	1.74

Notes: Unstandardized path estimates are shown; JD = job demands; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition-intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction; \* =  $p < .05$ .

Finally, considering that the respondents had different frequencies of interacting with customers per day, this study tested the model across the two groups of interactions below 15 and above 16 times per day. The results found significant differences between the customer interactions below 15 and above 16 times per day (z-value  $> |1.96|$ ,  $p < .05$ ) for the job demands-social use path (below 15 times:  $b = .25$ , above 16 times:  $b = 1.30$ ), job demands-hedonic and cognitive use (below 15

times:  $b = .32$ , above 16 times:  $b = 1.54$ ), job demands-relaxation and cognitive activity (below 15 times:  $b = .31$ , above 16 times:  $b = 1.38$ ), and job demands-nutrition-intake and social activity (below 15 times:  $b = .04$ , above 16 times:  $b = 1.37$ ) (see Table 20). The relationship between social use and recovery experiences, hedonic and cognitive use and recovery experiences, relaxation and cognitive activity and recovery experiences, and nutrition-intake and social activity and recovery experiences for the interactions below 15 times per day ( $b = .03, .16, .49, .15$ ) were also significantly different from above 16 times per day ( $b = .89, 1.97, 1.89, 6.01$ ). The multigroup analysis succeeded to identify significant differences in the model caused by the frequencies of interacting with customers per day, thereby illustrating the moderating effects of frequencies of interactions with customers on the relationships between social use, hedonic and cognitive use, at-work break activities, and recovery experiences.

Table 20. Results of multigroup analysis for the frequencies of interacting with customers per day.

Path	$\leq 15$ (176)		$\geq 16$ (237)		z-value
	Estimate	p-value	Estimate	p-value	
JD → SU	.25	.15	1.30	.00	-3.25*
JD → HCU	.32	.02	1.54	.00	-3.70*
JD → RC	.04	.56	1.37	.00	-4.67*
JD → NS	.31	.00	1.38	.00	-3.64*
SU → RE	.03	.58	.89	.01	2.59*
HCU → RE	.16	.01	1.97	.02	2.47*
RC → RE	.49	.01	1.89	.02	2.48*
NS → RE	.15	.39	6.01	.00	-3.07*
RE → JS	.26	.00	.45	.00	-1.42
RE → LS	.15	.06	.10	.29	.41
JS → LS	.75	.00	.65	.00	-.57

Notes: Unstandardized path estimates are shown; JD = job demands; SU = social use; HU = hedonic use; BA = non-social media break activities; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition-intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction; \* =  $p < .05$ .

#### 4.8 Mediating Effects

To further test the mediating effects of social use, hedonic and cognitive use, relaxation and cognitive activity, nutrition-intake and social activity, recovery experiences, and job satisfaction on the relationship between job demands and recovery experience, non-social media break activities and job satisfaction, social media break activities and job satisfaction, as well as recovery experience and life satisfaction, the author turned to Baron and Kenny's (1986) study. They suggested that a variable functions as a mediator when it meets the following three conditions: (1) the independent variable significantly influences the mediating variable (path a); (2) the mediating variable significantly influences the dependent variable (path b); and (3) when paths a and b are controlled, a previously significant relationship between the independent variable and the dependent variable (path c) is reduced or no longer significant. The mediating variable can either explain all or some of the observed relationship between the independent variable and dependent variable. Full mediation occurs when the independent variable no longer affects the dependent variable (dropping path c to zero) after the mediating variable has been controlled. Partial mediation occurs when the path from the independent variable to the dependent variable (path c) is decreased in absolute size but is still different from zero when the mediating variable is introduced.

A mediational analysis can be conducted using either SEM or multiple regression (Frazier, Tix, & Barron, 2004). MacKinnon (2000) stated that multiple regression is the most common method that is employed in mediation testing. The regression results are presented in Table 21 and show that relaxation and cognitive activity ( $\beta = .22, p < .001$ ) and nutrition-intake and social activity ( $\beta = .18, p < .05$ )

have partially mediating effects on the relationship between job demands and recovery experiences. The results also reveal that hedonic and cognitive use ( $\beta = .18$ ,  $p < .001$ ) partially mediates the relationship between job demands and recovery experiences. In sum, the results first found that job demands have significant and positive impacts on recovery experiences ( $\beta = .35$ ,  $p < .001$ ). This relationship was weak but still significant after including the mediating variables of social and non-social media break activities.

In addition, the path between relaxation and cognitive activity ( $\beta = .10$ ,  $p < .05$ ) or nutrition-intake and social activity ( $\beta = .11$ ,  $p < .05$ ) and job satisfaction is significant. With recovery experiences added, this path is not significant ( $\beta = .03$ ,  $.06$ ,  $p > .05$ ), indicating that recovery experiences ( $\beta = .28$ ,  $.27$ ,  $p < .001$ ) have a complete mediating effect on job satisfaction. Table 20 also lists the information on the complete mediating effect of recovery experiences ( $\beta = .28$ ,  $p < .001$ ) between hedonic and cognitive use and job satisfaction. The results confirm that the significant impact of relaxation and cognitive activity ( $\beta = .09$ ,  $p > .05$ ), nutrition-intake and social activity ( $\beta = .04$ ,  $p > .05$ ), and hedonic and cognitive use ( $\beta = .01$ ,  $p > .05$ ) on life satisfaction disappeared after the mediating variable of recovery experiences was included. Finally, after adding job satisfaction to the prediction of life satisfaction, the impact of recovery experiences is weak but still significant ( $\beta = .16$ ,  $p < .001$ ), suggesting that job satisfaction ( $\beta = .50$ ,  $p < .001$ ) does indeed exert a partial mediating effect between recovery experiences and life satisfaction. Accordingly, the results confirmed the mediating roles of social media break activities, non-social media break activities, recovery experiences, and job satisfaction.

Table 21. Regression results for the mediating effects of non-social media break

activities, social media break activities, recovery experiences, and job satisfaction.

JD→RC→RE	RC as the DV	RE as the DV	
		Model 1	Model 2
JD	.15*	.35***	.33***
RC			.22***
$R^2$	.01	.12	.17
Adjusted $R^2$	.01	.12	.17
$F$	3.73*	57.75***	41.92***
JD→NS→RE	NS as the DV	RE as the DV	
		Model 1	Model 2
JD	.32***	.35***	.32***
NS			.18*
$R^2$	.10	.12	.13
Adjusted $R^2$	.10	.12	.13
$F$	46.39***	57.75***	30.51***
JD→HCU→RE	HCU as the DV	RE as the DV	
		Model 1	Model 2
JD	.21***	.35***	.31***
HCU			.18***
$R^2$	.04	.12	.16
Adjusted $R^2$	.04	.12	.15
$F$	18.98***	57.75***	37.55***
RC→RE→JS	RE as the DV	JS as the DV	
		Model 1	Model 2
RC	.25***	.10*	.03
RE			.28***
$R^2$	.06	.01	.08
Adjusted $R^2$	.06	.01	.08
$F$	26.96***	3.92*	17.93***
NS→RE→JS	RE as the DV	JS as the DV	
		Model 1	Model 2
NS	.19***	.11*	.06
RE			.27***
$R^2$	.04	.01	.08
Adjusted $R^2$	.03	.01	.08
$F$	14.95***	5.68*	18.77***
HCU→RE→JS	RE as the DV	JS as the DV	
		Model 1	Model 2
HCU	.25***	.10*	.03
RE			.28***
$R^2$	.06	.01	.08
Adjusted $R^2$	.06	.01	.08
$F$	26.83***	3.99*	17.94***

RC→RE→LS	RE as the DV	LS as the DV	
		Model 1	Model 2
RC	.25***	.16*	.09
RE			.28***
$R^2$	.06	.03	.10
Adjusted $R^2$	.06	.02	.10
$F$	26.96***	10.77*	22.74

NS→RE→LS	RE as the DV	LS as the DV	
		Model 1	Model 2
NS	.19***	.10*	.04
RE			.30***
$R^2$	.04	.01	.09
Adjusted $R^2$	.03	.01	.09
$F$	14.95***	3.43*	21.13*

HCU→RE→LS	RE as the DV	LS as the DV	
		Model 1	Model 2
SU	.25***	.10*	.01
RE			.30***
$R^2$	.06	.01	.09
Adjusted $R^2$	.06	.01	.09
$F$	26.83***	3.17*	20.87***

RE→JS→LS	JS as the DV	LS as the DV	
		Model 1	Model 2
RE	.28***	.30***	.16***
JS			.50***
$R^2$	.08	.09	.33
Adjusted $R^2$	.08	.09	.32
$F$	35.56***	41.76***	99.14***

Notes: JD = job demands; BA = non-social media break activities; HU = hedonic use; RE = recovery experiences; JS = job satisfaction; DV = dependent variable; \*\*\* =  $p < .001$ ; \* =  $p < .05$ .

## 5 CONCLUSIONS

### 5.1 Introduction

This study aimed to increase our understanding of the relationships between job demands, at-work break activities (non-social and social media break activities), recovery experiences, job satisfaction, and life satisfaction. Specifically, this study advances our understanding of why employees believe at-work break activities are important for them at work. Moreover, this study sought to understand whether social media break activities or non-social media break activities helps employees experience recovery to deal with job demands and positively affect their perceptions of job satisfaction and life satisfaction. This study further explored whether the impacts of social media break activities are strong as much as non-social media break activities. A summary of hypothesis testing and further analysis is given in Table 22 and Table 23.

Table 22. Results of hypothesis testing.

Hypothesis	Path	Result
H1a	JD → RA	Supported
H1b	JD → NA	Supported
H1c	JD → SA	Supported
H1d	JD → CA	Supported
H2a	JD → SU	Supported
H2b	JD → HU	Supported
H2c	JD → CU	Supported
H3a	RA → RE	Supported
H3b	NA → RE	Supported
H3c	SA → RE	Supported
H3d	CA → RE	Supported
H4a	SU → RE	Not Supported
H4b	HU → RE	Supported
H4c	CU → RE	Supported
H5	RE → JS	Supported
H6	RE → LS	Supported
H7	JS → LS	Supported

Notes: JD = job demands; SU = social use; HCU = hedonic use; CU = cognitive use; RA = relaxation activity, NA = nutrition-intake activity; SA = social activity; CA =



cognitive activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction.

Table 23. Results of mediation and moderation analysis.

Description	Path/Variable	Result
Mediation	JD → RC → RE	Supported
Mediation	JD → NS → RE	Supported
Mediation	JD → HCU → RE	Supported
Mediation	RC → RE → JS	Supported
Mediation	NS → RE → JS	Supported
Mediation	HCU → RE → JS	Supported
Mediation	RC → RE → LS	Supported
Mediation	NS → RE → LS	Supported
Mediation	HCU → RE → LS	Supported
Mediation	RE → JS → LS	Supported
Moderation	Gender	Supported
Moderation	Job position	Supported
Moderation	Minutes spent on social media for personal purposes per day	Supported
Moderation	Frequencies of interacting with customers per day	Supported

Notes: JD = job demands; SU = social use; HCU = hedonic and cognitive use; RC = relaxation and cognitive activity; NS = nutrition= intake and social activity; RE = recovery experiences; JS = job satisfaction; LS = life satisfaction.

## 5.2 Discussion

Importantly, this study found that job demands are an important trigger for hospitality employees to engage in non-social media break activities such as relaxation and cognitive activity and nutrition-intake and social activity. The finding of the positive relationship between non-social break activities and recovery experiences is consistent with prior studies (Kim et al., 2017). In other words, employees who have a need to cope with high job demands can be satisfied by involving in typical at-work break activities such as stretching, reading books, snacking, and texting. These short and informal respite activities taken voluntarily between tasks finally help employees experience momentary detachment and relaxation, which in turn increase their job and life satisfaction.

Despite the popular use of social media in the workplace, much past research on social media use highlights positive outcomes of using social media at work for professional purposes (El Ouiridi et al., 2015; Wickramasinghe & Nisaf, 2013) and personal use of social media at work has been discouraged for negative impacts on employee and organizational performance. Moreover, at-work break activities such as social media use has not been well studied and understood. Although the importance of each variable examined here is already understood, the interrelationships between the variables were not tested. This study found that job demands induce employees to access social media during work breaks to recover from stressful work, resulted in higher job satisfaction, and ultimately higher life satisfaction. Accordingly, job demands are regarded as a motivation (antecedent) of social media break activities. Hedonic and cognitive use of social media leads employees to experience psychological detachment and relaxation during work, and gratify employees' needs and expectations to deal with job demands. Thus, recovery experiences are considered as the consequences of social media break activities.

Moreover, the mediating effects of social media break activities, non-social media break activities, recovery experiences, and job satisfaction have been clearly defined in this study. Specifically, the results of mediation analyses determined the roles of hedonic and cognitive use, relaxation and cognitive activity, nutrition-intake and social activity, recovery experiences, and job satisfaction as a mediator in the links between job demands and recovery experiences, social or non-social media break activities and job satisfaction, social or non-social media break activities and life satisfaction, and recovery experiences and life satisfaction.

Overall, the study contributes to the development of a comprehensive research model and the application of this model to the hospitality industry. Specifically, this

empirical study develops a conceptual model that indicates the important antecedents (job demands) and consequences (recovery experiences, job satisfaction, and life satisfaction) of social media and non-social media break activities. Based on the findings, this study offers several conclusions and implications for researchers and practitioners.

First, when examining the relationship between job demands and social media break activities, this study found that a high degree of job demands had a high level of personal use of social media at work during work breaks. When employees sense stronger job demands than their expectations from the job characteristics, their social and hedonic and cognitive needs are increased to find an escape by using social media during work breaks. As with Charoensukmongkol's (2014) investigation that job demands play a key role in social media use intensity at work, this study also revealed that job demands are a major antecedent of social media use at work. However, based on the past findings by Charoensukmongkol (2014), organizations only can understand whether employees attach to social media at work and the improvements in job satisfaction and job performance depending on the extent of attachment. The purpose of using social media at work for personal or professional use is unknown. More importantly, organizations were not aware of what functions of social media make employees want to use these outlets at work. Therefore, the current study offers further insight regarding how employees engage in social media break activities at work. The results show that job demands facilitate different use contexts to meet employees' specific needs. The different use contexts provide more clues related to use intensity so that organizations can understand employees' actual social media use behaviors and the reasons behind their use at work. Interestingly, job demands had stronger effects on hedonic and cognitive use ( $\beta = .43, p < .001$ ) than social use ( $\beta$

= .33,  $p < .001$ ), according to the results of SEM. That is to say, employees are more likely to have an urge to use social media to fulfill the needs of 1) enjoyment, relaxation, and entertainment such as watching videos, listening to music, and playing games, and 2) information seeking and sharing such as searching information they are interested in and sharing a(n) important life event/story/opinion when they experience high job demands.

Second, the study found that social media break activities positively affects employees. The results indicate that hedonic and cognitive use helps hospitality employees experience recovery from job demands. Specifically, social media break activities offer psychological detachment and relaxation to employees to deal with emotional demands at work. It is reasonable to feel relaxed and detach from work temporarily because employees engage in social media at work to play games, listen to music, or watch videos. On the other hand, although social use did not have a significant influence on recovery experiences, it did not indicate that social use would increase job stress. As the effort-recovery model proposes (Meijman & Mulder, 1998), effort expended on job demands is associated with a need for recovery to help human functional systems return to their pre-stressor levels. The results of this study expand the application of effort-recovery model to social media research. A need for recovery occurs when hospitality employees make every effort to modify emotional expressions at work. Social media break activities contributes to a recovery function if employees lack for job resources such as co-worker or supervisor support and job autonomy to deal with job demands. Social media enable employees to experience psychological detachment and relaxation via hedonic and cognitive use (e.g., watching videos and sharing a post). Therefore, social media break activities should not be considered as a waste of time or distraction from work. In fact, social media is

an effective tool to cope with stress caused by high job demands. These results are consistent with past findings that information communication technologies become a vital and popular leisure platform for employees to trigger psychological recovery during and after work (Collins & Cox, 2014; Quinones & Griffiths, 2017).

Third, this study found that non-social media break activities still play a key role in enhancing recovery experiences. Employees who had high job demands were motivated to engage in relaxation activities, nutrition-intake activities, social activities, and cognitive activities at work. The results of SEM confirmed that job demands had a direct and positive impact on non-social media break activities, and non-social media break activities had a direct and positive effect on recovery experiences. Interestingly, although employees who had high job demands tended to engage more in nutrition-intake and social activity ( $\beta = .56, p < .001$ ) than relaxation and cognitive activity ( $\beta = .36, p < .001$ ), relaxation and cognitive activity ( $\beta = .25, p < .001$ ) had a stronger impact on recovery experiences than nutrition-intake and social activity ( $\beta = .14, p < .05$ ). Overall, the non-social media break activities had similar impacts to social media break activities on recovery experiences. Specifically, relaxation and cognitive activity ( $\beta = .25, p < .001$ ) had the strongest effect on at-work recovery experiences, followed by hedonic and cognitive use ( $\beta = .16, p < .05$ ) and nutrition-intake and social activity ( $\beta = .14, p < .05$ ). Both social media and non-social media break activities are able to help employees experience at-work recovery and generate positive work-related outcomes. Thus, to increase job satisfaction and life satisfaction, both social media and non-social media break activities should be encouraged to engage while at work. These findings have essential practical implications for human resources management, particularly in the United States.

Fourth, the positive relationship between recovery experiences and job satisfaction demonstrates that an employee's at-work recovery experiences after engaging in social and non-social media break activities is important in predicting job satisfaction. It is relatively easy for employees to recover from job-related stress after work because they have large amounts of off-job time to engage in the activities they want. This study claims that after-work recovery activities are not the only way to enhance employee satisfaction. The findings remind hospitality managers to recognize the importance and benefits of at-work break activities. To increase job satisfaction, the continuous improvement of at-work recovery experiences should be ensured, and the findings from this study show that the personal use of social media at work is another good at-work break activity in addition to typical non-social media break activities for employees to release stress and frustration at work. Interactive and entertaining media stimuli are key features of social media for employees to cope with work stress caused by high job demands. To illustrate, hedonic entertainment experiences through media use can lead to experience recovery dimensions of psychological detachment and relaxation, which, in turn, result in increased vitality and psychological well-being (Reinecke et al., 2011; Rieger et al., 2014). Employees' recovery experiences are pleasurable reactions to media stimuli. Media enjoyment makes employees have an opportunity to better evaluate their work lives. Another key feature of social media, cognitive use, is also a key indicator of at-work recovery. For example, seeking information such as live sports and sports' video highlights on Facebook may meet an employee's interest and need to deal with job demands. Sharing a funny video after watching on Facebook may be another good example to release stress from work, experience entertainment and relaxation, and eventually generate a positive attitude towards work.

Fifth, the study found that an individual's life satisfaction is influenced by his or her job satisfaction. That is, employees with positive attitudes toward their jobs are more likely to have a better quality of life. These empirical results are in accordance with prior research (Dabke, 2014; Lee et al., 2016; Reizer, 2015). Since people spent about half of their waking hours at work, if their daily work strain cannot be reduced during work, a negative affect such as anxiousness and fatigue would be generated at the end of workday (Kim et al., 2017) and thus influence their after-work lives. The relationship between work and life attitude is highly correlated because a negative attitude and emotion from job stress may lead employees to spend more off-job time to engage in either work-related tasks or recovery activities to release job stress before sleeping. Thus, an individual's assessment of his or her job experience has to be ensured to improve an overall quality of life.

Sixth, the results supported the positive relationship between recovery experiences and life satisfaction. Previous research only found that after-work recovery experiences or positive experiences outside of workplace such as holiday recovery experiences have a positive impact on life satisfaction after a pleasure trip (Chen et al., 2016). Tourism experience is a vital predictor of employee well-being because one of roles of tourists is employees, and they can recovery from job stress during their vacations. Based on Sonnentag and Frtize (2007)'s four types of recovery experiences, individuals who are on vacation are able to feel detached form work (detachment), feel relaxed (relaxation), control what they want to do (control), and experience something challenging or new things (mastery) and are more likely to be satisfied with their vacation and quality of life in general. It is reasonable to find a positive relationship between at-work recovery experiences and life satisfaction as holiday experiences share some common outcomes with social and non-social media

break activities such as experiencing momentary detachment and relaxation when watching a short video on Instagram or reading a magazine. This is an important finding because it offers a new perspective on how human resource managers can efficiently manage their employees and improve employee well-being.

Seventh, the analysis confirms that social and non-social media break activities are a mediator between job demands and recovery experiences. In essence, employees are more likely to engage in at-work break activities if they sense high job demands, and the increased hedonic and cognitive use, relaxation and cognitive activity, and nutrition-intake and social activity eventually boosted the positive recovery experiences such as psychological detachment and relaxation. The empirical results also clarify that recovery experiences functions as an important mediating variable on the relationships between social media and non-social media break activities and job satisfaction as well as social media and non-social media break activities and life satisfaction. Specifically, employees' hedonic and cognitive use, relaxation and cognitive activity, and nutrition-intake and social activity do not guarantee their job satisfaction and life satisfaction; experiencing psychological detachment and relaxation after engaging in at-work break activities are a necessary intermediate stage. To put it more simply, employee perceptions of recovery experiences are the key to job satisfaction and life satisfaction. Organizations strive to enhance employee well-being such as job satisfaction and life satisfaction, and they may understand that social media is an effective tool for doing so in addition to short respite activities at work. The results also show that when employees experience recovery at work, they are more likely to be satisfied with their work lives, and this will improve their evaluation of life satisfaction. Therefore, to raise employees'



attitudes toward their life, job satisfaction should be recognized as a major contributing factor in increasing life satisfaction.

Finally, this study further tested and verified the moderating effects of gender, job position, minutes spent on social media for personal purposes per day, and frequencies of interacting with customers per day. The results of multigroup analysis show that job demands had greater impacts on social and non-social media break activities among males than females. The results also reveal that the more social and non-social media break activities employees involve in, the higher recovery experiences and job satisfaction perceive for males than females. For males, both social and non-social media break activities could effectively increase their recovery experiences and job satisfaction; for females, relaxation and cognitive activity could significantly experience recovery from work and enhance job satisfaction and life satisfaction. The findings imply that non-social media break activities might apply better to female employees than social media break activities or female employees may not need the use of social media at work to deal with high job demands.

In terms of the moderating effect of job position, the impact of job demands on social media break activities was stronger for managerial employees than non-managerial employees. The job position differences found in this study imply that management is an important job responsibility for managerial employees in addition to front-line service. This specific and high job demand makes managerial employees have a higher need of at-work break activities than non-managerial employees. Furthermore, relaxation and cognitive activity works for both managerial and non-managerial employees to experience at-work recovery. However, social use and nutrition-intake and social activity are only applicable to non-managerial employees, while hedonic and cognitive use works better for managerial than non-managerial

employees. Moreover, the different minutes spent on social media per day moderate the relationship between job demands and hedonic and cognitive use, hedonic and cognitive use and recovery experiences as well as recovery experiences and job satisfaction or life satisfaction. To be more specific, employees who had high job demands and used social media at work over an hour per day were more likely to engage in the hedonic and cognitive use, which resulted in more positive recovery experiences, job satisfaction, and life satisfaction than employees who used social media at work less than one hour per day. The daily frequency of customer interaction is another moderator on the relationships between job demands and social and non-social media break activities as well as social and non-social media break activities and recovery experiences. Employees who had more customer interactions per day had a higher engagement in social and non-social media break activities. Engaging in social and non-social media break activities finally had positive effects on recovery experiences and job satisfaction. Since the hospitality industry is a people-facing industry, the frequency of interactions with customers is one of key drivers of emotional work demands (Mann, 2004). Employees involved in ‘people-work’ are expected to engage in a great deal of emotion regulation or management. Thus, at-work break activities could be regarded as strategies for coping with the stress of performing emotional labor.

### **5.3 Theoretical Implications**

The current study contributes to the social media and at-work recovery literature through the development and application of a research model in the hospitality industry. In essence, employees’ nonwork behaviors during short work breaks are beneficial to employee outcomes. This study adds significant insight to the

current literature on the antecedents and consequences of at-work break activities including social and non-social media break activities.

A review of the previous literature relating to the variable relationships in this study addressed the theoretical underpinning of the study and the basis for the research model. The review and application of effort-recovery model and U&G theory to this research form the solid theoretical foundation of this study. Although previous studies in social media literature demonstrated the importance of the above variables (Ali-Hassan et al., 2015; Charoensukmongkol, 2014; Lee et al., 2016), further investigation was necessary to specify the interrelationships, especially in the recent, popular, leisure platform of social media that has not been well researched for personal use in the workplace. Therefore, this study provides further insight into social media use at work in the hospitality industry and generates additional knowledge for the existing literature.

The hospitality industry is a service-oriented business, and employees play an important role in serving and interacting with customers (Kong et al., 2015). Due to high emotional demands of hospitality work, it motivates employees to choose a certain media to balance their work and personal lives. According to U&G theory, individuals are active in choosing media to meet their requirements. This study suggests that employees' needs of dealing with high job demands can be satisfied via social media. Different use contexts of social media such as hedonic and cognitive use are able to gratify specific needs and expectations and help employees feel much better at work.

Building on the effort-recovery model, this study first empirically examined the relationships between job demands, non-social media break activities, social media break activities, and recovery experiences. Job demands have shown a

tendency to rise and become a major cause of job stress and burnout (Demerouti et al., 2009). The issue of job stress is a serious and global problem that is influencing the hospitality industry (Manyamba, Zimbabwe, Ngezi, & Zimbabwe, 2017). A need for recovery is a key predictor of the long-term stress effects (Siltaloppi, Kinnunen, Feldt, & Tolvanen, 2012). Employees lose their energy and positive attitude when they cannot find a way to recover from work. When employees invest effort to fulfill job demands made on them at work, human functional systems and personal resources are depleted resulting in an exhausted state. Efficient recovery can lead to the rebuilding of resources depleted during work, thereby promoting employee well-being. Since job demands are unavoidable, hospitality managers should be aware of why and when employees have a need to engage in at-work break activities, such as contacting friends, seeking entertainment and enjoyment experiences, and accessing others' content to outlet stress. Instead of involving in typical at-work respite activities, the results promote a better understanding of why, when, and how employees want to use social media during work breaks. This study also advances our understanding of the impacts of social media break activities. The present findings confirm that employees not only perceive social media are important at work, but also facilitate recovery experiences to avoid job stressors such as service interactions with customers.

In addition, this study's findings add to those of earlier research, and illustrate a positive effect of social media break activities on on-the-job recovery experiences, job satisfaction, and life satisfaction. In other words, social media could be a means to gratify employees' hedonic and cognitive needs, which releases job stress at work and makes for better employee evaluations toward their jobs and lives. The results promote further insight into the importance of at-work recovery experiences. Typically, at-work recovery occurs during coffee breaks, lunch breaks, and short (i.e.,

an hour or less), informal breaks (De Bloom, 2015). The common break activities during work are taking a walk (e.g., park walks), reading a book, socializing (e.g., short chats with coworkers or friends), napping, drinking coffee, smoking cigarettes, nutrition intake through beverages and snacks, and relaxation exercises (e.g., deep-breathing and muscle tension release) (De Bloom et al., 2017; Fritz et al., 2013; Kim, Park, & Niu, 2017). One of the very few studies so far to focus on positive recovery opportunities through technology use was conducted by Ragsdale and Hoover (2016). The authors proposed that mobile technology use (e.g., cellphones) after work such as watching videos or listening to music on a cellphone might advance relaxation experiences. Employees who are more attached to their mobile devices may use them as a recovery opportunity. However, there is no empirical evidence to support this assumption. More importantly, most research found that technology use after work interferes with recovery (Derks & Bakker, 2012; Derks, Ten Brummelhuis, Zecic, & Bakker, 2014), not to mention social media use at work. To reach sufficient at-work recovery, social media use could be an effective recovery activity. Considering a lack of empirical research on at-work recovery through social media use, this study found that social media could be a key mechanism to mitigate the negative influence of the prevailing demanding working conditions in the hospitality industry. To summarize, this study shed light on recovery during work through social media use, thereby yielding a more comprehensive picture of strategies employees can use to maintain their emotional regulation and mental energy at work.

A theoretical framework explaining the positive relationship between hedonic use and recovery experiences has been well established by this study. As Ali-Hassan et al. (2015) stated, although hedonic use had a negative impact on routine job performance, hedonic use is a driver of innovative performance (creativity and

innovation) in the workplace. It is vital to note that hedonic use of social media has a positive side. From a theoretical perspective, hedonic use of social media is good or bad in the workplace depending on how the researchers focus case by case. Hence, a tendency to think that the hedonic use of social media at work is not productive should be changed.

On the theoretical level, this study provides empirical evidence confirming that hedonic and cognitive use of social media at work plays a critical mediating role in affecting recovery experiences. This study also identified the mediating effect of recovery experiences on the relationship between hedonic and cognitive use of social media at work and job satisfaction as well as life satisfaction. In addition to the direct and positive relationship between non-social media break activities and recovery experiences that is in line with the findings of some previous researches (Kim et al., 2017), this study offers insights into how non-social media break activities can contribute to recovery experiences as a mediating role. While the concept of job satisfaction is simple, its mediating effect on life satisfaction has not been examined in previous studies. This paper identifies the relationship between recovery experiences, job satisfaction and life satisfaction by providing evidence to show that job satisfaction functions as a significant mediating role. In sum, the present study adds to the extant literature by identifying three strong mediators that can strengthen a relationship and have a greater impact on the dependent variables.

Arguably, the current investigation can also offer insights into how the gender, job position, time spent on social media at work per day, and frequency of daily customer interaction can contribute to at-work break activities, recovery experiences, job satisfaction, and life satisfaction. In particular, this research focuses on the

moderating effects of general information and non-work behavior on work-related outcomes, which have been absent in the at-work recovery literature.

#### **5.4 Practical Implications**

From a practical perspective, this study provides empirical evidence from managerial and non-managerial hospitality employees establishing that the benefits of using social media at work are not limited to professional purposes, but also to personal purposes. Psychological detachment and relaxation are two positive outcomes of social media break activities. It overturns the argument that personal use of social media at work is harmful for employees' work attitudes and behaviors. This finding may be valuable for hospitality managers seeking to enhance work-related outcomes. In addition to general at-work break activities (non-social media break activities), social media should be seen as an effective and useful tool for employees to recover from job stressors. Different use contexts such as social, hedonic, or cognitive uses are able to help employees feel much better at work. Then, employees who are happy at work are more likely to be happy in life. To provide better employee benefits and working environments, hospitality managers might consider conducting an internal survey or offering some other platform to solicit feedback from employees. Analysis results of the survey can help managers to better understand employees' non-work behaviors and modify organizational policy for social media use at work. Using performance appraisal may be another good way to understand employees' perceptions of social and non-social media break activities and to link their work attitudes and behaviors. In terms of organizational policy, employees should be well informed in advance and managers should be ready to explain the change.

In addition, the findings can provide further insight and empirical evidence about the ongoing debate of social media use for personal purposes while at work. Building on the key role of emotional resources, the current study encourages hospitality organizations whose employees are subject to high levels of job demands to allow and encourage the use of social media at work for personal purposes during informal breaks. The non-social media break activities should certainly be kept for employees to release job stress in the workplace. Hospitality organizations should regard non-work behaviors as a key factor of the improvement of organizational performance. According to the results of t-test and ANOVA, employees who had high job demands and more interactions with customers per workday were more likely to engage in social and non-social media break activities. Thus, this study suggests companies should make sure to provide employees sufficient break time and allow them to pursue break activities they preferred to diminish their job stress and restore their energy. As most people spend about half of their waking hours at their workplaces, at-work breaks are prime opportunities to replenish emotional resources and retain employees' well-being and job performance (De Bloom et al., 2015).

Furthermore, hospitality managers should aware that mentally disengaging from work during work and break time helps to experience recovery. The improvement of vitality and prevention of exhaustion are not only limited to at home or after work. Instead, it can occur when employees return to work after a break during work hours. Despite the use of smartphones, it may be hard to decrease emotional exhaustion by job demands; the positive or negative influences of such use on employees depend on the way smartphones are used in the workplace (Rhee & Kim, 2016). This study believes that when employees who feel stressed and fatigued in work are motivated to search for ways to recover, they can select social media use



as their break activities because social media use at work positively contributes to recovery.

Eventually, the hedonic use of nonwork behavior should be approved as an organizational support in term of hospitality employees' recovery experiences during work. In fact, enjoyment and entertainment are two positive consequences of hedonic use. Of course, the long amounts of hedonic use may affect employee performance. However, this concern is not necessary since most of respondents spent less than 60 minutes on social media break activities a day. Moreover, mindfulness was found as a key role that leads to the distinction in outcomes that employees obtained from accessing social media during work hours (Charoensukmongkol, 2016). To be more specific, a positive relationship between social media use intensity at work and job burnout can be affected and changed when employees have a high or low level of mindfulness. Using social media at work can benefit workers with a high level of mindfulness but harm them if they lack mindfulness. The concept of mindfulness helps individuals to monitor their emotions, thoughts, and behaviors and run them effectively. Hence, hospitality organizations should not ban the use of social media at work without solid and sound reasons but encourage self-regulation. In sum, self-initiated, voluntary, and short work breaks including social and non-social media break activities are beneficial for employee well-being based on the findings of the study. Since hospitality employees usually do not have formally scheduled breaks, the self-initiated informal short breaks in the hospitality industry are more important than other industries. The conceptual model and empirical results can help researchers, human resource professionals, and practitioners to better understand the practice of at-work break activities.

## **5.5 Limitations and Directions for Future Research**

The limitations of the present study suggest directions for future research. First, the study only considered the above variables. Future research could explore a wider range of variables such as job burnout, job performance, and work engagement to develop a more comprehensive model in social media literature. Second, this research model is worth testing in different industries such as tourism and service industries to examine the validity of the findings. Third, future research could focus on studying a specific type of social media site such as Facebook or Instagram to find the unique information in terms of personal use of social media at work. Fourth, future research could further compare different job positions such as frontline employees versus back of house or managers regarding nonwork behavior and its impacts at work. Finally, due to time and complexity, this study conducted the investigation as a snapshot study. In the future, it may be useful to advance a longitudinal study to track whether social media use at work is good for employees over time and provide further insights regarding outcomes of social media use at work.

## **APPENDIX I: Questionnaire**

### **Are Social Media Bad for Your Employees? Effects of At-Work Break Activities on Recovery Experience, Job Satisfaction, and Life Satisfaction**

#### **Cover Letter for All Subjects**

You are invited to participate in a study. This study aims to explore your attitude and behavior towards at-work break activities in the hospitality industry. You will be asked to rate the extent of your agreement with questions (e.g., social media and non-social media break activities, job demands, recovery experiences, job satisfaction, and life satisfaction). The entire survey would take approximately 15 minutes to complete. We really appreciate your help and the participation.

Your participation is completely ANONYMOUS. If you have read this form and decide to participate in this study, please understand your participation is VOLUNTARY. However, you can help us very much by sparing some of your valuable time to complete the questionnaire.

This study involves research. The data that are collected from you will be held in strictest confidence. No personally identifiable information will be used to link back to you, or shared with a third party. Your privacy will be protected to the maximum extent allowable by law. Your participation will help researchers better understand and utilize online social structures for business success.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the University of Missouri Campus Institutional Review Board (which is a group of people who review the research studies to protect participants' rights) at 573-882-9585 or [umcresearchcirb@missouri.edu](mailto:umcresearchcirb@missouri.edu).

We understand that you are busy, and recognize that your time is valuable. Thank you very much for helping with this important study. Should you wish to contact us, you may reach us by e-mail.

Sincerely yours,

Yi-Sung (Ethan) Cheng, Doctoral Candidate  
Hospitality Management  
111 Eckles Hall, University of Missouri  
Columbia, MO 65211  
[ycv67@mail.missouri.edu](mailto:ycv67@mail.missouri.edu)

Seonghee Cho, Associate Professor  
Hospitality Management  
105 Eckles Hall, University of Missouri  
Columbia, MO 65211  
[choseo@missouri.edu](mailto:choseo@missouri.edu)

### Section I: Job Demands

Please rate the extent of your **agreement** with the following statements. (Please circle your answer)

	5 ▼	4 ▼	3 ▼	2 ▼	1 ▼
	<b>Strongly Agree</b>	Agree	Neither agree nor disagree	Disagree	<b>Strongly Disagree</b>
1. During the past 30 days, my job usually required me to reassure customers who were distressed or upset.	5	4	3	2	1
2. During the past 30 days, my job usually required me to remain calm even when I was astonished.	5	4	3	2	1
3. During the past 30 days, I often had to express feelings of sympathy (e.g., saying I “understand”, I am sorry to hear about something).	5	4	3	2	1
4. During the past 30 days, I often had to express friendly emotions (e.g., smiling, giving compliments, making small talk).	5	4	3	2	1
5. During the past 30 days, I often had to hide anger or disapproval about something someone had done.	5	4	3	2	1
6. During the past 30 days, I often had to hide disgust over something someone had done.	5	4	3	2	1
7. During the past 30 days, I often had to react with understanding to customers with unreasonable behavior.	5	4	3	2	1
8. During the past 30 days, I often had to hide my frustration or anger, when I was dealing with unreasonable customers.	5	4	3	2	1
9. During the past 30 days, I dealt with customers who incessantly complained, although I always did everything to help them.	5	4	3	2	1
10. During the past 30 days, I often had to deal with demanding customers.	5	4	3	2	1

### Section II: Social Media Break Activities

Please select the number that best describes how you usually feel about each item. (Please circle your answer)

During the past 30 days, please estimate your frequency of using social media at work on the following activities per day.

Types of social media include: Facebook, Instagram, Twitter, LinkedIn, YouTube, Snapchat and so on.

	5 ▼	4 ▼	3 ▼	2 ▼	1 ▼
	<b>Very often More than 5 times a day</b>	Fairly Often 4-5 times a day	Sometimes 2-3 times a day	Occasionally 1 time a day	<b>Never Never</b>
1. During the past 30 days, how often did you use social media at work to create new relationships (e.g., add or follow a friend on social media)?	5	4	3	2	1

2. During the past 30 days, how often did you use social media at work to get to know people you would otherwise not meet (e.g., view friends' posts/updates)?	5	4	3	2	1
3. During the past 30 days, how often did you use social media at work to maintain close social relationships with people (e.g., chat with friends to update our recent status of life and work)?	5	4	3	2	1
4. During the past 30 days, how often did you use social media at work to get acquainted with friends who shared your interests (e.g., talk with friends who are familiar with my current job, life and interests)?	5	4	3	2	1
5. During the past 30 days, how often did you use social media at work to meet people with your interests (e.g., talk with friends who are familiar with my current job, life and interests)?	5	4	3	2	1
6. During the past 30 days, how often did you use social media at work to chat with others (e.g., talk with friends about my job and life to get social support)?	5	4	3	2	1
7. During the past 30 days, how often did you use social media at work to keep up with what's going on with friends (e.g., view friends' posts/updates)?	5	4	3	2	1
8. During the past 30 days, how often did you use social media at work to <u>enjoy</u> your break (e.g., have a feeling of enjoyment)?	5	4	3	2	1
9. During the past 30 days, how often did you use social media at work to take a break from work (e.g., use social media to take time for leisure)?	5	4	3	2	1
10. During the past 30 days, how often did you use social media at work to <u>entertain</u> yourself (e.g., watch videos, play games, or listen to music)?	5	4	3	2	1
11. During the past 30 days, how often did you use social media at work to <u>relax</u> at work (e.g., use social media for fun)?	5	4	3	2	1
<b>The following activities of using social media at work are not related to work but personal purposes.</b>					
12. During the past 30 days, how often did you use social media at work to gain information (e.g., learn and know something through reading others' posts)?	5	4	3	2	1
13. During the past 30 days, how often did you use social media at work to share information (e.g., share others' posts that you feel interested, funny or useful)?	5	4	3	2	1
14. During the past 30 days, how often did you use social media at work to create content for personal purposes (e.g., share important life events or personal experiences, opinions or feelings with friends on social media)?	5	4	3	2	1
15. During the past 30 days, how often did you use social media at work to seek information (e.g., search for information that you are interested in)?	5	4	3	2	1
16. During the past 30 days, how often did you use social media at work to participate in discussions and answer questions (e.g., comment on posts to exchange ideas and interact with others to receive feedback)?	5	4	3	2	1

1. How many years have you used social media? \_\_\_\_\_ Years

2. How many minutes do you spend on social media at work for personal use a day?  
\_\_\_\_\_ Minutes
3. How many minutes do you spend on social media at work for work purpose a day?  
\_\_\_\_\_ Minutes
4. Types of social media used for personal purposes (non-work-related).  Facebook  YouTube  LinkedIn  Instagram  Twitter  Snapchat  Others \_\_\_\_\_  
(multiple answers)
5. Types of social media used for professional purposes (work-related).  Facebook  YouTube  LinkedIn  Instagram  Twitter  Snapchat  Others \_\_\_\_\_  
(multiple answers)
6. When do you use social media at work? (multiple answers)  
 During work  During coffee breaks  During lunch breaks  
 During free time (e.g., when you are not serving customers)  Between shifts  Others \_\_\_\_\_
7. Organizational policy towards the use of social media at work.  
 Allowed  Not allowed  No policy  Don't know
8. Does your company allow to check/use social media at work for personal use?  
 Allowed  Not allowed  Don't know
9. The degree to which the use of social media is related to work.  
 Not related  A little bit related  Moderately related  Pretty much related  Highly related
10. Purpose of using social media at work. (multiple answers)  
 Professional use (e.g., collaboration/communication with coworkers to solve work-related problems)  
 Socialization (e.g., stay in touch with old friends/meet new people)  
 Entertainment (e.g., play games/watch videos/listen music)  
 Cognitive use (e.g., seek, gain, share or create information/content)  
 Others \_\_\_\_\_

### Section III: Non-Social Media Break Activities

Please select the number that best describes how you usually feel about each item. (Please circle your answer)

During the past 30 days, please estimate your frequency of engaging in the following break activities per workday.

The following break activities are not related to social media use at work.

	5 ▼	4 ▼	3 ▼	2 ▼	1 ▼
<b>Very often</b>		Fairly Often	Sometimes	Occasionally	<b>Never</b>
<b>More than 5 times a day</b>		4-5 times a day	2-3 times a day	1 time a day	<b>Never</b>

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. During the past 30 days, how often did you stretch, walk around the office, or relax briefly (e.g., deep breathing, muscle tension release) at work? | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|

2. During the past 30 days, how often did you listen to music, daydream, gaze out the office windows, take a quick nap, or any other psychological relaxation?	5	4	3	2	1
3. During the past 30 days, how often did you drink caffeinated beverages (e.g., energy drinks, coffee, black or green tea) at work?	5	4	3	2	1
4. During the past 30 days, how often did you snack (e.g., cookies) or drink non-caffeinated beverages (e.g., juice, water, vitamin water, soda) at work?	5	4	3	2	1
5. During the past 30 days, how often did you chat with coworkers at work on non-work related topics?	5	4	3	2	1
6. During the past 30 days, how often did you text, use instant messenger, or call to friends or family members at work?	5	4	3	2	1
7. During the past 30 days, how often did you surf the Web for entertainment (e.g., playing a game, shopping online, getting sports' scores and info, getting travel info, making a reservation for travel)?	5	4	3	2	1
8. During the past 30 days, how often did you read books, newspapers, or magazines at work for personal learning or entertainment?	5	4	3	2	1

1. What is your preference of at-work break activities?  
Please rank the following activities in the order of degree you like from best (1) to worst (7).
  - Social media use during breaks at work
    - Social use (e.g., chat with friends/family members)
    - Hedonic use (e.g., play games/watch videos/listen to music)
    - Cognitive use (e.g., seek, gain, share or create information/content)
  - Non-social media break activities at work
    - Relaxation activities (e.g., stretch, daydream, gaze out the office windows)
    - Nutrition-intake activities (e.g., drink caffeinated beverages, have a snack)
    - Social activities (e.g., chat with co-workers, text or call to friends)
    - Cognitive activities (e.g., read books/magazines, shop online)
2. Please rank the following activities in the order of the time you spend the most (1) to the least (7) per workday.
  - Social media use during breaks at work
    - Social use (e.g., chat with friends/family members)
    - Hedonic use (e.g., play games/watch videos/listen to music)
    - Cognitive use (e.g., seek, gain, share or create information/content)
  - Non-social media break activities at work
    - Relaxation activities (e.g., stretch, daydream, gaze out the office windows)
    - Nutrition-intake activities (e.g., drink caffeinated beverages, have a snack)
    - Social activities (e.g., chat with co-workers, text or call to friends)
    - Cognitive activities (e.g., read books/magazines, shop online)

#### Section IV: Recovery Experiences

Please rate the extent of your **agreement** with the following statements. (Please circle your answer)

	5 ▼	4 ▼	3 ▼	2 ▼	1 ▼
	<b>Strongly Agree</b>	Agree	Neither agree nor disagree	Disagree	<b>Strongly Disagree</b>
1. During the past 30 days, I forgot about work temporarily after using social media at work.	5	4	3	2	1
2. During the past 30 days, I didn't think about work temporarily after using social media at work.	5	4	3	2	1
3. During the past 30 days, I got a temporary break from the demands of work after using social media at work.	5	4	3	2	1
4. During the past 30 days, I distanced myself from my work temporarily after using social media at work.	5	4	3	2	1
5. During the past 30 days, I kicked back and relaxed temporarily after using social media at work.	5	4	3	2	1
6. During the past 30 days, I experienced recovery from job stress because I used the time to relax and entertain myself after using social media at work.	5	4	3	2	1
7. During the past 30 days, I experienced recovery from job stress because I took time to use social media at work for leisure.	5	4	3	2	1
8. During the past 30 days, I experienced recovery from job stress because I used social media at work to do relaxing things.	5	4	3	2	1

#### Section V: Job Satisfaction

Please rate the extent of your **agreement** with the following statements. (not how you feel today, but how you usually feel about each item) (Please circle your answer)

	5 ▼	4 ▼	3 ▼	2 ▼	1 ▼
	<b>Strongly Agree</b>	Agree	Neither agree nor disagree	Disagree	<b>Strongly Disagree</b>
1. All in all, I am satisfied with my current job.	5	4	3	2	1
2. In general, I like working at my organization.	5	4	3	2	1
3. In general, I do like my present job.	5	4	3	2	1

#### Section VI: Life Satisfaction

Please rate the extent of your **agreement** with the following statements. (not how you feel today, but how you usually feel about each item) (Please circle your answer)

	5 ▼	4 ▼	3 ▼	2 ▼	1 ▼
	<b>Strongly Agree</b>	Agree	Neither agree nor disagree	Disagree	<b>Strongly Disagree</b>
1. In most ways my life is close to my ideal.	5	4	3	2	1
2. The conditions of my life are excellent.	5	4	3	2	1
3. So far, I have gotten the important things I want in life.	5	4	3	2	1



4. I am satisfied with my life.	5	4	3	2	1
5. If I could live my life over, I would change almost nothing.	5	4	3	2	1

**Section VII: General Information**

1. Please indicate your gender:  Female  Male
2. How old are you? \_\_\_\_\_ Years old
3. What is your education level?  High school  
 Some college experience  
 Associate’s degree -  Currently pursuing  
 Bachelor’s degree -  Currently pursuing  
 Master’s degree or above -  Currently pursuing
4. What is your occupation in the hospitality industry?  
 Hotel/Motel/Inn  Restaurant/Bar  Others \_\_\_\_\_
5. What is your job position?  
 Non-managerial employees  Managerial employees  Others \_\_\_\_\_
6. What is your employment status?  
 Full-time (work more than 35 hours a week)  Part-time  Others \_\_\_\_\_
7. How many years do you work for hospitality industry? \_\_\_\_\_ Years
8. How often do you interact with customers per day?  
 1-5 times  6-10 times  11-15 times  16-20 times  21-25 times  
 More than 25 times
9. Ranking about your performance at work.  
 Top 1-10%  Top 11-20%  Top 21-30%  Top 31-40%  Top 41-50%  
 Lower than 49%

Thank you so much!

## **APPENDIX II: Item-Sorting Procedure**

### **Item-Sorting Procedure**

#### **Instruction**

Thank you for participating this task. This task can help me to determine the final survey. The survey will be used in my dissertation. Basically, you need to 1) read a definition of each variable, 2) read a random list of questions, and then 3) select and sort questions that best fit to measure each variable.

Step 1:

Read the definition of each variable.

Step 2:

Read the items from the random list.

Step 3:

Select and sort the items that best describe and measure each variable.

Please feel free to contact me if you have any questions. Thank you for your help!

Yi-Sung (Ethan) Cheng

Doctoral Candidate

Hospitality Management

111 Eckles Hall

University of Missouri

Columbia, MO 65211

ycv67@mail.missouri.edu

## **Definitions**

### **Job Demands**

Job demands can be regarded as negative job characteristics of a given job. Job demands are physical, psychological, social, or organizational aspects of a job that require substantial physical and psychological effort and energy from workers. Job demands commonly contain two dimensions, quantitative (workload) and qualitative (emotional) demands. This study only focuses on emotional demands.

### **Emotional Demands**

The high level of emotional demands that employees are subject to (and that are often related to the conflict between felt and expressed emotions) requires the investment of effort (physical and/or psychological). Emotional demands were assessed in terms of both emotional rule dissonance and customer demands.

### **Social Media Break Activities**

It is defined as employees use social media at work (during work breaks, coffee breaks, lunch breaks, free time without serving customers and between shifts) for personal (non-work-related) purposes such as chatting with others, reading others' posts, creating or sharing a post, playing games, listening to music, watching videos and seeking information. The following three dimensions can be used to measure and explain social media usage behavior.

### **Social Use**

Social use is defined as using social media to meet new people and keep in touch with existing friends and family. In other words, it is related to bridging and bonding relationships.

### **Hedonic Use**

Unlike social use, hedonic use aims to provide entertainment, enjoyment and relaxation such as watching videos, listening to music and playing games. Users can access social media to occupy time and relieve boredom.

### **Cognitive Use**

Cognitive use is defined as using social media to seek and share information. Information seeking refers to using social media to search content that created by others and self-educate. Information sharing refers to using social media to present information about my interests or concerns and share information with others including sharing stories, ratings, opinions, arguments, personal photos and videos.

### **Recovery Experiences**

Recovery means to a process during which individual functional systems that have been called upon during a stressful experience return to their initial and pre-stressor levels. Psychological detachment and relaxation are two common strategies for experiencing recovery because they indicate that no further demands are made on human functional systems called upon during work.

### **Psychological Detachment**

Detachment refers to an individual's sense of being away from the work situation. Detachment implies not to be occupied by work-related duties. Psychological detachment refers to disengage oneself mentally from work. It indicates to stop thinking about one's work and work-related problems and tasks.

### **Relaxation**

Relaxation is a process often associated with leisure activities. It is characterized by a state of low activation and increased positive affect. Many individuals expect relaxation from activities that put few social demands on them, that require little physical or intellectual effort, and that present no challenge to them.

### **Job Satisfaction**

Job satisfaction refers to an employee's attitude towards his job and he is more likely to achieve organization goals if he has a positive attitude such as he likes his job. Job satisfaction is an affective state deriving from an individual's subjective experience with his or her job.

## **Life Satisfaction**

Life satisfaction is defined as a construct that estimates the overall well-being of a person, which derives from an assessment of life in general. That is to say, life satisfaction is an individual's general evaluation with the overall quality of life and is an indicator of subjective well-being.

### **Random List of Items**

1. During the past 30 days, how often did you use social media at work to get acquainted with friends who shared your interests (e.g., talk with friends who are familiar with my current job, life and interests)?
2. So far, I have gotten the important things I want in life.
3. During the past 30 days, I experienced recovery from job stress because I used social media at work to do relaxing things.
4. During the past 30 days, how often did you use social media at work to meet people with your interests (e.g., talk with friends who are familiar with my current job, life and interests)?
5. During the past 30 days, how often did you use social media at work to gain information (e.g., learn and know something through reading others' posts)?
6. I like to gossip at times.
7. During the past 30 days, I didn't think about work temporarily after using social media at work.
8. During the past 30 days, how often did you use social media at work to enjoy your break (e.g., have a feeling of enjoyment)?
9. During the past 30 days, I often had to hide my frustration or anger, when I was dealing with unreasonable customers.
10. During the past 30 days, I often had to hide anger or disapproval about something someone had done.
11. During the past 30 days, I often had to express friendly emotions (e.g., smiling, giving compliments, making small talk).
12. During the past 30 days, how often did you use social media at work to create new relationships (e.g., add or follow a friend on social media)?
13. During the past 30 days, I often had to express feelings of sympathy (e.g., saying I "understand", I am sorry to hear about something).
14. During the past 30 days, I often had to react with understanding to customers with unreasonable behavior.
15. During the past 30 days, how often did you use social media at work to share information (e.g., share others' posts that you feel interested, funny or useful)?
16. During the past 30 days, I distanced myself from my work temporarily after using social media at work.

17. During the past 30 days, I kicked back and relaxed temporarily after using social media at work.
18. During the past 30 days, how often did you use social media at work to get to know people you would otherwise not meet (e.g., view friends' posts/updates)?
19. During the past 30 days, I dealt with customers who incessantly complained, although I always did everything to help them.
20. In general, I like working at my organization.
21. I am very happy with my performance in current job.
22. I am very satisfied with my performance in my current job.
23. During the past 30 days, how often did you use social media at work to seek information (e.g., search for information that you are interested in)?
24. During the past 30 days, how often did you use social media at work to seek relationships with others (e.g., make new friends via social media)?
25. During the past 30 days, I often had to hide disgust over something someone had done.
26. During the past 30 days, how often did you use social media at work to participate in discussions and answer questions (e.g., comment on posts to exchange ideas and interact with others to receive feedback)?
27. I am satisfied with my life.
28. During the past 30 days, I experienced recovery from job stress because I took time to use social media at work for leisure.
29. During the past 30 days, how often did you use social media at work to relax at work (e.g., use social media for fun)?
30. The conditions of my life are excellent.
31. During the past 30 days, how often did you use social media at work to take a break from work (e.g., use social media to take time for leisure)?
32. If I could live my life over, I would change almost nothing.
33. During the past 30 days, I experienced recovery from job stress because I used the time to relax and entertain myself after using social media at work.
34. During the past 30 days, how often did you use social media at work to discover friends with interests that were similar to yours (e.g., identify individuals with shared interests)?
35. During the past 30 days, I often had to deal with demanding customers.

36. During the past 30 days, how often did you use social media at work to entertain yourself (e.g., watch videos, play games, or listen to music)?
37. During the past 30 days, my job usually required me to remain calm even when I was astonished.
38. In general, I do like my present job.
39. During the past 30 days, my job usually required me to reassure customers who were distressed or upset.
40. My performance in my current job is excellent.
41. During the past 30 days, I forgot about work temporarily after using social media at work.
42. During the past 30 days, how often did you use social media at work to chat with others (e.g., talk with friends about my job and life to get social support)?
43. During the past 30 days, how often did you use social media at work to create content for personal purposes (e.g., share important life events or personal experiences, opinions or feelings with friends on social media)?
44. During the past 30 days, I got a temporary break from the demands of work after using social media at work.
45. In most ways my life is close to my ideal.
46. All in all, I am satisfied with my current job.
47. During the past 30 days, how often did you use social media at work to keep up with what's going on with friends (e.g., view friends' posts/updates)?
48. During the past 30 days, how often did you use social media at work to maintain close social relationships with people (e.g., chat with friends to update our recent status of life and work)?



**Item Sorting (Please list the number of question such as 1, 10, or 21 to each box)**

**Job Demands**

**Emotional Demands (the job requires you to perform)**

--

**Social Media Break Activities**

**Social Use (use social media to build or maintain relationships)**

--

**Hedonic Use (use social media to have fun and experience relaxation and entertainment)**

--

**Cognitive Use (use social media to seek, share and create information)**

--

**Recovery Experiences (experience recovery after using social media at work)**

**Psychological Detachment (detach from work mentally after using social media)**

--

**Relaxation (feel relaxed after using social media)**

**Job Satisfaction (the quality of job)**

**Life Satisfaction (the quality of life)**

**Thank you again for your help!**

## REFERENCES

- 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.
- Ali-Hassan, H., & Nevo, D. (2009). Identifying social computing dimensions: A multidimensional scaling study. *In Proceedings of the International Conference for Information Systems* (pp. 15-18). Phoenix, AZ: AIS Electronic Library.
- Ali-Hassan, H., Nevo, D., & Wade, M. (2015). Linking dimensions of social media use to job performance: The role of social capital. *Journal of Strategic Information Systems 24*(2), 65-89.
- Anderson, J. C., & Gerbing, D. W. (1991). Predicting the performance of measures in a confirmatory factor analysis with a pretest assessment of their substantive validities. *Journal of Applied Psychology, 76*(5), 732-740.
- Anderson, S., Auquier, A., Hauck, W. W., Oakes, D., Vandaele, W., & Weisberg, H. I., Bryk, A. S., & Kleinman, J. (1980). *Statistical methods for comparative studies: Techniques for bias reduction*. New York, NY: John Wiley & Sons, Inc.
- Appel, H., Crusius, J., & Gerlach, A. L. (2015). Social comparison, envy, and depression of Facebook: A study looking at the effects of high comparison standards on depressed individuals. *Journal of Social and Clinical Psychology, 34*(4), 277-289.
- Argyle, M., & Dean, J. (1965). Eye contact and distance affiliation. *Sociometry, 28*(3), 289-304.

- Ashraf, N., & Javed, T. (2014). Impact of social networking on employee performance. *Business Management and Strategy*, 5(2), 139-150.
- Ayyad, K. (2011). Internet usage vs traditional media usage among university students in the United Arab Emirates. *Journal of Arab & Muslim Media Research*, 4(1), 41-61.
- Babin, B. J., & Boles J. S. (1998). Employee behavior in a service environment: A model and test of potential differences between men and women. *Journal of Marketing*, 62(2), 77-91.
- Baka, L. (2015). Does job burnout mediate negative effects of job demands on mental and physical health in a group of teachers? Testing the energetic process of Job Demands-Resources model. *International Journal of Occupational Medicine and Environmental Health*, 28(2), 335-346.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285.
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341-356.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(2), 170-180.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83-104.

- Bantz, C. (1982). Exploring uses and gratifications: A comparison of reported uses of television and reported uses of favorite program type. *Communication Research, 9*(3), 352-379.
- Baral, R., & Bhargava, S. (2010). Work-family enrichment as a mediator between organizational interventions for work-life balance and job outcomes. *Journal of Managerial Psychology, 25*(3), 274-300.
- Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing, 13*(2), 139-161.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588-606.
- Berger, K., Klier, J., Klier, M., & Probst, F. (2014). A review of information systems research on online social networks. *Communications of the Association for Information Systems, 35*(1), 145-172.
- Best, R. G., Downey, R. G., & Jones, R. G. (1997, April). *Incumbent perceptions of emotional work requirements*. Paper presented at the 12th annual conference of the Society for Industrial and Organizational Psychology, St. Louis, Missouri.
- Bevan, J. L., Gomez, R., & Sparks, L. (2014). Disclosures about important life events on Facebook: Relationships with stress and quality of life. *Computers in Human Behavior, 39*, 246-253.

- Biocca, F., Harms, C., & Burgoon, J. K. (2003). Towards a more robust theory and measure of social presence: Review and suggested criteria. *Presence Teleoperators & Virtual Environments*, *12*(5), 456-480.
- Blumer, J. (1979). The role of theory in uses and gratifications studies. *Communication Research*, *6*(1), 9-36.
- Bollen, K. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, *17*(3), 303-316.
- Brief, A. P. (1998). *Attitudes in and around organizations*. Thousand Oaks, CA: Sage.
- Brief, A. P., & Roberson, L. (1989). Job attitude organization: An exploratory study. *Journal of Applied Social Psychology*, *19*(9), 717-727.
- Brooks, S. (2015). Does personal social media usage affect efficiency and well-being? *Computers in Human Behavior*, *46*, 26-37.
- Brooks, S., & Califf, C. (2017). Social media-induced technostress: Its impact on the job performance of it professionals and the moderating role of job characteristics. *Computer Networks*, *114*, 143-153.
- Brown, D. K., Barton, J. L., Pretty, J., & Gladwell, V. F. (2014). Walks4Work: Assessing the role of the natural environment in a workplace physical activity intervention. *Scandinavian Journal of Work, Environment & Health*, *40*(4), 390-399.
- Brown, J. S., & Duguid, P. (2002). *The social life of information*. Boston, MA: Harvard Business Press.
- Bureau of Labor Statistics (2017). Table 16. Annual total separations rates by industry and region, not seasonally adjusted. Retrieved from <https://www.bls.gov/news.release/jolts.t16.htm>

- Burke, M., & Kraut, R. E. (2016). The relationship between Facebook use and well-being depends on communication type and tie strength. *Journal of Computer-Mediated Communication, 21*(4), 265-281.
- Burns, A. C., & Bush, R. F. (1995). *Marketing research*. Englewood Cliffs, NJ: Prentice Hall.
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. (1983). *Assessing the attitudes and perceptions of organizational members*. In *Assessing Organizational Change*, eds. S. E. Seashore, E. E. Lawler, III, P. H. Mirvis and C. Cammann, New York: NY: John Wiley and Sons.
- Cao, X., Vogel, D. R, Guo, X., Liu, H., & Gu, J. (2012). Understanding the influence of social media in the workplace: An integration of media synchronicity and social capital theories. *In 45th Hawaii International Conference on System Science (HICSS)* (pp. 3938-3947). Maui, HI: IEEE.
- Ceglarek, P. J. D., & Ward, L. M. (2016). A tool for help or harm? How associations between social networking use, social support, and mental health differ for sexual minority and heterosexual youth. *Computers in Human Behavior, 65*, 201-209.
- Charoensukmongkol, P. (2014). Effects of support and job demands on social media use and work outcomes. *Computers in Human Behavior, 36*, 340-349.
- Charoensukmongkol, P. (2015). Social media use and job performance: Moderating roles of workplace factors. *International Journal of Cyber Behavior, Psychology and Learning, 5*(2), 59-74.
- Charoensukmongkol, P. (2016). Mindful Facebooking: The moderating role of mindfulness on the relationship between social media use intensity at work and burnout. *Journal of Health Psychology, 21*(9), 1966-1980.

- Charoensukmongkol, P. (2018). The impact of social media on social comparison and envy in teenagers: The moderating role of the parent comparing children and in-group competition among friends. *Journal of Child and Family Study*, 27(1), 69-79.
- Chang, C.-M., & Hsu, M.-H. (2016). Understanding the determinants of users' subjective well-being in social networking sites: An integration of social capital theory and social presence theory. *Behaviour & Information Technology*. 35(9), 720-729.
- Chen, C.-C., Huang, W.-J., & Petrick, J. F. (2016). Holiday recovery experiences, tourism satisfaction and life satisfaction - Is there a relationship? *Tourism Management*, 53, 140-147.
- Chen, C.-F., & Chen, S.-C. (2014). Investigating the effects of job demands and job resources on cabin crew safety behaviors. *Tourism Management*, 41, 45-52.
- Chen, W., & Lee, K. Y. (2013). Sharing, liking, commenting, and distressed? The pathway between Facebook interaction and psychological distress. *Cyberpsychology, Behavior, and Social Networking*, 16(10), 728-734.
- Chiang, F. F. T., Birtch, T. A., & Cai, Z. (2014). Front-line service employees' job satisfaction in the hospitality industry: The influence of job demand variability and the moderating roles of job content and job context factors. *Cornell Hospitality Quarterly*, 55(4), 398-407.
- Chiang, F. T., T., Birtch, A., & Kwan, H. K. (2010). The moderating roles of job control and work-life balance practices on employee stress in the hotel and catering industry. *International Journal of Hospitality Management*, 29(1), 25-32.



- Cho, V. (2017). A study of negative emotional disclosure behavior in social network media: Will an unexpected negative event and personality matter? *Computers in Human Behavior*, *73*, 172-180.
- Choi, H. J., & Kim, Y. T. (2012). Work-family conflict, work-family facilitation, and job outcomes in the Korean hotel industry. *International Journal of Contemporary Hospitality Management*, *24*(7), 1011-1028.
- Choi, S. B., & Lim, M. S. (2016). Effects of social and technology overload on psychological well-being in young South Korean adults: The mediatory role of social network service addiction. *Computers in Human Behavior*, *61*, 245-254.
- Chu, K. H., Baker, M. A., & Murrmann, S. K. (2012). When we are onstage, we smile: The effects of emotional labor on employee work outcomes. *International Journal of Hospitality Management*, *31*(3), 906-915.
- Chung, N., Han, H., & Koo, C. (2015). Adoption of travel information in user-generated content on social media: The moderating effect of social presence. *Behaviour & Information Technology*, *34*(9), 902-919.
- Cochran, W. G. (1977). *Sampling techniques* (3rd Ed.). New York, NY: John Wiley and Sons, Inc.
- Cohrs, J. C., Abele, A. E., & Dette, D. E. (2006). Integrating situational and dispositional determinants of job satisfaction: Findings from three samples of professions. *Journal of Psychology*, *140*(4), 363-396.
- Collins, E., & Cox, A. L. (2014). Switch on to games: Can digital games aid post-work recovery? *International Journal of Human-Computer Studies*, *72*(8-9), 654-662.

- Cooper, C. L., & Marshall, J. (1976). Occupational sources of stress: A review of the literature relating to coronary heart disease and mental ill health. *Journal of Occupational Psychology*, 49(1), 11-28.
- Cui, G., Lockee, B., & Meng, C. (2013). Building modern online social presence: A review of social presence theory and its instructional design implications for future trends. *Education and Information Technologies*, 18(4), 661-685.
- Dabke, D. (2014). Can life satisfaction be predicted by emotional intelligence, job satisfaction and personality type? *Aweshkar Research Journal*, 17(1), 22-32.
- Dawson, M., Abbott, J., & Shoemaker, S. (2011). The hospitality culture scale: A measure organizational culture and personal attributes. *International Journal of Hospitality Management*, 30(2), 290-300.
- De Bloom, J., Kinnunen, U., & Korpela, K. (2015). Recovery processes during and after work: Associations with health, work engagement, and job performance. *Journal of Occupational and Environment Medicine*, 57(7), 732-742.
- De Bloom, J., Sianoja, M., Korpela, K., Tuomisto, M., Lilja, A., Geurts, S., & Kinnunen, U. (2017). Effects of park walks and relaxation exercises during lunch breaks on recovery from job stress: Two randomized controlled trials. *Journal of Environmental Psychology*, 51, 14-30.
- Derks, D., & Bakker, A. B. (2012). Smartphone use, work-home interference and burnout: A diary study on the role of recovery. *Applied Psychology: An International Review*, 63(3), 411-440.
- Derks, D., Ten Brummelhuis, L. L., Zecic, D., & Bakker, A. B. (2014). Switching on and off...: Does smartphone use obstruct the possibility to engage in recovery activities? *European Journal of Work and Organizational Psychology*, 23(1), 80-90.

- De Vries, D. A., Moller, A. M., Wieringa, M. S., Eigenraam, A. W., & Hamelink, K. (2018). Social comparison as the thief of joy: Emotional consequences of viewing strangers' Instagram posts. *Media Psychology, 21*(2), 222-245.
- De Zubielqui, G. C., Fryges, H., & Jones, J. (2018). Social media, open innovation & HRM: Implications for performance. *Technological Forecasting & Social Change*. Advance online publication. DOI: 10.1016/j.techfore.2017.07.014
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512.
- Demerouti, E., Bakker, A. B., Geurts, S. A. E., & Taris, T. W. (2009). Daily recovery from work-related effort during non-work time. In S. Sonnentag, P. L. Perrewé, D. C. Ganster (Eds.), *Research in occupational stress and well-being: Vol. 7. Current perspectives on job-stress recovery* (pp. 85-123). Bingley, UK: Emerald Group Publishing Limited.
- Diener, E., & Fujita, F. (1995). Resources, personal strivings, and subjective well-being: A nomothetic and ideographic approach. *Journal of Personality and Social Psychology, 68*(5), 926-935.
- Dole, C., & Schroeder, R. G. (2001). The impact of various factors on the personality, job satisfaction and turnover intentions of professional accountants. *Managerial Auditing Journal, 16*(4), 234-245.
- Doll, W. J., Xia, W., & Torkzadeh, G. (1994). A confirmatory factor analysis of the end-user computing satisfaction instrument. *MIS Quarterly, 18*(4), 453-461.
- Dollard, M. F., LaMontagne, A. D., Caulfield, N., Blewett, V., & Shaw, A. (2007). Job stress in the Australian and international health and community services

- sector: A review of the literature. *International Journal of Stress Management*, 14(4), 417-445.
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, 17(2), 245-260.
- Dunlap, J. C., & Lowenthal, P. R. (2009). Tweeting the night away: Using Twitter to enhance social presence. *Journal of Information Systems Education*, 20(2), 129-135.
- El Ouiridi, A., El Ouiridi, M., Segers, J., & Henderickx, E. (2014). Social media conceptualization and taxonomy: A Lasswellian framework. *Journal of Creative Communications*, 9(2), 107-126.
- El Ouiridi, A., El Ouiridi, M., Segers, J., & Henderickx, E. (2015). Employees' use of social media technologies: A methodological and thematic review. *Behaviour & Information Technology*, 34(5), 454-464.
- 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.
- 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.
- Ferreira, A., & Du Plessis, T. (2009). Effect of online social networking on employee productivity. *South African Journal of Information Management*, 11(1), 1-16.
- Ford, R. C., Sturman, M. C., & Heaton, C. P. (2012). *Managing quality service in hospitality: How organizations achieve excellence in the guest experience*. Clifton Park, NY: Delmar Cengage Learning.

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fortes-Ferreira, L., Peiró, J. M., González-Morales, M. G., & Martín, I. (2006). Work-related stress and well-being: The roles of direct action coping. *Scandinavian Journal of Psychology*, 47(4), 293-302.
- Frank, K. A. (2000). Impact of a confounding variable on a regression coefficient. *Sociological Methods & Research*, 29(2), 147-194.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 115-134.
- Fritz, C., Ellis, A. M., Demsky, C. A., Lin, B. C., & Guros, F. (2013). Embracing work breaks: Recovering from work stress. *Organizational Dynamics*, 42(4), 274-280.
- Fritz, C., Lam, C. F., & Spreitzer, G. M. (2011). It's the little things that matter: An examination of knowledge workers' energy management. *The Academy of Management Perspectives*, 25(3), 28-39.
- Frost, R. L., & Rickwood, D. J. (2017). A systematic review of the mental health outcomes associated with Facebook use. *Computers in Human Behavior*, 76, 576-600.
- Gamor, E., Amissah, E. F., & Boakye, K. A. A. (2014). Work-family conflict among hotel employees in Sekondi-Takoradi Metropolis, Ghana. *Tourism Management Perspectives*, 12, 1-8.

- Gan, C., & Li, H. (2018). Understanding the effects of gratifications on the continuance intention to use WeChat in China: A perspective on uses and gratifications. *Computers in Human Behavior, 78*, 306-315.
- Gao, Q., & Feng, C. (2016). Branding with social media: User gratifications, usage patterns, and brand message content strategies. *Computers in Human Behavior, 63*, 868-890.
- Gaskin, J. (2016). Stats tools package. Retrieved from <http://statwiki.kolobkreations.com>
- Gerson, J., Plagnol, A. C., & Corr, P. J. (2016). Subjective well-being and social media use: Do personality traits moderate the impact of social comparison on Facebook? *Computers in Human Behavior, 63*, 813-822.
- Gervais, R. L. (2016). Detachment and recovery after work: An overview. Retrieved from [https://oshwiki.eu/index.php?title=Detachment\\_and\\_recovery\\_after\\_work:\\_A\\_n\\_overview&oldid=245858](https://oshwiki.eu/index.php?title=Detachment_and_recovery_after_work:_A_n_overview&oldid=245858)
- Geurts, S. A., & Sonnentag, S. (2006). Recovery as an explanatory mechanism in the relation between acute stress reactions and chronic health impairment. *Scandinavian Journal of Work, Environment & Health, 32*(6), 482-492.
- Ghiselli, R. E., La Lopa J. M., & Bai, B. (2001). Job satisfaction, life satisfaction, and turnover intent among food-service managers. *Cornell Hotel and Restaurant Administration Quarterly, 42*(2), 28-37.
- Good, A., Sambhanthan, A., & Panjganj, V. (2013). Looking back at Facebook content and the positive impact upon wellbeing: Exploring reminiscing as a tool for self soothing. In A. A. Ozok, & P. Zaphiris (Eds.), *OCSC 2013*.

- Proceedings of International Conference on Online Communities and Social Computing* (pp. 278-286). Las Vegas, NV: Springer-Verlag Berlin Heidelberg.
- Grandey, A. A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labour. *Journal of Occupational Health Psychology*, 5(1), 95-110.
- Grandey, A. A. (2003). When “the show must go on”: Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46(1), 86-96.
- Graves, L. M., Ohlott, P. J., & Ruderman, M. N. (2007). Commitment to family roles: Effects on manager’s attitudes and performance. *Journal of Applied Psychology* 92(1), 44-56.
- Gunawardena, C. N. (1995). Social presence theory and implications for interaction and collaborative learning in computer conferences. *International Journal of Educational Telecommunications*. 1(2/3), 147-166.
- Ha, L., & Fang, L. (2012). Internet experience and time displacement of traditional news media use: An application of the theory of the niche. *Telematics and Informatics*, 29(2), 177-186.
- Ha, L., & James, E. L. (1998). Interactivity re-examined: A baseline analysis of early business websites. *Journal of Broadcasting & Electronic Media*, 42, 457-474.
- Ha, Y. W., Kim, J., Libaque-Saenz, C. F., Chang, Y., & Park, M.-C. (2015). Use and gratifications of mobile SNSs: Facebook and KakaoTalk in Korea. *Telematics and Informatics*, 32(3), 425-438.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159-170.

- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hahn, V. C., & Dormann, C. (2013). The role of partners and children for employees psychological detachment from work and well-being. *Journal of Applied Psychology*, 98(1), 26-36.
- Hair, J. T., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis with readings*. New York, NY: Macmillan.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Hausser, J. A., Mojzisch, A., Niesel, M., & Schulz-Hardt, S. (2010). Ten years on: A review of recent research on the Job Demand–Control (-Support) model and psychological well-being. *Work & Stress*, 24(1), 1-35.
- Hayes, M., Van Stolk-Cooke, K., & Muench, F. (2015). Understanding Facebook use and the psychological affects of use across generations. *Computers in Human Behavior*, 49, 507-511.
- Hayes, R. A., Carr, C. T., & Wohn, D. Y. (2016). One click, many meanings: Interpreting paralinguistic digital affordances in social media. *Journal of Broadcasting & Electronic Media*, 60(1), 171-187.
- Heller, D., Judge, T. A., & Waston, D. (2002). The confounding role of personality and trait affectivity in the relationship between job and life satisfaction. *Journal of Organizational Behavior*, 23(7), 815-835.



- Herlle, M., & Astray-Caneda, V. (2012). The impact of social media in the workplace. In M. S. Plakhotnik, S. M. Nielsen, & D. M. Pane (Eds.), *COERC 2012. Proceedings of the 11th Annual College of Education & Graduate Student Network Research Conference* (pp. 67-73). Miami, FL: Florida International University.
- Higgins, C. A., Duxbury, L. E., & Irving, R. H. (1992). Work–family conflict in the dual-career family. *Organizational Behavior and Human Decision Processes* 51(1), 51-75.
- Hinkin, T. R., Tracey, J. B., & Enz, C. A. (1997). *Scale construction: Developing reliable and valid measurement instruments*. Retrieved from <http://scholarship.sha.cornell.edu/articles/613>
- Hochschild, A. R. (1983). *The managed heart*. London, UK: University of California Press.
- Hong, F. Y., & Chiu, S. L. (2016). Factors influencing Facebook usage and Facebook addictive tendency in university students: The role of online psychological privacy and Facebook usage motivation. *Stress and Health*, 32(2), 117-127.
- Hoonakker, P., Carayon, P., & Korunka, C. (2013). Using the Job-Demands-Resources model to predict turnover in the information technology workforce – General effects and gender differences. *Horizons of Psychology*, 22(1), 51-65.
- Hopwood, C. J. (2007). Moderation and mediation in structural equation modeling: Applications for early intervention research. *Journal of Early Intervention*, 29(3), 262-272.
- Horley, J. (1984). Life satisfaction, happiness, and morale: Two problems with the use of subjective well-being indicators. *Gerontologist*, 24(2), 124-127.

- Hsu, L. C., & Liao, P. W. (2016). From job characteristics to job satisfaction of foreign workers in Taiwan's construction industry: The mediating role of organizational commitment. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 26(2), 243-255.
- Huang, L.-Y., Hsieh, Y.-J., & Wu, Y.-C. (2014). Gratifications and social network service usage: The mediating role of online experience. *Information & Management*, 51(6), 774-782.
- Hunter, E. M., & Wu, C. (2016). Give me a better break: Choosing workday break activities to maximize resource recovery. *Journal of Applied Psychology*, 101(2), 302-311.
- Hur, K., Kim, T. T., Karatepe, O. M., & Lee, G. (2017). An exploration of the factors influencing social media continuance usage and information sharing intentions among Korean travellers. *Tourism Management*, 63, 170-178.
- 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.
- Ineson, E. M., Benke, E., & László, J. (2013). Employee loyalty in Hungarian hotels. *International Journal of Hospitality Management*, 32(1), 31-39.
- Ismiyarto, I., Suwitri, S., Warella, Y., & Sundarso, S. (2015). Organizational culture, motivation, job satisfaction and performance of employees toward the implementation of internal bureaucracy reform in the ministry for the empowerment of state apparatus and bureaucracy reform (The Ministry of PANRB). *Journal of Management and Sustainability*, 5(1), 192-199.
- Jha, S. (2004). Determinants of delegation: A study in five star hotels. *Vision: The Journal of Business Perspective*, 8(2), 17-32.

- Jha, S. S., & Nair, S. K. (2008). Influence of locus of control, job characteristics and superior-subordinate relationship on psychological empowerment: A study in five star hotels. *Journal of Management Research*, 8(3), 147-161.
- Jiménez, A. G., López, M. C. L. D., & Pisionero, C. G. (2012). A vision of uses and gratifications applied to the study of Internet use by adolescents. *Communication & Society*, 25(2), 231-254.
- Johnson, B. K., & Knobloch-Westerwick, S. (2014). Glancing up or down: Mood management and selective social comparisons on social networking sites. *Computers in Human Behavior*, 41, 33-39.
- Jones, M. D. (2006). Which is a better predictor of job performance: Job satisfaction or life satisfaction? *Journal of Behavioral and Applied Management*, 8(1), 20-42.
- Judge, T. A., & Watanabe, S. (1993). Another look at the job satisfaction-life satisfaction relationship. *Journal of Applied Psychology*, 78(6), 939-948.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68.
- Kara, D., Uysal, M., & Magnini, V. P. (2012). Gender differences on job satisfaction of the five-star hotel employees: The case of the Turkish hotel industry. *International Journal of Contemporary Hospitality Management*, 24(7), 1047-1065.
- Karatepe, O. M. (2011). Do job resources moderate the effect of emotional dissonance on burnout? A study in the city of Ankara, Turkey. *International Journal of Contemporary Hospitality Management*, 23(1), 44-65.

- Karatepe, O. M. (2012). Job resources, work engagement, and hotel employee outcomes: A time-lagged analysis. *Economic Research-Ekonomika Istrazivanja*, 25(4), 1127-1139.
- Karatepe, O. M. (2013). The effects of work overload and work-family conflict on job embeddedness and job performance: The mediation of emotional exhaustion. *International Journal of Contemporary Hospitality Management*, 25(4), 614-634.
- Karatepe, O. M., & Baddar, L. (2006). An empirical study of the selected consequences of frontline employees' work-family conflict and family-work conflict. *Tourism Management*, 27(5), 1017-1028.
- Karatepe, O. M., & Bekteshi, L. (2008). Antecedents and outcomes of work-family facilitation and family-work facilitation among frontline hotel employees. *International Journal of Hospitality Management*, 27(4), 517-528.
- Karatepe, O. M., & Sokmen, A. (2006) The effects of work role and family role variables on psychological and behavioral outcomes of frontline employees. *Tourism Management*, 27(2), 255-268.
- Karikari, S., Osei-Frimpong, K., & Owusu-Frimpong, N. (2017). Evaluating individual level antecedents and consequences of social media use in Ghana. *Technological Forecasting & Social Change*, 123, 68-79.
- Katz, E., Haas, H., Gurevitch, M. (1973). On the use of the mass media for important things. *American Sociological Review*, 38(2), 164-181.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In Blumler, J. G., Katz, E. (Eds.), *The uses of mass communications: Current perspectives on gratifications research* (pp. 19-32). Beverly Hills, CA: Sage Publications.

- Keene, J. R., & Reynolds, J. R. (2005). The job cost of family demands: Gender differences in negative family-to-work spillover. *Journal of Family Issues*, 26(3), 275-299.
- Kim, H., Knight, D. K., & Crutsinger, C. (2009). Generation Y employees' retail work experience: The mediating effect of job characteristics. *Journal of Business Research*, 62(5), 548-556.
- Kim, H. J. (2008). Hotel service providers' emotional labor: The antecedents and effects on burnout. *International Journal of Hospitality Management*, 27(2), 151-161.
- Kim, H. J., Shin, K. H., & Umbreit, W. T. (2007). Hotel job burnout: The role of personality characteristics. *International Journal of Hospitality Management*, 26(2), 421-434.
- Kim, J., Kwon, Y., & Cho, D. (2011). Investigating factors that influence social presence and learning outcomes in distance higher education. *Computers & Education* 57(2), 1512-1520.
- 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.
- Kim, K., & Jogaratnam, G. (2010). Effects of individual and organizational factors on job satisfaction and intent to stay in the hotel and restaurant industry. *Journal of Human Resources in Hospitality & Tourism*, 9(3), 318-339.
- Kim, S., Park, Y., & Headrick, L. (2015). Employees' micro-break activities and job performance: An examination of telemarketing employees. *Academy of Management Proceedings*, 2015(1), 13943-13948.

- Kim, S., Park, Y., & Headrick, L. (2018). Daily micro-breaks and job performance: General work engagement as a cross-level moderator. *Journal of Applied Psychology, 103*(7), 772-786.
- Kim, S., Park, Y., & Niu, Q. (2017). Micro-break activities at work to recover from daily work demands. *Journal of Organizational Behavior, 38*(1), 28-44.
- Kinnunen, U., Feldt, T., De Bloom, J., Korpela, K. (2015). Patterns of daily energy management at work: Relations to employee well-being and job characteristics. *International Archives of Occupational and Environmental Health, 88*(8), 1077-1086.
- Kinnunen, U., Feldt, T., Siltaloppi, M., & Sonnentag, S. (2011). Job demands-resources model in the context of recovery: Testing recovery experiences as mediators. *European Journal of Work and Organizational Psychology, 20*(6), 805-832.
- Kishokumar, R. (2016). Influence of social networking in the work place on individual job performance: Special reference to the financial sector in Batticaloa District. *International Journal of Engineering Research and General Science, 4*(6), 306-323.
- Kong, H., Wang, S., & Fu, X. (2015). Meeting career expectation: Can it enhance job satisfaction of Generation Y? *International Journal of Contemporary Hospitality Management, 27*(1), 147-168.
- Krajewski, J., Wieland, R., & Sauerland, M. (2010). Regulating strain states by using the recovery potential of lunch breaks. *Journal of Occupational Health Psychology, 15*(2), 131-139.
- Kraut, R., & Burke, M. (2015). Internet use and psychological well-being: Effects of activity and audience. *Communications of the ACM, 58*(12), 94-100.

- Kühnel, J., Zacher, H., De Bloom, J., & Bledow, R. (2017). Take a break! Benefits of sleep and short breaks for daily work engagement. *European Journal of Work and Organizational Psychology, 26*(4), 481-491.
- Kuruüzüm, A., Anafarta, N., & Irmak, S. (2008). Predictors of burnout among middle managers in the Turkish hospitality industry. *International Journal of Contemporary Hospitality Management, 20*(2), 186-198.
- Kusluvan, S., Kusluvan, Z., Ilhan, I., & Buyruk, L. (2010). The human dimension: A review of human resources management issues in the tourism and hospitality industry. *Cornell Hospitality Quarterly, 51*(2), 171-214.
- Kwahk, K. Y., & Park, D. H. (2016). The effects of network sharing on knowledge-sharing activities and job performance in enterprise social media environments. *Computers in Human Behavior, 55*, 826-839.
- Lawson, K. M., Davis, K. D., Crouter, A. C., & O'Neill, J. W. (2013). Understanding work-family spillover in hotel managers. *International Journal of Hospitality Management, 33*(2), 273-281.
- Lee, K. H., Choo, S. W., & Hyun, S. S. (2016). Effects of recovery experiences on hotel employees' subjective well-being. *International Journal of Hospitality Management, 52*, 1-12.
- Lee, S. Y. (2014). How do people compare themselves with others on social network sites? The case of Facebook. *Computers in Human Behavior, 32*, 253-260.
- Lee-Ross, D. (2005). Perceived job characteristics and internal work motivation: An exploratory cross-cultural analysis of the motivational antecedents of hotel workers in Mauritius and Australia. *Journal of Management Development, 24*(3), 253-266.

- Leftheriotis, I., & Giannakos, M. N. (2014). Using social media for work: Losing your time or improving your work? *Computers in Human Behavior, 31*, 134-142.
- Leung, L., & Wei, R. (2000). More than just talk on the move: Uses and gratifications of the cellular phone. *Journalism & Mass Communication Quarterly, 77*(2), 308-320.
- Li, H., Liu, Y., Xu, X., Heikkilä, J., & Van Der Heijden, H. (2015). Modeling hedonic is continuance through the uses and gratifications theory: An empirical study in online games. *Computers in Human Behavior, 48*, 261-272.
- Li, X., Chen, W., & Popiel, P. (2015). What happens on Facebook stays on Facebook? The implications of Facebook interaction for perceived, receiving, and giving social support. *Computers in Human Behavior, 51*, 106-113.
- Lim, M., & Yang, Y. (2015). Effects of users' envy and shame on social comparison that occurs on social network services. *Computers in Human Behavior, 51*, 300-311.
- Lin, J.-H., Wong, J.-Y., & Ho, C.-H. (2013). Promoting frontline employees' quality of life: Leisure benefit system and work-to-leisure conflicts. *Tourism Management, 36*, 178-187.
- Lin, J.-H., Wong, J.-Y., & Ho, C.-H. (2015). The role of work-to-leisure conflict in promoting frontline employees' leisure satisfaction: Examining the job demand-control-support model. *International Journal of Contemporary Hospitality Management, 27*(7), 1539-1555.
- Lin, R., & Utz, S. (2015). The emotional responses of browsing Facebook: Happiness, envy, and the role of tie strength. *Computers in Human Behavior, 52*, 29-38.



- Lin, X., Li, S., & Qu, C. (2017). Social network sites influence recovery from social exclusion: Individual differences in social anxiety. *Computers in Human Behavior, 75*, 538-546.
- Liu, P., Tov, W., Kosinski, M., Stillwell, D. J., & Qiu, L. (2015). Do Facebook status updates reflect subjective well-being? *Cyberpsychology, Behavior, and Social Networking, 18*(7), 373-379.
- Locke, E. A. (1976). *The nature and cause of job satisfaction*. Chicago, IL: Rand McNally.
- Lometti, G. E., Reeves, B., & Bybee, C. R. (1977). Investigating the assumptions of uses and gratifications research. *Communication Research, 4*(3), 321.
- Longstreet, P., & Brooks, S. (2017). Life satisfaction: A key to managing internet & social media addiction. *Technology in Society, 50*, 73-77.
- Loo, R., & Thorpe, K. (2000). Confirmatory factor analyses of the full and short versions of the Marlowe-Crowne social desirability scale. *The Journal of Social Psychology, 140*(5), 628-635.
- Lowenthal, P. R. (2009). The evolution and influence of social presence theory on online learning. In T. T. Kidd (Ed.), *Online education and adult learning: New frontiers for teaching practices* (pp. 124-139). Hershey, PA: IGI Global.
- Luchman, J. N., Bergstrom, J., & Krulikowski, C. (2014). A motives framework of social media website use: A survey of young Americans. *Computers in Human Behavior, 38*, 136-141.
- Luo, N., Guo, X, Lu, B., & Chen, G. (2018). Can non-work-related social media use benefit the company? A study on corporate blogging and affective organizational commitment. *Computers in Human Behavior, 81*, 84-92.

- Luqman, A., Cao, X., Ali, A., Masood, A., & Yu, L. (2017). Empirical investigation of Facebook discontinues usage intentions based on SOR paradigm. *Computers in Human Behavior, 70*, 544-555.
- MacKinnon, D. P. (2000). Contrasts in multiple mediator models. In J. S. Rose, L. Chassin, C. C. Presson, & S. J. Sherman (Eds.), *Multivariate applications in substance use research: New methods for new questions* (pp. 141-160). Mahwah, NJ: Erlbaum.
- Manyamba, V., Zimbabwe, C., Ngezi, T., & Zimbabwe, G. (2017). The Effort Reward Imbalance model and work related stress in 3-5 Star hotels in Zimbabwe. *African Journal of Hospitality, Tourism and Leisure, 6*(2), 1-12.
- Marchese, M. C., & Ryan, J. (2001). Capitalizing on the benefits of utilizing part-time employees through job autonomy. *Journal of Business Psychology, 15*(4), 549-560.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth & T. H. (Eds.), *Handbook of work and organizational psychology. Vol. 2: Work psychology* (pp. 5-33). Hove, England: Psychology Press.
- Miao, R., & Kim, H. G. (2010). Perceived organizational support, job satisfaction and employee performance: A Chinese empirical study. *Journal Service Science & Management, 3*(2), 257-264.
- Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. (2011). Antecedents of work–family conflict: A meta-analytic review. *Journal of Organizational Behavior, 32*(5), 689-725.
- Montgomery, A. J., Panagopolou, E., Wildt, M., & Meenks, E. (2006). Work-family interference, emotional labor and burnout. *Journal of Managerial Psychology, 21*(1), 36-51.

- Moqbel, M., Nevo, S., & Kock, N. (2013). Organizational members' use of social networking sites and job performance: An exploratory study. *Information Technology & People, 26*(3), 240-264.
- Near, J. P., Rice, R. W., & Hunt, R. G. (1978). Work and extra-work correlates of life and job satisfaction. *Academy of Management Journal, 21*, 248-264.
- New Economics Foundation (2014). Well-being at work: A review of the literature. Retrieved from [http://b.3cdn.net/nefoundation/71c1bb59a2ce151df7\\_8am6bqr2q.pdf](http://b.3cdn.net/nefoundation/71c1bb59a2ce151df7_8am6bqr2q.pdf)
- Noone, B. M. (2008). Customer perceived control and the moderating effect of restaurant type on evaluations of restaurant employee performance. *International Journal of Hospitality Management, 27*(1), 23-29.
- Nunnally, J. C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.
- 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.
- Okazaki, S. (2006). What do we know about mobile Internet adopters? A cluster analysis. *Information & Management, 43*(2), 127-141.
- O'Keefe, G. J., & Sulanowski, B. (1995). More than just talk: Uses, gratifications, and the telephone. *Journalism & Mass Communication Quarterly, 72*(4), 922-933.
- Oliver, L. A. (2016). *Work breaks, employee morale, and satisfaction in the Restaurant industry* (Doctoral dissertation). Retrieved from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=4160&context=dissertations>

- O'Neill, J. W., & Davis, K. (2011). Work stress and well-being in the hotel industry. *International Journal of Hospitality Management*, 30(2), 385-390.
- O'Neill, J. W., & Xiao, Q. (2010). Effects of organizational/occupational characteristics and personality traits on hotel manager emotional exhaustion. *International Journal of Hospitality Management*, 29(4), 652-658.
- Osei-Frimpong, K., & McLean, G. (2017). Examining online social brand engagement: A social presence theory perspective. *Technological Forecasting & Social Change*. Advance online publication. Retrieved from <https://doi.org/10.1016/j.techfore.2017.10.010>
- Ozturk, A. B., Hancer, M., & Im, J. M. (2014). Job characteristics, job satisfaction, and organizational commitment for hotel workers in Turkey. *Journal of Hospitality Marketing & Management*, 23(3), 294-313.
- Panagopoulou, E., Kersbergen, B., & Maes, S. (2002). The effects of emotional (non-) expression in (chronic) disease: A meta-analytic review. *Psychology & Health*, 17(5), 529-545.
- Papacharissi, Z., & Mendelson, A. (2011). Toward a new(er) sociability: Uses, gratifications and social capital on Facebook. In Papathanassopoulos, S. (Ed.), *Media perspectives for the 21st century* (pp. 212-230), New York, NY: Routledge.
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of internet use. *Journal of Broadcasting & Electronic Media*, 44(2), 175-196.
- Pappachan, J., & Koshy, M. P. (2016). Moderation effect of travel context in the linkage among employee service-quality, satisfaction and trust on word-of-mouth of airline passengers in India. *Amity Journal of Marketing*, 1(1), 75-92.

- Park, J. Y., Im, I., & Sung, C. S. (2017). Is social networking a waste of time? The impact of social network and knowledge characteristics on job performance. *Knowledge Management Research & Practice, 15*(4), 560-571.
- Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *CyberPsychology & Behavior, 12*(6), 729-733.
- Pavesic, D. V., & Brymer, R. A. (1990). Job satisfaction: What's happening to the young managers? *Cornell Hotel and Restaurant Administration Quarterly, 30*(4), 90-96.
- Pereira, D., Hächler, P., & Achim, E. (2017). Recovery experiences during vacation and their association with job stressors and health. *Psychological Writings, 10*(1), 13-30.
- Pizam, A. (2004). Are hospitality employees equipped to hide their feelings? *International Journal of Hospitality Management, 23*(4), 315-316.
- Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of the human capital resource: A multilevel model. *The Academy of Management Review, 36*(1), 127-150.
- Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. *Bulletin of Science, Technology & Society, 30*(5), 350-361.
- Quinn, K. (2016). Why we share: A uses and gratifications approach to privacy regulation in social media use. *Journal of Broadcasting & Electronic Media, 60*(1), 61-86.
- Quinones, C., & Griffiths, M. D. (2017). The impact of daily emotional demands, job resources and emotional effort on intensive internet use during and after work. *Computers in Human Behavior, 76*, 561-575.

- Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *CyberPsychology & Behavior, 11*(2), 169-174.
- Ragsdale, J. M., & Hoover, C. S. (2016). Cell phones during nonwork time: A source of job demands and resources. *Computers in Human Behavior, 57*, 54-60.
- Read, S. J., & Miller, L. C. (1995). Stories are fundamental to meaning and memory: For social creatures, could it be otherwise? In R. S. Wyer (Ed.), *Knowledge and memory: The real story* (pp. 139-152). Hillsday, NJ: Lawrence Erlbaum Associates.
- Reinecke, L., Klatt, J., & Kramer, N. C. (2011). Entertaining media use and the satisfaction of recovery needs: Recovery outcomes associated with the use of interactive and noninteractive entertaining media. *Media Psychology, 14*(2), 192-215.
- Reizer, A. (2015). Influence of employees' attachment styles on their life satisfaction as mediated by job satisfaction and burnout. *The Journal of Psychology, 149*(4), 356-377.
- Rhee, H., & Kim, S. (2016). Effects of breaks on regaining vitality at work: An empirical comparison of 'conventional' and 'smart phone' breaks. *Computers in Human Behavior, 57*, 160-167.
- Rice, R. W., McFarlin, D. B., Hunt, R. G., & Near, J. P. (1985). Job importance as a moderator of the relationship between job satisfaction and life satisfaction. *Basic and Applied Social Psychology, 6*(4), 297-316.
- Rieger, D., Reinecke, L., Frischlich, L., Bente, G. (2014). Media entertainment and well-being—Linking hedonic and eudaimonic entertainment experience to

- media-induced recovery and vitality. *Journal of Communication*, 64(3), 456-478.
- Robertson, B. W., & Kee, K. F. (2017). Social media at work: The roles of job satisfaction, employment status, and Facebook use with co-workers. *Computers in Human Behavior*, 70, 191-196.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communications & Society*, 3(1), 3-37.
- Rungtusanatham, M., & Anderson, J. C. (1996). A clarification on conceptual and methodological issues related to the job characteristics model. *Journal of Operations Management*, 14(4), 357-367.
- Ryan, R. M., Bernstein, J. H., & Brown, K. W. (2010). Weekends, work, and well-being: Psychological need satisfactions and day of the week effects on mood, vitality, and physical symptoms. *Journal of Social and Clinical Psychology*, 29(1), 95-122.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
- Safstrom, M., & Hartig, T. (2013). Psychological detachment in the relationship between job stressors and strain. *Behavioral Sciences*, 3(3), 418-433.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893-917.

- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the Job Demands-Resource model: Implications for improving work and health. In G. F. Bauer, & O. Hammig, (eds.), *Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach*, (pp. 43-68). Dordrecht: Springer.
- Seery, B. L., Corrigall, E. A., & Harpel, T. (2008). Job-related emotional labor and its relationship to work-family conflict and facilitation. *Journal of Family and Economic*, 29(3), 461-477.
- Shakya, H. B., & Christakis, N. A. (2017). Association of Facebook use with compromised well-being: A longitudinal study. *American Journal of Epidemiology*, 185(3), 203-211.
- Shani, A., & Pizam, A. (2009.) Work-related depression among hotel employees. *Cornell Hospitality Quarterly* 50(4), 446-459.
- Shao, G. (2009). Understanding the appeal of user-generated media: A uses and gratification perspective. *Internet Research*, 19(1), 7-25.
- Shin, D. H. (2011). Understanding e-book users: Uses and gratification expectancy model. *New Media & Society*, 13(2), 260-278.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London, UK: John Wiley and Sons.
- Sianoja, M., Syrek, C. J., De Bloom, J., Korpela, K., & Kinnunen, U. (2018). Enhancing daily well-being at work through lunchtime park walks and relaxation exercises: Recovery experiences as mediators. *Journal of Occupational Health Psychology*, 23(3), 428-442.
- Siltaloppi, M., Kinnunen U, & Feldt, T. (2009). Recovery experiences as moderators between psychosocial work characteristics and occupational well-being. *Work Stress*, 23(4), 330-348.



- Siltaloppi, M., Kinnunen, U., Feldt, T., & Tolvanen, A. (2012). Development of need for recovery from work over one year: A person-centered approach. *Anxiety, Stress, & Coping, 25*(1), 23-42.
- Sims, H. P., Jr, Szilagy, A. D., & Keller, R. T. (1976). The measurement of job characteristics. *Academy of Management Journal, 19*(2), 195-212.
- Skiera, B., Hinz, O., & Spann, M. (2015). Social media and academic performance: Does the intensity of Facebook activity relate to good grades? *Schmalenbach Business Review, 67*(1), 54-72.
- Smith, J. C. (2005). *Relaxation, meditation, and mindfulness: A mental health practitioner's guide to new and traditional approaches*. New York, NY: Springer Publishing Company.
- Spinelli, M., & Canavos, G. (2000). Investigating the relationship between employee satisfaction and guest satisfaction. *Cornell Hotel and Restaurant Administration Quarterly, 41*(6), 29-33.
- Socialnomics.net (2012). 39 social media statistics to start 2012. Retrieved from <https://socialnomics.net/2012/01/04/39-social-media-statistics-to-start-2012/>
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology, 88*(3), 518-528.
- Sonnentag, S., Binnewies, C., & Mojza, E. J. (2010). Staying well and engaged when demands are high: The role of psychological detachment. *Journal of Applied Psychology, 95*(5), 965-976.
- Sonnentag, S., & Fritz, C. (2007). The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and

- unwinding from work. *Journal of Occupational Health Psychology*, 12(3), 204-221.
- Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36(1), 72-103.
- Sonnentag, S., & Geurts, S. A. E. (2009). Methodological issues in recovery research. In S. Sonnentag, P. Perrewé, & D. Ganster (Eds.), *Currents perspectives on job-stress recovery* (pp. 1-36). Bingley, UK: Emerald.
- Sonnentag, S., Kuttler, I., & Fritz, C. (2010). Job stressors, emotional exhaustion, and need for recovery: A multi-source study on the benefits of psychological detachment. *Journal of Vocational Behavior*, 76(3), 355-365.
- Sonnentag, S., & Natter, E. (2004). Flight attendants' daily recovery from work: Is there no place like home? *International Journal of Stress Management*, 11(4), 366-391.
- Sonnentag, S., Pundt, A., & Venz, L. (2017). Distal and proximal predictors of snacking at work: A daily-survey study. *Journal of Applied Psychology*, 102(2), 151-162.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes and consequences*. Thousand Oaks, CA: Sage Publications.
- Stafford, T. F., Stafford, M. R., & Schkade, L. L. (2004). Determining uses and gratifications for the Internet. *Decision Sciences*, 35(2), 259-288.
- Statista (2017a). Average daily time spent on social media usage worldwide 2012-2016. Retrieved from <http://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/>

- Statista (2017b). Number of global social media users 2010-2021. Retrieved from <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22(1), 46-56.
- Sun, S., Zhang, S., & Fan, X. (2016). Media use, cognitive performance, and life satisfaction of the Chinese elderly. *Health Communication*, 31(10), 1223-1234.
- Tandoc, E. C., Jr., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is Facebooking depressing? *Computers in Human Behavior*, 43, 139-146.
- Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist*, 67(7), 545-556.
- Tromp, D. M., & Blomme, R. J. (2012). The effect of effort expenditure, job control and work-home arrangements on negative work-home interference in the hospitality industry. *International Journal of Hospitality Management*, 3(4), 1213-1221.
- Trougakos, J. P., Beal, D. J., Green, S. G., & Weiss, H. M. (2008). Making the break count: An episodic examination of recovery activities, emotional experiences, and positive affective displays. *Academy of Management Journal*, 51(1), 131-146.
- Trougakos, J. P., & Hideg, I. (2009). Momentary work-recovery: The role of within-day work breaks. In S. Sonnentag, P. L. Perrewe, & D. C. Ganster (Eds.),

- Current perspectives on job-stress Recovery: Research in occupational stress and well-being* (pp. 37-84). Bingley, UK: Emerald Group Publishing Limited.
- Trougakos, J., Hideg, I., Cheng, B., & Beal, D. (2014). Lunch breaks unpacked: The role of autonomy as a moderator of recovery during lunch. *Academy of Management Journal*, 57(2), 405-421.
- Tsaur, S.-H., & Tang, Y.-Y. (2012). Job stress and well-being of female employees in hospitality: The role of regulatory leisure coping styles. *International Journal of Hospitality Management*, 31(4), 1038-1044.
- Tu, C.-H. (2000). On-line learning migration: From social learning theory to social presence theory in a CMC environment. *Journal of Network and Computer Applications*, 23(1), 27-37.
- Uysal, M., Sirgy, M. J., Woo, E., & Kim, H. (2015). Quality of life (QOL) and well-being research in tourism. *Tourism Management*, 53, 244-261.
- Van Puijenbroek, T., Poell, R. F., Kroon, B., & Timmerman, V. (2014). The effect of social media use on work-related learning. *Journal of Computer Assisted Learning*, 30(2), 159-172.
- Van Zyl, A. S. (2009). The impact of Social Networking 2.0 on organisations. *The Electronic Library*, 27(6), 906-918.
- Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences* 86, 249-256.
- Weiss, H. M., & Cropanzano, R. (1996). An affective events approach to job satisfaction. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 1-74). Greenwich, CT: JAI Press.

- Welsh, D. T., Ellis, A. P., Christian, M. S., & Mai, K. M. (2014). Building a self-regulatory model of sleep deprivation and deception: The role of caffeine and social influence. *Journal of Applied Psychology, 99*(6), 1268-1277.
- Wan, Y. K. P., & Chan, S. H. J. (2013). Casino employees' perceptions of their quality of work life. *International Journal of Hospitality Management, 34*, 348-358.
- Whiting, A., & Williams, D. (2013). Why people use social media: A uses and gratifications approach. *Qualitative Market Research: An International Journal, 16*(4), 362-369.
- Wickramasinghe, V., & Nisaf, M. S. M. (2013). Organizational policy as a moderator between online social networking and job performance. *VINE: The Journal of Information and Knowledge Management Systems, 43*(2), 161-184.
- Wiener, M., & Mehrabian, A. (1968). *Language within language: Immediacy, a channel in verbal communication*. New York, NY: Appleton.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology, 5*(1), 84-94.
- Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employees facing emotional demands. *Journal of Personnel Psychology, 12*(2), 74-84.
- Xu, C., Ryan, S., Prybutok, V., & Wen, C. (2012). It is not for fun: An examination of social network site usage. *Information & Management, 49*(5), 210-217.
- Yang, J. T. (2010). Antecedents and consequences of job satisfaction in the hotel industry. *International Journal of Hospitality Management, 29*(4), 609-619.

- Yeshambel, T., Belete, M., & Mulualem, Y. (2016). Impact of online social networking on employees productivity at work place in University of Gondar - A case study. *International Journal of Computer Applications*, 135(3), 18-24.
- Zacher, H., Brailsford, H. A., & Parker, S. L. (2014). Micro-breaks matter: A diary study on the effects of energy management strategies on occupational well-being. *Journal of Vocational Behavior*, 85(3), 287-297.
- Zhang, R. (2017). The stress-buffering effect of self-disclosure on Facebook: An examination of stressful life events, social support, and mental health among college students. *Computers in Human Behavior*, 75, 527-537.
- Zhao, X., & Ghiselli, R. (2016). Why do you feel stressed in a “smile factory”? Hospitality job characteristics influence work–family conflict and job stress. *International Journal of Contemporary Hospitality Management*, 28(2), 305-326.
- Zhao, X., Ghiselli, R., Law, R., & Ma, J. (2016). Motivating frontline employees: Role of job characteristics in work and life satisfaction. *Journal of Hospitality and Tourism Management*, 27, 27-38.
- Zhao, X., Qu, H., & Ghiselli, R. (2011). Examining the relationship of work–family conflict to job and life satisfaction: A case of hotel sales managers. *International Journal of Hospitality Management*, 30(1), 46-54.
- Zoupanou, Z., Cropley, M., & Rydstedt, L. W. (2013). Recovery after work: The role of work beliefs in the unwinding process. *PLoS ONE*, 8(12), e81381.

## VITA

Yi-Sung (Ethan) Cheng was born and raised in Taipei City, Taiwan. Before pursuing his doctoral degree at the University of Missouri – Columbia, he earned his master's degree in tourism management from Ming Chuan University in Taiwan and his bachelor's degree in leisure management from Minghsin University of Science and Technology in Taiwan.

Yi-Sung's current research focuses on human resource management and information technology. Since he joined the University of Missouri – Columbia in 2014, he has been involved in writing manuscripts, conducting literature reviews, data collection, data analysis, and grant writing. Previously, he had garnered several years of research experience and worked on various research projects in service marketing and consumer behavior. During the most recent five years, he has published 11 journal articles in refereed journals, including *Asia Pacific Journal of Tourism Research*, *Journal of Travel & Tourism Marketing*, *Journal of Quality Assurance in Hospitality & Tourism*, *Journal of China Tourism Research*, and *Anatolia: An International Journal of Tourism and Hospitality Research*. In addition, several drafts of his papers are currently in progress or under review at refereed journals. He has also had 19 conference papers accepted/published at international conferences, including the International Council on Hotel, Restaurant and Institutional Education (ICHRIE) Annual Conference, Asia Pacific Tourism Association Annual Conference, and Global Marketing Conference. To enhance his grant writing skills, he has also taken several grant writing courses and earned the Graduate Certificate in Grantsmanship at the University of Missouri – Columbia.