

University of Central Florida

STARS

Honors Undergraduate Theses

UCF Theses and Dissertations

2022

Break the No Lunch Break Habit

Mayleen Gonzalez

University of Central Florida



Part of the [Industrial and Organizational Psychology Commons](#)

Find similar works at: <https://stars.library.ucf.edu/honorsthesis>

University of Central Florida Libraries <http://library.ucf.edu>

This Open Access is brought to you for free and open access by the UCF Theses and Dissertations at STARS. It has been accepted for inclusion in Honors Undergraduate Theses by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Gonzalez, Mayleen, "Break the No Lunch Break Habit" (2022). *Honors Undergraduate Theses*. 1142.
<https://stars.library.ucf.edu/honorsthesis/1142>

BREAK THE NO LUNCH BREAK HABIT

by

MAYLEEN GONZALEZ

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Psychology
in the College of Science
and in the Burnett Honors College
at the University of Central Florida
Orlando, Florida

Spring Term

2022

Thesis Chair: Dr. Steve Jex

ABSTRACT

A plethora of extant research focuses on the positive outcomes of recovering from the workday. However, since the COVID-19 pandemic, there has been more of a focus on how employees can recover *during* the workday as individuals are regularly experiencing pressure from the workplace. This thesis explicitly explores the relationship between various lunch break habits (e.g., eating during one's lunch break, not eating during one's lunch break, multitasking during one's lunch break) and psychological wellbeing, physiological strain, and counterproductive work behaviors (CWB). To add to the current research, the impact of ego depletion on the relationship is also studied. A survey was conducted to test the hypothesized mediation of ego depletion on the relationship between the three different lunch break habits and psychological wellbeing, physiological strain, and CWB. The participants included 394 individuals over the age of 18 years who were employed full-time, lived in the U.S., and worked from a central place of work. Results indicated that ego depletion significantly buffered the relationship between two of the lunch breaks habits (e.g., eating during one's lunch break and not eating during one's lunch break) when it predicted psychological wellbeing, physiological strain, and CWB. However, the third lunch break habit (e.g., multitasking during one's lunch break) was not supported. Future research directions, limitations, and practical implications are included.

TABLE OF CONTENTS

LIST OF FIGURES	iv
LIST OF TABLES	v
INTRODUCTION	1
STRESS	5
RECOVERY	9
EATING BEHAVIORS	11
EATING DURING LUNCH BREAK	12
NO EATING DURING LUNCH BREAK	14
MULTITASKING DURING LUNCH BREAK	16
EGO DEPLETION ON EATING BEHAVIORS	17
METHOD	21
PARTICIPANTS	21
PROCEDURE	21
MEASURES	22
LUNCH BREAK	22
EGO DEPLETION	22
COUNTERPRODUCTIVE WORK BEHAVIOR	22
PHYSIOLOGICAL AND PSYCHOLOGICAL STRAIN	23
DISCUSSION	26
CONCLUSION	29
APPENDIX A: FIGURES AND TABLES	30
APPENDIX B: EATING BEHAVIOR SCALE	41
APPENDIX C: EGO DEPLETION SCALE	43
APPENDIX D: COUNTERPRODUCTIVE WORK BEHAVIOR SCALE	45
APPENDIX E: PHYSIOLOGICAL STRAIN AND PSYCHOLOGY WELLBEING MEASURES	47
APPENDIX F: IRB APPROVAL DOCUMENTS	50
REFERENCES	53

LIST OF FIGURES

Figure 1. Direct Effect of Eating During Lunch Break	35
Figure 2. Direct Effect of Not Eating During Lunch Break Models	36
Figure 3. Direct Effect of Multitasking Eating During Lunch Break Models	37
Figure 4. Eating During Lunch Break and Mediation via Ego Depletion Models	38
Figure 5. Not Eating During Lunch Break and Mediation via Ego Depletion Models	39
Figure 6. Multitasking During Lunch Break and Mediation via Ego Depletion Models	40

LIST OF TABLES

Table 1. Descriptive Statistics and Study Variable Intercorrelations	31
Table 2. Summary of Direct Effect of Eating During Lunch break.....	31
Table 3. Summary of Direct Effect of Not Eating During Lunch Break.....	32
Table 4. Summary of Direct Effect of Multitasking During Lunch Break.....	32
Table 5. Summary of Eating During Lunch Break and Mediation via Ego Depletion.....	33
Table 6. Summary of Not Eating During Lunch Break and Mediation via Ego Depletion.....	33
Table 7. Summary of Multitasking During Lunch Break and Mediation via Ego Depletion.....	34

INTRODUCTION

Given the hardships that have resulted from the COVID-19 pandemic and the innovation from today's technological advancements, the line between work and home is nebulous. It is more important now than ever for employees to detach from their work and participate in leisure time to help recover from their stressful work experiences (Repetti, 1989). When employees feel a sense of overwhelming pressure from an organization, they are more likely to perceive high levels of work overload, which has the potential only to perpetuate the stress cycle. This sense of pressure can, for example, cause employees to feel incapable of stepping away from their work during the day to allocate sufficient time to complete their work (Maslach, 1982). This phenomenon is commonly referred to as *absorption*, which has been defined as "being fully concentrated and highly engrossed in one's work, where time passes quickly, and one has difficulties with detaching oneself from work" (Schaufeli, 2002, p. 75). Although it may seem productive, the employee is instead actually engaging in an unhealthy coping mechanism because it decreases the opportunity for the body and mind to be in a state of rest. Such a lack of restoration can foster negative employee well-being and impose harsh health consequences such as fatigue, burnout, and mental health problems (Grebner et al., 2005). The implications of a stressful work environment can be seen at both the individual level and organizational level. For employees, impaired physical and mental health leads to increased absences from work and poor job performance (Dwyer & Ganster, 1991). At the organizational level, increased employee healthcare costs translate to more expensive insurance costs for the organization, as well as a decrease in productivity levels (Cooper & Cartwright, 1994).

Recent theoretical and empirical findings (e.g., Bosch et al., 2018; Kim et al., 2021) have supported the buffering effects of breaks throughout the workday on employee strain. As a break permits an individual to take a brief pause from work responsibilities and provides the employee an opportunity to restore their physiological and psychological resources, breaks are considered a form of recovery (Craig & Cooper, 1992). The recovery literature examines the largely beneficial effects that occur when employees detach from their work responsibilities, such as enhanced physical and psychological wellbeing (de Bloom et al., 2015). Recovery occurs when the individual is in a state of relaxation or not mentally preoccupied with their work. Examples of such recovery activities include microbreaks, leisure activities, socializing, and exercising. While these activities may differ in duration and intensity, they all serve a common purpose to aid in the individual's detachment, or recovery, from work (Bosch et al., 2018). For individuals employed in highly stressful occupations (e.g., nurses, police officers, paramedics), it is even more vital that they take the opportunity to recover when afforded, as they are more prone to experience enhanced levels of depletion that exhaust their level of available resources more quickly (Binnewies & Sonnentag; 2008; Sonnentag & Krueger, 2006). Jansen and colleagues (2003), for instance, surveyed employees from 45 different organizations and found that working long hours and overtime was positively related to there being a need for recovery. When employees work longer hours, there is a decrease in availability to regain one's resources due to being consumed by job stressors and the span in which work continues.

While the beneficial effects of post-work recovery activities have been well-established (e.g., Sonnentag et al., 2005; Sonnentag et al., 2007), since most of the literature conceptualizes recovery as occurring after the workday, how recovery experiences can be

utilized and incorporated *during* the workday has largely been ignored. One instance in which recovery can occur during the workday is by employees taking breaks, such as their midday lunch break, or even by engaging in microbreak activities (e.g., getting coffee in the break room or enjoying a light snack). Generally, a lunch break is about 30 to 45 minutes, likely making it the most extended break within a typical workday. If an employee is privileged with a lunch break, this break grants the individual to pause work responsibilities for the chance to reinstate their energy, which is therefore advantageous. A lunch break also provides individuals with the freedom to choose how they want to spend their time. For example, employees can socialize with coworkers, eat alone, or leave their workplace to buy food elsewhere. A study conducted by Trougakos and colleagues (2014) studied the effects of lunch break autonomy on lunch break activities (e.g., relaxing activity, social activity) and energy levels at the end of the workday. Using a multi-level design, Trougakos et al. (2014) found that engaging in relaxing breaks was positively related to vigor meanwhile end-of- work fatigue emerged when employees had lower lunch break autonomy or were involved in social and work-related breaks.

Extending the findings from Trougakos et al. (2014), the current study contributes to the recovery literature by introducing a new perspective that broadens the traditional idea of limiting recovery activities to those that happen solely after work through focusing on the eating behaviors habits and the impact of ego depletion. By expanding recovery activities to those that occur *during* the workday, individuals will not have to wait until the end of the workday to restore their resources. By restoring their resources during the workday, it is more likely individuals will subsequently experience enhanced levels of satisfaction, rejuvenation, and relaxation, all likely contributing to improved employee

performance. For clarification before proceeding, when using the term "lunch break habit" or "lunchtime factors" within this paper, it refers to an individual's eating behavior (e.g., regularly eating during one's lunch break, regularly not eating during one's lunch break, regularly multitasking during one's lunch break). This study intends to examine how these various factors (e.g., regularly eating during one's lunch break, regularly not eating during one's lunch break, regularly multitasking during one's lunch break) related to an employee's general lunchtime habit can predict subsequent levels of ego depletion and ultimately, influence outcomes, such as physiological strain (e.g., headache, upset stomach, bloated), psychological strain (e.g., fatigue, stress, low blood pressure), and counterproductive work behaviors (CWBs).

Moreover, drawing on theory ego depletion (Muraven & Baumeister, 2000), this study proposes that feelings of depletion will mediate the extent to which lunch break habits result in psychological wellbeing, physiological strain, and CWBs. One practical implication of this study includes highlighting the importance of during-the-workday recovery experiences. More specifically, this study aims to clarify the common misconception that breaks are detrimental to productivity by illustrating how lunch breaks have the potential to improve performance as opposed to hinder it. Secondly, the specific lunch break habit in which the employee chooses to engage in has a difference in how it will affect one's psychological and physiological outcome as well as engagement in CWB. Thirdly, organizations will experience reduced negative consequences such as health-related employee absences and higher insurance coverage costs by maximizing their readily available resources due to affording and encouraging employees the time for a lunch break. Lastly, by organizations prioritizing and encouraging their employees to detach from their

work responsibilities during their lunch break, employee perceptions of organizational support are likely to increase, which has been shown to be associated with beneficial outcomes such as good wellbeing and productive employees (Clohessy et al., 2019; Eisenberger & Stinglhamber, 2011).

This proposal begins with an overview of the stress literature and introduces the ego depletion construct. A discussion of the recovery process and its relationship with ego depletion will follow. Subsequently, the idea of lunch breaks as recovery opportunities will then be introduced, ultimately lending credence to the study's mediation hypothesis. In sum, this thesis aims to leverage the extant recovery literature by introducing lunch breaks as a form of during-work recovery. More precisely, by examining how eating behaviors related to an employee's lunch break habit can predict outcomes, such as employee wellbeing, and engagement in CWBs, this thesis highlights the importance of breaking the no lunch break habit.

STRESS

Within the workplace, employees are commonly faced with pressures, such as completing a particular task in a seemingly impossible timeframe or adjusting to recently implemented organizational changes. Such forces have the potential to be appraised by employees as stressful or a potential threat to their wellbeing (Lazarus & Folkman, 1984). More broadly, the stress process can be defined as an individual's response to a constraining situation, an individual's experience with an external environmental factor, or an interconnection between both ideas (Ganster & Perrewe, 2011). Essentially, an individual will experience stress depending upon their appraisal of some external factor or situation (e.g., another person, the external environment). If the individual perceives that they have

the resources needed to handle the particular case, they are less likely to appraise the situation as stressful (Lazarus & Folkman, 1984).

On the contrary, if an individual perceives that they lack the resources needed to handle a particular situation, then they are more likely to appraise the situation as stressful (Lazarus & Folkman, 1984). Any factor or condition that induces stress, such as organizational change or work overload, is referred to as a stressor. The subsequent consequences of the stressor, such as job dissatisfaction or poor job performance, are referred to as strains.

Lazarus & Folkman (1984) conceptualize the stress process using a two-part appraisal. The initial primary appraisal involves the individual evaluating the significance of a particular factor or situation and judging whether it has the potential to negatively impact one's wellbeing. An example of this includes an employee being assigned to a project that requires it to be completed within the month. If the looming deadline of the project is not considered threatening or potentially stressful, then the stress process ends with the primary appraisal. On the other hand, if the project's deadline is considered threatening or potentially stressful, then the stress process moves into the secondary appraisal phase, in which the level of one's available resources is appraised. If an individual feels that they lack the resources (e.g., not enough human resources, not enough time) to cope with the situation (i.e., deadline), then the problem is considered stressful; thus, the deadline is appraised as a stressor because it has the potential to impact one's wellbeing negatively. Alternatively, if the employee feels that they possess the necessary resources (e.g., coworker and leader support, team with diverse skills) to effectively cope with the

situation (i.e., meeting the project deadline), then the situation is not considered to be stressful.

The conservation of resources (COR) theory can also be used to gain a better theoretical understanding of the stress process. COR rests on the assumption that "individuals strive to obtain, retain, foster, and protect those things they centrally value" (Hobfoll et al., 2018, p. 104). Essentially, when an individual perceives that their resources are lost or threatened with loss (regardless of whether or not the resources are *actually* being threatened), or when there is a failure to gain a surplus of essential resources, an individual will experience stress. Similar to the primary and secondary appraisal process proposed by Lazarus and Folkman (1984), COR theory also emphasizes the role of the individual's appraisal of resources in the stress process. As such, when taken together, the primary and secondary appraisal process and COR theory both highlight the subjectivity of the stress process, such that the idea of some factor or situation being considered stressful is rooted in an individual's judgment of their own ability to cope and the level of adversity associated with the potential stressor (Hobfoll, 1989).

Furthermore, if an individual has already experienced the loss of resources, it is easy to enter a cycle of continuous loss. The only way to avoid such a cycle is to accumulate a surplus of resources; however, this is both challenging and burdensome. For instance, one study found that 78 patients with chronic obstructive pulmonary disease and who suffered a sequence of losses associated with the disease (e.g., loss of ability) reported greater levels of anger (Lane & Hobfoll, 1992). Fundamentally, it concludes that even if demands are costly, like having an everlasting disease, it can be challenging to regain resources. More importantly, if there is an inability to gain resources, it elicits an emotional reaction (e.g.,

anger). An additional study conducted by Bakker and Demerouti (2005) studied the buffering impact resources have on the relationship between job demands and burnout. Participants were employees of a prominent institute for higher education and found they had a strong desire for securing resources. However, when the resources were low, and demands were high, the findings illustrated the consequences of burnout and demoralization when individuals draw upon their already depleted resources, resulting in suboptimal functioning, such as difficulty remaining focused and committed (Eisenberger & Stinglhamber, 2011).

The theory of ego depletion, more specifically, refers to "a state in which the self does not have all the resources it has normally" (Baumeister & Vohs, 2007, p.2). In other words, an individual's loss of resources is simultaneously accompanied by a loss of self-regulatory capabilities, as the very process of regulating one's behavior requires the use of resources. Employees generally possess the resources needed to control their behaviors, allowing them to create goals and produce work efficiently and effectively. However, when an employee is experiencing stress, one must use available resources to cope with the stressor, leaving fewer resources for self-regulation. This overdrawn of one's resource pool causes the individual to feel depleted or drained (Dahm et al., 2015). Lanaj and colleagues (2016) demonstrated this idea by conducting a multi-day study in which they examined the impact of how responding to help request from colleagues at work can be costly to the helper. Participants were required to complete one survey that measured employee's depletion and positive affect in the morning, in addition to a second survey that measured the individual's depletion, helping, and perceived prosocial impact of helping in the afternoon. Findings revealed that depletion is experienced when helping but replenished

by perceived prosocial impact of helping. Therefore, as the employee provides their resources to the next person, it causes a loss of resources for self-regulation. Being that the theory of ego depletion has been well-studied, potential adverse consequences at both the individual- and organizational level have also been well documented.

Having now identified the stressor-strain relationship and its role in resource depletion, the following section will examine the idea of recovery, in which one experiences a replenishment of resources.

RECOVERY

Building upon the stress literature, the concept of recovery is to help provide employees the opportunity to gain resources with the view to help themselves, others and to possess strong qualities of wellbeing. Recovery can be defined as the "unwinding and restoration processes during which a person's strain level that has increased as a reaction to a stressor or any other demand returns to its prestressor level" (Sonnentag et al., 2017, p. 366). For example, a study conducted by Barnes and Hollenbeck (2009) explains that sleep deprivation, which is a type of strain, does prevent the restoration of mental resources and leads to depletion at work. Therefore, restoring resources through the engagement of recovery activities like exercising, reading a book, taking vacations, or practicing mindfulness after work all serve to alleviate strain (Demerouti et al., 2009). This implies that there is a need for the process of recovery, because of its beneficial nature in assisting the individual's return to a state of not being stressed. Recovery as a process refers to the action taken that permits individuals to detach from responsibilities expected of them (Sonntag et al., 2017). Since recovery from work can occur within and outside the workplace, it can be attributed as either internal or external. Internal recovery occurs at the

workplace (i.e., breaks); meanwhile, external recovery occurs outside work (i.e., after-hours, weekends; Demerouti et al., 2009). Subsequently, recovery as an outcome refers to an individual's psychological and physiological state after engaging in recovery as a process (Sonnentag et al., 2017; Sonnentag & Geurts, 2009).

A study involving 133 employees examined recovery experiences during the weekend as a predictor of the state of recovery and whether it benefits job performance factors when returning to the workplace (Binnewies et al., 2010). It was found that employees that recover by being actively involved in pleasurable activities, personal fulfillment activities, or simply detaching mentally from work were positively related to the state of being recovered when beginning the workweek. Considering the link between the state of recovery and weekly performance, results support that people will be in a higher state of recovery when resource drain is prevented, and restoration by mentally switching off from work is encouraged. Further studies have also shown that successful recovery depends upon factors such as reduced fatigue, low heart rate, or "adrenaline excretion" as it is an indication of good health (Linden et al., 1997). In other words, recovery mitigates the adverse effects of ego depletion because it replenishes the lack of energy, encourages the act of helping, and overall restores health conditions (Bosch et al., 2018; Meijman & Mulder, 1998).

As previous studies have predominantly focused on how post-work or weekend recovery activities help to mitigate the adverse effects of depleted employees, the literature has been absent regarding opportunities for during-work recovery activities. Focusing on internal recovery activities like taking a break is crucial because it broadens the potential to be involved in other recovery activities and interrupts the prolonged effects of stress.

Likewise, within-work recovery spares the employee from having to take time off or be absent for the sake of saving more resources. More recently, Trougakos et al. (2014) investigated the relationship between lunch break activities and after-work fatigue with lunch break autonomy as a moderator. Thus, the level of after-work fatigue will determine if the recovery activities (e.g., relaxing activity, work activity, social activity, break autonomy) employees associate with are beneficial or detrimental. As well as whether the level of lunchbreak autonomy buffers employees' sense of fatigue. Based on the results of employees of a North American University and their closest coworkers, it was found that when employees engaged in social or work activities during their lunch break, they tended to experience higher levels of fatigue. On the contrary, when employees participated in relaxing activities with high break autonomy, it helped to reduce fatigue. From these findings, it is apparent that for employees to be vigorous, they should be involved in relaxing lunch break activities or be provided high levels of lunch break autonomy.

EATING BEHAVIORS

While Trougakos and colleagues (2014) examined lunch break autonomy on the relation between lunch break activities and after-work fatigue, they failed to heavily consider eating behaviors. Although they did use a simple measure of whether the individual consumed food during their break, that was the only extent to which eating behaviors were examined. Moreover, in the final analysis of this control variable, it was omitted in the final hypothesized model. Additionally, Trougakos et al. (2014) had the focal employee include contact information of a colleague they most interacted with at work. The colleague was then responsible for reporting the focal employees' fatigue at the end of the workday. However, this may have restricted the proper examination involving the extent to

which the employee felt fatigued since the focal employee was unable to self-report. Although the colleague may have frequently interacted with the focal employee it does not undermine the fact that another person (e.g., colleague) cannot determine the degree to which one (e.g., focal employee) *is* fatigued. For example, if the case is extreme then there is potential for the colleague to report the affects seen more accurately. Nonetheless, if the case is less extreme, the report from the colleague could cause variation to what was *actually* felt. The focal employee may have looked vigorous and capable of conducting their normal work tasks, but in actuality they are fatigued.

In this thesis, the concept of lunch breaks differs from previous research because this study intends on examining employee's eating behaviors and the indirect effect of ego depletion. Surprisingly, although there is research on lunch breaks, it has predominately focused on social behaviors or the activities in which one has the option of selecting as a form of recovering (Bosch et al., 2018; Fritz et al., 2013; Trougakos et al., 2014). However, limiting the construct to only lunch break activities when researching lunch breaks within the workday may result in a misunderstanding that those are the only effective patterns to engage in. Eating behavior habits can be identified as regularly eating during one's lunch break, regularly not eating during one's lunch break, or regularly multitasking during one's lunch break which are various nutritional patterns that have the potential to predict aversive outcomes.

EATING DURING LUNCH BREAK

Based on the role that the COR theory plays in the recovery research, relationships would be expected between the three different lunch break habits and general mental wellbeing (e.g., feelings of happiness and confidence, ability to concentrate),

physiological strain (e.g., fatigue, headaches, backache), CWBs, and further, ego depletion. As previously mentioned, the COR theory suggests that stress levels have the potential to increase when the threat of resource loss or actual resource loss is present (Hobfall et al., 2017). While an individual may begin the workday with “saved” resources, acts, for example, like helping other colleagues throughout the day may generate a deficit in resources and thus, the employee needs to eat during their break. While the employee eats their lunch, this assists in regulating their energy and ultimately replenishes their resources. Eating during one’s lunch break is a way in which an employee can mitigate adverse outcomes of physiological strain and engagement in counterproductive work behaviors (CWBs) and reinforce their general mental wellbeing.

Glucose is the main sugar found within the body and can be derived from the food we eat (Burkhalter & Hillman, 2011). This term is of importance to the present study as when glucose levels are moderate to high, this refers to nutrition being supplied to the body. Whereas low glucose levels suggest no to little food was digested. According to Burkhalter and Hillman (2011), among individuals between the ages of 19 and 33, those that eat a balanced meal have been attributed to positive changes in disposition, attentiveness, and motivation. Previous empirical findings have further demonstrated that good memory and performance on a vigilance task can be correlated to having higher levels of glucose (Benton & Owen, 1993; Benton et al., 1994; Parker & Benton, 1995). In simpler terms, when individuals eat, they are “recovering” which will regulate the body. Once this process is complete, the individual will be more likely to experience positive outcomes (e.g., good memory, strong performance, higher energy) (Benton & Owen, 1993; Gailliot et al., 2007; Parker & Benton, 1995). In related research focusing on recovery and health through the

implementation of progressive muscle relaxation (an intensive technique to achieve the most mental and physical relaxation), Krajewski and authors (2010) found that employee's engagement in progressive muscle relaxation during a lunch break helped to reduce participants cortisol. Essentially, this upholds the idea that when psychological and physical wellbeing is strengthened during one's lunch break specifically with PMR, recovery is endured. This links to the same idea that having the habit of regularly eating during one's break would help foster the same outcomes. Based on this, it is likely regularly eating during one's lunch break will result in more level of general mental wellbeing and lower levels of physiological strain and CWBs.

Hypothesis 1a: Employees who regularly eat during their lunch break are more likely to experience higher levels of general mental wellbeing.

Hypothesis 1b: Employees who regularly eat during their lunch break are less likely to experience physiological strain.

Hypothesis 1c: Employees who regularly eat during their lunch break are less likely to engage in CWBs.

NO EATING DURING LUNCH BREAK

Meanwhile as the second lunch break habit encompasses regularly not eating during one's lunch break it is proposed that there will be a negative relationship with general mental wellbeing, but a positive relationship with physiological strain and CWBs. These outcomes are drawn on the fact that it is believed the predictor of not eating slows down one's body as it lacks the opportunity to be well balanced. More recently, studies have revealed that skipping a meal during the day has the possibility to be detrimental (Aryee et al., 2013; Shin & Kim, 2022). A study conducted on 220 nurses in Ghana found that obsess

and overweight nurses can be correlated to their lifestyle and dietary behavior. More specifically, those that reported “yes” to skipping a meal included 118 (53.6%) nurses in which 1.8% were underweight, 17.7% were normal weight, 20.5% were overweight, and 13.6% were obese (Aryee et al., 2013). Most nurses did relate this dietary decision to the nature of their work; however, this allows us to assume these employees would then be more at risk of chronic health diseases. Additionally, to be psychologically well and not experience anxiety, depression, or lose concentration, for instance, individual’s need a “regular diet that provides nutrients such as carbohydrates, vitamins, and minerals to enable optimal brain function” (Lee et al., 2017; O’Sullivan et al., 2009). Whenever employees repeatedly do not provide their body the proper nutrition, both their general mental and physical wellbeing will suffer.

Similarly, an individual’s engagement at work will depreciate and cause for more counterproductive work behaviors (CWBs). Examples of CWBs include leaving work earlier than allowed, purposely working slower, trying to look busy while doing nothing, or refusing to help someone else. Especially if the reason an employee does not take their lunch break relates back to the nature of the job, it might cause more ill feelings in the employee (Fox et al., 2012). Altogether, as the day continues and one is not fuel by food, it is likely the employee will begin to not be able to concentrate (e.g., psychological strain), will likely experience fatigue (e.g., physiological strain), and may be more unwilling to help others (e.g., CWB).

Hypothesis 2a: Employees who typically do not eat during their lunch break are less likely to experience higher levels of general mental wellbeing.

Hypothesis 2b: Employees who typically do not eat during their lunch break are more likely to experience higher levels of physiological strain.

Hypothesis 2c: Employees who typically do not eat during their lunch break are more likely to engage in CWBs.

MULTITASKING DURING LUNCH BREAK

Looking at the last habit an employee can engage in (e.g., multitasking during their lunch break) it is believed to predict general mental wellbeing, physiological strain, and CWBs. The term multitasking during a lunch break refers to the idea that the employee eats and simultaneously completes work responsibilities. When attempting to multitask it can be connected to perceived work overload and pressure. To give a better illustration, if an employee has a lot of work to complete with a little time frame, they may eat so they do not feel hungry and complete the necessary work responsibilities to avoid any lost time. Although this type of eating behavior may seem beneficial and multipurposed as the individual is still ensuring to provide nutrients to their body, it may have the potential to lessen the effect of positive outcomes and strengthen the effect of negative outcomes. Lazarus, R. S., & Folkman, S. (1984) speaks on escapism which can be defined as “activities where people attempted to distract their attention away from the potential source of stress to more pleasant times to gain a sense of relief” (Trenberth & Dewe, 2002). In common with recovery, it tempts to do away with stressors and fulfill one’s resources.

Yet for the recovery process or escapism to operate to its full capacity, a person should only focus on one activity to recover. Drawing on the literature from Trenberth and Dewe (2002), the period in which an individual chooses to recover should guarantee distraction from work-related ruminative thoughts. However, implementing this eating plus

work-related tasks contradicts the effectiveness because the individual is more likely to prioritize completing the task at hand rather than eating. This similarly relates to when it is suggested to for people to either watch television to relax or only do work to concentrate as we only have the capacity to do so much (Brumby, 2014). On such grounds, I propose the following hypotheses.

Hypothesis 3a: Regularly multitasking during one’s lunch break will predict lower levels of general mental wellbeing.

Hypothesis 3b: Regularly multitasking during one’s lunch break will predict higher levels of physiological strain.

Hypothesis 3c: Regularly multitasking during one’s lunch break are more likely to engage in CWBs.

EGO DEPLETION ON EATING BEHAVIORS

In this present study, ego depletion is said to indirectly impact the relationship between all the eating behavior habits and psychological wellbeing, physiological strain, and CWBs. To reestablish the definition of the term “ego depletion”, it can be described as one’s experience of extreme fatigue (Trougakos et al., 2014, p. 407). This fatigue is fostered when an individual exerts the resources, they would normally hold in addition to not having the opportunity to replenish their resources (Baumeister et al., 2007; Muraven & Baumeister, 2000; Trougakos et al., 2014). Therefore, introducing this construct as a mediator may to some extent affect the outcome according to the eating behavior chosen. For instance, it is possible that a depleted individual may choose to regularly eat during their break to attempt to increase their resources and limit any aversive outcomes. Or a depleted individual may regularly not eat during their break which may further the intensity

one may feel strained and engage in CWB. Lastly, as multitasking does not seem to allow the full opportunity for a person to feel better, ego depletion may explain this by worsening psychological wellbeing, physiological strain, and CWBs.

In connection with the COR theory, an ego depleted person is responsible for investing in resources to aid themselves against the loss of resources to recover from the loss as well as possibly gain new resources (Hobfall et al., 2017). Through the engagement of one of the three eating behaviors, individuals are seeking to provide themselves with the resources (e.g., mental wellbeing, physical wellbeing, strong work performance) to continue throughout the remainder of the workday. Without a lunch break or engagement in an eating behavior, the individual is bound to be of disservice to an organization as they will not be mentally or physically well in addition to have poor job performance when entering a cycle of continuous resources loss (Allen & Armstrong, 2006; Folkman et al., 1986).

Earlier findings have demonstrated the beneficial outcomes that are associated with fulfilling a person's low levels of depletion. Gaillot & Baumeister (2007), for example, did a review of empirical findings that indicated that by restoring blood glucose it can enhance capacities for self-control. In another study that ran four experiments related to self-control, results showed that tasks that involved a participant to be self-disciplined, it depleted their energy which was shown through behaviors in performance and persistence. More specifically, by having to withhold outward reactions to films that were intended for a reaction, participants did worse on cognitive and physical tasks (Baumeister et al., 1998). In the workplace, this looks like an individual that must remain professional for the duration of the day which in turn causes depletion to arise and weaken engagement or performance.

In summary, because ego depletion is a construct that does not positively help an employee, individuals will feel more positive outcomes or negative outcomes dependent upon the eating behavior. Ego depletion is placed as a mediator of the direct relationship of eating behaviors and outcomes such as psychological wellbeing, physiological strain, and CWBs. It is anticipated that ego depletion will be indirectly related to each predictor and outcome. As such, I hypothesize the following:

Hypothesis 4a: Regularly eating during one's lunch break will be indirectly related to psychological wellbeing via ego depletion.

Hypothesis 4b: Regularly eating during one's lunch break will be indirectly related to physiological strain via ego depletion.

Hypothesis 4c: Regularly eating during one's lunch break will be indirectly related to CWB via ego depletion.

Hypothesis 5a: Regularly not eating during one's lunch break will be indirectly related to psychological wellbeing via ego depletion.

Hypothesis 5b: Regularly not eating during one's lunch break will be indirectly related to physiological strain via ego depletion.

Hypothesis 5c: Regularly not eating during one's lunch break will be indirectly related to CWB via ego depletion.

Hypothesis 6a: Multitasking during one's lunch break will be indirectly related to psychological wellbeing via ego depletion.

Hypothesis 6b: Multitasking during one's lunch break will be indirectly related to physiological strain via ego depletion.

Hypothesis 6c: Multitasking during one's lunch break will be indirectly related to CWB via ego depletion.

METHOD

PARTICIPANTS

Participants were recruited through Prolific, an up-and-coming program that recruits qualified individuals to participate in studies to which they meet the specified criteria. Participants were required to be 18 years of age or older, live within the U.S., and be a current full-time employee (~40 hours a week or more) to ensure the employee has a consistent lunchtime habit. As COVID-19 has afforded many employees the flexibility to work from various locations, participants were also required to always work from a central place of work. Thereafter, participants were compensated \$1.80 for their involvement in the study. Payment was contingent on effortful responses and successfully completing two out of the three attention check items.

A total of 420 participants completed the study. Upon reviewing the data, a few cases were excluded because the participant responded incorrectly to two of the three attention check items. This review resulted in the final sample totaling to 394 which were 49.7% male, 81.10% white, worked an average of 42.58 ($SD = 6.24$) hours per week, and an average age of 37.83 ($SD = 11.45$). Participants were primarily employed in the organization industries of healthcare and social assistance (20.35%), and education (19.85%). Most participants were non-managerial employees (54.96%), managerial (41.22%), and held executive positions (3.82%).

PROCEDURE

Once participants were deemed eligible according to the eligibility requirements (via screening items), participants completed a Prolific survey that includes all measures necessary to test the hypotheses of this study. Participants were asked to reflect on their

experiences over the past month of work regarding employees' lunch break habits, ego depletion, physiological strain, psychological strain, and CWBs. Prior to the beginning the survey, participants were provided with a consent form detailing the study procedure and participation expectations. After reading the consent form, any individual who proceeded to the next page of the survey actively gave their consent to participate by doing so, as explained in the consent form. This study did not utilize deception, so the completion of the study survey by participants should have been straightforward and non-strenuous.

MEASURES

LUNCH BREAK

The lunch break eating behaviors were assessed using a 3-item scale explicitly created for this study. A five-point Likert scale ranging from "*Strongly disagree*" to "*Strongly agree*" were used. Example items are "I eat lunch at my desk, so I can work at the same time." A complete item list is located in Appendix A.

EGO DEPLETION

The frequency of depletion an employee felt was measured using the Work Fatigue Inventory (Frone & Tidwell, 2015). The same 18-item scale that encompasses mental, physical, and emotional fatigue will be used for this study. A sample item includes "I feel mentally exhausted during the workday." Participants will be asked to respond on a 5-point scale ranging from "*Never*" to "*Every day*." A full item list and reference are located in Appendix B.

COUNTERPRODUCTIVE WORK BEHAVIOR

CWB will be measured using the Counterproductive Work Behavior Checklist (CWB-O; CWB-I) used by Spector, Bauer, and Fox (2006). The same shortened 15-item scale will be

used for this study, which Fox and Spector devised from their original 43-item scale. A sample item includes "Taken a longer break than you were allowed to take." Participants will be asked to respond on a 5-point scale (*Never, Rarely, Sometimes, Often, Always*). A full item list and copyright reference are located in Appendix D.

PHYSIOLOGICAL AND PSYCHOLOGICAL STRAIN

The level of physiological and psychological strain was measured using the Physical Symptoms Inventory (PSI) (Spector & Jex, 1998) and General Mental Health Questionnaire (Goldberg & Williams, 1988). The same 13-item scale from the PSI will be used in the study on a five-point Likert scale ranging from "*Not at all*" (1) to "*Every day*" (5). An example item from the Physical Symptoms Inventory is "An upset stomach or nausea." This study will also use the same 12- items scale from the General Mental Health Questionnaire with a 3-point scale ranging from "*Never*" to "*Always*." An example item is "Feeling unhappy and depressed." A full item list and copyright references are in Appendix E.

RESULTS

Table 1 summarizes the correlations among the study variables and descriptive statistics. To test Hypotheses 1a-1c, 2a-2c, and 3a-3c, simple linear regression was utilized. Analyses revealed that employees who regularly ate during their lunch break were more likely to experience higher levels of general mental wellbeing ($b = .06, p < .05$) and less likely to experience physiological strain ($b = -.09, p < .05$). Regularly eating during one's lunch break did not significantly predict engagement in CWBs ($b = -.04, n.s.$). Therefore, Hypothesis 1a and 1b were supported, but Hypothesis 1c was not supported. Moreover, results found that employees who typically do not take their lunch break experienced lower levels of general mental wellbeing ($b = -.03, p < .05$) and greater levels of physiological strain ($b = .06, p < .05$). Regularly not eating during one's lunch break did not significantly predict engagement in CWBs ($b = .02, n.s.$). Hence, Hypothesis 2a and 2b were supported, but Hypothesis 2c was not supported. Lastly, multitasking during one's lunch break did not significantly predict general mental wellbeing ($b = .00, n.s.$), physiological strain ($b = .00, n.s.$), nor CWB ($b = .01, n.s.$). Therefore, Hypothesis 3a, 3b, and 3c were not supported.

Hypotheses 4a-4c, 5a-5c, 6a-6c were evaluated using the SPSS Process macro (Hayes, 2013), specifying 5,000 bootstrapped samples. Hypotheses 4a-4c predicted that regularly eating during one's lunch break will be indirectly related to psychological wellbeing, physiological strain, and CWB via ego depletion. Analyses revealed ego depletion was a significant mediator of the relationships between an individual regularly eating during their lunch break and psychological wellbeing (indirect effect = .05; CI: [.02,

.08]), physiological strain (indirect effect = $-.06$; CI: $[-.10, -.03]$), and CWB (indirect effect = $-.03$; CI: $[-.05, -.01]$). Therefore, Hypotheses 4a, 4b, and 4c were supported.

Hypotheses 5a-5c predicted that regularly not eating during one's lunch break will be indirectly related to psychological wellbeing, physiological strain, and CWB via ego depletion. Analyses revealed ego depletion was a significant mediator of the relationships between an individual not regularly eating during their lunch break and psychological wellbeing (indirect effect = $-.03$; CI: $[-.06, -.01]$), physiological strain (indirect effect = $.04$; CI: $[.01, .07]$), and CWB (indirect effect = $.02$; CI: $[.01, .04]$). Hence, Hypotheses 5a, 5b, and 5c were supported.

Hypotheses 6a-6c predicted that multitasking during one's lunch break will be indirectly related to psychological wellbeing, physiological strain, and CWB via ego depletion. Analyses revealed ego depletion was not a significant mediator of the relationships between an individual multitasking during their lunch break and psychological wellbeing (indirect effect = $-.02$; CI: $[-.04, .00]$), physiological strain (indirect effect = $.02$; CI: $[.00, .05]$), and CWB (indirect effect = $.01$; CI: $[.00, .03]$). Hence, Hypotheses 6a, 6b, and 6c were not supported.

DISCUSSION

This study examined the influence of the relationship between various eating behavior habits (e.g., eating during one's lunch break, not eating during one's lunch break, multitasking during one's lunch break) and psychological wellbeing, physiological strain, and counterproductive work behaviors (CWB) via ego depletion. Results demonstrated that employees who regularly ate during their lunch break were more likely to experience lower levels of psychological and physiological strain, suggesting that taking the time to eat during one's lunch break is worthwhile. Secondly, those who typically do not take their lunch break experience higher psychological and physiological strain levels, indicating a reduction in overall well-being when individuals regularly do not eat within their break. Moreover, ego depletion significantly mediates the relationship between eating behavior habits (e.g., regularly eating during one's lunch break, regularly not eating during one's lunch break) and psychological wellbeing, physiological strain, and CWB. Hence, hypothesis 1a-1b, 2a-2b, 4a-4c, and 5a-5c was supported. Meanwhile hypothesis 1c, 2c, 3a-3c, and 6a-6c were not supported. Such eating behavior habits have the potential to better replenish employees' resources over others, in which the individual be mentally and physically healthier in addition to stronger performance at work. This study supports the relatively limited literature that ego depletion is a related variable for eating behavior habits. More specifically, this study showed that regularly eating during one's lunch break should be the most encouraged eating behavior during the workday as it can lessen the adverse outcomes of psychological and physiological strain, ultimately enhancing employee performance and health which simultaneously reduces insurance costs for an organization.

Based on the study's findings, several practical implications can be drawn. First, organizations should consider providing lunches to all employees within the workday. Opening the accessibility to food supports the idea that individuals should engage in an eating behavior that provides nutrients. On the organizational level, this will increase employees perceived support of taking a lunch break and most likely increase the engagement which can simultaneously increase work productivity. While on the individual level, the employee will be less likely to engage in hurtful acts that can harm the organization or its members (Miles et al., 2002) and experience better wellbeing (Burkhalter & Hillman, 2011), being that previous findings have shown that nutrients from a meal replenishes your resources (Burkhalter & Hillman, 2011; Gailliot et al., 2007). Second, organizations should consider the implementation of interventions that focus on health behaviors (e.g., eating behaviors, healthy diet) and lunch breaks. Being that interventions are said promote health behaviors and reduce the negative behaviors this would be a great opportunity for employees to learn the behaviors that would be most useful during their break (Tetrick & Winslow, 2015; Umberson et al., 2010). Lastly, with the support received on the individual level to eat during one's lunch break and the use of interventions, which overall promotes health behaviors, the organization in return may experience less costly expenses. Without the encouragement for employees to not feel pressured to skip their lunch breaks, organizations could easily undergo increased insurance coverage expensive or health-related absences (Cooper & Cartwright, 1994).

One limitation of the current study is the participant sample used. As detailed previously, the sample focused on employees that worked an average of 40 hours per work

(e.g., full-time), lived within the U.S., and worked from a central place. Although the sample does not reflect the general working population, it neglects other types of employees or employment. Future researchers should consider methods of obtaining a sample reflective of the multiple types of employment (e.g., part-time, remote worker, hybrid). Additionally, this study asked participants to reflect on their experiences over the past month of work regarding their lunch break habits, ego depletion, physiological strain, psychological strain, and CWBs and self-report it through a survey, however this limits the validity of their experiences. Therefore, using a different study design such as a daily diary would better allow for real-time experiences and help draw more detailed conclusions. Another limitation of this study was the scales used to report ego depletion and CWB. While inputting the scales on Qualtrics, the statement "Want to physically shut down during the workday" and "Avoided returning a phone call to someone you should at work" was missing. Unfortunately, this limits the extent to which participants could report how physically fatigued they felt and their involvement in CWB during the past month. Including this information in the future will allow more accurate statistical outputs. Lastly, the item "I like to multitask and eat lunch while at my desk" from the eating behavior scale is too general. As it is not clear as to whether multitasking refers to focusing on work responsibilities or engaging in gratifying activities, it becomes open for interpretation when the participant selects the extent to which they agree. Consequently, future researchers should make this item of multitasking explicitly about eating lunch while completing work responsibilities.

CONCLUSION

This study aimed to provide a newer perspective on how an employee's eating behaviors during lunch breaks (e.g., regularly eating during one's lunch break, regularly not eating during one's lunch break, multitasking during one's lunch break) can predict outcomes of psychological wellbeing, physiological strain, and counterproductive work behaviors via ego depletion. While extensive recovery literature focuses on recovery after work, a significant gap fails to consider employees eating behaviors in the time of their lunch breaks. This study helps close the gap by expanding recovery activities to those that happen *during* the workday. The findings of this study supported hypotheses 1a-1b, 2a-2b, 4a-4c, and 5a-5c. Thus, the results of this study emphasize that lunch breaks serve as a recovery activity that employees can engage in *during* the workday, employees who regularly eat during their lunch break are less likely to experience negative psychological and physiological strains, and employees who regularly eat during their lunch break are less likely to engage in counterproductive work behaviors.

APPENDIX A: FIGURES AND TABLES

Table 1. Descriptive Statistics and Study Variable Intercorrelations

	Mean	SD	1	2	3	4	5	6	7
EBS1	4.16	1.01	-						
EBS2	2.01	1.24	.44**	-					
EBS3	2.99	1.45	-.15**	.45**	-				
Ego depletion	2.56	1.09	-.18**	.14**	.09	(.92)			
Psychological wellbeing	2.41	0.40	.15**	-.10*	-.01	-.70**	(.89)		
Physiological strain	1.91	0.59	-.15**	.12*	.00	.60**	-.60**	(.85)	
CWB	1.54	0.44	-.08	.07	.04	.43**	-.47**	.29**	(.83)

Note. Bolded values on the diagonal represent Cronbach's α for the measures. EBS1 = eating during lunch break. EBS2 = not eating during lunch break. EBS3 = multitasking during lunch break.

* $p < .05$. ** $p < .05$

Table 2. Summary of Direct Effect of Eating During Lunch Break

Variable	<i>b</i>	SE	<i>t</i>	<i>p</i>
Dependent Variable = Psychological Wellbeing				
Constant	2.16	.09	25.22	.00
EBS1	.06	.02	3.01	.00
Dependent Variable = Physiological Strain				
Constant	2.27	.13	18.19	.00
EBS1	-.09	.03	-2.94	.00
Dependent Variable = CWB				
Constant	1.68	.09	17.88	.00
EBS 1	-.04	.02	-1.59	.11

Note. $n = 394$. SE = standard error. EBS1 = eating during lunch break.

Table 3. Summary of Direct Effect of Not Eating During Lunch Break

Variable	<i>b</i>	SE	<i>t</i>	<i>p</i>
Dependent Variable = Psychological Wellbeing				
Constant	2.47	.04	63.83	.00
EBS 2	-.03	.02	-1.98	.05
Dependent Variable = Physiological Strain				
Constant	1.8	.06	31.92	.00
EBS 2	.06	.02	2.32	.02
Dependent Variable = CWB				
Constant	1.49	.04	35.19	.00
EBS 2	.02	.02	1.28	.2

Note. *n* = 394. SE = standard error. EBS2 = not eating during lunch break.

Table 4. Summary of Direct Effect of Multitasking During Lunch Break

Variable	<i>b</i>	SE	<i>t</i>	<i>p</i>
Dependent Variable = Psychological Wellbeing				
Constant	2.42	.05	51.8	.00
EBS 3	.00	.01	-1.83	.86
Dependent Variable = Physiological Strain				
Constant	1.91	.07	28.12	.00
EBS 3	.00	.02	.04	.97
Dependent Variable = CWB				
Constant	1.5	.05	29.57	.00
EBS 3	.01	.02	.76	.45

Note. *n* = 394. SE = standard error. EBS3 = multitasking during lunch break.

Table 5. Summary of Eating During Lunch Break and Mediation via Ego Depletion

Mediator	Decomposed effects				Indirect effects		
	<i>a</i>	<i>b</i>	<i>c'</i>	<i>c</i>	<i>Boot ab (SE)</i>	<i>LLCI</i>	<i>ULCI</i>
Dependent Variable = Psychological Wellbeing							
Ego Depletion	-.19*(.05)	-.26*(.01)	.01(.01)	.01(.01)	.05(.01)	.02	.08
Dependent Variable = Physiological Strain							
Ego Depletion	-.20*(.05)	.32*(.02)	-.02(.02)	-.02(.02)	-.06(.02)	-.10	-.03
Dependent Variable = CWB							
Ego Depletion	-.19*(.05)	.17*(.02)	.00(.02)	.00(.02)	-.03(.01)	-.05	-.01

Note. *n* = 394. Boot ab = bootstrapped indirect effect. SE = standard error. Standardized regression coefficients reported based on bias-corrected 95% confidence intervals (CIs).
**p* < .05

Table 6. Summary of Not Eating During Lunch Break and Mediation via Ego Depletion

Mediator	Decomposed effects				Indirect effects		
	<i>a</i>	<i>b</i>	<i>c'</i>	<i>c</i>	<i>Boot ab (SE)</i>	<i>LLCI</i>	<i>ULCI</i>
Dependent Variable = Psychological Wellbeing							
Ego Depletion	.12*(.04)	-.26*(.01)	.00(.01)	.00(.01)	-.03(.01)	-.06	-.01
Dependent Variable = Physiological Strain							
Ego Depletion	.12*(.04)	.32*(.02)	.02(.02)	.02(.02)	.04(.02)	.01	.07
Dependent Variable = CWB							
Ego Depletion	.12*(.04)	.17*(.02)	.00(.02)	.00(.02)	.02(.01)	.01	.04

Note. *n* = 394. Boot ab = bootstrapped indirect effect. SE = standard error. Standardized regression coefficients reported based on bias-corrected 95% confidence intervals (CIs).
**p* < .05

Table 7. Summary of Multitasking During Lunch Break and Mediation via Ego Depletion

Mediator	Decomposed effects				Indirect effects		
	<i>a</i>	<i>b</i>	<i>c'</i>	<i>c</i>	<i>Boot ab</i> (<i>SE</i>)	<i>LLCI</i>	<i>ULCI</i>
Dependent Variable = Psychological Wellbeing							
Ego Depletion	.07(.04)	-.26*(.01)	.02(.01)	.02(.01)	-.02(.01)	-.04	.00
Dependent Variable = Physiological Strain							
Ego Depletion	.07(.04)	.33*(.02)	-.02(.02)	-.02(.02)	.02(.01)	.00	.05
Dependent Variable = CWB							
Ego Depletion	.07(.04)	.17*(.02)	.00(.01)	.00(.01)	.01(.01)	.00	.03

Note. *n* = 394. Boot ab = bootstrapped indirect effect. SE = standard error. Standardized regression coefficients reported based on bias-corrected 95% confidence intervals (CIs).

**p* < .05

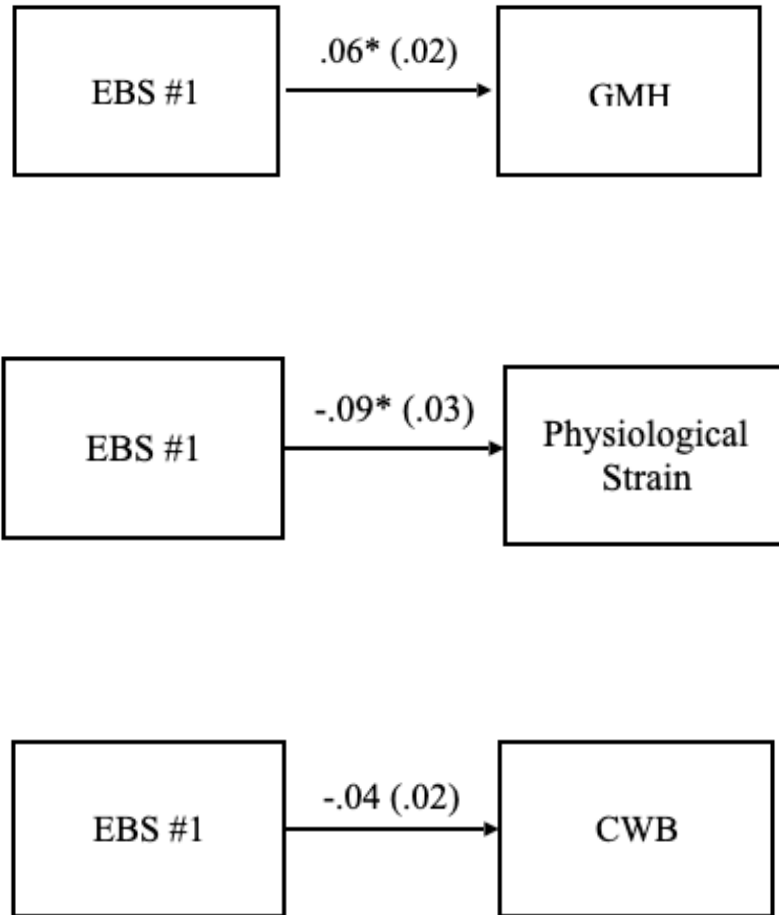


Figure 1. Direct Effect of Eating During Lunch Break

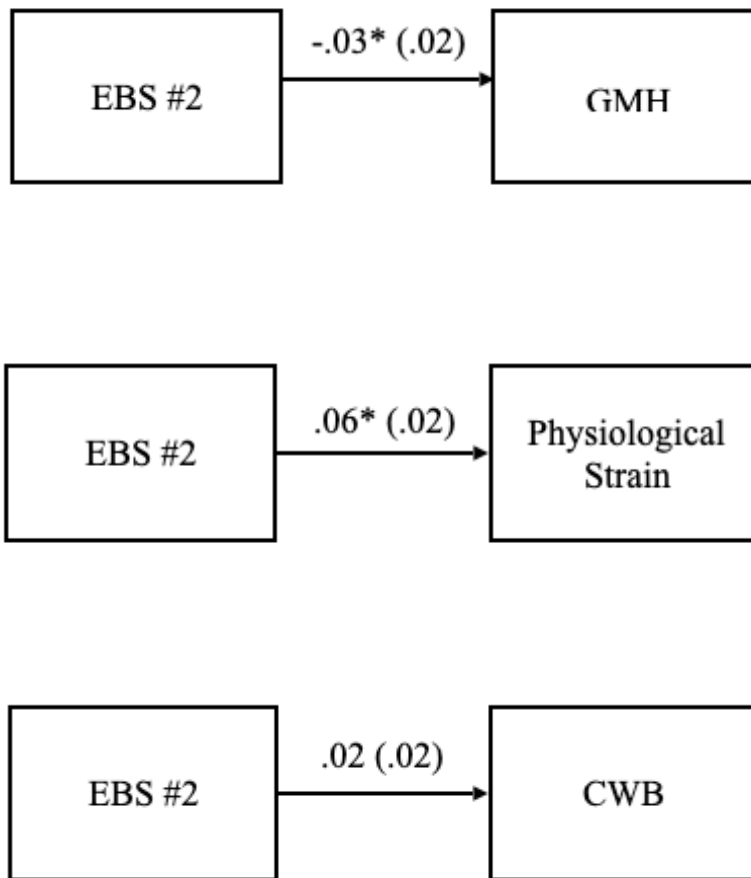


Figure 2. Direct Effect of Not Eating During Lunch Break Models

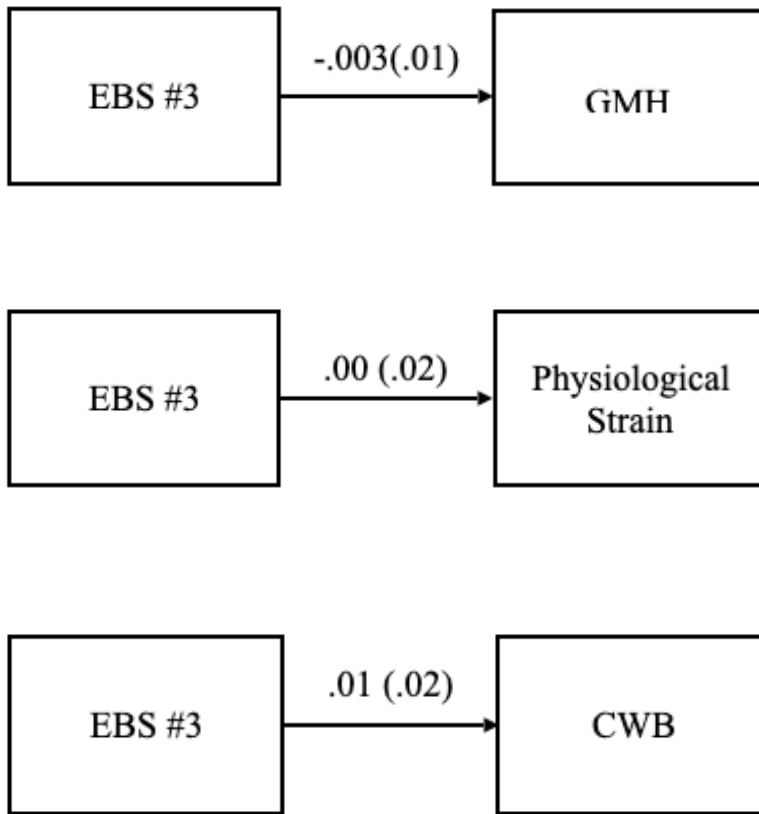


Figure 3. Direct Effect of Multitasking Eating During Lunch Break Models

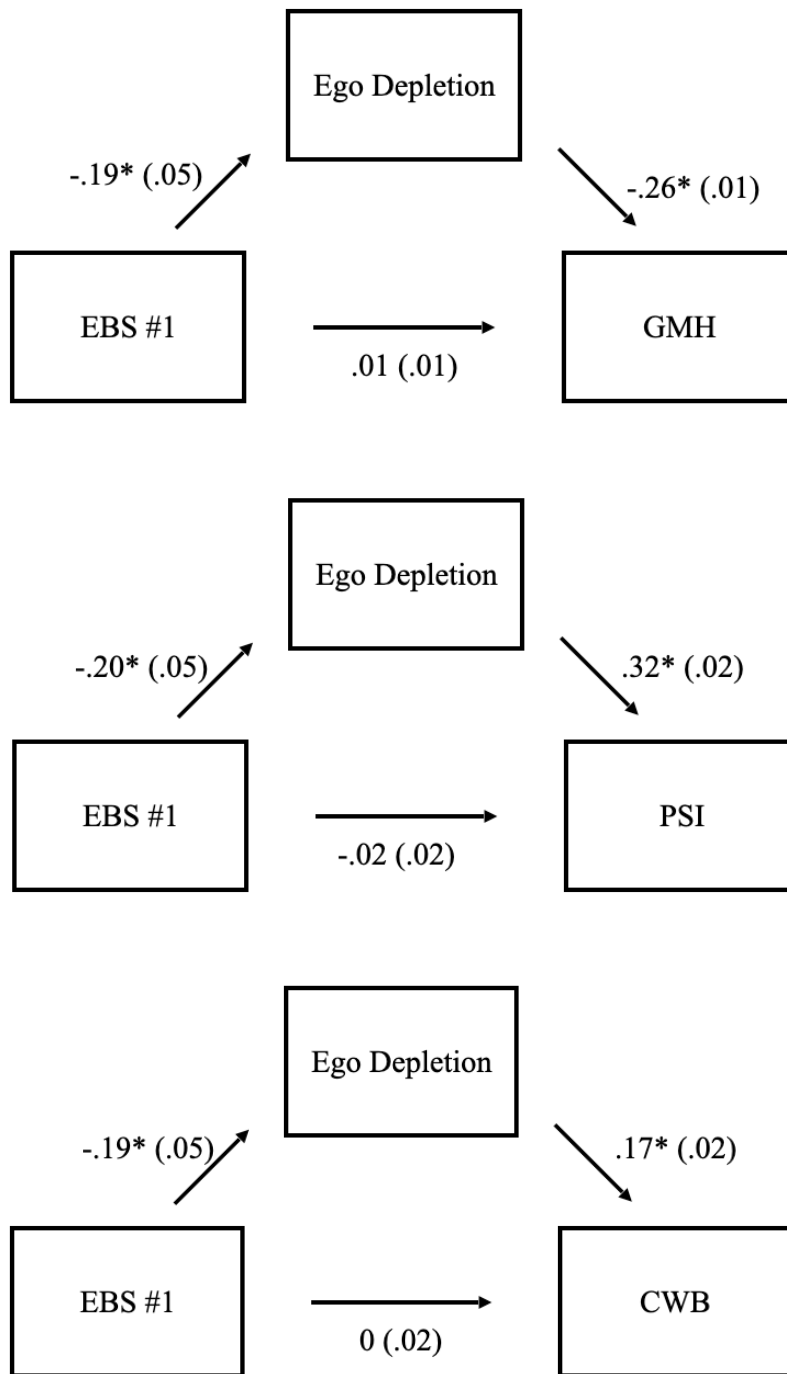


Figure 4. Eating During Lunch Break and Mediation via Ego Depletion Models

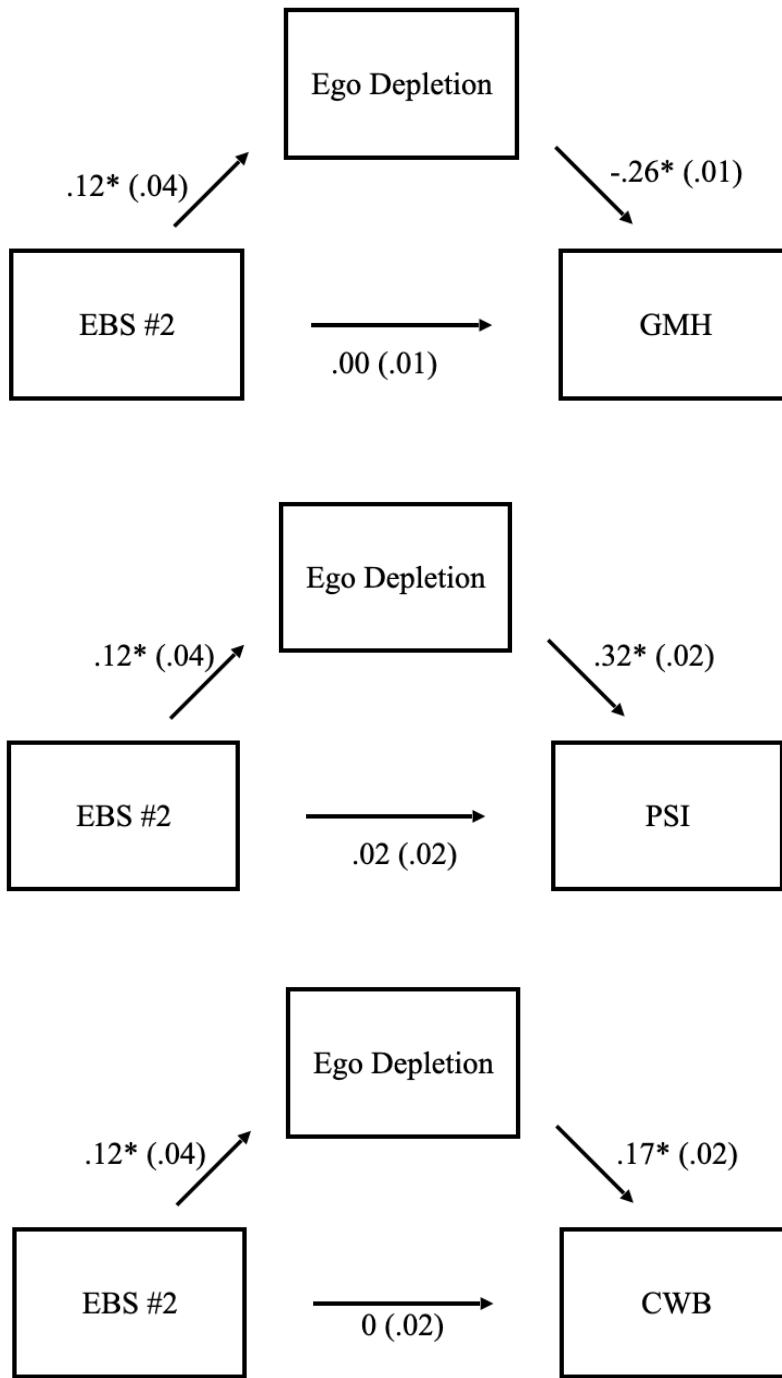


Figure 5. Not Eating During Lunch Break and Mediation via Ego Depletion Models

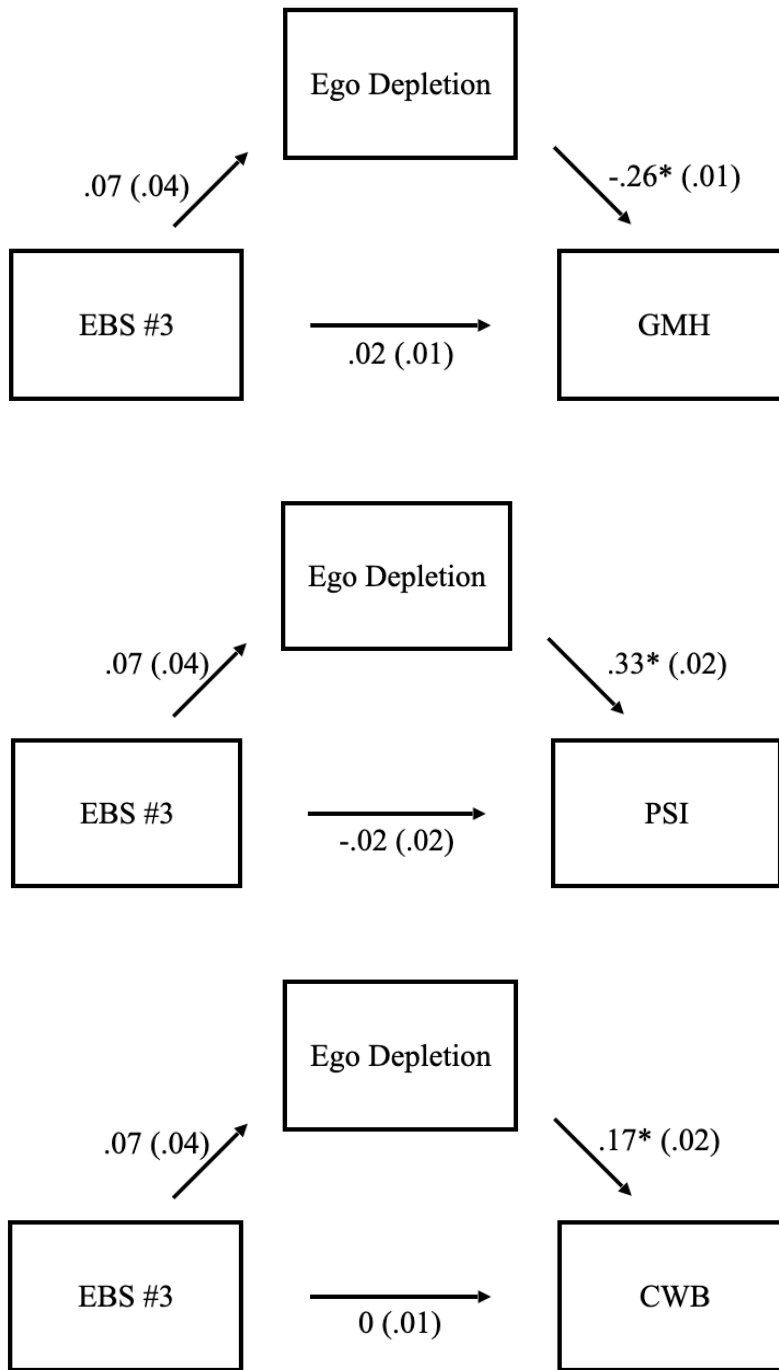


Figure 6. Multitasking During Lunch Break and Mediation via Ego Depletion Models

APPENDIX B: EATING BEHAVIOR SCALE

Please select the extent to which you agree or disagree with the following statements in reference to your eating habits at work.	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I eat lunch during my lunch break	1	2	3	4	5
2. Most days I typically do not take my lunch break	1	2	3	4	5
3. I like to multitask and eat lunch while at my desk	1	2	3	4	5

APPENDIX C: EGO DEPLETION SCALE

Physical fatigue involves extreme tiredness and an inability to engage in physical activity. During the past month, how often did you...	Never	Once or twice a month	Once or twice per week	Most days	Every day
1. Feel physically exhausted during the workday?	1	2	3	4	5
2. Have difficulty engaging in physical activity during the workday?	1	2	3	4	5
3. Feel physically worn out during the workday?	1	2	3	4	5
4. Want to physically shut down during the workday?	1	2	3	4	5
5. Feel physically drained during the workday?	1	2	3	4	5
6. Want to avoid anything that took too much physical energy during the workday?	1	2	3	4	5
Mental fatigue involves mental tiredness and an inability to think or concentrate. During the past month, how often did you...	Never	Once or twice a month	Once or twice per week	Most days	Every day
1. Feel mentally exhausted during the workday?	1	2	3	4	5
2. Have difficulty thinking and concentrating during the workday?	1	2	3	4	5
3. Feel mentally worn out during the workday?	1	2	3	4	5
4. Want to mentally shut down during the workday?	1	2	3	4	5
5. Feel mentally drained during the workday?	1	2	3	4	5
6. Want to avoid anything that took too much mental energy during the workday?	1	2	3	4	5
Emotional fatigue involves extreme mental tiredness and an inability to feel or show emotions. During the past month, how often did you...	Never	Once or twice a month	Once or twice per week	Most days	Every day
1. Feel emotionally exhausted during the workday?	1	2	3	4	5
2. Have difficulty showing and dealing with emotions during the workday?	1	2	3	4	5
3. Feel emotionally worn out during the workday?	1	2	3	4	5
4. Want to emotionally shut down during the workday?	1	2	3	4	5
5. Feel emotionally drained during the workday?	1	2	3	4	5
6. Want to avoid anything that takes too much emotional energy during the workday?	1	2	3	4	5

(Frone & Tidwell, 2015)

APPENDIX D: COUNTERPRODUCTIVE WORK BEHAVIOR SCALE

How often during the past month have you done each of the following things?					
	Never	Rarely	Sometimes	Often	Always
1. Taken a longer break than you were allowed to take	1	2	3	4	5
2. Left work earlier than you were allowed to	1	2	3	4	5
3. Purposely worked slowly when things needed to get done	1	2	3	4	5
4. Daydreamed rather than did your work	1	2	3	4	5
5. Complained about insignificant things at work	1	2	3	4	5
6. Purposely wasted your employer's material/supplies	1	2	3	4	5
7. Tried to look busy while doing nothing	1	2	3	4	5
8. Started or continued a damaging or harmful rumor at work	1	2	3	4	5
9. Avoided returning a phone call to someone you should at work	1	2	3	4	5
10. Blamed someone at work for error you made	1	2	3	4	5
11. Ignored someone at work	1	2	3	4	5
12. Been nasty or rude to a client or customer	1	2	3	4	5
13. Failed to report a problem so it would get worse	1	2	3	4	5
14. Refused to help someone at work	1	2	3	4	5
15. Did something to make someone at work look bad	1	2	3	4	5

(Spector et al., 2006)

Copyright 2003 Suzy Fox and Paul E. Spector, All rights reserved.

APPENDIX E: PHYSIOLOGICAL STRAIN AND PSYCHOLOGY
WELLBEING MEASURES

Over the past month, how often have you experienced each of the following symptoms?					
	Not at all	Once or twice	Once or twice per week	Most days	Every day
1. An upset stomach or nausea	1	2	3	4	5
2. Trouble sleeping	1	2	3	4	5
3. Headache	1	2	3	4	5
4. Acid indigestion or heartburn	1	2	3	4	5
5. Eye strain	1	2	3	4	5
6. Diarrhea	1	2	3	4	5
7. Stomach cramps (Not menstrual)	1	2	3	4	5
8. Constipation	1	2	3	4	5
9. Ringing in the ears	1	2	3	4	5
10. Loss of appetite	1	2	3	4	5
11. Dizziness	1	2	3	4	5
12. Tired or fatigue	1	2	3	4	5
13. Backache	1	2	3	4	5

(Spector & Jex, 1998)

Copyright 1997, Paul E. Spector and Steve M. Jex, All rights reserved.

Over the past month, how often have you experienced each of the following?			
	Never	Sometimes	Always
1. Able to concentrate	1	2	3
2. Loss of sleep over worry (-)	1	2	3
3. Playing a useful part	1	2	3
4. Capable of making decisions	1	2	3
5. Felt constantly under strain (-)	1	2	3
6. Couldn't overcome difficulties (-)	1	2	3
7. Able to enjoy day-to-day activities	1	2	3
8. Able to face problems	1	2	3
9. Feeling unhappy and depressed (-)	1	2	3
10. Losing confidence (-)	1	2	3
11. Thinking of self as worthless (-)	1	2	3
12. Feeling reasonably happy	1	2	3

(Goldberg & Williams, 1988)

APPENDIX F: IRB APPROVAL DOCUMENTS



UNIVERSITY OF CENTRAL FLORIDA

Institutional Review Board

FWA00000351
IRB00001138, IRB00012110
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

January 3, 2022

Dear Steve Jex:

On 1/3/2022, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study, Category 2(i)
Title:	Lunchtime Factors
Investigator:	Steve Jex
IRB ID:	STUDY00003765
Funding:	Name: University of Central Florida Research Foundation, Inc., Funding Source ID: College of Science
Grant ID:	
Documents Reviewed:	<ul style="list-style-type: none"> • 254 Explanation of Research .pdf, Category: Consent Form; • HRP-255 Request for Exemption.docx, Category: IRB Protocol; • Letter of Acceptance-HUT Scholarship.png, Category: Sponsor Attachment; • Survey Measures.docx, Category: Survey / Questionnaire

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please submit a modification request to the IRB. Guidance on submitting Modifications and Administrative Check-in are detailed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Katie Kilgore
Designated Reviewer



UNIVERSITY OF CENTRAL FLORIDA

Institutional Review Board

FWA00000351
IRB00001138, IRB00012110
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

February 18, 2022

Dear Steve Jex:

On 2/18/2022, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Modification / Update
Title:	Lunchtime Factors
Investigator:	Steve Jex
IRB ID:	MOD00002618
Funding:	Name: University of Central Florida Research Foundation, Inc., Funding Source ID: College of Science
Grant ID:	None
Documents Reviewed:	None

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please submit a modification request to the IRB. Guidance on submitting Modifications and Administrative Check-in are detailed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Kamille Birkbeck
Designated Reviewer

REFERENCES

- Allen, T. D., & Armstrong, J. (2006). Further examination of the link between work-family conflict and physical health. *American Behavioral Scientist*, *49*(9), 1204-1221.
<https://doi.org/10.1177/0002764206286386>
- Aryee, P., Helegbe, G., Baah, B., Sarfo-Asante, R., & Quist-Therson, R. (2013). Prevalence and risk factors for overweight and obesity among nurses in the tamale metropolis of Ghana. *Journal of Medical and Biomedical Sciences*, *2*(4), 13. <https://doi.org/10.4314/jmbs.v2i4.3>
- 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.
<https://doi.org/10.1037/1076-8998.10.2.170>
- Barnes, C. M., & Hollenbeck, J. R. (2009). Sleep deprivation and decision-making teams: Burning the midnight oil or playing with fire? *Academy of Management Review*, *34*(1), 56-66. <https://doi.org/10.5465/amr.2009.35713280>
- Benton, D., & Owens, D. S. (1993). Blood glucose and human memory. *Psychopharmacology*, *113*(1), 83-88. <https://doi.org/10.1007/bf02244338>
- Benton, D., Owens, D. S., & Parker, P. Y. (1994). Blood glucose influences memory and attention in young adults. *Neuropsychologia*, *32*(5), 595-607. [https://doi.org/10.1016/0028-3932\(94\)90147-3](https://doi.org/10.1016/0028-3932(94)90147-3)
- Baumeister, R. F., & Vohs, K. D. (2007). Self-regulation, ego depletion, and motivation. *Social and Personality Psychology Compass*, *1*(1), 115-128. <https://doi.org/10.1111/j.1751-9004.2007.00001.x>
- Binnewies, C., Sonnentag, S., & Mojza, E. J. (2010). Recovery during the weekend and fluctuations in weekly job performance: A week-level study examining intra-individual relationships. *Journal of Occupational and Organizational Psychology*, *83*(2), 419-441.
<https://doi.org/10.1348/096317909x418049>
- Binnewies, C., & Sonnentag, S. (2008). Recovery after work: Unwinding from daily job stress. *The long work hours culture. Causes, consequences and choices*, 275-294.

- Bosch, C., Sonnentag, S., & Pinck, A. S. (2018). What makes for a good break? A diary study on recovery experiences during lunch break. *Journal of Occupational and Organizational Psychology, 91*(1), 134-157. <https://doi.org/10.1111/joop.12195>
- Burkhalter, T. M., & Hillman, C. H. (2011). A narrative review of physical activity, nutrition, and obesity to cognition and scholastic performance across the human lifespan. *Advances in Nutrition, 2*(2), 201S-206S. <https://doi.org/10.3945/an.111.000331>
- Brumby, D. P., Du Toit, H., Griffin, H. J., Tajadura-Jiménez, A., & Cox, A. L. (2014). Working with the television on. *CHI '14 Extended Abstracts on Human Factors in Computing Systems*. <https://doi.org/10.1145/2559206.2581210>
- Cooper, C. L., & Cartwright, S. (1994). Healthy mind; Healthy organization— a proactive approach to occupational stress. *Human Relations, 47*(4), 455-471. <https://doi.org/10.1177/001872679404700405>
- Craig, A., & Cooper, R. E. (1992). Symptoms of acute and chronic fatigue. *Handbook of human performance, 3*, 289-339.
- Clohessy, S., Walasek, L., & Meyer, C. (2019). Factors influencing employees' eating behaviors in the office-based workplace: A systematic review. *Obesity Reviews, 20*(12), 1771-1780. <https://doi.org/10.1111/obr.12920>
- Dahm, P. C., Glomb, T. M., Manchester, C. F., & Leroy, S. (2015). Work-family conflict and self-discrepant time allocation at work. *Journal of Applied Psychology, 100*(3), 767-792. <https://doi.org/10.1037/a0038542>
- De Bloom, J., Kinnunen, U., & Korpela, K. (2015). Recovery processes during and after work. *Journal of Occupational & Environmental Medicine, 57*(7), 732-742. <https://doi.org/10.1097/jom.0000000000000475>
- Demerouti, E., Bakker, A. B., Geurts, S. A., & Taris, T. W. (2009). Daily recovery from work-related effort during non-work time. *Current Perspectives on Job-Stress Recovery, 85*-123. [https://doi.org/10.1108/s1479-3555\(2009\)0000007006](https://doi.org/10.1108/s1479-3555(2009)0000007006)

- Dwyer, D. J., & Ganster, D. C. (1991). The effects of job demands and control on employee attendance and satisfaction. *Journal of Organizational Behavior*, 12(7), 595-608. <https://doi.org/10.1002/job.4030120704>
- Eisenberger, R., & Stinglhamber, F. (2011). Perceived organizational support. *Perceived organizational support: Fostering enthusiastic and productive employees*, 25-60. <https://doi.org/10.1037/12318-002>
- Fox, S., Spector, P. E., Goh, A., Bruursema, K., & Kessler, S. R. (2012). The deviant citizen: Measuring potential positive relations between counterproductive work behaviour and organizational citizenship behaviour. *Journal of Occupational and Organizational Psychology*, 85(1), 199-220. <https://doi.org/10.1111/j.2044-8325.2011.02032.x>
- Fritz, C., Ellis, A. M., Demsky, C. A., Lin, B. C., & Guros, F. (2013). Embracing work breaks. *Organizational Dynamics*, 42(4), 274-280. <https://doi.org/10.1016/j.orgdyn.2013.07.005>
- Frone, M. R., & Tidwell, M. O. (2015). The meaning and measurement of work fatigue: Development and evaluation of the three-dimensional work fatigue inventory (3D-WFI). *Journal of Occupational Health Psychology*, 20(3), 273-288. <https://doi.org/10.1037/a0038>
- Gailliot, M. T., Baumeister, R. F., DeWall, C. N., Maner, J. K., Plant, E. A., Tice, D. M., Brewer, L. E., & Schmeichel, B. J. (2007). Self-control relies on glucose as a limited energy source: Willpower is more than a metaphor. *Journal of Personality and Social Psychology*, 92: 325-33
- Ganster, D. C., & Perrewé, P. L. (2011). Theories of occupational stress. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (2nd ed.): 37-53. Washington, DC: American Psychological Association.
- Ganster, D. C., & Rosen, C. C. (2013). Work stress and employee health. *Journal of Management*, 39(5), 1085-1122. <https://doi.org/10.1177/0149206313475815>
- Goldberg, D., & Williams, P. (1988). *A user's guide to the General Health Questionnaire*. Windsor, UK: NFER-Nelson.
- Grebner, S., Semmer, N. K., & Elfering, A. (2005). Working conditions and threetypes of wellbeing: A longitudinal study with self-report and rating data. *Journal of Occupational Health Psychology*, 10(1), 31-43. <https://doi.org/10.1037/1076-8998.10.1.31>

- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513-524. <https://doi.org/10.1037/0003-066x.44.3.513>
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, *50*(3), 337-421. <https://doi.org/10.1111/1464-0597.00062>
- Hobfoll, S. E., Halbesleben, J., Neveu, J., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*(1), 103-128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Jansen, N., Kant, I., Van Amelsvoort, L., Nijhuis, F., & Van den Brandt, P. (2003). Need for recovery from work: Evaluating short-term effects of working hours, patterns, and schedules. *Ergonomics*, *46*(7), 664-680. <https://doi.org/10.1080/0014013031000085662>
- Kim, S., Cho, S., & Park, Y. (2021). Daily microbreaks in a self-regulatory resources lens: Perceived health climate as a contextual moderator via microbreak autonomy. *Journal of Applied Psychology*. <https://doi.org/10.1037/apl0000891>
- Krajewski, J., Sauerland, M., & Wieland, R. (2011). Relaxation-induced cortisol changes within lunch breaks - an experimental longitudinal worksite field study. *Journal of Occupational & Organizational Psychology*, *84*(2), 382-394.
- Lanaj, K., Johnson, R. E., & Wang, M. (2016). When lending a hand depletes the will: The Daily costs and benefits of helping. *Journal of Applied Psychology*, *101*(8), 1097-1110. <https://doi.org/10.1037/apl0000118>
- Lane, C., & Hobfoll, S. E. (1992). How loss affects anger and alienates potential supporters. *Journal of Consulting and Clinical Psychology*, *60*(6), 935-942. <https://doi.org/10.1037/0022-006x.60.6.935>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Lee, G., Han, K., & Kim, H. (2017). Risk of mental health problems in adolescents skipping meals: The Korean national health and nutrition

- examination survey 2010 to 2012. *Nursing Outlook*, 65(4), 411-419. <https://doi.org/10.1016/j.outlook.2017.01.007>
- Linden, W., Earle, T., Gerin, W., & Christenfeld, N. (1997). Physiological stress reactivity and recovery: Conceptual siblings separated at birth? *Journal of Psychosomatic Research*, 42(2), 117-135. [https://doi.org/10.1016/s0022-3999\(96\)00240-1](https://doi.org/10.1016/s0022-3999(96)00240-1)
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, N.J.: Prentice-Hall.
- McCrae, R. R. (1989). Why I advocate the five-factor model: Joint factor analyses of the NEO-PI with other instruments. *Personality Psychology*, 237-245. https://doi.org/10.1007/978-1-4684-0634-4_18
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth, H. Thierry & C. J. de Wolff (Eds.), *Handbook of work and organizational psychology*, Vol. 2 (pp. 5–33). Hove, UK: Psychology Press.
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126(2), 247-259. <https://doi.org/10.1037/0033-2909.126.2.247>
- O'Sullivan, T. A., Robinson, M., Kendall, G. E., Miller, M., Jacoby, P., Silburn, S. R., & Oddy, W. H. (2009). A good-quality breakfast is associated with better mental health in adolescence. *Public Health Nutrition*, 12(2), 249-258. <https://doi.org/10.1017/s1368980008003935>
- Parker, P. Y., & Benton, D. (1995). Blood glucose levels selectively influence memory for word lists dichotically presented to the right ear. *Neuropsychologia*, 33(7), 843-854.
- Repetti, R. L. (1989). Effects of daily workload on subsequent behavior during marital interaction: The roles of social withdrawal and spouse support. *Journal of Personality and Social Psychology*, 57(4), 651-659. <https://doi.org/10.1037/0022-3514.57.4.651>
- Ryan, R. M., & Deci, E. L. (2008). From ego depletion to vitality: Theory and findings concerning the facilitation of energy available to the self. *Social and Personality Psychology Compass*, 2(2), 702-717. <https://doi.org/10.1111/j.1751-9004.2008.00098.x>

- Schaufeli W.B., Salanova M., Gonzalez-Roma V. & Bakker A.B. (2002) The measurement of engagement and burnout: a confirmative analytic approach. *Journal of Happiness Studies* (3), 71– 92.
- Shin, W., & Kim, J. (2020). Use of workplace foodservices is associated with reduced meal skipping in Korean adult workers: A nationwide cross-sectional study. <https://doi.org/10.21203/rs.3.rs-34607/v1>
- Sonnentag, S., & Bayer, U. (2005). Switching off mentally: Predictors and consequences of psychological detachment from work during off-job time. *Journal of Occupational Health Psychology*, 10(4), 393-414. <https://doi.org/10.1037/1076-8998.10.4.393>
- 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. <https://doi.org/10.1037/1076-8998.12.3.204>
- Sonnentag, S., & Geurts, S. A. (2009). Methodological issues in recovery research. *Current Perspectives on Job-Stress Recovery*, 1-36. [https://doi.org/10.1108/s1479-3555\(2009\)0000007004](https://doi.org/10.1108/s1479-3555(2009)0000007004)
- Sonnentag, S., & Krueger, U. (2006). Psychological detachment from work during off-job time: The role of job stressors, job involvement, and recovery-related self-efficacy. *Work and Rest: A Topic for Work and Organizational Psychology*, 197-217. <https://doi.org/10.4324/9781003059714-5>
- Sonnentag, S., Mojza, E. J., Binnewies, C., & Scholl, A. (2008). Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect. *Work & Stress*, 22(3), 257-276. <https://doi.org/10.1080/02678370802379440>
- Sonnentag, S., Venz, L., & Casper, A. (2017). Advances in recovery research: What have we learned? What should be done next? *Journal of Occupational Health Psychology*, 22(3), 365-380. <https://doi.org/10.1037/ocp0000079>
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all

counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68(3), 446-460. <https://doi.org/10.1016/j.jvb.2005.10.005>

Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3(4), 356-367. <https://doi.org/10.1037/1076-8998.3.4.356>

Tetrick, L. E., & Winslow, C. J. (2015). Workplace stress management interventions and health promotion. *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 583-603.

Trenberth, L., & Dewe, P. (2002). The importance of leisure as a means of coping with work related stress: An exploratory study. *Counselling Psychology Quarterly*, 15, 59-72.

Trougakos, J. P., Hideg, I., Cheng, B. H., & Beal, D. J. (2014). Lunch breaks unpacked: The role of autonomy as a moderator of recovery during lunch. *Academy of Management Journal*, 57(2), 405-421. <https://doi.org/10.5465/amj.2011.1072>

Umberson, D., Crosnoe, R., & Reczek, C. (2010). Social relationships and health behavior across the life course. *Annual Review of Sociology*, 36(1), 139-157.

