Weekend recovery's effect on Monday morning exhaustion and engagement: The role of workaholism

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Abstract

Work recovery is the process by which employees rebuild their lost resources and acquire new resources, such as energy or time (Barber et al., 2019; Ginoux et al., 2021; Sonnentag, 2001; Sonnentag et al., 2012). This accumulation of resources helps employees to be productive during their next work period (Casper et al., 2018; Sonnentag et al., 2012). To better understand the recovery process, the current study examined each of the four main recovery experiences (psychological detachment, relaxation, mastery, and control) as they occur over the weekend and their relationships with Monday morning exhaustion and engagement. Additionally, this study examined how workaholism moderates the relationships between weekend recovery experiences and their relationship with Monday morning exhaustion and engagement. Data were analyzed from 209 participants. The results suggest that mastery and control experiences over the weekend are most beneficial for recovery and led to reduced exhaustion and increased engagement levels on Monday morning. Moreover, the results indicate that the positive relationship between weekend control experiences and Monday morning engagement is moderated by workaholism. These findings demonstrate the restorative power of control experiences over the weekend when workaholic tendencies are high.

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Introduction

The traditional, white-collar employee goes to work Monday to Friday, week after week, and uses the weekend to recover from work. However, sometimes the weekend is just not long enough, which can make it difficult to go to work on Monday mornings. Even after those two days off work, employees can still feel drained on Monday morning and throughout the workday (Ginoux et al., 2021). Each day of work requires employees to expend resources to meet their work-related demands (Bakker et al., 2012; Chawla et al., 2020; Sonnentag, 2001; Sonnentag & Fritz, 2007; Sonnentag et al., 2012). When employees are at work, they are constantly having to face stricter, impeding deadlines while handling other fast paced organizational needs (Aziz & Moyer, 2018; Molina et al. 2018; Wijhe et al., 2013). This may cause employees to work on the weekends to meet goals. The American Psychology Association's annual Stress in America survey has consistently identified work as a major stressor for American adults (American Psychology Association, 2018), and over a quarter of adults in America state that they are so stressed it is hard to even function (APA Stress in America survey, 2022). This need has also grown with the advancement of technology and organizations needing employees to be available more than in the past (Barber et al., 2019). Although these increasing pressures to remain engaged with work might seem to have immediate positive outcomes (e.g., increased productivity; Aziz & Moyer, 2018; Clark et al., 2016), research has shown how these kinds of conditions can be harmful for longer-term organizational and individual outcomes (Clark et al., 2016; Gryzwacz et al., 2004; Molino et al., 2018; Sonnentag & Frese, 2003; Sonnentag et al., 2008). For some

employees to meet their job demands and expectations (e.g., strict deadlines and heavy workloads), they must use (and potentially deplete) their resources, such as their psychological resources, time, and energy (Bakker et al., 2013; Bennett et al., 2018; Chawla et al., 2020; Ginoux et al., 2021; Molino et al., 2018). Employees must then attempt to regain or replenish their expended resources to be ready for the next work period (Bennett et al., 2018; Ginoux et al., 2021). This is typically done through a process known as recovery (Chawla et al., 2020; Bennett et al., 2018; Sonnentag, 2001; Sonnentag & Fritz, 2007). The goal of the current study is to further develop our understanding of the recovery process. With the increased demands and stress that organizations are placing on employees (Aziz & Moyer, 2018; Molina et al. 2018, Wijhe et al., 2013), it is more critical for employees to be properly and effectively engaging in the recovery process (Bennett et al., 2018). Despite the growing importance of recovery, the increasing work demands and stressors may be making it less likely for employees to fully recover (Bennett et al., 2018; Chawla et al., 2020; Ginoux et al., 2021; Sonnnentag, 2001, Sonnentag et al., 2012; Wendsche et al., 2017). The demands and stressors may be placing higher pressures on employees to stay on top of their duties, which may require them to use their non-work time to accomplish work-related activities (Bennett et al., 2018; Sonnentag, 2001; Sonnentag & Fritz, 2007; Sonnentag et al., 2012).

Much of the recovery literature has utilized five-day diary studies and examined recovery during the work week (Bakker et al., 2013; Chawla et al., 2020; Molino et al., 2018; Wijhe et al., 2013). However, as some researchers have noted, weekend periods are the most optimal for recovery to take place (Bennett et al., 2018; Ginoux et al., 2021; Sonnentag, 2001). Unfortunately, there have not been many studies conducted that analyze

recovery during this time (Bakker et al., 2013; Bennett et al., 2018; Molino et al., 2018; Sonnentag, 2001; Wijhe et al.m 2013). A better understanding of how weekend activity choices may impact employees' engagement and exhaustion levels on Monday morning may help organizations better manage their human capital, decrease workrelated exhaustion, and increase engagement. Therefore, the present study aims to examine the effects of specific recovery activity behavior over the weekend on Monday morning exhaustion and engagement.

Finally, with the kinds of organizational demands that are present today, there is an increased pressure to engage in work related communication during non-work time (Barber et al., 2019), to work longer hours and more excessively than what is needed (Aziz & Moyer, 2018), and to expend more energy getting tasks done in an insufficient amount of time (Wijhe et al., 2013). This may lead people to feel like they must always be working in some capacity (Barber et al., 2019; Chawla et al., 2020). Indeed, there has been an increase in workaholic tendencies in employees (Andreassen et al., 2018; Aziz & Moyer, 2018; Clark et al., 2016). Workaholism refers to an addiction to work where one cannot stop working without feeling dissatisfied (Andreassen et al., 2012). Workaholism can play a significant role in the recovery process by hindering recovery (Molino et al., 2018). Therefore, the present study examines whether the effect of specific weekend recovery experiences on exhaustion and on engagement depends on one's level of workaholism.

Recovery

Recovery refers to the process by which employees rebuild their lost or expended resources as well as acquire new resources, such as energy or time (Barber et al., 2019;

Casper et al., 2018; Chawla et al., 2020; Ginoux et al., 2021; Sonnentag, 2001;

Sonnentag & Fritz, 2007; Sonnentag et al., 2012; Sonnentag et al., 2008; Sonnentag &

Niessen, 2020). The concept of recovery is built on the Conservation of Resource Theory

(COR; Ginoux et al., 2021; Headrick et al., 2022; Sonnentag, 2001). COR theory

explains that as human beings we are inherently motivated to conserve or protect our

existing resources while also investing these existing resources into adopting new ones

(Halbesleben et al. 2014, Hobfoll et al., 2016). Resources have been conceptualized in a

variety of ways. For example, Hobfoll (1998, pg. 45) defined resources as "objects,

personal characteristics, and energies that are either themselves valued for survival,

directly or indirectly, or that serve as a means of achieving these resources." Similarly,

resources might be "anything perceived by the individual as helpful for attaining his or

her goals" (Halbesleben et al. 2014, pg. 1338). The common theme across definitions is

that resources are valuable to people and people will continue to do what they can to

protect them (Hobfoll et al., 2016).

     According to COR theory, there are two main actions people engage in regarding

resources. First is the action of conserving resources and refers to one's motivation to

protect their resources. This means that people are always seeking ways to safeguard our

existing resources and do their best not to waste them (Halbesleben et al. 2014). For

example, people will protect their time (resource) by not taking on more work when they

will not be properly compensated. Protecting one's time in this way in ensures that they

have enough resources to engage in other activities. The second action is acquiring

resources, which refers to people's need to constantly build up and gain new resources

even in the face of losing existing ones. For instance, someone who is working long

hours, and living life paycheck to paycheck will likely accept a higher paying job to build their financial resource pool. These actions are highlighted in the two key principles of COR theory. The first principle of COR theory states, "resource loss is more salient than resource gain" (Halbesleben et al., 2014, p. 1337). This means that loosing resources can do more damage than the good that gaining resources can do. The second principle states that "people must invest resources to gain resources and protect themselves from losing resources or to recover from resource loss" (Halbesleben et al., 2014, p. 1337). This means that people must expend resources to gain new ones or recover existing ones.

COR theory can be used to investigate and understand the recovery process and why recovery is so important (Halbesleben et al., 2014). People intrinsically desire to maintain and protect their resources (Halbesleben et al., 2014, Hobfoll et al., 2015). Thus, they must logically make time to replenish and restore the resources that are lost while at work. The concept of workplace recovery fits into this theory by explaining how time away from work can be beneficial for employees to take the time to invest in greater resources (Sonnentag, 2001). Once the workday is finished, employees must be removed from their work-related demands and engage in restorative activities that help them rebuild or replenish their lost resources. For employees to be energized and adequately able to participate in work the next day, they must properly recover (Bennett et al., 2018). The process of recovery allows employees to relieve the stress-load reactions that are induced while they are at work; this also allows them to return to their pre-stressor levels (Bakker et al, 2013). Failure to reach these restorative states can hurt an individual's ability to properly recover as they will remain in a high stress-load state. When in this state of heightened stress, resources are constantly being drained from the individual,

making it harder for them to rebuild and gain new resources for any future work (Bakker et al., 2013; Bennett et al., 2018; Halbesleben et al., 2014; Headrick et al., 2022; Hobfoll et al., 2015; Wijhe et al., 2013). When stressful demands are placed on an individual's psychological systems, the individual needs to be removed in order to alleviate those stressful demands, so they may engage in non-work activities, which is when recovery will typically occur (Craig & Cooper, 1992).

Recovery from work can have benefits for employees and organizations, and failing to recover from work can have detrimental effects for employees and organizations. For example, previous research has shown that failure for employees to reach pre-stressor levels can result in exhaustion and burnout (Andreassen et al., 2018; Bennett et al., 2018; Chawla et al., 2020; Ginoux et al., 2021; Headrick et al., 2022; Molino et al., 2018; Wijhe et al. 2013). On the other hand, engaging in this recovery process has been shown to increase job performance (Sonnetag, 2001; Headrick et al., 2022, Sonnentage et al., 2008) positive affect, vigor (Ginoux et al., 2021), engagement (Headrick et al., 2022), subjective well-being (Molino et al., 2018; Headrick et al., 2022; Sonnentag, 2001; Wijhe et al., 2013) and improved mood and energy levels (Wijhe et al., 2013). Thus, recovery can be a critical aspect of an employee's life, and it should be a major concern for organizations and managers as they continue to do their best to motivate and retain their employees (Sonnentag, 2001). A better understanding of how their employees' recovery practices might be influencing employee overall attitudes and behaviors while at work can also be a strategic way to promote employee health and well-being.

Recovery Activities and Experiences

Research has shown that people tend to engage in specific kinds of activities that allow them to recover and accrue resources. Although it is easier for recovery to take place away from work, recovery can also occur at work. For example, research has shown evidence that recovery might occur while at work during microbreaks (Ginoux et al., 2021; Sonnentag et al., 2012). While previous research has included work related activities while not at work (e.g., checking emails at home) and activities that expend resources (Bakker et al., 2013; Ginoux et al, 2021; Sonnentag, 2001), these kinds of activities do not truly represent the idea of recovery. According to Sonnentag and Fritz (2007), "It is not a specific activity per se that helps to recover from job stress but its underlying attributes" (p. 204). They suggest that different people engage in different activities to recover from work, and it is the psychological experiences one has during these activities that make recovery effective (Sonnentag & Fritz, 2007). Based on past research, such as Bennett et al. (2018), Steed et al. (2021), and Headrick et al. (2022), the best way to conceptualize recovery is in terms of the four recovery experiences. Thus, the present study will only focus on the kinds of activities that help a person replenish or acquire resources.

There are four predominant recovery experiences seen in the literature surrounding workplace recovery (Barber et al., 2019; Bennett et al., 2018; Headrick et al., 2022; Molino et al., 2018; Ginoux et al., 2021). These four recovery experiences are psychological detachment, relaxation, mastery, and control (Sonnentag & Fritz, 2007). Psychological detachment is defined as being able to fully disconnect and not think about work or work-related tasks while not at work (Bennett et al., 2018; Sonnentag et al.,

2012). Relaxation refers to reaching low-activation levels and not using much brain power (Bennett et al., 2018; Headrick et al., 2022; Sonnentag et al., 2012). Mastery experiences are when workers are able to participate in activities and use skills that they are good at but are not work related. This can also include improving on skills that one has not yet mastered but that they enjoy (i.e., taking a cooking class; Chawla et al., 2020; Sonnentag & Fritz, 2007). Finally, control is having the power and autonomy to choose what you do in your leisure time (Sonnentag & Fritz, 2007). By engaging in recovery experiences, individuals gain the positive psychological restoration benefits they offer, which ultimately leads to greater feelings of being recovered (Ginoux et al., 2021). Below, each type of recovery experience is explained in detail.

Psychological Detachment

Psychological detachment, which refers to removing oneself from actively engaging in or thinking about work-related tasks or responsibilities, has been shown to be a crucial aspect of successfully recovering from work (Sonnentag & Niessen, 2020). When someone is psychologically detached from work, they are better able to direct their attention to replenishing their resources to help prepare them for when they return to work (Sonnentag & Niessen, 2020). There is more to psychological detachment than just the physically removing oneself from their place of work. There is also a disconnection from engaging in any work-related tasks, such as answering office emails or prepping for upcoming meetings (Sonnentag & Fritz, 2007). Additionally, there is also the mental or psychological disconnection to where one does not let work-related thoughts or ideas into their conscious mind (Sonnentag & Fritz, 2007). Thus, an important component of

psychological detachment is not expending resources thinking about work when not at work.

Most previous research states that psychological detachment is favorable for positive outcomes such as positive affective states and well-being (Sonnentag & Niessen, 2020; Bakker et al., 2013; Headrick et al., 2022; Sonnetag et al., 2008). However, some have argued that completely switching off all work-related thoughts might be harmful for job performance upon returning to work (Sonnentag & Niessen, 2020, Headrick et al., 2022). Research suggests that attitudes might play a role in this relationship. Those who engage in negative thinking about work during their non-work time are seen to have higher rates of negative outcomes, such as negative affect. On the other hand, those who think more positively about work or fully detach from work are seen to have more positive outcomes, such as positive affect (Sonnentag & Niessen, 2020). More positive and constructive thoughts about work may be more beneficial than full detachment from all things work-related (Sonnentag & Niessen, 2020). This is because it could provide employees with the opportunity to reflect on their previous work in a helpful manner so that they are better prepared to start work back up again (Sonnentag et al., 2012).

Relaxation Experiences

Relaxation, which refers to inhabiting a state of low mental arousal so that you are not mentally or physically putting a high amount of effort or energy into accomplishing anything, can be restorative and beneficial for recovery. Relaxation can target both the body and the mind (Sonnentag & Fritz, 2007, Sonnentag et al., 2012). People typically expect relaxation from activities that they enjoy and do not require large amounts of effort, nor are they seen as challenging (Tinsley & Eldredge, 1995; Bennett et

al., 2018; Headrick et al., 2022). Some examples of activities that are typically associated with relaxation would be listening to calming music and meditation because they allow individuals to reside in these low arousal states and relax. (Sonnentag et al., 2012).

Mastery Experiences

Mastery, which can be described as participating in a skill or activity that brings the individual a sense of accomplishment and is self-rewarding to the person (Barber et al., 2019; Bennett et al., 2018; Chawla et al., 2020; Ginoux et al., 2021; Headrick et al., 2022). Unlike relaxation experiences, these mastery experiences can bring some challenges to the individual and might require more than a little amount of effort. For example, Sonnentag et al. (2012) stated that mastery experiences are "off-job experiences that provide challenges and opportunities for learning" (p. 870). Despite requiring some challenge and effort, mastery experiences are good for facilitating recovery because they provide opportunities for individuals to build up and obtain additional resources (Sonnentag & Fritz, 2007). A common example of a mastery experience good for recovery would be playing a sport or learning a new language in one's free time (Sonnentag & Fritz, 2007; Sonnentag & Natter, 2004). It is also worth pointing out that mastery experiences need to be non-work-related for them to truly be restorative. Otherwise, there would be no added resources and only more depletion of resources (Sonnentag & Fritz, 2007).

Control Experiences

Control refers to the experience of being able to pick and choose the kinds of activities one might engage in when they are in their non-work time (Chawla et al., 2020). Since work influences a lot of what people do, people find that having this control

over their leisure time promotes positive experiences and feelings (Sonnentag et al., 2012). Control is beneficial for recovery because it helps compensate for the lack of autonomy that one may face while at work (Sonnentag et al., 2012). As people, we have a natural desire to want to have control over the events that occur to us in our lives (Kelley, 1971). Control experiences are not only the power of choosing what you do but having the authority to pick and choose how and when you do them (Sonnentag & Fritz, 2007).

Antecedents of Recovery

Job Demands

Job demands are pressures or strains placed on people due to work related responsibilities (Chawla et al., 2020), or things that make accomplishing job tasks more difficult (Bennett et al., 2018) Previous research shows that job demands are negatively related to recovery (Bennett et al., 2018; Sonnentag & Fritz, 2007; Wendesche & Lohmann-Haislah, 2017; Steed et al., 2021; Chawla et al., 2020; Ginoux et al., 2021). Job demands have typically been categorized into two groups: challenge demands and hindrance demands (Cavanaugh et al., 2000). Challenge demands refer to those job demands that are challenging but not impossible to meet, which can usually foster some kinds of positive emotions such as self-efficacy (Cavanough et al., 2000). This leads to high enjoyment of one's work, which can increase the likelihood that they continue engaging in work-related activities even when they are not at work, and therefore makes these challenge demands negatively related to psychological detachment (Bennett et al., 2018; Querstret & Cropley, 2012). This enjoyment from work can also lead to higher positive affect at the end of the day which might cause high levels of activation at the end

of work (Bennett et al., 2018, Tadić Vujčić et al., 2017). This in turn can lead to lower levels of relaxation during non-work time (Bennett et al., 2018). The enthusiasm that can be brought about through challenge demands might impede on individuals' non-work time which can leave them with less availability to do other things that they may want to do (Wood & Michaelides, 2016), or engage in other non-work-related activities (Bennett et al., 2018). For example, one might engage in positive problem solving during their leisure time, which they might enjoy but does not allow them to psychologically detach (Sonnentag & Niessen, 2020). Therefore, challenge demands have also been linked to lower mastery and control experiences (Bennett et al., 2018).

On the other hand, hindrance demands typically produce more negative emotions because they prevent goal attainment (Bennett et al., 2018). When the working conditions an employee experiences do not allow them to reach their goals, this causes role conflict and role ambiguity, which can increase one's levels of anger and anxiety (Bennett et al., 2018, Tuckey et al., 2015). These negative emotions have been shown to make it less likely that employees will engage in recovery experiences after work (Bennett et al., 2018, Chawla et al., 2020; Sonnentag & Fritz, 2007). With hindrance demands, employees are more stressed when they leave work. Therefore, they will be less likely to disengage from thoughts about work because they will be more motivated to think of solutions to their problems (Sonnentag & Fritz, 2007). This explains the negative relationship found between hindrance demands and psychological detachment (Bennett et al., 2018; Chawla et al., 2020; Sonnentag & Fritz, 2007). Additionally, the stress and anxiety that is produced by hindrance demands will lead to an increased activation state, which decreases the chances of reaching the low activation state achieved from relaxation

experiences (Bennett et al., 2018; Chawla et al., 2020; Sonnentag & Fritz., 2007). Because hindrance demands require employees to use an abundance of their psychological resources, these kinds of demands can leave them worn down by the time that work concludes (Sonnentag & Fritz, 2007). Ultimately, hindrance demands can decrease the likelihood employees would engage in any non-work activities due to their lowered resources at the end of the workday (Bennett et al., 2018; Sonnentag & Fritz, 2007). Moreover, feelings of stress and anxiety that are produced by hindrance demands can cause employees to feel overwhelmed and as if they have no control over their activities during their non-work time (Sonnentag & Fritz, 2007).

Job Resources

Like job demands, job resources can influence the recovery process. However, unlike job demands, job resources have a more positive impact. Job resources are aspects of the employees' work environment that help employees reach their goals (Sonnentag & Fritz., 2007). Job resources might include social support at work (Chawla et al., 2020), job control (Sonnentag & Fritz, 2007), job variety, and growth opportunities (Bennett et al, 2018, Sonnentag et al., 2015). Job resources can have an overall positive effect on recovery (Bennett et al., 2018; Crawford et al., 2010; Sonnentag & Fritz, 2007). This is because a greater sense of job control can lead to better protection of existing resources, as well as a greater capacity to replenish depleted resources. (Bennett et al., 2018; Crawford et al., 2010). Indeed, Hobfoll et al. (2015) demonstrated that when there are greater resources for employees to draw on while they are at work, there is a greater chance employees will recover their lost resources and gain new resources (Hobfoll et al., 2015).

Affective States

   While job demands and resources are characteristics of the job that influence recovery, one characteristic of employees that influences recovery is their affective state. Specifically, the affective state that one is in at the end of a working period predicts their recovery experiences (Sonnentag et al., 2012; Sonnentag & Niessen, 2020; Wendsche & Lohmann-Haislah, 2017). A positive affective state seems to improve recovery, while a negative affective state seems to hinder recovery (Wendsche & Lohmann-Haislah, 2017). Positive affective states can occur at both high and low activation levels (Russell & Carroll, 1999; Sonnentag et al., 2012). Positive affect when activation levels are high can present itself in the form of enthusiasm, excitement, and alertness (Sonnentag et al., 2012; Sonnentag & Niessen, 2020). When one is in a high activation positive affect state at the end of the workday, they are more likely to experience psychological detachment and mastery (Sonnentag & Niessen, 2020). On the other hand, positive affect with low activation levels usually presents itself as calmness, serenity, and pleasantness (Sonnentag et al., 2012). In these instances, individuals are more likely to recover by engaging in psychological detachment or relaxation (Sonnentag et al., 2012). Negative affect is defined as a general state of unpleasantness (Watson et al., 1988). This typically means the individual is in some way distressed (Watson et al., 1988). When employees are in this negative affective state when they leave work, they are less likely to engage in recovery experiences during their non-work time (Sonnentag & Niessen, 2020). More specifically, since the distress from work often leads to more worrying, this leaves a greater chance of not psychologically detaching from work, and continuing to think about what is worrying them (Sonnentag & Niessen, 2020).

Outcomes of Recovery

Throughout all the previous research, recovery has been operationalized in a variety of different ways. It is important to note that direct measures of recovery are seldom used in research (Bennett at al., 2018; Headrick et al., 2022). Instead, researchers often rely on assessing changes in outcomes of recovery. This is frequently operationalized as changes in resources or changes in the depletion of resources, such as the levels of exhaustion, burnout, positive affect, vigor, engagement, and energy (Bennett et al., 2018; Headrick et al., 2022; Steed et al., 2021; Wendsche & Lohmann-Haislah, 2017). The notion is that if one experiences improved outcomes, then the individual has recovered (Bennett at al., 2018; Headrick et al., 2022; Sonnentag et al., 2012; Sonnentag & Niessen, 2020). Below, I discuss some of the outcomes commonly used to operationalize recovery.

Work-Life Balance

One way recovery has been operationalized is by changes in work-life balance. For example, Barber et al. (2019) examined one's work-life balance to determine how well individuals recovered during their non-work time. Since people value being able to spend time with family in their personal time, not being able to allocate resources to participating in these activities could be due to a lack of recovery experiences (Barber et al., 2019). When people are not recovering properly, they are not replenishing their resources. This means there are fewer resources available to spend on engaging with family or other personal responsibilities, which leads to a decrease in work-life balance satisfaction (Barber et al., 2019, Headrick et al., 2022).

Well-being

Other researchers have analyzed recovery in terms of well-being (Chawla et al., 2020; Ginoux et al., 2020; Sonnentag, 2001; Sonnentag & Fritz, 2007; Headrick et al., 2022; Steed et al., 2021). This is one of the more popular operationalizations of recovery, which shows how important recovery is for employees' well-being. The consensus in the research is that well-being is positively correlated to recovery experiences (Headrick et al., 2022; Sonnentag, 2001; Chawla et al., 2020; Ginoux et al., 2021; Sonnentag & Fritz, 2007). The more people are able to recover from demands and stress placed on them while they are at work, the more likely they will report higher levels of well-being (Sonnentag, 2001). Moreover, with less recovery, the more likely one's well-being will be negatively impacted (Sonnentag, 2001).

When developing the Recovery Experience Questionnaire, Sonnentag & Fritz (2007) viewed changes in psychological well-being as an outcome of recovery. They focused mainly on psychological well-being because recovery is an experience that helps alleviate stress and return to pre-stressor states after work. Therefore, it is logical to see how recovery has a major impact on one's psychological well-being (Sonnentag & Fritz, 2007; Steed et al., 2021). When analyzing psychological well-being, Sonnentag & Fritz (2007) specifically examined health complaints, burnout, and depressive symptoms. They found that recovery experiences were negatively related to these three criteria, meaning that as recovery experiences increase, one's health complaints, burnout, and depressive symptoms decreased.

Sleep Quality and Quantity

Beyond general well-being, researchers have operationalized recovery in terms of changes in specific aspects of well-being. For example, Chawla et al. (2020) assessed sleep quality as an indicator of well-being. Sleep quality can be examined by looking at one's subjective aspects of sleep and/or sleep duration (Headrick et al., 2022). Chawla et al. (2020) found that recovery and sleep quality were positively correlated; meaning that with higher levels of recovery, the higher quality of sleep one is likely to get at night. This relationship was explored more in depth by Headrick et al. (2022) who found that sleep quality was positively related to psychological detachment, relaxation, mastery, and control. They also found that sleep quantity positively correlated with psychological detachment and control, but there was a negative relationship with relaxation and mastery. This may be because mastery experiences typically result in positive emotions and states, such as excitement and achievement (i.e., heightened activation), which might hinder one's ability to fall asleep at night (Sonnentag et al., 2012). Additionally, too much relaxation after work might lead to higher energy levels right before bed, which could negatively impact sleep quantity (Sonnentag et al., 2012).

Exhaustion

Other researchers investigated employee's varying levels of exhaustion (Ginoux et al., 2021; Bennet et al., 2018, Headrick et al., 2022, Chawla et al., 2020). Exhaustion can be examined at both the physical and emotional level (Bennet et al., 2018). In organizational behavior research emotional exhaustion can be defined as a "feeling of being overextended and exhausted by one's work" (Maslasch & Jackson, 1986, p. 194).

Based on the basic recovery principles, individuals who recover can acquire new resources while restoring lost ones to better reduce the strains and demands created from work, so they reach the optimal level of resources. This in turn should lead to a reduction in the levels of exhaustion before starting a new work period (Ginoux et al., 2021). Moreover, the relationship between recovery and emotional exhaustion was negative, which means that higher levels of recovery lead to lower levels of emotional exhaustion (Chawla et al., 2020).

Recovery experiences can help reduce feelings of exhaustion (Andreassen et al., 2018; Bennett et al., 2018; Chawla et al., 2020; Ginoux et al., 2021; Headrick et al., 2022; Molino et al., 2018; Wijhe et al. 2013). When there is a lack of recovery, individuals remain at high stress levels which only continues to deplete their existing resources and prevents the acquisition of any new resources (Sonnentag, 2001; Sonnnetag et al., 2012). Without these resources employees are not able to gain back the energy they need to fulfill their daily roles which results in high levels of exhaustion (Molino et al., 2018).

Fatigue

Closely related to exhaustion is fatigue, which Steed et al. (2021), Bennet et al. (2018), and Wendsche and Lohmann-Haislah (2017) used to operationalize recovery. The researchers defined fatigue as both physical and psychological exhaustion. Consistently, all three of these studies found that all four recovery experiences were negatively related to fatigue. However, there was a stronger correlation between psychological detachment and relaxation on fatigue (Bennett et al., 2018). This is probably because psychological

detachment and relaxation are more restorative experiences, while mastery and control help in providing *new* resources for individuals (Bennet et al., 2018, Chawla et al., 2020, Ginoux et al., 2021).

Burnout

Burnout is a common consequence of high levels of exhaustion (Bennett et al., 2018, Headrick et al., 2022; Andreassen et al., 2007). When looking at exhaustion in relation to each of the recovery experiences, research has demonstrated that employees report higher levels of psychological detachment, are also more likely to experience lower levels of burnout (Siltaloppi et al., 2009; Demerouti et al., 2003; Headrick et al., 2022). The same relationship has been found between burnout and relaxation and mastery (Drach-Zahavy et al., 2013; Ginoux et al., 2021) as well as control (Ginoux et al., 2021). Employees that do not use recovery to build resources, will never revert to their prestressor state (Bakker et al., 2013). When resources are low in these situations, employees are then operating with depleted resources (Ginoux et al., 2021). However, job tasks still need to be completed, but employees may not have the sufficient resources (e.g., energy) available to do the work effectively (Sonnentag, 2001). This is typical in the nursing field, as nurses are expected to work long hours and back-to-back shifts, starting a second shift before they have fully recovered or restored their resources from their first shift (Dall'Ora et al., 2020). This is problematic because nurses also must manage heavy workloads during their shifts, which further depletes their resources (Dall'Ora et al., 2020). Continuously operating on depleted resources like this can cause increased levels of negative feelings and attitudes, such as burnout and exhaustion (Sonnentag & Fritz, 2007).

Engagement

Unlike the negative relationship found between recovery and exhaustion, research supports the idea that recovery leads to better engagement levels (Chawla et al., 2020; Headrick et al., 2022). Engagement is defined as "the positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption" (Schaufeli et al., 2002, p. 74). The concept of engagement describes the extent to which an employee finds that their work is interesting and attractive (absorption), meaningful and valuable (dedication), and stimulating and lively (vigor) (Headrick et al., 2022). Many researchers have examined the vigor sub-dimension of engagement (Bennett et al., 2018; Sonnentag et al., 2012; Wendsche & Lohmann-Haislah, 2017). Sonnentag et al. (2012) state that recovery is predictive of accumulated vigor at the beginning of each work period. The positive relationship between recovery and vigor stems from recovery's ability to produce more resources, which make it possible for employees to feel more energized at work (Headrick et al., 2022). Each recovery experience influences vigor differently (Ginoux et al., 2021; Bennet et al., 2018; Headrick et al., 2022). According to Ginoux et al., (2021), the recovery experience relaxation was the strongest predictor of vigor at the beginning of each work period. However, Headrick et al. (2022) found that the recovery experience of mastery was the strongest vigor predictor. Additionally, Headrick et al. (2022) found that all the recovery experiences were positively correlated with vigor, except for psychological detachment which was negatively related to vigor. In light of these findings, recovery experiences seem to be beneficial for improving energy and vigor levels (Headrick et al., 2022).

Affective States

Another common way previous researchers have operationalized recovery is in terms of changes in affective states (Steed et al., 2021; Headrick et al., 2022; Sonnentag et al., 2012; Sonnentag et al., 2008; Sonnentag & Niessen, 2020). As mentioned earlier, affective states can influence the recovery process, but at the same time, recovery can influence affective states. According to Headrick et al. (2022), increased mastery and control experiences are helpful for improvements in positive affective states, while psychological detachment, mastery, and control are shown to lead to decreases in negative affective states. Psychological detachment has most frequently been associated with changes in positive affective states (Sonnentag & Niessen, 2020; Sonnentag et al., 2008; Sonnentag et al., 2012), but there is also a strong link to relaxation experiences (Molino et al., 2018; Sonnentag et al., 2012) and mastery experience (Bakker et al., 2013) to positive affect increases. Sonnentag et al. (2012) also states that physical activities during one's leisure time can be especially predictive of positive affective states. Headrick et al. (2022) found that three of the four recovery experiences had a significant negative relationship with negative affect. Namely, psychological detachment, mastery and control experiences were all negatively correlated with negative affect. Therefore, the more psychological detachment, mastery and control experiences one engages in, the more likely they will experience a decrease in negative affect (Sonnentag & Niessen, 2020; Headrick et al., 2022).

Outcomes of Interest to Organizations

In addition to all these individual level outcomes of recovery, research shows that recovery from work can also influence organizational level outcomes (Chawla et al.,

2020; Headrick et al., 2022; Sonnentag et al., 2012; Bennett et al., 2018). As recovery increases and employees build up their available resources, they are better able to contribute meaningfully and be productive members of the organization (Sonnentag et al., 2012). Outcomes of interest to organizations that seem to be affected by recovery experiences are task and job performance (Headrick et al., 2022; Sonnentag et al., 2012, Bennett et al., 2018), creativity (Headrick et al., 2022; Sonnentag et al., 2012), organizational citizenship behaviors (Headrick et al., 2022; Sonnentag, 2015, Sonnentag et al., 2012), personal initiative (Chawla et al., 2020; Sonnentag et al., 2012), psychological withdrawal (Headrick et al., 2022), and job satisfaction (Headrick et al., 2022). With their newly restored and gained resources, employees are more likely to participate in these organizational behaviors after adequate recovery.

What has not been Studied

Previous research has been thorough in its investigation of the recovery process, antecedents of recovery, and outcomes of recovery. Within the research, Molino et al. (2018) demonstrated a negative relationship between general recovery and exhaustion. This also aligns with the results found by others (e.g., Bennett et al., 2018; Chawla et al., 2020; Headrick et al., 2022). However, Molino et al. (2018) extended the recovery literature by examining the relationship between workaholism and general recovery. The goal of their study was to investigate whether the negative relationship between general recovery and exhaustion was different for those low on workaholism versus those high on workaholism. However, the Molino et al. (2018) study only examined recovery in general terms, and therefore, did not account for the specific recovery experiences. The current study seeks to add to the recovery literature by investigating each recovery

experience (psychological detachment, relaxation, mastery, and control) individually. More specifically, this study examines how each recovery experience leads to recovery and how these relationships might vary among high and low levels of workaholism. For the purposes of this study, recovery will be operationalized as low levels of exhaustion and high level of engagement at the end of the weekend.

In the Molino et al. (2018) study, the relationship between general recovery and exhaustion was also examined at the day level. This is common in recovery research, as many studies use a five-day dairy study to examine recovery in the evenings of the traditional five-day work week. What is less studied, is recovery during the weekend. There is evidence suggesting that recovery might look different when it occurs over the weekend than in the evening during the week (Ginoux et al., 2021; Headrick et al., 2022; Sonnentag, 2001). Some claim that weekend recovery is the most optimal for employees because weekends are long enough to engage in multiple activities to receive the most benefits (Ginoux et al., 2021, Headrick et al., 2022). Additionally, weekends occur every week and therefore are more stable than compared to vacations which may only occur once or twice per year, which makes weekends the most advantageous recovery period (Ginoux et al., 2021, Headrick et al., 2022). In light of this argument, and in order to extend the existing research, the current study is focused on weekend recovery.

Psychological detachment allows employees to disconnect themselves from the demands and strains that have their stress levels elevated (Sonnentag & Fritz, 2007). Once detached, employees are better able to restore lost resources (Headrick et al., 2022). They can then use these resources to acquire more energy and mood levels (Wijhe et al., 2013), which can lead to a decrease in exhaustion (Bennett et al., 2018; Headrick et al.,

2022).

> *Hypothesis 1a: There is a negative relationship between psychological*
>
> *detachment experiences over the weekend and exhaustion levels on Monday*
>
> *morning.*

As mentioned earlier, once employees are detached from work and are experiencing psychological detachment, they have the opportunity to restore resources and build them back up (Headrick et al., 2022). However, some researchers have found that too much psychological detachment can be harmful to engagement during the next work period (Headrick et al., 2022; Sonnentag & Niessen, 2020). Moreover, thinking positively about work and engaging in enjoyable problem solving during non-work time can be more beneficial for recovery and engagement when compared to full psychological detachment (Sonnentag & Niessen, 2020). However, for the purposes of this study we examine a broader concept of psychological detachment and do not consider different variations of this experience. Therefore, when thinking of the influence general psychological detachment has on employees, it should manifest itself in higher engagement levels.

> *Hypothesis 1b: There is a positive relationship between psychological detachment*
>
> *experiences over the weekend and engagement levels on Monday morning.*

Relaxation experiences help individuals reach low-activation levels so that they reside in a calm and restful state (Sonnentag & Fritz, 2007). These states should allow individuals to gain the resources they need in order to feel more energized and less exhausted for their next work period.

> *Hypothesis 2a: There is a negative relationship between relaxation experiences*
>
> *over the weekend and exhaustion levels on Monday morning.*

Additionally, the restorative nature of relaxation experiences allows for the accumulation of resources needed to be prepared for, and engage with, work (Ginoux et al., 2021). This means higher levels of relaxation experiences result in higher engagement levels (Headrick et al., 2022).

Hypothesis 2b: There is a positive relationship between relaxation experiences over the weekend and engagement levels on Monday morning.

Mastery experiences allow employees to explore their skill sets outside of workrelated activities (Sonnentag & Fritz, 2007). Mastery experiences can facilitate resource gain, which lessens the strain employees feel when they must use resources to fulfill their job roles (Sonnentag et al., 2012). This in turn should decrease negative feelings such as exhaustion.

Hypothesis 3a: There is a negative relationship between mastery experiences over the weekend and exhaustion levels on Monday morning.

Moreover, mastery experiences can improve positive and energizing states within individuals (Sonnentag & Fritz, 2007). This is because mastery experiences allow employees to feel self-achievement and demonstrate their skills of non-work-related activities, so they are more prepared to engage in work-related activities on Monday morning (Bennett et al., 2018).

Hypothesis 3b: There is a positive relationship between mastery experiences over the weekend and engagement levels on Monday morning.

Control experiences occur when individuals have the freedom to choose what they do, how they do it, and when they do it (Sonnentag et al., 2012; Sonnentag & Fritz, 2007). This also allows them to choose the amount of effort or resources they want to

expend on these activities, which should leave them with more available resources since they are able to conserve them. Thus, control experiences should result in lower exhaustion levels (Sonnentag et al., 2012).

> *Hypothesis 4a: There is a negative relationship between control experiences over the weekend and exhaustion levels on Monday morning.*

Experiencing control over activities that one engages in over the weekend can help foster a more positive attitude when returning work and having to pursue workrelated activities that might not be in the employee's control (Headrick et al., 2022). *Hypothesis 4b: There is a positive relationship between control experiences over the weekend and engagement levels on Monday morning.*

Workaholism

There are several ways in which researchers have defined workaholism. In 1998, Robinson described workaholism as choosing to continuously keep working despite the negative social and health-related outcomes that may come from it. A less specific definition by Andreassen et al. (2007) stated that workaholism is a need to keep working. Building on this simple definition, in 2012, Andreassen et al. defined workaholism as "being overly concerned about work, being driven by uncontrollable work motivation, and spending so much energy and effort on work that it impairs private relationships, spare-time activities and health" (p. 265). A meta-analysis conducted in 2016 by Clark and colleagues established a basic consensus for the definition of workaholism as compulsively and excessively working. Although this is a good, simple definition, it does not capture the full and comprehensive picture of what actually qualifies as workaholism (Schaufeli et al., 2006; Ng et al., 2007).

For a more specific definition, workaholism can be understood as an "addiction characterized by an intense work drive that leads to neglect of other interests and negative consequences" (Aziz et al., 2013, p. 71). With this definition, it is easier to see that there is both a behavioral and cognitive component of workaholism. As explained by Aziz & Moyer (2018), the behavioral component to workaholism includes workaholics' tendencies to work excessively. Additionally, they state that the cognitive component refers to the compulsive nature of workaholism. Workaholism also involves some kind of behavioral addiction, where one must always be working. When a workaholic is not working, they are thinking about working and feeling guilty for not working, which only emphasizes that there is both a behavioral and cognitive component (Aziz & Moyer, 2018).

The distinction between the behavioral and cognitive components explains the importance of assessing the work-related behaviors that workaholics engage in and their cognitive processes as they are participating in work-related activities. Understanding the underlying cognitive reasoning behind the excessive work behaviors is a key aspect to determining workaholism. (Aziz & Moyer, 2018; Schaufeli et al., 2009). This distinct cognitive component is important because there are other work attitudes that seem to be similar to workaholism when one just examines the behavioral component (Schaufeli et al., 2009). For example, workaholics are commonly known to work excessive hours and go beyond what is expected of them; however, the same is true for highly engaged employees (Aziz & Moyer, 2018; Schaufeli et al., 2006). The key distinction between workaholism and engagement is that although both types of workers tend to work excessively and compulsively, workaholics may not necessarily find pleasure in their

work, while engaged workers are typically very passionate about the work they are doing (Avanzi et al., 2012; Caesens et al., 2014). Workaholism is linked to a variety of negative organizational and personal consequences, such as work stress, dissatisfaction, and negative affect (Schaufeli et al., 2009). On the other hand, work engagement can result in more positive outcomes (Schaufeli et al., 2009).

Further, high levels of workaholism seem to be dysfunctional for employees. Previous research has found that workaholics are at a greater risk for experiencing poorer health, less work-life balance, and are less likely to truly enjoy the work that they do (Caesens et al., 2014). Additionally, Clark et al. (2016) found that workaholism leads to decreased job satisfaction, life satisfaction, and physical and mental health and leads to increased job stress, burnout, and counterproductive work behaviors (Clark et al., 2016). Workaholism can also negatively impact the family domain by decreasing work-life balance (Aziz & Moyer, 2018) and family satisfaction (Clark et al., 2016), as well as increasing marital dissatisfaction and work-life conflict (Clark et al., 2016). Additionally, the research also notes that workaholics are not much of a benefit to their organizations because of these undesirable consequences (Clark et al., 2016). Despite this, there are still people out there that see workaholism as a positive because these individuals may work harder to obtain goals (Schaufeli et al., 2006). In defense of this idea, some research shows that workaholism can produce some short-term positive effects, such as increased work motivation (Scott et al., 1997). However, these short-term effects do not outweigh the long-term negative outcomes (Molino et al., 2018; Andreassen et al., 2018).

Workaholism as a Moderator

In recent years, work demands have been increasing in intensity. Organizations are more aggressively placing requirements on employees to meet tight deadlines and take on great worker loads (Wijhe et al., 2013; Molina et al. 2018; Aziz & Moyer, 2018). These overbearing pressures to meet these needs have led to employees having to work longer and harder than we have originally seen (Wijhe et al., 2013; Molina et al. 2018). This poses no issue, as working hard is typically categorized as a positive behavior (Wijhe et al., 2013). The problem arises when demands become so intense that employees are no longer able to find the time that they need to recover from the stress these demands impose on employees (Wijhe et al., 2013). This is a common issue among workaholics as their compulsive need to constantly work takes up all their energy and resources and leaves them with only limited resources to direct towards recovery activities, (Schaufeli et al., 2009). As explained earlier, recovery is a necessary requirement for employees to avoid feelings of exhaustion which can lead to burnout (Clark et al., 2016; Bakker et al., 2012; Aziz & Moyer et al., 2018). Additionally, recovery is a key component to facilitating vigor and being fully engaged at work (Headrick et al., 2022; Bennett et al., 2018). Moreover, past research has demonstrated the benefits of analyzing recovery through its four recovery experiences (i.e., psychological detachment, relaxation, mastery and control). This approach is beneficial because different experiences seem to relate differently to different outcomes of recovery, such as exhaustion and engagement (Bakker et al., 2012; Bennett et al., 2018, Haedrick et al., 2022). Research has even shown that workaholism moderates the relationships between general recovery and exhaustion (Molino et al., 2018). However, Molino et al.

(2018) call upon researchers to extend this research by examining these effects with specific recovery experiences (i.e., psychological detachment, relaxation, mastery, and control). Thus, the main goal of the current study seeks to examine how the relationships between each of the four recovery experiences over the weekend and exhaustion and engagement levels on Monday morning are moderated by workaholism.   When considering the relationship between psychological detachment and exhaustion with workaholism as a moderator, I predict that psychological detachment will be less effective for recovery when workaholism is high. Since workaholism is characterized as a compulsive desire to constantly work (Andreassen et al., 2012; Aziz & Moyer, 2018; Bakker et al., 2013; Clark et al., 2016), experiences of psychological detachment might cause an increase in negative feelings or attitudes, such as anxiety or guilt (Aziz & Moyer et al., 2018; Clark et al., 2016). These negative emotions have been shown to lead to a decrease in psychological detachment (Bennett et al., 2018, Sonnentag & Niessen, 2020).

>*Hypothesis 5a: The negative relationship between weekend psychological detachment experiences and exhaustion on Monday mornings is dependent on workaholism, such that the relationship will be weaker when workaholism is higher.*

Psychological detachment is hypothesized to have a positive relationship with engagement. However, due to the inherent drive that workaholics must excessively engage in work activities (Aziz & Moyer, 2018; Bakker et al., 2013; Clark et al., 2016), it is likely that workaholism will cause the relationship between psychological detachment and engagement to be more positive. Even though those who score high on workaholism

are less likely to engage in these kinds of activities, when they do, they will actually experience more positive outcomes in terms of engagement.

> *Hypothesis 5b: The positive relationship between weekend psychological detachment experiences and engagement levels on Monday mornings is dependent on workaholism, such that the relationship will be strengthened when workaholism is higher.*

It was predicted that relaxation would be negatively related to exhaustion. However, in the case of workaholism relaxation might not be as effective in reducing feelings of exhaustion (Bakker et al., 2013; Molino et al., 2018). Since workaholics do not prioritize recovery, these experiences will have less of an impact on them (Molino et al., 2018).

> *Hypothesis 6a: The negative relationship between weekend relaxation experiences and exhaustion levels on Monday morning is dependent on workaholism, such that the relationship will be weaker when workaholism is higher.*

The relationship between relaxation and engagement has been described as positive in the research (Bennett et al., 2018; Headrick et al., 2022). This relationship was also hypothesized to be positive in this study. Due to their constant work habits, it is reasonable to suggest that workaholics can benefit from relaxation experiences but are less likely to engage in them. This makes relaxation experiences less effective compared to those low on workaholism, therefore, they are less likely to be effective when workaholism is higher.

Hypothesis 6b: The positive relationship between weekend relaxation experiences and engagement levels on Monday morning is dependent on workaholism, such that the relationship will be weakened when workaholism is higher.

The relationship between mastery experiences and exhaustion is thought to be negative. As mastery increases, exhaustion levels decrease (Bennett et al., 2018; Headrick et al.,2022). Activities that are commonly associated with mastery experiences include physical activities. In a study conducted by Bakker et al. (2013), the researchers found that physical activities had a greater impact on the positive states of workaholics than compared to non-workaholic employees. Following this logic, it would be expected that the relationship between mastery experiences and exhaustion would strengthen when moderated by workaholism.

Hypothesis 7a: The negative relationship between weekend mastery experiences and exhaustion levels on Monday morning is dependent on workaholism, such that the relationship will be strengthened when workaholism is higher.

Additionally, the hypothesized relationship between mastery experiences and engagement was positive. Once again following the findings from Bakker et al. (2013), which state that those activities related to mastery experiences actually produced greater positive outcomes for workaholics than non-workaholics, it is hypothesized that the positive relationship between mastery experience and engagement would be strengthened when moderated by workaholism.

Hypothesis 7b: The positive relationship between weekend mastery experiences and engagement levels on Monday morning is dependent on workaholism, such that the relationship will be strengthened when workaholism is higher.

In the relationship between control and exhaustion, the research shows that higher levels of control result in lower levels of exhaustion (Headrick et al., 2022). In accordance with the previous research, this study hypothesized a negative relationship between control experiences and exhaustion. The desire to have control over the events in our life is a common attribute of human beings all around (Halbesleben et al., 2014). However, the restorative experience that non-workaholics get from having this control might not fully transfer over to workaholics because they do not invest the same resources into these experiences (Molino et al., 2018). Workaholics would most likely choose to spend weekend time on work-related activities (Aziz & Moyer, 2018; Bakker et al., 2013; Clark et al., 2016, Molino et al., 2018) which would lead to fewer resources come Monday morning (Bennett et al., 2018).

> *Hypothesis 8a: The negative relationship between weekend control experiences and exhaustion levels on Monday morning is dependent on workaholism, such that the relationship will be weakened when workaholism is higher.*

Finally, the current study hypothesized that there would be a positive correlation between control experiences and engagement. To add to this relationship, workaholism would likely increase its intensity. Workaholism is at its core an addiction that involves both behavioral and cognitive components (Aziz & Moyer, 2018; Clark et al., 2016; Schaufeli et al., 2009). If workaholics do not have control over the activities they engage in, to the point of not being able to satisfy their addiction, this would surely lead to negative outcomes, such as guilt or negative affect. On the other hand, as this control increases, so would more positive outcomes, such as engagement for those who score high on workaholism.

Hypothesis 8b: The positive relationship between weekend control experiences and engagement levels on Monday morning will be dependent on workaholism, such that the relationship will be strengthened when workaholism is higher.

Each of the hypothesized relationships is presented in Figures 1 and 2.
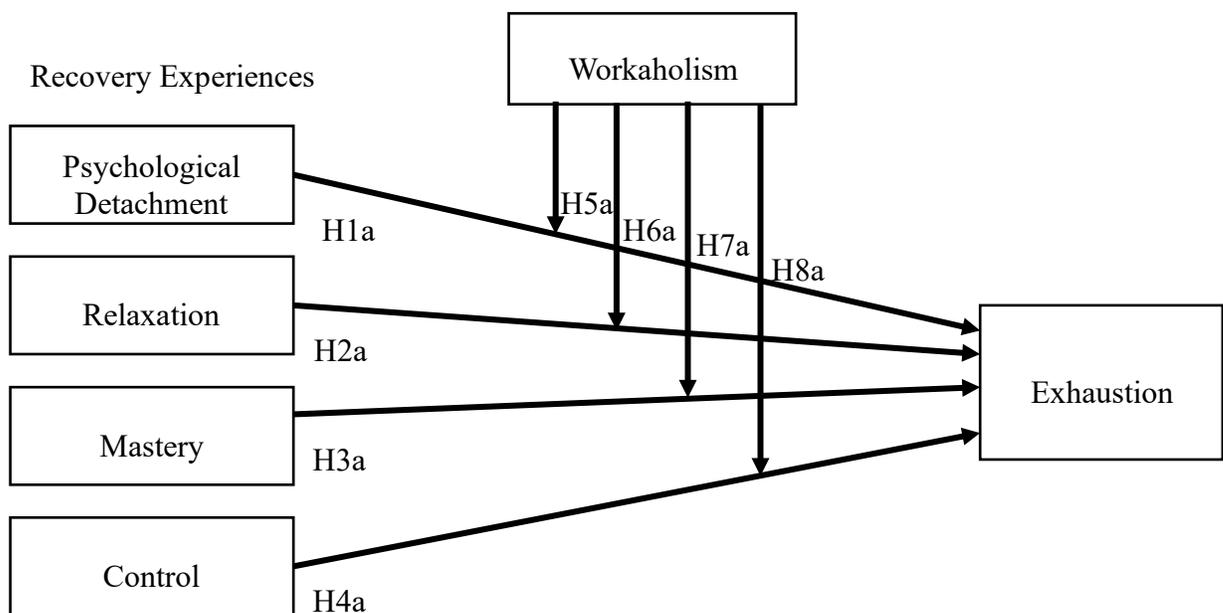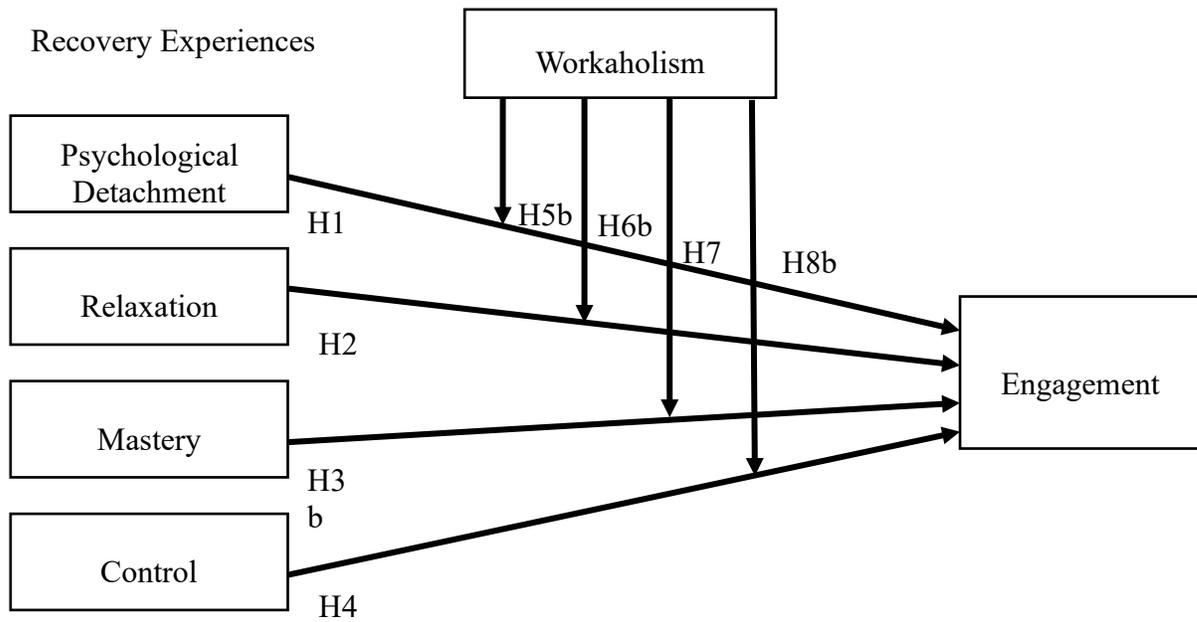
Figure 1

Exhaustion Hypotheses

Figure 2

Engagement Hypotheses

Recovery Experiences

Methods

Participants

An *a priori* power analysis was conducted using G*Power to determine the needed sample size. Using the interaction effect found between day-level recovery and workaholism on day-level exhaustion in the Molino et al. (2018) study, it was determined that the study should include data from at least 218 participants. Participants were recruited via email from a large Southeastern university. Only participants above the age of 18, who were employed at least 30 hours per week and who were not scheduled to work on the weekends were eligible to participate. Participants were provided with a link to the study survey in the recruitment email. Those interested in participating did so by clicking on the link and completing the survey between the hours of 7:00 and 10:00 am. Those who participated were also entered in a drawing for the chance to win one of two $50 Amazon gift cards. Anticipating that recruitment from the university would not result in 218 participants, I also used social media to recruit the remaining participants needed. The same procedures applied to both the university and social media participant groups.

Measures

Recovery Measures

Recovery was operationalized in two ways for the present study. Recovery was operationalized as low levels of exhaustion after the weekend and high levels of engagement after the weekend.

Exhaustion To measure exhaustion levels on Monday morning, the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003) was used. This measure includes 16 items designed to assess one's degree of work-related exhaustion (Demerouti et al., 2010). In

the original measure, participants are instructed to respond to each item using a Likert scale that ranges from 1 (Strongly Agree) to 4 (Strongly Disagree). For this study we instructed them to respond using a Likert Scale that is labeled as 1 (Strongly Disagree) to 4 (Strongly Agree) to keep the anchor positions consistent between the different measures in this study and decrease possible confusion. An example item states, "There are days when I feel tired before I arrive to work." High scores indicate higher levels of burnout and exhaustion. See Appendix A for the full scale. The internal consistency reliability of the OLBI in this study was $\alpha = .80$.

Engagement To measure engagement levels on Monday morning, the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2004) was used. The UWES also includes three subscales that measure the dimensions of engagement. The subscales are vigor (6 items), dedication (5 items), and absorption (6 items). However, for the purpose of this study, only the overall engagement score was used. To complete the measure, participants responded to the items in accordance to how frequently they experience each statement using a Likert Scale that ranges from 0 (Never) to 6 (Everyday/Always). An example item states, "Time flies when I am working." Those who score high on the UWES have a high level of work engagement. See Appendix A for the full scale. The internal consistency reliability of the UWES in this study was $\alpha = .94$.

Recovery experiences

To assess recovery experiences over the weekend, the Recovery Experiences Questionnaire (REQ), which was created by Sonnentag and Fritz (2007), was used. Because the measure assesses each of the four recovery experiences (psychological detachment, relaxation, mastery, and control), there are four subscales in the measure.

There are 16 items included in this measure, four for each respective recovery experience. An example item associated with psychological detachment is "I don't think about work at all." A relaxation item states, "I do relaxing things." An example mastery item states, "I learn new things," and an example control item states, "I decide my own schedule." Participants are asked to indicate their agreement with each item using a 5point Likert Scale that ranges from 1 (*I Do Not Agree At All*) to 5 (*I Fully Agree*). Higher scores on each of the subscales indicates that the individual engages in a greater amount of each of the recovery experiences. See Appendix A for the full scale. The internal consistency reliability of the psychological detachment subscale in this study was $\alpha = .82$. The internal consistency reliability of the relaxation subscale in this study was $\alpha = .85$. The internal consistency reliability of the mastery subscale in this study was $\alpha = .85$. The internal consistency reliability of the control subscale in this study was $\alpha = .80$.

Following the REQ, participants were prompted to answer two free response questions regarding their weekend recovery habits, so I could gain a better understanding of the kinds of activities people engaged in over the weekend to recover. The questions are as follows, "Did you engage in recovery activities from work this weekend?" and "What specific activities did you engage in to recover from work?"

Additionally, the Recovery Experience Taxonomy (RET; Ayres, 2022) was included in this study for exploratory purposes. The measure goes beyond the four traditional recovery experiences (psychological detachment, relaxation, mastery, and control) to also include subscales focusing on service, spiritual, routine, inertia, and nature. An example item from the newly added service experience subscale is, "My mind

was focused on helping others." An example item from the spiritual subscale is, "I felt connected to a higher power." An example item from the routine subscale is, "I benefitted from diving into a familiar activity." An example item from the inertia subscale is, "I felt like I was doing the activity just to do something." And finally, an example item from the nature subscale is, "I felt I was getting fresh air." This measure contains a total of 32 items and requires respondents to rate each of the items on a Likert Scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). See Appendix A for the full scale. The internal consistency reliability of the RET in this study was $\alpha = .92$.

Workaholism

To measure levels of workaholism, the Bergen Work Addiction Scale (BWAS; Andreassen et al., 2012) was used. Although there have been several measures created to assess workaholism, they each operationalize the concept in different ways. For example, the Workaholism Battery (Spence & Robbins; 1992) defines workaholism as having high work involvement, an inner drive to keep working, and a low enjoyment of one's work. The Workaholism Analysis Questionnaire (WAQ; Aziz et al., 2013) includes aspects of work-life imbalance and disruptions in one's personal life. The Bergen Work Addiction Scale is the best choice for this study because it defines workaholism from the addiction perspective and emphasizes the compulsive need to keep working, which emphasizes both the cognitive and mental aspects of this concept. Further, the BWAS matches the definition of workaholism adopted in this study. The BWAS contains seven items. Each of the seven items represent one of the seven addiction components: salience, tolerance, mood modification, relapse, withdrawal, conflict, and problems. An example item states,

"How often during last year have you thought of how you could free up more time to work," and this is reflective of the salience component of addiction. Participants would then respond using a Likert Scale that ranges from 1 (*Never*) and 5 (*Always*). Even though each item represents one of the seven addiction components, an overall score was computed by calculating the sum. Higher scores on this scale indicate higher levels of workaholic tendencies. See Appendix A for the full scale. The internal consistency reliability of the BWAS in this study was $\alpha = .89$.

Demographics

The study also gathered some demographic information from each participant. The average participant was 37.2 years old (SD = 12.9). The majority were female (57.4%) and worked an average of 41.4 hours per week (SD= 9.53) with only 22.6% engaging in work-related behaviors during the previous weekend. Participants varied in job-type; 16.0% worked in clerical administrative type jobs, 15.3% worked in the retail/hospitality industry, 13.0% held a skilled trades job, 10.3% worked in an education/teaching type job, and 8.4% worked in a sales/customer service type job. Finally, 56.4% of the indicated that they were a parent/guardian, and 70.5% indicated that they owned a home. See appendix B for all demographic items.

Procedures

Emails were sent on Monday morning at the start of the traditional workday and work week. Emails were sent at 7:00 am, and the survey was closed at 10:00 am, giving participants three hours to complete the survey. It was estimated that the survey took approximately 10 minutes to complete. The survey included an electronic consent form, all four measures (OLBI, UWES, REQ, and BWAS), demographic questions, and a

debriefing statement. Upon completion, participants were redirected to a second survey where they had the opportunity to provide their email to be entered into the drawing for the gift cards.

Results

This study gathered data from 564 participants. The data was cleaned to ensure that the data analyzed was accurate. One hundred seventy participants were removed for answering yes to having scheduled work the previous weekend, 38 participants were removed for working under 30 hours per week, and 1 participant was removed for being under 18 years old. Sixty-three participants were screened out for non-consent or withdrawing on the consent page. An additional 45 participants were removed for not answering any questions, and 5 were removed for not answering any questions after giving consent. Ten participants were screened out for admitting to just clicking through the survey, and 14 were removed for not responding after the first scale. Finally, 9 participants were removed for suggesting that their data not be used in the analyses. Participants also provided us with a reason as to why their data should not be used. Two participants answered with "I didn't really know what I was doing," one participant answered with "I just skimmed through the questions," two responded with "I wasn't really paying attention," three answered with "I just clicked randomly," and one responded with "I did not understand the tasks/questions." This left the study with 209 participants.

Data Analysis

The current study was conducted to examine predictors of employees' work exhaustion and engagement levels on Monday morning. Predictors were weekend recovery experiences and workaholism. I hypothesized that weekend recovery experiences and workaholism would interact to predict Monday morning exhaustion and engagement. To test the hypotheses, two separate regression models were examined, with

exhaustion and engagement as the respective outcome variable in each model. Each

model is discussed below. Table 1 displays the means, standard deviations, and

intercorrelations for the variables in this study.

Table 1

Means, standard deviations and intercorrelations of target variables

	Mean	SD	1	2	3	4	5	6
1. Exhaustion	2.46	0.45						
2. Engagement	5.26	1.13	**-.43**					
3. REQ- Detachment	3.22	1.01	-.05	-.01				
4. REQ- Relaxation	4.02	0.81	**-.31**	**.27**	**.34**			
5. REQ- Mastery	3.82	0.84	**-.29**	**.44**	.04	**.37**		
6. REQ- Control	4.01	0.81	**-.41**	**.34**	**.25**	**.59**	**.34**	
7. Workaholism	2.99	0.95	**.36**	**.27**	<.01	**-.18**	.13	-.09

Note: Bolded numbers indicate significant correlations ($p < .05$).
Exhaustion scores could range from 1-4. Engagement scores could range from 0-6. REQ
scores could range from 1-5. Workaholism scores could range from 1-5

Prior to testing the hypothesized models, the correlations were examined. The

results show that there was not a significant relationship between psychological

detachment recovery experiences and Monday morning exhaustion. However, there were

significant relationships found between the other three recovery experiences (relaxation,

mastery and control) and exhaustion level. Finally, there was a significant relationship

found between workaholism and exhaustion.

The results also showed that psychological detachment recovery experiences were

not significantly related to engagement levels. However, there were significant

relationships found between the other three recovery experiences (relaxation, mastery,

and control) and Monday morning engagement. Finally, there was a significant

relationship found between workaholism and engagement.

Monday Morning Exhaustion

To examine the effects of weekend recovery experiences, workaholism, and their interactions on Monday morning exhaustion, the centered main effects were entered in step one, and the interaction terms were entered in step two of the first regression model. All assumptions for multiple regression were tested. The DW test for autocorrelation statistics equaled 1.98. These are slightly below the desired value of 2.00 which indicates a slight positive autocorrelation but still an acceptable value for this test. Additionally, the Shapiro-Wilks normality test was conducted ($W = .99$, $p = .12$), which suggests that the data are normally distributed.

Hypotheses 1a, 2a, 3a, and 4a predicted main effects of recovery experiences on exhaustion. All correlations were found to be significant except for the relationship between psychological detachment and exhaustion. To determine whether the significant correlations found in the correlation matrix were uniquely significant, the unique main effects were also examined in Jamovi utilizing the linear regression function. Table 2 displays the main effects for the exhaustion model. The overall model was significant and accounted for 36% of the variance in Monday morning exhaustion, $F(5, 174) = 17.50$, $p < .01$. As can be seen in Table 2, neither detachment nor relaxation were unique significant predictors of Monday morning exhaustion. Therefore, hypotheses 1a and 2a were not supported. However, the recovery experience of mastery was found to be a uniquely significant predictor of decreased exhaustion ($B = - 0.11$, $p < .01$). These results support hypothesis 3a. Additionally, the recovery experience of control was found to be a uniquely significant predictor of decreased exhaustion ($B = -0.19$, $p = < .01$). Hypothesis 4a was supported. Although it was not hypothesized, workaholism was found to be a

uniquely significant predictor of increased exhaustion $(B = 0.16, p < .01)$. Table 2 also

shows the effects of the interactions on exhaustion. These were also calculated using the

linear regression function in Jamovi and showed a good model fit, $F(9, 170) = 10.70, p <$

.01). The addition of the interaction terms however did not account for significant

incremental variance in Monday morning exhaustion, $F(4,170) = 1.75, p = .140$. No

significant interactions were found. Therefore, hypotheses 5a, 6a, 7a, and 8a were not

supported.

Table 2
Main and interactions effects – Exhaustion model

			95% Confidence Interval			
Predictor	Estimate	SE	Lower	Upper	t	p
Step 1						
Intercept	3.17	0.20	2.77	3.57	15.58	< .001
REQ- Detachment	< .01	0.03	-0.06	0.06	0.08	.93
REQ- Relaxation	< .01	0.05	-0.1	0.09	-0.08	.94
REQ- Mastery	-0.11	0.04	-0.19	-0.04	-2.98	.01
REQ- Control	-0.19	0.04	-0.27	-0.11	-4.43	< .001
Workaholism	0.16	0.03	0.10	0.22	5.38	< .001
Step 2						
REQ- Detachment * Workaholism	-0.05	0.03	-0.12	0.01	-1.54	.13
REQ- Relaxation * Workaholism	0.05	0.06	-0.06	0.16	0.97	.33
REQ- Mastery * Workaholism	0.07	0.05	-0.03	0.16	1.41	.16
REQ- Control * Workaholism	-0.10	0.05	-0.20	0.006	-1.86	.07

Monday Morning Engagement

To examine the effects of weekend recovery experiences, workaholism, and their

interactions on Monday morning engagement, the centered main effects were entered in

step one, and the interaction terms were entered in step two of the second regression

model. All assumptions for multiple regression were tested. The DW test for autocorrelation statistics was 1.81. This was slightly below the desired value of 2.00, which indicates a slight positive autocorrelation but still an acceptable value for this test. Additionally, the Shapiro-Wilks normality test was conducted ($W = .98$, $p = .02$), which suggests that the data are *not* normally distributed. This means the model data deviates from a normal distribution. Further tests were conducted, and I discovered a negative skew of the engagement data. To address this, I used a natural log to transform to a create a more normal distribution. The same analyses were performed on the transformed data and the original data; however, the relative strength and significance of relationships did not vary between the non-transformed and transformed data. Therefore, I report the results using the analyses conducted on the non-transformed data for ease of interpretation.

Hypotheses 1b, 2b, 3b, and 4b predicted main effects of recovery experiences on engagement. All correlations were found to be significant except for the relationship between psychological detachment and engagement. To determine whether the significant correlations found in the correlation matrix were uniquely significant, the unique main effects were also examined in Jamovi utilizing the linear regression function. Table 3 displays the main effects for the engagement model. The overall model was significant and accounted for 36% of the variance in Monday morning engagement, $F(5, 170) = 19.1$, $p < .01$. As can be seen in Table 3, neither detachment nor relaxation were unique significant predictors of Monday morning engagement. Therefore, hypotheses 1b and 2b were not supported. However, the recovery experience of mastery was found to be a uniquely significant predictor of increased engagement ($B = 0.36$, $p <$

.01). These results support hypothesis 3b. Additionally, the recovery experience of control was found to be a uniquely significant predictor of increased engagement (B = 0.38, $p < .01$). Hypothesis 4b was supported. Although it was not hypothesized, workaholism was found to be a uniquely significant predictor of decreased engagement ($B = 0.16, p < .01$).

Table 3 also shows the effects of the interactions on engagement. These were also calculated using the linear regression function in Jamovi and showed a good model fit, $F(9, 166) = 11.50, p < .01$. The addition of the interaction terms did not account for significant incremental variance in Monday morning engagement, $F(4,166) = 1.61, p = .17$. Even though the addition of the interaction terms did not explain a significant amount of incremental variance, I *explored* the individual interactions. Results showed there was a significant interaction between the recovery experience of control and workaholism on engagement levels ($B = 0.29, p = .02$). To probe this interaction, the simple effects of this interaction were examined at +1 *SD*, mean, and -1 *SD* values for workaholism. When workaholism was low (-1 *SD*), the effect of control experiences on engagement was not significant, $B = .16, t(166) = 1.15, p = .25$. When workaholism was at the mean level, the effect of control experiences on engagement was significant, $B = .44, t(166) = 4.08, p < .01$. When workaholism is high (+1 SD), the effect of control experiences on engagement was significant, $B = .72, t(166) = 4.00, p < .01$. Figure 3 displays this interaction. This provides some support for hypothesis 8b, such that the positive relationship between control experiences over weekend and Monday morning engagement levels is strengthened when workaholism is higher. None of the other interactions were significant, so hypotheses 5b, 6b, and 7b were not supported.

Table 3

Main and interaction effects- Engagement model

| Predictor | Estimate | SE | 95% Confidence Interval | | t | p |
			Lower	Upper		
Step 1						
Intercept	1.01	0.45	0.03	1.99	2.04	.04
REQ- Detachment	-0.11	0.07	-0.26	0.04	-1.46	.15
REQ- Relaxation	0.16	0.12	-0.08	0.55	1.33	.19
REQ- Mastery	0.36	0.09	0.18	0.18	3.88	< .001
REQ- Control	0.38	0.10	0.18	0.18	3.67	< .001
Workaholism	0.37	0.07	0.22	0.22	4.93	< .001
Step 2						
REQ- Detachment * Workaholism	0.06	0.08	-0.10	0.22	0.71	.48
REQ- Relaxation * Workaholism	-0.25	0.14	-0.52	0.02	-1.85	.07
REQ- Mastery * Workaholism	-0.04	0.11	-0.26	0.18	-0.34	.73
REQ- Control * Workaholism	0.29	0.13	0.04	0.54	2.31	.02

Figure 3

Moderation effect of workaholism on control experiences and engagement
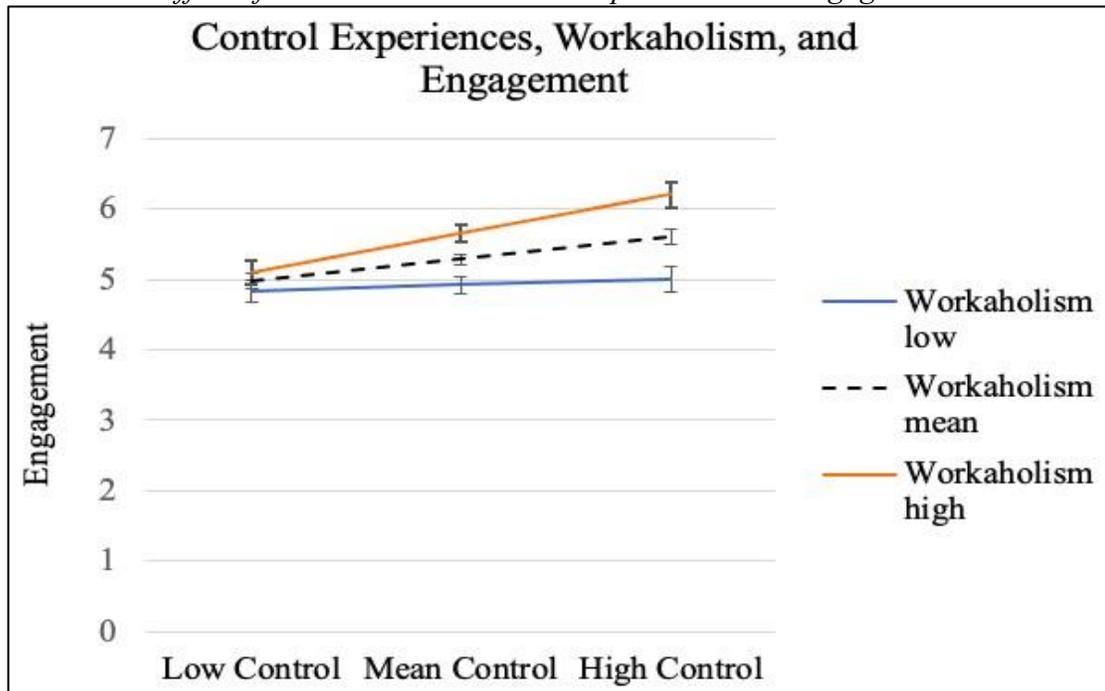
Discussion

The results of this study show support for hypotheses 3a and 3b, which stated that mastery experiences over the weekend would be negatively correlated to employee's Monday morning exhaustion levels and positively correlated with Monday morning engagement. This means that participants who engaged in greater mastery experiences over the weekend tended to be less exhausted on Monday. Further, participants who had greater mastery experiences over the weekend tended to be more engaged on Monday morning.

To engage in more mastery experiences, individuals should focus on activities that help them learn or develop new and existing skills. These experiences should bring about a sense of self-accomplishment for the individual engaging in the experience. Some examples of activities that produce mastery experiences include learning a new language or playing a sport.

One possible example as to why these experiences are helpful for Monday morning exhaustion and engagement is that they allow individuals to acquire new resources as they are developing new skills. The more resources employees have at the start of the workday, the less exhausted and more engaged they will be.

The results also show support for hypothesis 4a and 4b, which state that control experiences over the weekend would be negatively correlated to employee's Monday morning exhaustion levels and positively correlated with Monday morning engagement. This means that participants who engaged in greater control experiences over the weekend tended to be less exhausted on Monday. Further, participants who had greater control experiences over the weekend tended to be more engaged on Monday morning.

To engage in more control experiences, individuals should focus on activities that they want to do. These experiences should bring about a sense of power and autonomy for the individual engaging in the experience. Some examples of activities that produce control experiences include choosing what to cook for dinner or what movie you want to watch as you wind down for the evening.

One possible explanation as to why these experiences are helpful for Monday morning exhaustion and engagement is that they allow individuals to feel positive emotions since they are doing activities they chose to do. This could then help people replenish lost resources since they are in such a satisfied state. This replenishment of resources means employees have a greater amount of resources available to them on Monday morning. This in turn helps reduce their exhaustion and increase their engagement.

The results of this study further indicated that weekend psychological detachment and relaxation were not unique significant predictors of Monday morning exhaustion and engagement. Meaning that one's weekend detachment and relaxation experiences did not have a significant impact on their exhaustion or engagement levels on Monday morning above and beyond control and mastery experiences. Considering previous recovery research, this was a surprising finding as many studies have demonstrated the importance of psychological detachment and relaxation for recovery (e.g., Bennet et al., 2018; Chawla et al., 2020; Ginoux et al., 2021; Headrick et al., 2022).

Finally, the data analysis showed support for hypothesis 8b which stated that the relationship between weekend control experiences and Monday morning engagement levels would be dependent on workaholism, such that the relationship will be

strengthened when workaholism is higher. This means that workaholism moderates the relationship between weekend control experiences and increased Monday morning engagement levels. More specifically, employees with greater levels of workaholic tendencies can benefit more from weekend control experiences when looking in terms of Monday morning engagement levels.

Implications

This study provides several practical implications for both employee's and organizational leaders/managers. First, mastery recovery experiences over the weekend were uniquely and significantly correlated with decreased exhaustion and increased engagement levels on Monday morning. Therefore, employees should find ways to include mastery experiences, such as picking up a new skill, like cooking or playing piano, in their weekend activities to improve their recovery practices and have a greater capacity to perform successfully at work on Monday morning.

Additionally, control recovery experiences over the weekend were uniquely and significantly correlated with decreased exhaustion and increased engagement levels on Monday morning. This suggests that employees should find ways to incorporate control experiences, such as choosing to take a nap or choosing to check your emails, into their weekend activities in order to improve their recovery practices and have a greater capacity to perform successfully at work come Monday morning. Lack of control experiences over the weekend might not always be due to reasons that are work related. Employees often have family and social obligations that they feel required to attend. These kinds of obligations can also interfere with an individual's ability to experience control over the weekend and subsequently recover.

For employees that have a natural inclination towards workaholic tendencies or even employees who work in high demanding jobs that promote workaholic tendencies, engaging in the recovery experience of control over the weekend can be restorative in terms of their engagement levels on Monday morning. Therefore, these employees should prioritize control experiences when finding ways to incorporate recovery into their weekend routines. Although, this may not always be an easy goal to achieve with the consistent responsibilities of both work and nonwork life. Employees could benefit by developing their time-management skills to better plan their weekends and leave time and energy for things they want and chose to do, whether that is work-related activities, personal activities, or social activities.

Additionally, this study shows that control experiences are more beneficial for those who score high on workaholism in terms of Monday morning engagement levels. Therefore, managers should ensure that their employees have the opportunity or the power to choose how they spend their weekend time to improve their Monday morning engagement levels. This may be tricky to do, especially for those employees that seem to always be working (e.g. taking on larger workload, working long hours), as managers might be tempted to tell them to "take a break this weekend" or "try not to do too much work this weekend." This can leave the employee feeling conflicted because the manager told the employee not to do something that the employee wanted to do. Therefore, the best thing managers can do to promote weekend recovery among their employees with workaholic tendencies is to emphasize that the weekend period is the employees' time, and they get to choose how they spend it.

Overall, my results highlight the importance of recovery experiences over the weekend. Given that mastery and control experiences directly impacted Monday morning exhaustion and engagement, managers and organizations should be cautious about asking employees to work on the weekend. If employees are not able to recover, this could ultimately lead to greater exhaustion and lower engagement. Managers and organizations could also facilitate recovery for their employees by providing time-management trainings or offering other kinds of skill development trainings, such as training on recovery techniques.

Study Strengths

There are several strengths to the current study. This is the first study, to our knowledge, that examines each of the four recovery experiences over the weekend individually and how they might be impacted by workaholism. This study also identifies which recovery experiences are most beneficial when workaholic tendencies are high. This kind of information can be valuable for employees and managers alike for reasons explained in the previous section.

Additionally, academia is one industry known for breeding workaholic behaviors (e.g., professors grading papers or answering students' email while not at work). I recruited part of the sample from a large Southern university, which captured enough variation in workaholism ratings to better analyze the results. However, it should be noted that data were collected during summer months, which is a period of time when academia experiences low workloads. In addition to the university sample, participants were also recruited through social media from various jobs and industries. This helped

create a more diverse sample of participants to help make the study results more generalizable.

A final strength of this study is that it examines recovery as it occurs over the weekend. This is a less explored area in the recovery research. Therefore, this study adds to our existing knowledge on recovery and may help other researchers better understand the role of weekend recovery.

Limitations and Future Research

The current study also had some potential limitations. One limitation was that I examined recovery in terms of the four general recovery experiences. However, recent research suggests that recovery experiences have more than four categories (Ayres, 2022). Further exploration on the various forms of recovery experiences could be beneficial to help determine which recovery experiences yield the greatest amount of recovery, especially for those who score high workaholism.

For the purpose of this study I examined recovery in terms of one's exhaustion and engagement levels. Although these are two valid and reliable operationalizations of recovery, there are many more out there. Future research might consider looking at different concepts to operationalize recovery. Additionally, the current study examined recovery, exhaustion, and engagement after the weekend with no measures before the weekend. Therefore, this study cannot draw strong causal inferences about weekend recovery experiences and Monday morning exhaustion and engagement. Further research should utilize more repeated measures designs and experimental methods to further draw these inferences.

The study was conducted using a self-report measure. This increases the chances of the social desirability bias, which could have influenced the results. Future research should examine the potential benefits of using additional measures outside of self-report, such as spouse report and/or supervisor report, to decrease this limitation.

This current study also focuses solely on weekend recovery which is a less explored area in the recovery research. However, this means that results from this study can only be applied in the weekend setting. Future research should consider exploring other time frames of recovery such as daily, evening, or vacation recovery.

Conclusion

Overall, this study investigated the relationships between employees' weekend recovery experiences and their Monday morning exhaustion and engagement levels. The study results suggest that mastery and control experiences over the weekend are significant predictors of decreased Monday morning exhaustion and increased Monday morning engagement. Therefore, employees and managers should do their best to incorporate these kinds of experiences into their weekend activities in order to maximize their productivity potential come Monday morning.

Additionally, the current study considers the high demands that organizations are placing on employees. To do this we assessed level of workaholism to determine how exhaustion and engagement might vary between those high versus low on workaholism. The study results showed that the positive relationship between control experiences over the weekend and Monday morning engagement levels is strengthened when workaholism is higher. In other words, those who score higher in workaholism can benefit more from control experiences over the weekend when looking in terms of Monday morning

engagement. This adds to the recovery research by examining weekend recovery to help better understand which recovery activities are most beneficial when workaholic tendencies are high. Overall, control experiences may be most beneficial for people with greater workaholic tendencies.

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Appendix A

Screening Questions:

1. What is your current age (in years)?
2. On average, how many hours do you work each week?
3. Were you scheduled for work this past weekend?

Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003)

Instruction: There are sixteen (16) statements below with which you may agree or disagree. Using the scale, please report the extent to which you agree or disagree with each of the statements.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

1. I always find new and interesting aspects in my work.
2. There are days when I feel tired before I arrive at work.
3. It happens more and more often that I talk about my work in a negative way.
4. After work, I tend to need more time in the past in order to relax and feel better.
5. I can tolerate the pressure of my work very well.
6. Lately, I tend to think less at work and do my job almost mechanically.
7. I find my work to be a positive challenge.
8. During my work, I often feel emotionally drained.
9. Over time, one can become disconnected from this type of work.
10. After working, I have enough energy for my leisure activity.
11. Sometimes I feel sickened by my work tasks.
12. After my work, I usually feel worn out and weary.
13. This is the only type of work that I can imagine myself.
14. Usually, I can manage the amount of my work well.
15. I feel more and more engaged in my work.
16. When I work, I usually feel energized.

Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003)
Instruction: The following seventeen (17) statements are about how you feel at work/on the job. Please respond using the scale to describe the extent to which you relate to these statements.

Never	A few times a day year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every
0	1	2	3	4	5	6

1. At my work, I feel bursting with energy.
2. I find the work I do full of meaning and purpose.
3. Time flies when I'm working.
4. At my job, I feel strong and resilient.
5. I am enthusiastic about my job.
6. When I am working, I forget everything else around me.
7. My job inspires me.
8. When I get up in the morning, I feel like going to work.
9. I feel happy when I am working intensely.
10. I am proud on the work that I do.
11. I am immersed in my work.
12. I can continue working for very long periods at a time.
13. To me, my job is challenging.
14. I get carried away when I'm working.
15. At my job, I am very resilient, mentally.
16. It is difficult to detach myself from my job.
17. At my work I always persevere, even when things do not go well.

The Recovery Experience Questionnaire (REQ; Sonnentag & Fritz, 2007)
Instructions: Below you will be presented with sixteen (16) statements with which you may agree or disagree. Please respond using the scale to describe the extent to which you agree or disagree.

I Do Not Agree At All	I Disagree A Little	Neutral	I Agree A Little	I Fully Agree
1	2	3	4	5

When I am not at work…
1. I forget about work.
2. I don't think about work at all.
3. I mentally distance myself from my work.
4. I get a break from the demands of work.
5. I kick back and relax.
6. I do things to relax.
7. I use time to relax.
8. I take time for leisure.
9. I learn new things.
10. I seek out intellectual challenges.
11. I do things that challenge me.
12. I do something to broaden my horizons.
13. I feel like I can decide for myself what to do.
14. I decide my own schedule.
15. I determine for myself how I will spend my time.
16. I take care of things the way that I want them done.

Additional Recovery Questions

Recovery from work refers to the process of reducing negative strains brough upon by work and increasing more positive experiences to restore and build up resources that were expended during work.

1. Did you engage in recovery activities this weekend?   Yes   No

2. If yes, what specific activities did you engage in to recover from work?

3. Did you engage in unscheduled work this weekend?   Yes   No

4. If yes, how many hours did you work?

5. Did you have any other scheduled obligations this weekend (e.g., picking up children from extra-curriculars)?   Yes   No

Recovery Experience Taxonomy (RET; Ayers, 2022)
Instructions: Below you will be presented with statements with which you may agree or disagree. Please respond using the scale to describe the extent to which you agree or disagree.

Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree
1	2	3	4	5

1. I had a sense of joy during the activity/behavior
2. I was filled with joy
3. I felt myself relaxing
4. I focused on relaxing
5. Work was the furthest thing from my mind
6. I felt completely free from work problems
7. I felt I had left the world of work behind for a while
8. I forgot about work
9. I felt challenged in a good way
10. I recognized that I was learning new things
11. I felt like my capacity was increasing
12. I wanted to do something that broadened my horizons
13. My mind was focused on helping others
14. I stopped focusing on my own problems when helping others
15. I felt a selfless caring for others
16. I felt that I was in service to my fellow beings
17. I felt connected to a higher power
18. I felt I was successfully following my religious convictions
19. I felt guided by God in the mist of daily activities
20. I was filled with power and energy from deity
21. I felt like I was determining for myself how I spend my time
22. I benefitted from diving into familiar activity
23. I wanted to do something familiar to me
24. I had confidence in my ability to do this activity due to prior experience with it.
25. There was no real reason for me to complete this activity
26. I didn't focus on anything during the activity
27. I felt numb during the activity
28. I notice the sounds of wildlife (e.g., birds, animals)
29. I felt I was getting fresh air
30. I heard the sounds of nature (e.g., wind, calmness)
31. I benefitted from fresh air
32. I felt like I was doing the activity just to do something

The Bergen Work Addition Scale (BWAS; Andreassen et al., 2012)
Instructions: Below you will be asked to respond to seven (7) questions related to you work/job. Answer each of the questions by selecting the one response option that best describes you.

Never	Rarely	Sometimes	Often	Always
1	2	3	4	5

How often during the last year have you…

1. Thought of how you could free up more time to work?
2. Spent much more time working than initially intended?
3. Worked in order to reduce feelings of guilt, anxiety, helplessness and depression?
4. Been told by others to cut down on work without listening to them?
5. Become stressed if you have been prohibited from working?
6. Deprioritized hobbies, leisure activities, and exercise because of your work?
7. Worked so much that it has negatively influenced your health?

Demographic Questions:

Instructions: Please answer the following questions about yourself:

1. Age?
2. With which gender do you identify?
3. What is your University role? (Student/Faculty/Staff)
4. Do you currently work for MTSU?
5. What is your current occupation or job type?
6. How many hours do you work each week?
7. Do you hold any leadership roles in your current position?
8. Are you a parent?
9. Are you responsible for home maintenance in your household?

Appendix B

Office of Research Compliance
2269 Middle Tennessee Blvd.
Sam H. Ingram Bldg (ING) Room 010A
Box 124
Murfreesboro, TN 37132
www.mtsu.edu/irb

Date: July 5, 2023
PI: Haylie Lloyd
Department: Middle Tennessee State University, Psychology
Re: Modification - IRB-FY2023-194
Weekend recovery's effect on Monday exhaustion and engagement: The role of workaholism

The Middle Tennessee State University Institutional Review Board has reviewed the modification request to the above referenced study and rendered the decision below.

Decision: Approved

Sincerely,
Middle Tennessee State University Institutional Review Board