Reactions to Daily Abusive Supervision: Exploring Day-to-Day Fluctuations with a Justice Perspective

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ABSTRACT

REACTIONS TO DAILY ABUSIVE SUPERVISION: EXPLORING DAY-TO-DAY
FLUCTUATIONS WITH A JUSTICE PERSPECTIVE

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Abusive supervision is a widely-studied phenomenon experienced by a multitude of workers across organizations. While abusive supervision is typically studied in terms of negative outcomes (i.e., supervisor-directed retaliation), there is some preliminary evidence that not all consequences of abusive supervision are negative. While there have been several studies exploring employee reactions to abusive supervision, they predominantly take a cross-sectional design perspective. The current study utilized 102 full-time employees from the U.S. who responded to 932 daily surveys assessing personality, workplace behaviors, and justice perceptions. The current study explored how perceptions of abusive supervision changed on a day-to-day basis and how those changes in turn impacted employee reactions, including potential positive outcomes that could stem from abusive supervision (e.g., supervisor-directed OCBs). The current study yielded several results. First, results related to actual employee behaviors demonstrated that abusive supervision was related to a decrease in justice perceptions and OCB engagement and an increase in retaliation. However, these effects did not carry forward to the following days. Rather, employees who retaliated more often reported more abusive supervision, potentially as a justification for their behavior. Second, results related to perceptions demonstrated that justice perceptions led to less abusive supervision and more OCBs during the following days. Hostile attribution bias interacted with perceptions of abuse and perceptions of interactional justice to increase employee retaliation. Third, results related to personality
demonstrated that Machiavellianism did not interact with abuse or justice to predict retaliation. Psychopathy interacted with abuse to predict reduced retaliation in cases of low abuse. Narcissism and everyday sadism interacted with justice perceptions to predict more retaliation when the situation was deemed unfair. Lastly, none of the individual differences predicted engagement in supervisor-directed OCBs.

*Keywords:* workplace aggression, abusive supervision, supervisor-directed retaliation, supervisor-directed OCBs, Dark Tetrad, Hostile Attribution Bias
REACTIONS TO DAILY ABUSIVE SUPERVISION: EXPLORING DAY-TO-DAY FLUCTUATIONS WITH A JUSTICE PERSPECTIVE

BY

RUSHIKA DE BRUIN
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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE DOCTOR OF PHILOSOPHY

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Doctoral Director:
Lisa M. Finkelstein
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You walk into work and say good morning to people you meet along the way. You run into your boss and greet them with a smile. Instead of smiling back, they turn their back towards you and rudely walk away. Later, they enter your office and throw on your desk the reports you had previously submitted. “This is complete garbage. What kind of work do you think I expect from my employees? If I wanted such sloppy work, I’d assign this to children.” They storm out, leaving you embarrassed and upset.

Abusive supervision has seeped into the leadership literature since being coined by Tepper (2000) as the “subordinates’ perceptions of the extent to which supervisors engage in sustained display of hostile verbal and nonverbal behaviors, excluding physical contact” (Tepper, 2000, p. 178). It has even bled into media with movies like ‘The Devil Wears Prada’ and ‘Horrible Bosses’, which highlight these negative interactions that employees may have with their supervisors. About 46% of workers in the U.S. have reported abusive behaviors from their supervisors, which has led to organizational costs of over $23 billion annually (Tepper, Duffy, Henle, & Lambert, 2006). Given the costs associated with such interactions, it is no surprise that this research area that has recently been in the spotlight.

With the growing focus on interpersonal relationships in the workplace aggression literature (Henderson & Van Hasselt, 2017; Park, Hoobler, Wu, Liden, Hu, & Wilson, 2017), abusive supervision research has gained popularity. This has led to researchers exploring antecedents (e.g., supervisor perceptions of interactional justice, Aryee, Chen, Sun, & Debrah,
2007; supervisor stress, Burton, Hoobler, & Scheuer, 2012; psychological contract breach, Hoobler & Brass, 2006; negative affect and stress, Zhang & Bednall, 2016), consequences (e.g., aggression, Burton & Hoobler, 2011; job performance, Harris, Kacmar, & Zivnuska, 2007; psychological distress, Harvey, Stoner, Hochwarter, & Kacmar, 2007; family undermining, Hoobler & Brass, 2006; low organizational commitment and job satisfaction, Tepper, 2000), and possible mechanisms (e.g., interactional justice, Burton & Hoobler, 2011; stress, Chi & Liang, 2013; self-control, Lian, Brown, Ferris, Keeping, & Morrison, 2014) to understand abusive supervision.

A limitation of the research on abusive supervisory behavior is the assumption that supervisors are either always abusive or never abusive (Tepper, 2007). However, there are a multitude of situational factors that can lead to daily changes in supervisory behavior, such as sleep deprivation (Barnes, Lucianetti, Bhave, & Christian, 2015) or family-work conflict (Courtright, Gardner, Smith, McCormick, & Colbert, 2016). Zhang and Liu (2018) even posit that the original definition introduced by Tepper (2000) was mostly theoretical instead of practical because it was coined entirely by scholars in the academic field. Thus, it may be valuable to sometimes deviate from this definition because some evidence may show that this definition is not always accurate. A reason for these within-subject differences can be drawn from Affective Events Theory (AET), which explains the connections between affect, workplace behaviors, and performance (Weiss & Cropanzano, 1996). According to AET, an event is defined as a change in circumstance or what one is currently experiencing (Weiss & Cropanzano, 1996), and workplace events can influence affective reactions, which then influence attitudes and behaviors. Thus, as events take place, such as being exposed to abusive supervision, employees can have varying affective reactions; in research studies, this process manifests as within-person
variability in employees’ affect while on-the-job (Dalal, Lam, Weiss, Welch, & Hulin, 2009). Employees’ reactions can stem from different events that they experience, even if the original events do not involve the supervisor themselves. This further supports the idea that, depending on the events employees are exposed to, they can perceive their supervisors as pleasant and positive one day, but negative and abusive the next day. If their supervisor ridicules them one day, then they are likely to have a different affective reaction compared to the days their supervisor smiles when passing by. These changes in daily events can lead to changes in affective reactions, which in turn can lead to changes in attitudes and response behaviors. While the effects of abusive supervision have been heavily studied, there has been limited exploration in how daily fluctuations in abusive behaviors influence employees’ behavioral reactions. This is important to consider because feelings that are triggered by events on the job can have consequences for current behaviors on the job (Judge, Hulin, & Dalal, 2012). The dynamic nature of changing affect typically warrants a within-person study design, given that approximately 60% of variance in affective changes comes from within-person differences (Judge et al., 2012). Additionally, at least 35% of variance in affective changes is attributable to employees’ perceptions of abusive supervision (Vogel & Mitchell, 2017).

Abusive supervision is particularly important in an interpersonal context as it focuses on a victim’s perceptions of events, which could vary widely among employees who have the same supervisor. Further, plenty of research has established that dealing with negative interactions on a constant basis leads to the subordinate retaliating against their supervisor (Tepper, 2000; Zhang & Liao, 2015). However, when do employees actually retaliate? Are their reactions immediate or do they build up over days before action is taken? Can a single act of abuse lead to these negative consequences? Is retaliation more likely on certain days, or does the workday not
matter? Further, what is the relationship between these mechanisms and individual difference factors, especially ones that are considered “dark”? The research proposed here attempts to answer these questions and open a vein for research into the daily fluctuations of abusive supervision and the differential reactions they can produce.

A heavily studied reaction to abusive supervision has been supervisor-directed retaliation. There have been mixed results in the area of supervisor-directed deviance as some researchers assert that employees cannot retaliate against their supervisors. This is because of power differentials that could lead to further negative consequences for employees (Tepper, Carr, Breauz, Geider, Hu & Hua, 2009). However, others (Inness, Barling, & Turner, 2005, Tepper et al., 2009), including meta-analytic summaries, emphasize the substantial relationship between abusive supervision and supervisor-directed retaliation ($r = .62$; Hershcovis & Barling, 2010; $r = 0.53$; Park et al., 2017). Thus, there seems to be consensus in the literature that abusive supervision can open the doorway to supervisor-directed negative retaliation.

A lesser-explored reaction in the abusive supervision literature is supervisor-directed organizational citizenship behaviors (OCBs). What might be driving those employee reactions are perceptions about that event. Some employees may see negative treatment from their supervisor as unfair, and thus retaliate negatively. Conversely, others may not think the event was unfair, but rather they might think they have done something to deserve it, and thus they may not have the same negative reaction. For instance, when leaders engage in abusive behaviors for an external environmental reason (e.g., poor sleep quality), employee reactions may not be negative (Zhang & Liu, 2018). Alternatively, if employees perceive that they have made a mistake that caused the problem in their relationship with their supervisor, they may engage in OCBs as a way of mending the relationship (Troster & Quaquebeke, 2018) A potential factor
that could influence those event perceptions is hostile attribution bias (HAB), or the tendency to attribute hostile intentions to others (Crick & Dodge, 1996).

A potential mechanism between employees experiencing abusive supervision and subsequently engaging in retaliatory behavior is interactional justice, which is an individual’s perceptions of the degree to which organizational representatives treat them with respect, honesty, propriety, and sensitivity to their personal needs (Bies & Moag, 1986). As demonstrated by Burton and Hoobler (2011), interactional justice is a significant mediator between abusive supervision and workplace deviance. This follows the justice-based model of responses put forth by Tepper (2000), which states that being subject to abusive behaviors lead to perceptions of injustice, which in turn lead to the negative consequences. While the connection between abusive supervision and perceptions of justice has been repeatedly shown, this was done in a cross-sectional manner. Thus, a clear next step is to explore if these injustice perceptions are immediately triggered by an event that has just occurred (i.e., abusive supervision) or if perceptions have to build up over time. An AET perspective would suggest that adverse events are the cause of the injustice perceptions, which in turn lead to the negative behaviors. A specific event (i.e., the abusive interaction with the supervisor) can initiate many other events in a trickle-down manner.

Further, the relationship between perceptions of justice and subsequent reactions can change based on a few contextual factors or individual difference factors. While plenty have been explored in the past, there has been an increasing interest in “dark personality” and its influences on workplace interactions. Given that interest, abusive supervision research has explored situations in which the supervisor possesses those traits (e.g., Kiazad, Restubog, Zagenczyk, Kiewtiz, & Tang, 2010; Waldman, Wang, Hannah, Owens, & Balthazard, 2018;
Wisse & Sleebos, 2016). However, there has not been much exploration of instances in which the employee possesses those traits and how that influences interpersonal relationships and employees’ reactions. Given that employee reactions can differ based on the traits they possess, this study aims to take an introductory look at the influences of the employee dark personality traits on their reactions.

The affective events perspective was illustrated by Judge and colleagues (2006) who found that an attribute of a social context (interpersonal justice) leads to an affective reaction (state hostility), which in turn leads to job satisfaction and finally to behaviors (workplace deviance). The current study replicated a similar type of model in an abusive supervisory context. To this end, the current study was designed to determine how perceptions of abusive supervision vary on a day-to-day basis, and how this variation leads to perceptions of interactional justice. It was anticipated that these justice perceptions would in turn lead to changes in retaliatory behaviors. A daily-diary approach was used for a period of 2 weeks. Participants filled out a pre-screen survey that predominantly assessed individual difference factors, workplace contextual factors, and their eligibility for participation. They then signed up to receive daily studies for a 2-week period (10 work days) that assessed daily perceptions of abusive supervision, daily interactional justice, and daily retaliatory behaviors.

Despite all the studies linking abusive supervision to supervisor-directed retaliation, none of them have looked at this relationship with daily fluctuations. Thus, this study will be the first to measure how daily fluctuations in perceptions of abusive behaviors lead to changes in employee behaviors, both positive and negative. It is important to examine this idea because most phenomena tend to fluctuate over time (Dalal & Hulin, 2008). Fluctuations in employee behaviors are especially likely due to the many dynamic states, behaviors, and situations that can
occur in a single workday (McCormick, Reeves, Downes, Li, & Ilies, 2018). Further, there has not been an exploration of the fluctuations in abusive supervision and OCBs, which will be explored given the recent interest in potentially positive outcomes associated with abusive supervision (Zhang & Liu, 2018). Personality will also be examined by looking at the influence of the dark triad and attribution style on these relationships because personality factors tend to moderate the link between job events and the resulting feelings and behaviors (Judge et al., 2009). Understanding these relationships will allow employers to screen for certain personality traits during the selection process or to potentially provide training to employees with certain traits in how to behave in negative situations. Further, McCormick and colleagues (2018) note that when dealing with situations where constructs fluctuate, outcomes are generally influenced by employees’ states at specific moments, such as with training or interventions.

Studies suggest that abusive leadership behaviors tend to fluctuate more within person than initially thought (61% variance, Johnson, Venus, Lanaj, Mao, & Chang, 2012; 35% variance, Vogel & Mitchell, 2017). There needs to be more exploration into how those day-to-day fluctuations can influence employee reactions. While most of the current literature has focused on exploring the consequences of abusive behaviors, they tend to focus on situations in which abusive behaviors are sustained. With the finding that situational factors influence daily behaviors, especially those related to abusive supervision (Barnes et al., 2015), further exploration is needed into the daily fluctuations and consequences involved. Further, there is some emerging research suggesting that abusive supervision does not always lead to negative reactions from the employees, but it can lead to certain positive situations like supervisor-directed OCBs (Troster & Quaquebeke, 2018) or strengthened social bonds with coworkers (Vogel & Mitchell, 2017).
Most of the work in organizational psychology tends to use a cross-sectional design based on self-reported questionnaires (Ohly, Sonnetag, Niessen, & Zapf, 2010). While there are a multitude of questions that can be answered with this design, there remains the fundamental assumption that the unit of analysis is the person and that the investigated constructs are stable over time. However, there has been considerable empirical evidence that this may not always be the case (Ilies, Scott & Judge, 2006). Actually, McCormick and colleagues (2018) posit, “over the course of a workday, employees experience fluctuations in their moods, situations, and behaviors” (p. 2). Vogel and Mitchell (2017), who found sufficient variance (around 35% variance) at the within-person level for both abusive supervision and supervisor-directed retaliation, as well as Johnson and colleagues (2012) who found 61% variance in abusive behaviors, found this. That is, supervisory behaviors can fluctuate based on multiple situational factors (such as mood). Similarly, employees who are subject to abuse can respond with retaliation because of changes in their current mood. Utilizing a diary study design offers the means to analyze such fluctuations and has been increasingly used in work and organization research (e.g., McCormick et al., 2018; van Eerde, Holman & Totterdell, 2005), especially in the domain of social interactions (Tschan, Rochat, & Zapf, 2005). This design is useful for capturing the short-term experiences of individuals in the work context so they can be analyzed in both a within-subject manner and a between-subject manner.

This study aims to add to the ever-growing domain of workplace aggression research and to explore the consequences of day-to-day fluctuations in negative interactions. Further, there has not been any research looking at the temporal relationship between perceptions of these negative interactions and subsequent behaviors. The current study offers a first step in understanding those relationships, which will hopefully lead to interventions that target “abusive behaviors”,
not “abusive supervisors”. Further, those interventions will hopefully help employees who deal with day-to-day fluctuations in supervisory behaviors. The sections below will explicate the relationships in the model displayed in Figure 1.

*Figure 1. Proposed theoretical model.*
While abusive supervision has been widely studied using multiple methodologies, there has not been a lot of focus on the daily fluctuations in those abusive behaviors. Even though abusive supervision is generally studied as an all-or-none concept, newer research highlights how supervisors’ behavior varies on a day-to-day basis (Barnes et al., 2015; Courtright et al., 2016). This research does so by surveying supervisors every day over an extended period of time and assessing in which behaviors they engaged on each day of the week. Barnes and colleagues (2015) found that employee perceptions of supervisors’ abusive behaviors differed based on daily changes in supervisor sleep quality and supervisor ego depletion. By tracking the differences between days, they were able to examine not only the average frequency of supervisor abuse over a two-week period but were also able to examine variability in supervisors’ abusive behaviors. This variability provides additional information that may not be fully conveyed by a simple average (Cole, Bedeian, Hirschfeld, & Vogel, 2011), and that additional information can be useful when attributing causal inference to the observed behaviors (Kelley, 1973). Similarly, Courtright and colleagues (2016) found that family-work conflict was a significant predictor of abusive behaviors when moderated by ego-depletion. Both of these studies show that leadership behaviors change on a daily basis, both from the leader’s perspective and from the subordinate’s perception. However, this idea is just starting to be explored from a subordinate’s perspective in studies in which employees were asked what kinds of behaviors their supervisors engaged in on a day-to-day basis (Barnes et al., 2015; Vogel &
Mitchell, 2017). Exploring day-to-day changes in supervisor behavior from an employee perspective, along with the employees’ personality, may allow exploration of the subordinate’s perceptions of intent, which may be attributed to their supervisor’s behavior. This carries importance as it may dictate the reactions that follow.

The concept of daily abusive supervision draws from Affective Events Theory (AET; Weiss & Cropanzano, 1996), which takes into account the dynamic nature of workplace affect, attitudes, and behaviors. The main premise of AET hinges on the idea that there is a link between job affect and job behaviors, which is separate from the link between cognitions and behaviors. It claims that workplace events can influence affective reactions, which then influence attitudes and behaviors. This model assumes that employee reactions are at least partially driven by affective responses through changes in feelings of injustice. Sometimes, people can respond impulsively and aggressively in the moment if they perceive they are wronged (Parrot & Giancola, 2007). However, that is not the only potential response involved. Deviant behaviors are not simply in-the-moment responses, but rather can be cognitively driven decisions that involve a lot of deliberation before an action is completed. Both job affect and job cognitions predict workplace deviance, which was seen when they were explored with registered nurses; both pay (cognition) and hostility (affect) were shown to predict workplace deviance (Lee & Allen, 2002).

According to AET, an event is defined as a change in circumstance or what one is currently experiencing (Weiss & Cropanzano, 1996). Thus, the focus tends to be on significant events, such as those that generate an emotional reaction or change of mood in people. Judge and colleagues (2006) propose that instances of interpersonal unfair treatment, such as being subject to an abusive supervisor, cause negative emotions. These events are psychological shocks that
generate both affective and cognitive appraisals of the situation. Emotions tend to be more intense than moods, which are more general in nature, and tend to interrupt an individual’s thoughts and behaviors (Weiss & Cropanzano, 1996). Further, given that emotions tend to be tied to specific events, such as an instance of abuse from a supervisor, emotional reactions will be the focus of this study. Further, these justice assessments tend to be rapid and automatic in nature, thereby generating specific emotional reactions.

These reactions have been explained with an organizational justice perspective incorporating Folger and Cropanzano’s (2001) fairness theory, which assumes that social justice centers on the assignment of blame. They further elaborate that violations of interactional justice tend to be directed towards outwardly focused emotions, such as anger. For instance, people tend to react in anger (an outwardly-focused emotion) when they are not adequately rewarded, and with guilt (an inwardly-focused emotion) when they are over-rewarded (Homans, 1961). Others confirm that employees tend to react in anger when they perceive unfairness that can be attributed to others (Folger, 1986; Smith, Haynes, Lazarus, & Pope, 1993). This feeling of injustice can incorporate a multitude of negative emotions, including anger, hostility, shame, or guilt (Harlos & Pinder, 2000). However, unfair treatment by another individual typically leads to feelings of anger, not of guilt (Watson, 2000).

There are multiple studies that allude to the idea that emotions play a role in the relationship between justice perceptions and retaliation (Bies & Tripp, 2002; Skarlicki & Folger, 1997). Barclay and colleagues (2005) confirmed this idea, finding that anger partially mediated the relationships between interactional justice and retaliation when drawing from a sample of individuals who had been recently laid off. Anger is a common emotional reaction when an event is regarded as unfair and when the blame can be attributed to someone else (such as in
supervisory abuse or being laid off; Barclay, Skarlicki, & Pugh, 2005). Personality factors do not entirely drive these differences, but rather encompass within-person differences that seem to be driven by personality factors and contextual situations. (Judge et al., 2006). However, these affective reactions can even be present when the outcome is beneficial, not just when it is detrimental; Conway and Briner (2002) found that employees reacted emotionally with the outcome of having a promise be exceeded.

A supervisor who engages in abusive behaviors on a daily basis might have their behavior attributed to themselves or their personality. This could then lead to the supervisor being viewed as an ineffective leader (Johnson et al., 2012). However, a supervisor who is sporadically abusive may have their behaviors attributed to situational factors, such as tight deadlines. Thus, these day-to-day fluctuations are important to consider from employee’s perspective. As Kelley and Michela (1980) suggest, attribution theory states that employees’ attributions are made on the basis of perceived causation. Burton, Taylor, and Barber (2014) explored these attributions by delving into the three attributions employees can make for abusive supervision and their influence on justice perceptions: internal (i.e., something about the employee), external (i.e., something about the supervisor), or relational (i.e., something about the relationship). They found that external attributions negatively predicted interactional justice, whereas internal attributions positively predicted interactional justice and relational attributions did not influence interactional justice. Given these differential attributions, employees could have differential reactions based on the attributions they form about the behaviors. For instance, higher levels of justice perceptions were negatively related to supervisor-directed aggression and positively related to supervisor-directed OCBs (Burton et al., 2014).
Johnson and colleagues (2012) found that supervisors who had larger behavioral variations were evaluated as less effective leaders compared to those who had smaller variations. This pattern may be due to the uncertainty employees experience from larger behavioral variations. Not knowing if their supervisor is going to be polite and respectful or rude and dismissive on a daily basis could be anxiety provoking. They explored this variability in behaviors and found that abusive leadership behaviors tend to fluctuate within person more often than leadership behaviors do, but slightly less often than transformational leadership. Thus, employees would probably detect more abusive supervisory behaviors on some days relative to other days. Vogel and Mitchell (2017) and Barnes and colleagues (2015) also found sufficient variance for within-person abusive supervision. Further, while employees noted a strong positive relationship between transformational leadership and leader effectiveness, an increase in the variance of transformational leadership led to a negative relationship with leader effectiveness (Johnson et al., 2012), lending evidence to the idea that increased variability in behaviors leads to employees having more negative experiences and perceptions. Thus, not knowing what behaviors your boss is going to display can lead to more negative experiences. The current study explores daily supervision based on Barnes and colleagues’ (2015) simplification of Tepper’s (2000) definition, which defines the subordinates’ perceptions in terms of supervisors’ displays of hostile verbal and nonverbal behaviors, excluding physical contact, and postulates how these perceptions vary on a day-to-day basis.

While many workplace events such as absenteeism and overtime (Nicholson, Jackson, & Howes, 1978; Van Hooff, Geurts, Kompier, & Taris, 2006) have been shown to fluctuate on a daily basis, there are still many events left to explore. Exploring workplace deviance at a day-to-day level has recently been of interest to researchers; however, this has not been explored as a
reaction to abusive supervision. While some have looked at the behaviors that leaders engage in on a daily basis (Courtright et al., 2016), there has been limited exploration of daily fluctuations in employee perceptions of abusive supervision. Rather, the research has focused on the perpetrator, in terms of daily fluctuations, characteristics, and situations (Barnes et al., 2015) in the case of abusive supervision. From the victim’s perspective, day-level incivility negatively related to situational well-being and psychological detachment (Nicholson & Griffin, 2015). This suggests the impact of day-to-day fluctuations of negative workplace interactions and how those interactions influence employee well-being. Bliesse and Jex (2002) suggest that, while between-person studies have been used to measure the impact of workplace aggression, this approach may be too simple to measure the complex relationships between organizational behavioral phenomena that might be related to aggression.

Nicholson and Griffin (2016) who found that the likelihood of experiencing incivility decreased from Monday to Friday also corroborated the existence of these daily fluctuations, and the weekly rhythms that accompany them. Given that incivility, another phenomenon of workplace aggression, also focuses on the employee’s perceptions of the perpetrator’s behaviors, there are parallels that can be drawn to abusive supervision. Nicholson and Griffin’s exploration in daily fluctuations of incivility helped to expand to the domain of abusive supervision research. They hypothesized and found that higher levels of stress that were associated with the start of the work week, which led to employees being more likely to perceive ambiguous behaviors as uncivil relative compared to at the end of the work week, when resources were higher in anticipation of the weekend. This draws from the well-established idea of the weekly mood cycle (Larsen & Kasimatis, 1990), which suggests that individuals tend to be in better moods during the weekend and in poorer moods on work days (Egloff, Tausch, Kohlmann, & Krohne, 1995).
Further, while daily fluctuations in recovery and stress have been explored (Beattie & Griffin, 2014; Nicholson & Griffin, 2015), comparatively little research has looked at fluctuations in perceptions of abusive supervision. That is, do employees really perceive differences in abusive supervision on a daily basis? Thus, the current study aims to explore daily fluctuations in the abusive supervisory behaviors reported by subordinates.

*Hypothesis 1a: Employees will perceive a decreasing number of abusive supervisory behaviors as the workweek progresses.*

Retaliation

Abusive supervision has been shown to have many negative effects on the subordinates and organizations involved (e.g., Martinko, Harvey, Brees, & Mackey, 2013; Tepper, 2007; Zhang & Liao, 2015). At an individual level, it is associated with psychological distress (Harvey et al., 2007), low organizational commitment, and job satisfaction (Tepper, 2000), and family conflict (Hoobler & Brass, 2006). At an organizational level, it is associated with workplace deviance, (Lian, Ferris, & Brown, 2012), lower performance both at an individual and group level (Xu, Huang, Lam, & Miao, 2012), and lower levels of creativity (Liu, Liao, & Loi, 2012).

Consequences of abusive supervision have been widely explored since 2000 (Tepper, 2000; Zhang & Liao, 2015), including workplace deviance. This refers to intentional behaviors that violate organizational norms, with the intention to harm the organization or employees (Bennett & Robinson, 2003). Workplace deviance can be separated into two categories: organizational deviance and interpersonal deviance (Robinson & Bennett, 1995). Organizational deviance is directed towards the organization and involves actions such as shrinking work time.
or intentionally working longer hours to extend overtime. Interpersonal deviance is directed towards specific individuals. Hershcovis and colleagues (2007) further separate interpersonal deviance into deviant behaviors that are targeted specifically against supervisors and those targeted at others. While some claim that victims of abusive supervision will displace their aggression onto those at lower levels of power than themselves (Tepper et al., 2009), some evidence shows that victims tend to retaliate against the aggressor (Hershcovis & Barling, 2010; Innes et al., 2005). Supervisor-directed retaliation can include gossip, a mean prank, or even public humiliation (Mitchell & Ambrose, 2007).

While there has been exploration of the daily fluctuations in reaction to incivility, there has been limited exploration of the relationship between abusive supervision and retaliation. Yang and Diefendorff (2009) explored the idea of relational deviance in the workplace by examining the impact of daily stressors on daily counterproductive work behaviors (CWBs) and how negative emotions explained this relationship. Specifically, they found that CWBs enacted directly against an individual were impacted by daily negative emotions, and this relationship was weaker for those who had higher levels of conscientiousness and agreeableness. These findings warrant further exploration in terms of other potential relational problems that could arise, such as those that could occur between a supervisor and subordinate in situations of abusive supervision.

Retaliation is a common response to abusive supervision because abusive supervision is not only perceived as unethical, but it also acts as a sanction of other ethically questionable behaviors among the targets of abuse (Park et al., 2017). The literature does not appear to question whether abused employees might retaliate; instead, the literature examines whom they retaliate against – the organization in general or the supervisor-directly. Mitchell and Ambrose
(2007) explored each of these retaliatory behaviors individually and found that they were all predicted by abusive supervision. However, only supervisor-directed deviance was moderated by negative reciprocity beliefs, which is an individual’s tendency to respond to negative treatment with further negative treatment (Cropanzano & Mitchell, 2005). Other findings suggest that the relationship between abusive supervision and supervisor-directed retaliation is moderated by supervisors’ coercive power and employees’ capacity for self-control (Lian et al., 2014). As expected, the relationship between abuse and retaliation was strongest when both supervisors’ coercive power and employee self-control capacity were low.

When organizational deviance and supervisor-directed deviance were compared in a meta-analytic study, they were both positively related to abusive supervision. However, supervisor-directed deviance had a stronger relationship to abusive supervision than organizational deviance (Zhang & Liao, 2015). Another meta-analytic review of the relationship between abusive supervision and employee deviance demonstrated that abusive supervision is more strongly related to supervisor-focused justice perceptions than to organization-focused justice perceptions (Park et al., 2017). Further, both of these justice perceptions were related to target-similar deviance (i.e., supervisor-focused justice perceptions were related to supervisor-directed deviance whereas organization-focused justice perceptions were related to organization-directed deviance; Park et al., 2017). Thus, many victims of abuse seem intent on retaliating against those who violate workplace norms of mutual respect, despite the personal cost (de Quervain et al., 2004).

Therefore, for the current study, a positive relationship was hypothesized between perceptions of abusive supervision and supervisor-directed retaliation, confirming what Burton and Hoobler (2011) found. Further, it was also hypothesized that supervisor-directed retaliation
would fluctuate on a daily basis. Meier and Gross (2015) used an interaction-record diary study to explore the relationship between supervisor incivility and supervisor-directed retaliation, along with the temporal dynamics behind those behaviors. They found that incivility experiences influenced employees’ negative reactions on same-day retaliation, but not on next-day retaliation. They drew from the idea that the negative interactions with supervisors affected mood, but only did so for a few hours (Ilies, Johnson, Judge, & Keeney, 2011). Thus, it was expected that similarly short-lived retaliatory effects would occur with instances of abusive supervision. While employees subject to such behaviors may experience more negative moods, these negative moods not carry forward to influence retaliation on the next day.

Hypothesis 2a: Daily variations in supervisor-directed retaliation and daily fluctuations in perceptions of abusive supervision will be positively related.

Hypothesis 2b: There will be a positive relationship between abusive supervision and supervisor-directed retaliation when the occurrence of abusive supervision is more common.

Hypothesis 2c: Perceptions of abusive supervision will influence retaliation on the same day, but not on the next day.

Research Question 1: How does the intensity of the relationship between supervisor-directed retaliation and perceptions of abusive supervision vary, depending on the day of the week?

Organizational Citizenship Behaviors

Another potential response to abusive supervision is Organizational Citizenship Behavior (OCB), which is defined as “individual behavior that is discretionary, not directly or explicitly
recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (Organ, 1988, p.4). While OCBs may not be directly rewarded, they promote an enhanced social environment and psychological environment (Organ, 1997). These behaviors can be directed at particular individuals, such as helping a coworker complete their work, or at the organization in general, such as by improving organizational commitment, socialization, or morale of the other workers. OCBs are similar to prosocial organizational behaviors, which are intended to benefit the target of the actions (Brief & Motowidlo, 1986).

There has been some exploration of the relationship between abusive supervision and OCBs. Zellars and colleagues (2002) found a negative relationship overall, whereby employees subject to abusive supervision were less likely to participate in OCBs. However, this mostly occurred for employees who deemed OCBs to be an extra-role behavior. In contrast, employees who deemed OCBs to be an in-role behavior participated in OCBs, even when subject to abusive supervision. Thus, it appeared that the sense of obligation led to the employees participating in OCBs, even when they experienced abusive supervision. Additionally, employees participated in fewer OCBs when procedural justice was low, and employees perceiving OCBs as extra-role behavior were more likely to let procedural justice affect their OCBs than employees perceiving OCBs as in-role behavior (Zellars et al., 2002). Similarly, the abusive supervision and individual-directed OCBs were negatively related in a Chinese sample (Liu & Wang, 2013). However, this relationship was mediated by supervisor-subordinate guanxi, or the “connection between parties and an extended network of interpersonal relationships which involve the exchange of favors (Liu & Wang, 2013, p. 1473). Abusive supervision led to lower levels of s-s guanxi, which in turn led to higher levels of OCBs.
Recently, there has been an exploration of potential positive outcomes of abusive supervision. For instance, employees who perceive more abusive supervision may react with more supervisor-directed helping when they feel guilty about the interaction (Troster & Quaquebeke, 2018). If employees generally have a good relationship with their supervisor and then are subject to abusive supervision, they are more likely to feel guilty, and that guilt will lead to them engaging in more supervisor-directed helping behaviors. They are more likely to believe that they had made a mistake or done something wrong, which presumably caused their supervisor to be abusive in response. The abusive behavior stands out in situations where the employee has an otherwise good relationship with their supervisor. Thus, this is an area for within-employee exploration as each employee may have a different relationship with his or her supervisor. In these types of situations, the negative interaction stood out due to its infrequency, which prompts the involved parties to amend the relationship. A similar idea has been found in the clinical exploration of women who remain in abusive relationships, in which they place the blame on themselves instead of the abuser (Kaner, Bulik, & Sullivan, 1993) and thus attempt to repair the relationship. Further, research indicates that OCBs directed at specific individuals tend to have significant within-person variability (35%; Halbesleben & Wheeler, 2011), indicating that differential reactions may be expressed on different days.

In a similar manner, perceptions of abusive supervision might also lead to paranoid psychological states that are tied to safety behaviors, or behaviors that are done with the intent of reducing the risk of additional negative interactions (Chan & McAllister, 2014). A commonly preferred safety behavior is avoidance, but compliance and ingratiating may also be used if avoidance is not possible (Freeman, Garety, & Kuipers, 2001). Thus, even when subject to negative interactions, employees may not necessarily react in a negative manner. The current
study explored the relationship between abusive supervision and supervisor-directed OCBs.

Similar to anticipated trends regarding retaliation, it was anticipated that employees might not dwell on the events of the previous day. Rather, abusive behaviors may have the most influence upon OCBs occurring on the same day instead of OCBs occurring on the next day.

*Hypothesis 3a:* There will be a positive relationship between abusive supervision and supervisor-directed OCBs when the occurrence of abusive supervision is less common.

*Hypothesis 3b:* Perceptions of abusive supervision will influence supervisor-directed OCBs on the same day, but not the next day.

*Research Question 2:* How does the intensity of the relationship between supervisor-directed OCBs and perceptions of abusive supervision vary, depending on the day of the week?
CHAPTER 3
JUSTICE

The organizational justice perspective has been heavily used to explain the consequences that arise due to abusive supervision. Procedural justice is a construct that captures the perceptions of fairness of the formalized procedures in the organization (Thubaut & Walker, 1975), and any abuse employees experience may affect their perceptions of an organization’s fairness. For example, employees may perceive that the organization is not taking adequate measures to prevent abuse or unfair treatment. In this case, the responsibility lies with the organization for not taking preventative measures to have procedures in place that would prevent such abuse. Abusive supervision can also occur with distributive justice, which is the perception of fairness in regard to what employees believe they receive in comparison to others (Adams, 1965). In terms of distributive justice, victims of abusive supervision may perceive relative deprivation. This is the belief that they are getting less than they deserve. In this situation, victims could perceive that they are being treated differently and unfairly, compared to their coworkers. This differential treatment may include aspects such as a lack of deserved praise or respect, both of which are addressed by the commonly used abusive supervision scale (Tepper, 2000). Thus, this form of justice can be attributed to the organization or to a particular person, depending on who the employee deems responsible for the unequal distribution.

Finally, the most relevant and vastly studied form of organizational justice related to abusive supervision has been interactional justice. Bies and Moag (1986) describe this as an
individual’s perceptions of whether an organization treats them with respect, honesty, propriety, and sensitivity to their needs. This is especially important because most organizational norms do not involve hostility or incivility; rather, they center on polite interactions (Adams, 1965). When supervisors engage in abusive behaviors, the subordinate’s assessment of the degree to which this behavior violates social and organizational norms- that is, interpersonal injustice- should determine their response. Given that people generally want to believe that we live in a just world where everyone gets what they deserve (Lerner, 1980), this violation of justice perceptions will need to be corrected by the victim, which may prompt them to engage in a behavioral response.

Tepper (2000) made the claim that interactional justice is the mechanism that drives reactions to abusive supervision in what he described as the ‘justice-based model of responses’. He found that, when employees are subject to additional abusive behaviors, they are more likely to perceive interactional injustice, which in turn leads to the negative consequences that have been widely shown in research. Cropanzano, Byrne, Bobocel, and Rupp (2001) stress that individuals’ perceptions of justice can be a strong motivational force that influences their behaviors. Thus, violations of social workplace norms should be the driving force for retaliatory behaviors intended to make the abuser suffer for their norm violation (Skarlicki & Folger, 1997). Aryee and colleagues (2007) confirm Tepper’s (2000) claim by informing us that the cognitive interpretation of interactional injustice is what leads to frustration and resentment from being subject to abuse. Thus, those employees are motivated to restore the fairness that has been shattered, and this can lead to them react aggressively (Aquino, Tripp, & Bies, 2001). Retaliation can be a way of restoring the balance according to a social exchange perspective (Cropanzano & Mitchell, 2005). Denzler, Forster, and Liberman (2009), who found that subordinates who retaliate tend to perceive less injustice, corroborate this. However, if employees do not perceive
injustice, then they may not react in a negative manner. Thus, if the level of interactional injustice is low, then they may instead react with less retaliation and more OCBs.

While others (Burton & Hoobler, 2011) have also confirmed the justice-based model hypothesized by Tepper (2000), there have not been explorations of how reactions to injustice can change at a day-to-day level. Do norm violations from one day carry forward to retaliatory behaviors on other days, or do they result in same-day reactions and then a return to baseline of justice perceptions? Liang, Brown, Lian, Hanig, Ferris, and Keeping (2018) suggest that justice perceptions would return to baseline once retaliation has occurred. They explored how the relationship between abusive supervision and justice perceptions are moderated by subordinate retaliation. They found that employees subject to abusive supervision who did not retaliate had the highest levels of injustice perceptions, compared to those who did retaliate and those who were not subject to abuse. However, it would be interesting to consider what occurs in situations in which employees do not have the opportunity to respond immediately. How would their experiences influence future behaviors? Thus, the current study explored the daily influence of interactional justice upon the relationship between abusive supervision and deviance, with an aim to replicate what has been previously shown in cross-sectional research (Burton & Hoobler, 2011; Tepper, 2000). Specifically, supervisor-directed deviance should replicate what has been found in the past whereby abusive supervision leads to more interactional justice, and thus more retaliation.

Although Troster and Quaquebeke (2018) emphasized the impact of guilt upon effects of abusive supervision, there is an abundance of research that supports the linkage between abusive supervision and interactional injustice. Therefore, the current study took the perspective that previously researched effects involving justice and OCBs would be replicated. While some
employees may see an instance of abusive supervision as unfair, others may think they did something to deserve the abuse and not see its unfairness. This could be driven by employees’ dispositions. Thus, employees’ personality could lead to varying levels of fairness perceptions. Using a social exchange perspective, research has shown that employee perceptions of fair treatment lead to positive workplace outcomes. For instance, Masterson, Lewis, Goldman, and Taylor (2000) found a positive relationship between interactional justice and supervisor-directed Organizational Citizenship Behaviors (OCBs). The positive relationship between justice perceptions and positive workplace outcomes, paired with the idea that abusive supervision may not always have negative outcomes, led to the current study exploring the relationships between abusive supervision and both positive outcomes and negative outcomes, as well as the influence that interactional justice has on that relationship.

There is some introductory work indicating that daily levels of interactional justice influence higher levels of next-day OCBs through the depletion of resources (Johnson, Lanaj, & Barnes, 2014). However, this study was specifically interested in lagged relationships and thus did not assess relationships between variables on the same day. While they aimed to explore ego depletion and the length of effects related to it, they did not assess relationships among variables that might be relevant to changes in employees’ perceptions. Thus, if a specific event influences one’s perceptions of justice, then the reactions that derive from those changes could differ from what was found by Johnson and colleagues.

Hypothesis 4a: Daily fluctuations of perceptions of abuse will be positively associated with daily fluctuations in interactional injustice.

Hypothesis 4b: Higher levels of interactional injustice will be positively associated with higher levels of supervisor-directed retaliation.
Hypothesis 4c: Lower levels of interactional injustice will be positively associated with higher levels of supervisor-directed OCBs.

Hypothesis 4d: Perceptions of abuse will be indirectly associated with higher levels of supervisor-directed retaliation via interactional injustice.

Hypothesis 4e: Perceptions of abuse will be indirectly associated with higher levels of supervisor-directed organizational citizenship behaviors via interactional justice.

Hypothesis 4f: Levels of justice will influence engagement in retaliation and OCBs on the same day, but not the next day.
While situational factors (such as being subject to abusive supervision) may lead to aggressive responses, the current study utilized the popcorn model of aggression to predict these aggressive responses (Folger & Skarlicki, 1998). This model takes an interactionist perspective to argue that, while situational factors may be related to workplace aggression, they may not be sufficient to predict it without consideration of other variables. Individual differences also play a role in predicting workplace aggression, and it may be the interaction of situational factors and individual differences that lead to aggressive responses (Aquino, Galperin, & Bennett, 2004; Inness et al., 2005). The “popcorn” model denotes that workplace conditions are analogous to the temperature of oil. The hotter the oil becomes, the more likely employees are to engage in workplace violence, similar to the kernels being more likely to pop.

Regarding the adult personality, Kelly (1955) discusses the influence of individual differences on the way individuals evaluate other people or situations. This is especially important for employee reactions that depend on perceptions of supervisor behaviors. Because multiple employees can share the same supervisor, this presents a conundrum. The supervisor’s exact behavior can be interpreted by one of their subordinates as abusive and interpreted by another as not abusive. These interpretations can influence the judgments each makes about their supervisor (Rosenberg & Sedalk, 1972), which can further influence their behaviors. The stress that employees feel is based on these subjective experiences, which further highlights the
importance of exploring individual differences and their interaction with situational factors (Bowling & Jex, 2013).

Another theory highlights the potential connection between individual differences and situational factors. Lazarus’ (1966) transactional theory of stress notes that people appraise situations differentially based on their individual differences, and thus individual differences can be a mechanism to explore differences in justice perceptions and further behaviors, including retaliation and OCBs. Thus, an individual’s personality factors can lead to them experiencing justice perceptions that differ from the behaviors they are exposed to, which may lead to different behavioral responses once they form their justice perceptions. Kahn and Byosiere (1992) corroborate this and posit that individuals who are exposed to similar environmental conditions can exhibit vastly different psychological and behavioral reactions. This study aims to explore the individual differences, specifically employee attribution style and the Dark Tetrad, that are especially important in the relationship between abusive supervision and the actions that follow. The inclusion of everyday sadism to the Dark Tetrad is a relatively new addition (Buckles, Jones, & Paulhus, 2013) and thus warrants exploration.

Hostile Attribution Bias

Attribution theory centers on the idea of perceived causes for another person’s behavior (Kelley & Michela, 1980), which can influence the observer’s behaviors, affect, and expectations that occur as a result. Information about a person’s behavior and the circumstances surrounding it are used to infer its cause. This stems from the idea that people have a desire to understand important situations in their lives (Martinko, Harvey, & Dasborough, 2011), such as interactions
with their supervisors. It is possible for employees to have multiple attributions for the same behavior, which implies that these attributions should be explored together (Martinko, 2004). Burton et al. (2014) explored the three attributions employees could make for abusive supervision and found that external attributions negatively predicted interactional justice, whereas internal attributions positively predicted interactional justice and relationship attributions did not influence interactional justice. This demonstrates that employees could have a range of reactions based on the attributions that they form.

In addition to the attributions made for specific behaviors, employees can have attributions styles; these are stable, trait-like tendencies to make certain types of attributions that affect behaviors (Martinko, Harvey, & Douglas 2007). One style that has been explored in conjuncture with abusive supervision has been the hostile attribution bias (HAB), which refers to the tendency to make external attributions for negative outcomes and to attribute hostile intentions to others (Crick & Dodge, 1996). Those with high HAB are more likely to believe that their failures and problems are due to external factors, such as their coworkers or supervisors (Martinko et al., 2007). This bias implies that employees would be more likely to attribute hostile intentions to a supervisor’s behaviors, such as when they perceive a supervisor is being abusive (Brees, Mackey, Martinko, & Harvey, 2014). Regardless of the supervisor’s intentions, this can lead to the employee feeling like their supervisor (Martinko et al., 2007) has mistreated them. HAB has been previously shown to moderate the relationship between psychological contract breach and employee deviance behaviors, with the relationship being stronger for those with higher HAB compared to individuals with lower HAB (Chiu & Peng, 2008). An explanatory mechanism for this could be based on the justice perceptions whereby those who feel mistreated and wronged may choose to retaliate to save face and maintain their honor (Bies & Tripp, 1998).
Those high in HAB are more likely to attribute negative intentions to the perpetrator (Milich & Dodge, 1984) and thus be more likely to perceive a grave injustice. Thus, HAB acts as a boundary condition on how people react once they have been wronged. In a sample of hotel workers in China, HAB strengthened the negative relationship between abusive supervision and work engagement, as well as the relationship between abusive supervision and customer-oriented OCBs (Lyu, Zhu, Zhong, & Hu, 2016). HAB is a factor that plays a large role in the relationship between abusive behaviors and retaliatory actions because it strongly affects frustrating situations and the behavioral response that results from them (Hoobler & Brass, 2006). This is evident in findings in which employee-perceived injustice was strongly related to hostility, and hostility was positively related to workplace deviance (Judge et al., 2006). Hostile attributions can lead to negative workplace interactions, especially when employees are exposed to contract breaches or injustices. Further, employees who were exposed to incivility in the workplace and had higher levels of HAB were more likely to respond with interpersonal deviance (Wu, Zhang, Chiu, Kwan, & He, 2014). Following the work of Burton and colleagues (2014) and Martinko and colleagues (2011), the current study aimed to investigate the impact of hostile attribution style on the relationship between abusive supervision and justice, as well as the relationship between abusive supervision and retaliatory behaviors.

**Hypothesis 5a:** There will be a stronger relationship between abusive behaviors and perceptions of injustice for those who are higher in hostile attribution bias, compared to those who are lower in hostile attribution bias.

**Hypothesis 5b:** There will be a stronger relationship between abusive supervision and retaliation for those who are higher in hostile attribution bias, compared to those who are lower in hostile attribution bias.
Dark Tetrad

There are four commonly grouped aversive personality traits at a subclinical level that have received recent attention in research termed the Dark Tetrad: psychopathy, Machiavellianism, narcissism, and everyday sadism (Buckels et al., 2013; Paulhus, 2014). Individuals possessing these traits are not under clinical supervision, rather their ratings fall under a “normal” level or are at a subclinical level and these individuals function normally in everyday society. These personality factors have been shown to predict concrete laboratory behaviors and real-world outcomes, such as selecting which manipulation tactics to use, cheating, plagiarizing work, and choosing a mating strategy to pursue (Furnham, Richards, & Paulhus, 2013).

Narcissists are described as those with grandiose thoughts about themselves who tend to heavily self-promote and continually crave attention (Campbell & Miller, 2011). Machiavellians tend to be master manipulators who deceive and exploit others to achieve their own goals (Jones & Paulhus, 2011). Sadists, at an everyday level, tend to enjoy hurting others either verbally or physically (Buckels et al., 2013). Workplace bullies tend to be a classic example of everyday sadists (Buckels, Trapnell, & Paulhus, 2014), which makes this personality factor especially interesting to the abusive supervision area as it has not been previously explored within supervisor personality factors. Finally, psychopathy has been described as the most malevolent trait (Paulhus, 2014, Rauthmann, 2012); psychopaths are individuals who seek to cause serious harm to others in an impulsive and callously thrill-seeking manner (Lebreton, Binning, & Adorno, 2006). While these traits share some commonalities, the most important being
callousness or a deficit in empathy (Paulhus, 2014), there are clear distinctions between the factors that need to be considered. While these factors have been explored in situations where the abuser or perpetrator possess these factors (Burton & Hoobler, 2011), not much research has looked at situations in which the victim possesses these traits and how that influences their retaliatory behaviors.

Given the overlap of these constructs, recommendations have arisen to test for all four variables instead of just one as some relationships may be attributable to the other variables instead of the one being tested for (O’Boyle, Forsyth, Banks, & McDaniel, 2015; Paulhus & Williams, 2002). Furnham, Richards, and Paulhus (2013) warned against the phenomenon of construct creep where writers can inevitably expand a construct’s coverage by focusing on a single personality factor instead of all four. Paulhus and Williams (2002), who coined the term “Dark Triad” and first put these personality factors together, suggest that “individuals with these traits share a tendency to be callous, selfish, and malevolent in their interpersonal dealings” (p.100). While all factors imply a lack of empathy for others, this callousness tends to display itself differently in individuals who are higher in all four of these personality factors. Paulhus (2014) delineates that narcissists tend to lack empathy for those they exploit when promoting themselves, Machiavellians tend to lack empathy for those they manipulate, psychopaths tend to take whatever they want with no regard if others get hurt, and everyday sadists seek out opportunities to watch or hurt others.

Given this focus on malevolence in interpersonal dealings, there is reason to think that these traits would be heavily influential in the relationship between abusive supervision and retaliation, specifically after justice perceptions have been formed. For example, Machiavellianism has been shown to increase the likelihood of retaliatory or revenge-driven
behaviors (Nathanson, 2008). However, Machiavellians also tend to be concerned with maintaining positive relationships in organizations that are beneficial to themselves and thus might be less likely to engage in counterproductive work behaviors (CWBs; Kessler, Bandelli, Spector, Borman, Nelson, & Penney, 2010). Kish-Gephart and colleagues (2010) recently found that there was a positive relationship between Machiavellianism and unethical behaviors, suggesting that those high in Machiavellianism would be more likely to engage in retaliatory behaviors because they are not as concerned with acting morally. Further, those who are high in Machiavellianism tend to view situations from a self-interested perspective (Sims, 2010), and being subject to abuse would not be in someone’s best interest (Sumanth, Mayer, & Kay, 2011). If they perceive that they have been wronged in a situation, Machiavellians could see retaliation as a way of enacting revenge on the abuser.

Hypothesis 6a: Machiavellianism will moderate the relationship between interactional justice and retaliation whereby those high in Machiavellianism will have a stronger relationship between injustice perceptions and supervisor-directed retaliation, compared to those lower in Machiavellianism.

Narcissists are closely related to Machiavellians in their attitudes and high levels of negative emotions such as anger (Bushman & Baumeister, 1998). While narcissists generally have interpersonal issues because they may refuse to compromise and block criticism (Resick, Whitman, Weingarden, & Hiller, 2009), they also may display violent behaviors especially when their egos are threatened (Miller, Widiger, & Campbell, 2010). Bushman and colleagues (2009) explain how the threatened-egotism hypothesis maintains that narcissists generally dismiss negative feedback. However, if this negative feedback is given in a public environment, they can respond aggressively. Those high in narcissism tend to respond with anger and with more
punishment compared to those lower in narcissism, especially when the behaviors displayed towards them were unfair (Bockler, Sharifi, Kanske, Dziobek, & Singer, 2017). If narcissists feel they have been wronged, they will likely want to enact revenge on the specific person who wronged them, leading to the hypothesis that they would have the stronger relationship.

*Hypothesis 6b: Narcissism will moderate the relationship between interactional justice and retaliation whereby those high in narcissism will have a stronger relationship between injustice perceptions and supervisor-directed retaliation, compared to those lower in narcissism.*

Psychopathy is especially marked by the lack of regard for adherence to societal norms (O’Boyle et al., 2015); this tendency combined with an increased insensitivity towards others (LeBreton et al., 2006) could lead to them being more likely to engage in retaliatory behaviors than those who are lower in psychopathy. This is especially evident from the increased association of psychopathy with violent and aggressive CWBs (O’Boyle et al., 2015). However, victims of abuse who are high in psychopathy may not retaliate simply because they are wronged. Woodworth and Porter (2002) explored the relationship between psychopathy scores and the nature of crimes and found that non-psychopaths tended to display violent behaviors for reactive reasons while psychopaths displayed violent behaviors for instrumental reasons. However, Cornell et al (1996) found that psychopaths are more likely to behave both instrumentally aggressively and reactively aggressively compared to non-psychopaths, suggesting that those high in psychopathy would be more likely to display retaliatory behaviors.

*Hypothesis 6c: Psychopathy will moderate the relationship between interactional justice and retaliation whereby those high in psychopathy will have a stronger relationship between injustice perceptions and supervisor-directed retaliation, compared to those lower in psychopathy.*
Everyday sadism would be closely related to any sort of violent retaliatory behaviors given the high correlation that Buckels and colleagues (2013) found between sadism and aggressive behaviors, both in terms of aggressive strength and reactivity. Sadists consistently gave louder noise blasts to their opponents, even when the opponent did not retaliate with any noise blasts themselves. Further, sadism was the single factor that correlated with actually working to aggress against others, whereas the other dark tetrad factors did not. Those high in sadism opted to complete a boring task - counting letter in a text - in order to get the opportunity to blast their opponent with a loud noise blast, while those higher in other Dark Triad traits, except sadism, did not.

Research Question 3: What role does everyday sadism play in moderating the relationship between interactional justice and retaliation?

Research Question 4: What role does each factor of the Dark Tetrad play in moderating the relationship between interactional justice and OCBs?

Research Question 5: What role does each factor of the Dark Tetrad play in moderating the relationship between abusive supervision and OCBs?
Participants and Procedure

Participants were recruited through Amazon’s Mechanical Turk (MTurk) for the pre-screen survey. MTurk is an online crowdsourcing platform that social science researchers commonly use (Behrend, Sharek, Meade, & Wiebe, 2011). This allowed me to obtain a diverse group of participants (Henrich, Heine, & Norenzayan, 2010) compared to an undergraduate sample or a typical internet sample that collects questionnaire data from multiple websites (Buhrmester, Kwang, & Gosling, 2011), especially because my population of interest was full-time employees. Further, MTurk alphas tend to be similar to participants obtained in a traditional sample; test-retest reliability also tends to be high (Buhrmester et al., 2011). While MTurk participants generally show better attention compared to undergraduate participants (Chandler & Shapiro, 2016), I restricted participation to those with a 95% approval rate as per Buhrmester, Talaifar, and Gosling’s (2018) latest recommendations. Further, multiple replication experiments with results from MTurk are similar to those obtained from national samples (Coppock, 2018), leading to confidence in the validity of MTurk participants. I had also planned to recruit Mechanical Turk Masters as they tend to fail less attention check questions, provide higher reliability scores, and are more likely to remain attentive during the task and pass manipulation check items (Peer, Vosgerau, & Acquisti, 2014). However, recent updates through MTurk’s services have shown that Amazon has designated very few Masters qualifications since 2016,
thus leaving a very small pool of workers with this designation. To ensure I was able to collect my whole sample, I set my qualifications to only allow workers who were in the United States, had a 95% approval rate, and had completed over 5,000 hits successfully. Of note, MTurk Masters are only required to complete 1,000 successful hits.

Only participants who were full-time workers in the U.S. were allowed to participate to ensure that all participants utilized similar workplace norms. Participants initially completed a pre-screen that assessed employment and demographics. If they noted that they are full-time employees who only had one supervisor, they were invited to participate in the main study. Boynton and colleagues (2014), who conducted a daily diary study on MTurk for 14 days, utilized a similar method. The average number of daily measures completed in that study was 8.5 out of 14, indicating a good response rate.

I aimed to get a final sample that comprised of 100 full-time employees, as recommended by Maas and Hox (2004). I only included participants who completed personality measures and at least 5 days of daily measures, following the conventions of previous studies that used at least 5 days per person for predictors at the day level (Ohly et al., 2010). My intended sample of 100 would be adequate, as the study design has between-participant variables as level 2 predictors and prior multilevel research recommends a sample size of at least 30 for the level 2 sample, with larger samples being recommended when detecting smaller effect sizes (Scherbaum & Ferreter, 2009). I aimed for a sample of 100, which is clearly above the recommended 30, to increase statistical power in anticipation of accounting for potential covariates with the individual difference variables (Reise & Duan, 2003). Further, Burton and Hoobler (2011) explored a cross-sectional mediation model in which interactional justice mediated the relationship between abusive supervision and interpersonal aggression. They found that the
relationship between abusive supervision and interactional justice was close to large (-0.57), the relationship between interactional justice and interpersonal aggression was close to medium (-0.34), and the direct effect between abusive supervision and interpersonal aggression was 0.15. Thus, if I expected to replicate this model by obtaining a large effect and a medium effect, I would need approximately 84 participants, accounting for 80% power (Fritz & MacKinnon, 2007). To attain this sample, I collected small batches and assessed them individually across the 10 days to determine the number of valid participants (i.e., who are full-time workers, have at least 5 out of the 10 daily surveys, did not miss more than 3 attention checks, and have only one supervisor). This continued until I reached my complete sample. To ensure that the workers did not have any days off during the daily surveys, I did not collect any data close to Thanksgiving, Christmas, or New Year’s holidays.

I had 937 participants complete the prescreen survey assessing demographics and employment. I removed 69 participants for not providing a valid MTurk ID, and another 63 for providing duplicate MTurk IDs, leaving me with a final sample of 805 valid participants. Of the 805 valid participants, 371 participants noted that they were full-time workers and answered to only 1 supervisor. Once selected via the prescreen survey, those 371 participants were provided the opportunity to participate in a 2-week long study that required them to complete an initial battery of personality items followed up with two weeks of daily surveys. A timeframe of two weeks was chosen as studies that are longer than this time frame can have lower-quality responses (Stone, Kessler, & Haythornwaite, 1991). This was also the time frame that McCormick and colleagues (2018) found to have the most within-person variability, followed closely by studies that lasted over 2 weeks. While abusive supervision tends to be a low-base rate phenomenon, Vogel and Mitchell (2017) were able to find sufficient variance at the within-
individual level (35.2% for abusive supervision) leading me to also expect that I would find similar variance.

From those participants who were provided access to the study, 135 completed the personality measures and passed at least 4 out of the 6 attention check items. Participants were compensated $1 for completion. Participants were also instructed that they would receive a short survey every day to complete before midnight of that day. To ensure participants in different time zones were not penalized for completion time, I set the deadline at midnight Pacific Standard Time. I used signal contingent sampling, or sampling at “semi-random” times throughout the day, to allow more variability in the within-person variance that could be expected (McCormick et al., 2018). Employees did not receive surveys before 2pm, as I wanted to ensure that they had spent at least some time at work before responding to the survey. The surveys were sent at different times between 2pm and 5pm every workday.

Participants were allowed to start the daily surveys on different days of the week depending on when they had completed the personality measures. However, I ensured that at least a single day had passed between the personality measures and when they started the daily surveys. Participants were compensated $0.40 for each survey completed that was assigned to them and bonused at the end of the two-week window. MTurk ID and participant emails were combined with the data to ensure that records were kept of which participants completed the surveys, and so that data could be linked upon completion. The data was kept completely confidential and only accessed and stored on password-protected computers. Once all the data were collected and participant IDs were assigned, MTurk IDs, emails, and any identifying information were deleted from the dataset.
Overall, 135 participants started the daily surveys, but only 102 provided adequate data. That is, they did not fail the daily attention check item and they responded to at least 5 out of the 10 daily surveys before midnight. Sixty percent of the sample identified as female and a majority identified as White/Caucasian (70% White). As expected, they were older than a general undergraduate sample ($M = 40.83, SD = 9.58$) and were all full-time workers who had a single supervisor and worked an average of 42.49 hours a week.

Measures

Level 1 Variables

Abusive Supervision

Participants completed daily measures of abusive supervision with the 5-item shortened scale developed by Mitchell and Ambrose (2007) from Tepper’s (2000) original 15-item scale. It was amended for the purpose of daily use. They were asked to indicate if their supervisor partook in any of the behaviors that particular day such as “Ridiculed me”. If they indicate ‘yes’, then they were also asked the number of times that behavior occurred. Past daily diary studies that looked at workplace aggression (Zhou, Che, Yan & Meier, 2014) mentioned that simply asking if an action took place or not may be inadequate measure, and this potential inadequacy might be rectified by asking about frequency. Thus, I asked for both measures.

Interactional Justice

Interactional justice was measured by four items from Colquitt’s (2001) scale that were specific to interpersonal aspects of interactional justice. Sample items include “My supervisor
treats me in a polite manner”, which was rated on a scale of 1 (strongly disagree) to 5 (strongly agree). In past research, this scale showed high internal consistency ($\alpha = 0.93$; Burton & Hoobler, 2011). This scale has been closely related to abusive supervision in past research (Burton & Hoobler, 2011). Because I was using it as a measure of daily interactional justice, each item was amended to specify a daily measure. For example, the item read “Today, my supervisor treated me in a polite manner”.

**Supervisor-directed retaliation**

Interpersonal deviance was assessed with the scale that Mitchell and Ambrose (2007) adapted from Bennett and Robinson (2000) and Aquino, Lewis, and Bradfield (1999). With each daily survey, they were asked if they engaged in any retaliatory behaviors directed towards their supervisor such as “Made fun of my supervisor at work”. To ascertain daily retaliatory behaviors, this measure sums all items indicating ‘yes’. Similar to the measure of daily abusive supervision, I also assessed the frequency of each action if they indicated a “yes”. Similar to Vogel and Mitchell (2017), who removed two items in their daily diary study, I also removed those two items as they were not conducive to a daily diary methodology.

**Organizational Citizenship Behaviors (OCBs)**

OCBs were assessed with the scale developed by William and Anderson (1991) that assesses in-role behavior, OCB-Organizational behaviors, and OCB-Interpersonal behaviors. To ensure that the daily surveys were not too long, I only assessed OCB-I as that is the construct of interest. It was amended so that it could be assessed with daily surveys and was relevant to the supervisor. I asked participants if they had partaken in each behavior that day, and if they had, they were asked the frequency of each behavior. A sample item would be “Helped my supervisor when he/she had a heavy work load”.
Attention Check Items

To ensure participants were paying attention the items, I included an attention check item in each daily survey. Responses from participant who missed three or more attention checks were excluded from the data for analyses.

Level 2 Variables

Abusive Supervision

Participants completed a baseline measure of abusive supervision with the 5-item shortened scale ($\alpha = .92$) developed by Mitchell and Ambrose (2007) from Tepper’s (2000) original 15-item scale. They were asked to indicate how frequently their supervisor displayed any of the behaviors in the past 6 months. I had them rate their agreement with each statement on a scale of 0 (strongly disagree) to 4 (strongly agree).

Interactional Justice

Participants completed a baseline measure of interactional justice with four items from Colquitt’s (2001; $\alpha = .94$) scale that were specific to interpersonal aspects of interactional justice. Sample items include “My supervisor treats me in a polite manner”, which was rated on a scale of 1 (strongly disagree) to 5 (strongly agree).

Dark Tetrad

Psychopathy, Machiavellianism, and narcissism were assessed with the Short Dark Triad (Jones & Paulhus, 2014) scale. This was assessed at a single time point before the daily surveys began. The scale consists of 27 items, 9 for each subscale, and asks participants to indicate the extent to which they agree with each statement on a scale of 1 (strongly disagree) to 5 (strongly agree). Items included are “It's not wise to tell your secrets” (Machiavellianism; $\alpha = .85$), “People see me as a natural leader” (Narcissism; $\alpha = .80$), and “I like to get revenge on
authorities” (Psychopathy; α = .83). Everyday sadism was assessed with 10 items from the Short Sadistic Impulse Scale (O’Meara, Davies, & Hammond, 2011; α = .90), which includes items such as “I enjoy seeing people hurt”. Originally, the response options were a dichotomous choice of “like me” or “unlike me”. However, to keep consistency with the other dark personality options, responses ranged from 1 (strongly disagree) to 5 (strongly agree), which is consistent with past research (Buckels, Trapnell, & Paulhus, 2014).

**Hostile Attribution Bias**

Hostile attribution bias was measured with Bal and O’Brien’s (2010; α = .84) 7-item scale to explore the extent to which workers are more likely to attribute hostile intentions to others (Crick & Dodge, 1996). Response options ranged from 1 (disagree very much) to 6 (agree very much) for items such as “When my things are missing, they have probably been stolen”.

**Life Satisfaction**

Life satisfaction was measured with the 5-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985; α = .94). This scale was included to hide the true nature of which personality variables were of interest. Participants were asked to rate their agreement with each statement from 1 (strongly disagree) to 5 (strongly agree), with a sample item being “I am satisfied with my life”.

**Attention Check Items**

I included six attention check items (e.g. used in Barber, Barnes, & Carlson, 2013) to account for careless responding. They followed the respective scales of each individual difference measure where they were embedded. For example, an item within the dark tetrad scales read “please select ‘agree’ to this item”. The items were sporadically placed in each scale.
Any illogical responses were scored as missed. Responses from participant who missed two or more attention checks were excluded from the data for analyses.

**Demographics**

Participants completed demographic information including age, ethnicity, gender, and employment status.
CHAPTER 6

RESULTS

Results were analyzed in R using the lme4 package (Bates, Maechler, Bolker, & Walker, 2015). The assumptions of normality and homogeneity of variances were checked and found to be met. To be included in the final sample, participants should not have failed more than two attention check items that identify insufficient effort responding (Huang, Liu, & Bowling, 2015) during the initial survey with personality measures. However, they were not excluded for missing scale items, nor was missing data imputed (Newman, 2014). Rather, I used all available data. I sent out 1,304 daily surveys, of which 1,039 were completed, resulting in an 80% response rate across time and participants. Some cases were excluded for being reported after midnight, which left a final sample of 932 cases, or a 71% valid response rate. Means, standard deviations, and correlations among the variables included in this study are reported in Table 1.

Preliminary Analyses

The hypotheses were tested using a multi-level model in which daily measures were nested within participants. This analytic approach allowed me to account for day-to-day fluctuations. I explored the Intraclass Correlation Coefficient (ICC), which represents within-group homogeneity, for each outcome measure to see whether within-person clustering was meaningful and if Hierarchical Linear Modeling (HLM) would be the best option for analyses. The ICC is an index of how similar the cases within the cluster (i.e., the daily responses from each individual) are to each other, and how distinct they are from cases in other clusters or
Table 1
Mean, Standard Deviations, and Correlations for all Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>1. Abusea</td>
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<td>-0.08</td>
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<tr>
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<td>4.18 (0.85)</td>
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<td>0.21*</td>
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<td>0.03</td>
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<td>0.07</td>
<td>-0.03</td>
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<tr>
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<td>0.13*</td>
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Table 1 continued

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<td>12. Everyday Sadism&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>.61*</td>
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<tr>
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<tr>
<td>15. Interactional Justice&lt;sup&gt;c&lt;/sup&gt;</td>
<td>4.05 (0.91)</td>
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<td>17. Age&lt;sup&gt;c&lt;/sup&gt;</td>
<td>40.54 (9.60)</td>
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<tr>
<td>18. Gender&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1.60 (0.49)</td>
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</tbody>
</table>

Note. * denotes p < .05.

<sup>a</sup> denotes daily variables (N = 932)
<sup>b</sup> denotes daily variable (N = 666)
<sup>c</sup> denotes person level variables (N = 102)

Within person M and SD: abuse, retaliation, and OCBs had daily measurements on a scale of 0 or 1 for each item, and justice was measured on a scale from 1 to 5. The composite daily scores were then averaged across all 10 days.

Between person M and SD: all personality variables were measured on a scale of 1 to 5, except abusive supervision which was measured on a scale of 0 to 4.

Within-person correlations are shown above the diagonal, and between person correlations are shown below the diagonal.
individuals. This is important to consider as observations within a cluster (or individual) are generally more similar than those between individuals. Thus, the use of statistical methods that assume independence of observations will lead to incorrect results. I also evaluated the meaningfulness of clusters with the design effect (DEFF), with which I hoped to see results that echoed those of the ICC. The DEFF gives an idea of how much the squared standard error increases due to clustering. A DEFF above 2 indicates clustering matters (Lai & Kowk, 2015).

All variables of interest showed an adequate importance of clustering. That is, abusive supervision (ICC = 0.334, DEFF = 3.71), supervisor-directed retaliation (ICC = 0.293, DEFF = 3.38), supervisor-directed OCBs (ICC = 0.522, DEFF = 5.25), and justice perceptions (ICC = 0.587, DEFF = 5.78) showed importance of clustering, as the DEFF was above 2 for each.

Further, as the nature of my data is longitudinal and within-subject, and I am interested in predictors at level 2, I cannot ignore clustering (Nezlek, 2008). Thus, all future models incorporate clustering. Multilevel modeling was used to account for the residuals being dependent within the individuals.

I also tested for adequate variation across employees. Perceptions of abuse varied significantly across employees ($t_{00} = 0.08$, $SD = 0.28$, 95% CI [0.24, 0.33]), and this value was significantly different from zero ($\beta_{00} = 0.11$, $SE = 0.31$, $p < .001$, 95% CI [0.04, 0.17]; Table 2). The average acts of supervisor-directed retaliation across employees varied significantly ($t_{00} = 0.13$, $SD = 0.36$, 95% CI [0.30, 0.43]), and this value was significantly different from zero ($\beta_{00} = 0.19$, $SE = 0.04$, $p < .001$, 95% CI [0.11, 0.27]; Table 3). The average number of times engaging in supervisor-directed OCBs varied significantly ($t_{00} = 1.97$, $SD = 1.40$, 95% CI [1.20, 1.63]) and significantly differed from zero ($\beta_{00} = 1.92$, $SE = 0.15$, $p < .001$, 95% CI [1.63, 2.21], Table 4). I examined if employee reports of justice perceptions varied on a daily basis and found
<table>
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<tr>
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<th>Model 2</th>
<th>Model 3</th>
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<td>t</td>
<td>Estimate</td>
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<td>SE</td>
<td>t</td>
<td>Estimate</td>
</tr>
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Note. * denotes p < .05
### Table 3
Multilevel Estimates for Models Predicting Supervisor-Directed Retaliation

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<th>Model 4</th>
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<td>Estimate</td>
<td>SE</td>
<td>Estimate</td>
</tr>
<tr>
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<td>0.15</td>
<td>0.04</td>
<td>0.18</td>
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<td>7.36*</td>
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</tr>
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<td>0.05</td>
<td></td>
<td></td>
<td>-0.22</td>
</tr>
<tr>
<td>Interactional Justice (t-1)</td>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>0.31 (0.56)</td>
<td>0.35 (0.59)</td>
<td>0.31 (0.56)</td>
<td>0.35 (0.59)</td>
</tr>
<tr>
<td>Level 2 variance (SD)</td>
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<td>0.10 (0.31)</td>
<td>0.12 (0.34)</td>
<td>0.10 (0.31)</td>
<td>0.11 (0.33)</td>
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<table>
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<tr>
<th>Variable</th>
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<td>Estimate</td>
<td>SE</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.15</td>
<td>0.03</td>
<td>1.01</td>
<td>0.13</td>
</tr>
<tr>
<td>Abuse</td>
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<td>0.05</td>
<td>4.32*</td>
<td>10.62*</td>
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<td>0.08</td>
<td>-0.32</td>
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<td>0.04</td>
<td>1.13</td>
<td>0.49</td>
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<tr>
<td>Psychopathy</td>
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<td>0.05</td>
<td>-1.92</td>
<td>-0.17</td>
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(Continued on next page)
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<td>1.92</td>
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<td>Psychopathy x Abuse</td>
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<td>5.56*</td>
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<td>0.05</td>
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<td>Interactional Justice</td>
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<td>Narcissism x Interactional</td>
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<td>-2.50*</td>
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<tr>
<td>Justice</td>
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<tr>
<td>Psychopathy x Interactional</td>
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<td>0.04</td>
<td>0.93</td>
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<tr>
<td>Justice</td>
<td></td>
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</tr>
<tr>
<td>Sadism x Interactional Justice</td>
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<td>0.03</td>
<td>-4.02*</td>
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<tr>
<td>Level 1 variance (SD)</td>
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<td>0.31</td>
<td>0.30</td>
<td>0.30</td>
<td>0.31</td>
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<tr>
<td>Level 2 variance (SD)</td>
<td>0.08</td>
<td>0.09</td>
<td>0.08</td>
<td>0.08</td>
<td>0.10</td>
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Note. * denotes p < .05
### Table 4.

Multilevel Estimates for Models Predicting Supervisor-Directed OCBs

<table>
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<tr>
<th>Variable</th>
<th>Null Model</th>
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<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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<tr>
<td><strong>Intercept</strong></td>
<td>1.92</td>
<td>1.95</td>
<td>1.83</td>
<td>-0.31</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Abuse</strong></td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
<td>0.35</td>
<td>0.40</td>
</tr>
<tr>
<td><strong>Abuse (t-1)</strong></td>
<td>-0.35</td>
<td>-0.14</td>
<td>-0.14</td>
<td>0.53</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Interational Justice</strong></td>
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<tr>
<td><strong>Interactional Justice (t-1)</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Level 1 variance (SD)</strong></td>
<td>1.80 (1.34)</td>
<td>1.78 (1.34)</td>
<td>1.76 (1.32)</td>
<td>1.72 (1.31)</td>
<td>1.76 (1.33)</td>
</tr>
<tr>
<td><strong>Level 2 variance (SD)</strong></td>
<td>1.97 (1.41)</td>
<td>1.95 (1.40)</td>
<td>1.96 (1.40)</td>
<td>1.78 (1.33)</td>
<td>1.87 (1.37)</td>
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<table>
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<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
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<td>1.95</td>
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<td>0.37</td>
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</tr>
<tr>
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<td>7.06*</td>
<td>0.57</td>
<td>7.09*</td>
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<tr>
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<th>Level 1 variance (SD)</th>
<th>Level 2 variance (SD)</th>
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<tr>
<td>Psychopathy x Interactional Justice</td>
<td>-0.09 0.08 -1.12</td>
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<td>1.72 (1.31)</td>
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Note. * denotes p < .05
that the employees’ average justice perceptions vary significantly ($\hat{\beta}_{00} = 0.43$, SD = 0.66, 95% CI [0.57, 0.76]) and this value significantly differs from zero ($\beta_{00} = 4.17$, $SE = 0.07$, $p < .001$, 95% CI [4.04, 4.30], Table 5).

I also tested to the linear growth models for each variable to see if there was a relationship of time on each variable. Abuse ($\beta_{10} = -0.00; SE = 0.00, p = .577, 95% CI [-0.01, 0.01]$), retaliation ($\beta_{10} = -0.00; SE = 0.01, p = .658, 95% CI [-0.02, 0.01]$), and justice ($\beta_{10} = -0.01; SE = 0.01, p = .315, 95% CI [-0.02, 0.01]$) showed no significant relationship. However, as time progressed, employees reported engaging in significantly less OCBs throughout the study ($\beta_{10} = -0.10; SE = 0.02, p < .001, 95% CI [-0.13, -0.07]$).

In an exploratory manner, I also investigated the effect of time on response behaviors. For instance, were employees more likely to report more abusive supervisory behaviors on Mondays, or more retaliatory behaviors on Fridays? As there is no previous research in this domain, these analyses will be the first step in answering temporal questions about abusive supervision.

Hypothesis Tests

Hypothesis 1a states that employees will perceive less abusive supervision as the week progresses. This was assessed by creating a variable which indicated the day of the week starting with Monday (i.e., Monday = 1, Tuesday = 2, Wednesday = 3, etc.) and adding that variable as a level 1 predictor. I found that the linear change in abuse as the week progressed was not statistically significant ($\beta_{10} = 0.00; SE = 0.00, p = .912, 95% CI [-0.02, 0.02]; Table 2).
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<th></th>
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<td>SE</td>
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<td>Estimate</td>
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<td>0.04</td>
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<tr>
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<td>-0.08</td>
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<td>-0.17</td>
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<td>-3.14*</td>
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<td>0.12</td>
<td>0.05</td>
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<tr>
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<td>0.12</td>
<td>0.05</td>
<td>2.56*</td>
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<tr>
<td>Level 1 variance (SD)</td>
<td>0.30 (0.55)</td>
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<td>0.23 (0.48)</td>
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<td>0.33 (0.58)</td>
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<td>0.23 (0.48)</td>
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<td>Level 2 variance (SD)</td>
<td>0.43 (0.66)</td>
<td></td>
<td></td>
<td>0.30 (0.55)</td>
<td></td>
<td></td>
<td>0.38 (0.61)</td>
<td></td>
<td></td>
<td>0.28 (0.53)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note. * denotes p < .05
Supervisor-Directed Reactions Hypotheses

Second, I examined the models with supervisor-directed retaliation as an outcome. Hypothesis 2a, which predicts a positive relationship between supervisor-directed retaliation and perceptions of abusive supervision, was assessed by adding abusive supervision as a level 1 predictor. As perceptions of abuse increased, there was a significant increase in supervisor-directed retaliation ($\beta_{10} = 0.33, SE = 0.04, p < .001, 95\% CI [0.24, 0.42];$ Table 3), offering support for Hypothesis 2a. Hypothesis 2c posits that perceptions of abusive supervision will influence retaliation on the same day, but not the next. To assess this, I linked abuse on a single day to retaliation the next day and checked for a significant relationship. While I did find a positive relationship on the same day, there was no significant relationship between perceptions of abuse and supervisor-directed retaliation the next day ($\beta_{10} = -0.01, SE = 0.05, p = .806, 95\% CI [-0.12, 0.10];$ Table 3), thus offering support for Hypothesis 2c.

I also explored the reverse relationships of retaliation predicting abuse on the same day and the following day. As expected, there was a significant positive relationship between retaliation and abuse whereby engaging in retaliation significantly predicted more reports of abusive supervision on the same day ($\beta_{10} = 0.16, SE = 0.02, p < .001, 95\% CI [0.12, 0.21])$. However, unlike abuse predicting next day retaliation, the reverse relationship held. That is, employee retaliation predicted next-day reports of abuse ($\beta_{10} = 0.16, SE = 0.03, p < .001, 95\% CI [0.10, 0.22];$ Table 2).

Third, I examined the models with supervisor-directed OCBs as the outcome. Hypothesis 3b posits that perceptions of abusive supervision will influence OCBs on the same day, but not the next. To assess this, I linked abuse on a single day to OCBs the next day and checked for a significant relationship. There was a negative relationship between abusive supervision and
engaging in OCBs on the same day ($\beta_{10} = -0.35, SE = 0.11, p = .002, 95\% CI [-0.58, -0.13]$) whereby employees who reported that their supervisors engaged in abusive acts reported engaging in fewer OCBs that day. This relationship did not hold for the next day, as abuse from the previous day did not predict employee engagement in OCBs on the next day ($\beta_{10} = -0.14, SE = 0.12, p = .276, 95\% CI [-0.38, 0.11]$; Table 4). This offered support for hypothesis 3b. I also explored the reverse relationships of engaging in OCBs predicting abuse on the same day, as well as the following day. As expected, there was a significant negative relationship between OCBs and abuse whereby engaging in OCBs significantly predicted fewer reports of abusive supervision on the same day ($\beta_{10} = -0.03, SE = 0.01, p = .002, 95\% CI [-0.05, -0.01]$). However, this relationship did not hold for the following day. That is, employee engagement in OCBs did not predict abusive supervision on the following day ($\beta_{10} = -0.01, SE = 0.01, p = .365; 95\% CI [-0.03, 0.01]$; Table 2).

Hypothesis 2b and hypothesis 3a were assessed together as I expected that the frequency of abuse over the two-week span would dictate how many retaliatory responses and OCB responses employees would engage in. That is, if they were subject to more abusive behaviors from their supervisor, employees would be more likely to engage in retaliation, but if abuse was less frequent, they would be more likely to engage in OCBs. I found partial support for this when exploring these respective paths using a multilevel structural equation modeling (SEM) analysis, in which retaliation and OCBs were the outcome variables and abuse was the predictor variable. I also checked whether retaliation and OCBs were correlated. There was a positive relationship between abuse and retaliation, whereby employees subject to more abuse were more likely to engage in retaliation ($b = 0.51, SE = 0.16, p = .002$). While non-significant, the relationship
between OCBs and abuse was negative (b = -0.32, SE = 0.69, p = .650). This offered support for hypothesis 2b but not for hypothesis 3a.

**Justice Hypotheses Testing**

Finally, I examined justice perceptions as an outcome. Hypothesis 4a, which assesses the relationship between perceptions of abuse and interactional justice, was assessed by adding abusive supervision as a level 1 predictor. There was a significant negative relationship between reporting abuse and perceptions of justice on the same day ($\beta_{10} = -0.71, SE = 0.04, p < .001, 95\% CI [-0.79, -0.63];$ Table 5) whereby employees who claimed more abuse reported less interactional justice. I also explored if this relationship held for the next day and it was not significant, whereby employees who reported abuse did not report less justice the following day ($\beta_{10} = -0.08, SE = 0.05, p = .166, 95\% CI [-0.18, 0.03]$). Further, I explored the inverse relationship to determine if justice perceptions influenced the probability that employees reported that their supervisors abused them. There was a negative relationship between justice and abuse whereby higher levels of justice perceptions led to employees reporting less abuse that day ($\beta_{10} = -0.34, SE = 0.02, p < .001, 95\% CI [-0.38, -0.30]$). Additionally, this relationship also held for the following day whereby employees who reported higher levels of justice also reported less abusive supervision the following day ($\beta_{10} = -0.13, SE = 0.02, p < .001, 95\% CI [-0.18, -0.08];$ Table 2).

Hypotheses 4b and 4c referred to employees’ rating of interactional justice as a predictor and to retaliation and OCBs as outcome variables. Again, I used multilevel SEM to account for the relationships within each path of interest. Hypothesis 4b posits that, if employees’ perception of justice is high, then they will engage in fewer retaliatory acts. This was supported by a negative relationship between justice and retaliation (b = -0.20, SE = 0.05, p < .001). In contrast,
hypothesis 4c posits that, if employees’ perception of justice is high, then they will engage in more OCBs. This was supported by a positive relationship between justice and OCBs (b = 0.67, SE = 0.22, p = .002). Thus, the data offered support for both hypothesis 4b and hypothesis 4c.

Hypotheses 4d and 4e were assessed with lower-level mediation model analyses, as all the variables of interest were at level 1. To test this mediation, I tested the indirect effect using bootstrapping with multilevel SEM in the lavaan package (Rosseel, 2012). This is a more valid and powerful method for testing intervening variable effects (MacKinnon, Fairchild, & Fritz, 2007) The predictor was abusive supervision, and interactional justice operated as a statistical mediator. When assessing the relationship between abusive supervision and supervisor-directed retaliation, abuse was found to negatively predict justice (b = -1.95, z = -8.22, p < .001) and justice negatively predicted retaliation (b = -0.20, z = -4.00, p < .001). The relationship between abusive supervision and supervisor-directed retaliation was fully mediated by interactional justice (b = 0.39, z = 3.59, p < .001). When assessing the relationship between abusive supervision and supervisor-directed OCBs, abuse was found to negatively predict justice (b = -1.95, z = -8.22, p < .001) and justice positively predicted OCBs (b = 0.67, z = 3.09, p = .002). The relationship between abuse and OCBs was fully mediated by interactional justice (b = -1.30, z = -2.89, p = .004).

Hypothesis 4f posits that interactional justice will influence retaliation and OCBs on the same day, but not the next. There was a negative relationship between justice perceptions and same-day retaliation whereby those who perceived less justice were more likely to retaliate ($\beta_{10} = -0.22, SE = 0.03, p < .001, 95\% CI [-0.28, -0.16]$), but this relationship did not hold for retaliation on the following day ($\beta_{10} = -0.06, SE = 0.04, p = .104, 95\% CI [-0.13, 0.01]$; Table 3). I also assessed the relationship between justice perceptions and supervisor-directed OCBs.
There was a positive relationship between same-day reactions whereby employees who perceived more justice engaged in more supervisor-directed OCBs on that day ($\beta_{10} = 0.53$, $SE = 0.08$, $p < .001$, 95% CI [0.38, 0.69]). While the effect size was not as strong, this relationship also held for supervisor-directed OCBs on the following day ($\beta_{10} = 0.20$, $SE = 0.09$, $p = .030$, 95% CI [0.02, 0.37]; Table 4).

**Hostile Attribution Bias (HAB) Hypotheses**

Hypothesis 5a and hypothesis 5b state that Hostile Attribution Bias (HAB) will moderate the respective relationships between abusive supervision and justice, as well as abusive supervision and retaliation. This was assessed by exploring the effect of HAB on the level 1 slope between abusive supervision and interactional justice, as well as abusive supervision and retaliation. In both analyses, abusive supervision was added as a level 1 predictor, HAB was added as the level 2 predictor, and interactional injustice and retaliation were the outcome variables. HAB was grand-mean centered in both instances to assess the relationship at average levels of HAB. This ensures that the slope was based on deviations from the grand mean and that the intercept is based on the expected outcome for an average participant from the sample (Nezlek, 2012).

When assessing the main effects of abuse and HAB to predict justice perceptions, those who reported more abuse had lower justice perceptions ($\beta_{10} = -0.75$, $SE = 0.04$, $p < .001$, 95% CI [-0.84, -0.66]), and those who had higher levels of HAB reported lower justice perceptions ($\beta_{01} = -0.17$, $SE = 0.06$, $p = .002$, 95% CI [-0.29, -0.07]). There was also a significant interaction between the two ($\beta_{11} = 0.12$, $SE = 0.05$, $p = .011$, 95% CI [0.03, 0.21], Figure 2). When exploring the simple slopes, those who had lower HAB ($b = -0.87$, $SE = 0.07$, $p < .001$) had a steeper slope compared to those who had higher HAB ($b = -0.63$, $SE = 0.06$, $p < .001$); but
both still showed significant decrease in justice perceptions as abuse increased. Thus, the data supported hypothesis 5a. When further exploring the interaction, at higher levels of abuse, there was no difference in justice perceptions among those higher or lower in HAB. However, at lower levels of abuse, those who have lower HAB are more likely to perceive more justice, compared to those who have higher levels of HAB.

Figure 2. The interaction between Abuse and HAB in predicting perceptions of interactional justice

When assessing the main effects of abuse and HAB on retaliation, abuse showed a positive relationship with retaliation ($\beta_{10} = 0.22, SE = 0.05, p < .001, 95\% CI [0.12, 0.31]$), whereas there was no significant relationship between HAB and retaliation ($\beta_{01} = 0.05, SE = 0.03, p = .130, 95\% CI [-0.01, 0.12]$). However, I did find a significant interaction between abuse and HAB predicting retaliation ($\beta_{11} = 0.24, SE = 0.05, p < .001, 95\% CI [0.14, 0.33], Figure 3$). When exploring the simple slopes, those who had higher HAB ($b = 0.46, SE = 0.08, p < .001$)
had a steeper slope which showed a significant increase in retaliation as levels of abuse increased, compared to those who had lower HAB (b = -0.02, SE = 0.05, p =0.696) where there were no significant differences. Thus, hypothesis 5b is supported. When further exploring the interaction at lower levels of abuse, there was no difference in retaliatory behaviors among those higher or lower in HAB. However, at higher levels of abuse, those who have lower HAB are less likely to engage in retaliation, compared to those who have higher levels of HAB.

![Graph showing the interaction between Abuse and HAB in predicting employee retaliation](image)

**Figure 3.** The interaction between Abuse and HAB in predicting employee retaliation

**Dark Tetrad Hypotheses**

Hypotheses 6a, 6b, and 6c state that Machiavellianism, narcissism, and psychopathy respectively will moderate the relationship between interactional justice and supervisor-directed retaliation. Research question 3 assessed the moderating role of everyday sadism on the relationship between interactional justice and retaliation. To assess the influence of the Dark Tetrad personality variables on the relationship between justice and retaliation, interactional
justice was added as a level 1 predictor and Machiavellianism, narcissism, psychopathy, and everyday sadism were added as level 2 predictors. All four variables were added to the model as they tend to have a high level of overlap and to identify the unique variance for each predictor. In the current sample, the means for these traits were slightly lower than previously published averages, which is typically seen in subclinical populations (Jones & Paulhus, 2014; O’Meara et al., 2011). All four variables were grand-mean centered. There was a marginally significant negative relationship between Machiavellianism and retaliation ($\beta_{01} = -0.32$, $SE = 0.17$, $p = .067$, 95% CI [-0.66, 0.02]). Narcissism ($\beta_{02} = 0.49$, $SE = 0.19$, $p = .010$, 95% CI [0.11, 0.84]) and everyday sadism ($\beta_{04} = 0.59$, $SE = 0.13$, $p < .001$, 95% CI [0.33, 0.84]) had significant positive relationships with retaliation. However, psychopathy was not related to retaliation ($\beta_{03} = -0.17$, $SE = 0.18$, $p = .349$, 95% CI [-0.52, 0.21]). When assessing the interaction of each variable with perceptions of justice to predict retaliation, a similar pattern is observed. Justice interacts marginally with Machiavellianism ($\beta_{11} = 0.07$, $SE = 0.04$, $p = .074$, 95% CI [-0.01, 0.15]), significantly with narcissism ($\beta_{12} = -0.10$, $SE = 0.04$, $p = .013$, 95% CI [-0.18, -0.02], Figure 4) and everyday sadism ($\beta_{14} = -0.12$, $SE = 0.03$, $p < .001$, 95% CI [-0.18, -0.06], Figure 5), and does not interact with psychopathy ($\beta_{13} = 0.04$, $SE = 0.04$, $p = .352$, 95% CI [-0.05, 0.12]) to predict retaliation.

When exploring the simple slopes for the significant interactions, those who had higher narcissism ($b = -0.29$, $SE = 0.05$, $p < .001$) had a steeper slope which showed a significant decrease in retaliation as levels of justice increased, compared to those who had lower narcissism ($b = -0.09$, $SE = 0.05$, $p =0.100$) where there were no significant differences. Similarly, those who had higher sadism ($b = -0.31$, $SE = 0.04$, $p < .001$) had a steeper slope which showed a
Figure 4. The interaction between Interactional Justice and Narcissism in predicting employee retaliation

Figure 5. The interaction between Interactional Justice and Sadism in predicting employee retaliation
significant decrease in retaliation with increased in levels of justice, compared to those who had lower sadism ($b = -0.07, SE = 0.05, p = 0.165$) where there were no significant differences.

Similarly, I wanted to explore if abusive supervision interacted with any of the Dark Tetrad traits to influence employee retaliation. To assess the influence of the Dark Tetrad personality variables on the relationship between abuse and retaliation, abusive supervision was added as a level 1 predictor and Machiavellianism, narcissism, psychopathy, and everyday sadism were added as level 2 predictors. All four variables were grand-mean centered. Machiavellianism ($\beta_{01} = 0.00, SE = 0.03, p = 0.938, 95\% CI [-0.06, 0.07]$) and narcissism ($\beta_{02} = 0.04, SE = 0.04, p = 0.260, 95\% CI [-0.03, 0.12]$) did not predict retaliation. Psychopathy marginally predicted lower levels of retaliation ($\beta_{03} = -0.09, SE = 0.05, p = 0.057, 95\% CI [-0.19, 0.00]$). Everyday sadism significantly predicted an increase in retaliation ($\beta_{04} = 0.12, SE = 0.04, p = 0.008, 95\% CI [0.03, 0.20]$). When assessing the interaction of each variable with abusive supervision to predict retaliation, Machiavellianism ($\beta_{11} = -0.01, SE = 0.09, p = 0.903, 95\% CI [-0.19, 0.17]$) and sadism ($\beta_{14} = 0.05, SE = 0.05, p = 0.310, 95\% CI [-0.05, 0.15]$) were not significant predictors. Narcissism and abuse marginally predicted retaliation ($\beta_{12} = 0.13, SE = 0.07, p = 0.055, 95\% CI [-0.00, 0.27]$), Psychopathy interacted with abusive supervision to significantly predict higher retaliation ($\beta_{13} = 0.29, SE = 0.05, p < 0.001, 95\% CI [0.19, 0.39]$, Figure 6). When exploring the simple slopes for the significant interaction, those who had higher psychopathy ($b = 0.67, SE = 0.07, p < 0.001$) had a steeper slope which showed a significant increase in retaliation as levels of abuse increased, compared to those who had lower psychopathy ($b = 0.09, SE = 0.07, p = 0.187$) where there were no significant differences. At higher levels of abuse, there was no difference in retaliation based on psychopathy level.
However, at lower levels of abuse, those higher in psychopathy retaliated less than those lower in psychopathy.

Figure 6. The interaction between Abuse and Psychopathy in predicting employee retaliation

Research Questions

For research question 1, I assessed how the intensity of the relationship between abuse and retaliation differs based on the day of the week. The days of the week were dummy coded and their interaction with abuse was added as level 1 predictors to ascertain the intensity of each slope. Similarly, research question 2 assesses how the intensity of the relationship between abuse and OCBs differs based on the day of the week. Thus, the days of the week were dummy coded and their interactions with abuse were added as level 1 predictors to ascertain the intensity of each slope. I was unable to ascertain these relationships on Saturday and Sunday as only a few
participants worked on those days. There did not appear to be any significant differences between the days of the week, in terms of the relationship between abuse and retaliation or the relationship between abuse and OCBs.

Research question 4 assessed the moderating effect of each Dark Tetrad variable on the relationship between interactional justice and OCBs. To assess the influence of the personality variables on the relationship between justice and OCBs, interactional justice was added as a level 1 predictor and Machiavellianism, narcissism, psychopathy, and everyday sadism were added as level 2 predictors. There were no significant main effects involving Machiavellianism ($\beta_{01} = 0.21, SE = 0.43, p = .623, 95\% CI [-0.62, 1.05]$), narcissism ($\beta_{02} = -0.17, SE = 0.52, p = .744, 95\% CI [-1.71, 0.85]$), or psychopathy ($\beta_{03} = -0.29, SE = 0.52, p = .576, 95\% CI [-1.30, 0.71]$) when predicting OCBs. Everyday sadism had a marginally positive relationship with retaliation ($\beta_{04} = 0.71, SE = 0.36, p = .050, 95\% CI [-0.00, 1.42]$). When assessing the interaction of each variable with perceptions of justice to predict OCBs, there was no significant interaction with Machiavellianism ($\beta_{11} = -0.04, SE = 0.10, p = .689, 95\% CI [-0.23, 0.15]$), narcissism ($\beta_{12} = 0.04, SE = 0.11, p = .711, 95\% CI [-0.18, 0.26]$), psychopathy ($\beta_{13} = 0.05, SE = 0.11, p = .678, 95\% CI [-0.17, 0.27]$), or everyday sadism ($\beta_{14} = -0.09, SE = 0.08, p = .265, 95\% CI [-0.24, 0.07]$).

Research question 5 assessed the moderating effect of each Dark Tetrad variable on the relationship between abusive supervision and OCBs. To assess the influence of the personality variables on the relationship between justice and OCBs, abuse was added as a level 1 predictor and Machiavellianism, narcissism, psychopathy, and everyday sadism were added as level 2 predictors. There were no significant relationships between Machiavellianism ($\beta_{01} = 0.04, SE = 0.09, p = .669, 95\% CI [-0.14, 0.22]$), narcissism ($\beta_{02} = 0.04 SE = 0.17, p = .806, 95\% CI [-0.28,
psychopathy ($\beta_0 = -0.07, SE = 0.21, p = .736, 95\%\ CI [-0.47, 0.33])$, or everyday sadism ($\beta_0 = 0.26, SE = 0.19, p = .178, 95\%\ CI [-0.11, 0.64]$) with OCBs. When assessing the interaction of each variable with abuse to predict OCBs, there was no significant interaction with Machiavellianism ($\beta_{11} = 0.03, SE = 0.23, p = .888, 95\%\ CI [-0.42, 0.49]$), narcissism ($\beta_{12} = 0.01, SE = 0.18, p = .934, 95\%\ CI [-0.34, 0.37]$), psychopathy ($\beta_{13} = 0.06, SE = 0.14, p = .692, 95\%\ CI [-0.23, 0.37]$), or everyday sadism ($\beta_{14} = 0.13, SE = 0.13, p = .320, 95\%\ CI [-0.12, 0.37]$).
Daily Abusive Supervision

The current study builds upon the leadership literature involving abusive supervision and the reactions it evokes from subordinates. Explorations in this area generally have not used a within-subjects diary design. With over 46% of workers in the U.S. reporting abusive behaviors from their supervisors (Tepper et al., 2006), I wanted to explore how much these workplace interactions varied on a day-to-day basis. While the abusive supervision literature assumes that supervisors are either always abusive or never abusive (Tepper, 2007), recent findings indicate that this may not necessarily be true. For instance, situational factors have been shown to lead to daily changes in supervisory behaviors (Barnes et al., 2015; Courtright et al., 2016). One study found daily variations in employees’ perceptions of supervisor abuse (Vogel & Mitchell, 2017). I was able to replicate those results by finding that employees’ reports of being subject to abuse did vary on a daily basis. Given how perceptions of incivility change as the week progresses (Nicholson & Griffin, 2016), I expected that employees would report experiencing less abuse as the week progressed. However, this was not supported in the current study. I further explored if employees were more likely to report abuse on any particular day of the week and found no evidence linking abuse to any specific day.
Supervisor-Directed Reactions to Perceived Abuse (Retaliation and OCBs)

With supervisor-directed retaliation being one of the most common reactions to abusive supervision, I expected this behavior to vary on a daily basis, dependent on the level of abuse for that particular day. I found that employees engaged in retaliatory behaviors at varied rates throughout the week. Further, I tested the relationship between abuse and retaliation and, as expected, found a significant positive relationship between the two whereby those employees who were abused tended to report higher levels of retaliation. This replicates what has been found previously in a cross-sectional manner (Hershcovis & Barling, 2010; Park et al., 2017). Next, I assessed if this relationship held the following day. That is, if employees are abused on one day, are they likely to only retaliate on that day? Or do they retaliate on the following day too? My findings suggest that, while employees tend to retaliate on the day they were abused, retaliation does not carry over to the following day. While these results regarding the same day are informative, they do not allow for causal inferences. For example, it is also possible that employees are reporting more supervisory abuse to justify their negative behaviors.

Thus, I also explored the inverse relationship and found evidence for carry over effects. As expected, employees who engaged in retaliation were also more likely to report that their supervisor had abused them on that day. But they also reported that supervisors abused them the following day. Drawing from the model of state paranoia and abusive supervision put forth by Chan and McAllister (2014), employees may be engaging in such behaviors as a reaction to a perceived threat from their supervisors. However, this behavioral response may actually induce supervisors to treat those employees in ways that are more abusive (Aquino & Lamertz, 2004; Aquino & Thau, 2009). This sheds light on the negative cycle that can be started from a single
negative interaction and points to the cycle of abuse that can often escalate until victims either leave or transfer departments (Zapf & Gross, 2001). I also wanted to explore if the relationship between abuse and retaliation varied depending on the day of the week as demonstrated in past work in the incivility literature (Nicholson & Griffin, 2016). However, I found no evidence of such a difference.

Newer research is beginning to explore a not-so-negative consequence that could arise from abusive supervision: supervisor-directed OCBs. Troster and Quaquebeke (2018) actually found that employees who were subject to abusive supervision were more likely to engage in supervisor-directed helping behaviors as a way to mend the relationship that has been broken. Thus, I explored OCBs as a potential reaction to abusive supervision. I found that supervisor-directed OCBs varied on a daily basis. Specifically, employees were less likely to engage in supervisor-directed OCBs when they were subject to abusive supervision on the same day. This was contrary to the findings of Troster and Quaquebeke (2018), but it does replicate what has been found in other research (Zellers et al., 2002). The positive effects of abusive supervision only emerge under very specific circumstances, which involve employee guilt and the specific relationship between the leader and the subordinate. When exploring carry over effects to the next day were explored, there was no relationship between abuse and OCBs. Thus, the negative effects of being subject to abuse did not seem to carry over to the next day. That is, even though OCB engagement did decline for the day that employees were subject to abuse, it did not decline the next day.

Similar to the case with retaliation, the same-day relationships did not allow us to draw causal inferences as there were no significant carry over effects. I also explored the inverse relationship between OCBs and abuse. As expected, I found a negative relationship between
OCBs and abuse whereby those employees who report engaging in OCBs do not report being subject to abuse that day. However, unlike retaliation, engaging in OCBs did not predict being subject to abuse the following day. While the negative cycle of abuse tends to be harder to break once employees retaliate, this same cycle does not seem to emerge when employees withdraw their extra-role helping behaviors. Thus, it appears that engaging in negative behavior directed towards the supervisor tends to result in the supervisor noticing the behavior and responding in a similar manner. Additionally, I did not find evidence that this relationship varied depending on the day of the week. However, employees reported engaging in OCBs significantly less as the week progressed.

When adding both retaliation and OCBs to the model, I found that employees displayed differential amounts of these reactions based on the rate of abuse that they were exposed to, which replicates what has been shown previously in the literature. Those who are exposed to more abuse are more likely to retaliate against their supervisor (Hershcovis et al., 2007), while those who are exposed to less abuse are more likely to help their supervisor by engaging in supervisor-directed OCBs (Troster & Quaquebeke, 2018).

Interactional Justice

Interactional justice plays a large role in the abusive supervision literature as an explanatory mechanism for why employees react in the way they do. Thus, I explored whether it could be a potential mechanism for the reactions that derive from abusive supervision. First, I explored if perceptions of justice vary on a daily basis and found evidence for variation. Next, I expected that there would be a negative relationship between abuse and perceptions of justice.
This relationship was significant and showed that employees who were subject to more abuse reported lower levels of interactional justice, which replicates previous research with cross-sectional designs (Park et al., 2017). However, this relationship did not hold across time. Specifically, employees who reported more abuse did not report lower levels of justice on the following day. An exploration of the inverse relationship led to the finding that those who have lower justice perceptions tend to report higher levels of abuse on the same day, as would be expected (Chan & McAllister, 2014). However, this relationship also held for the following day. Thus, when thinking about causality in the relationship between abuse and justice perceptions, it appears that employees’ justice perceptions may have more influence on their reporting of abusive behaviors than vice-versa. That is, employees who already perceive injustice in the workplace are more likely to report that their supervisors are being abusive towards them. While Aryee and colleagues (2007) found that a supervisor who perceives interactional injustice will be likely to be abusive towards their subordinates, there has been no evidence that subordinates’ level of interactional justice influences their perceptions of abusive supervision. While it is not possible to pinpoint with this particular data whether abuse or low justice perceptions occur first in a workplace interaction, it does appear that there is a reciprocal relationship between the two variables, which supports the postulations of Chan and McAllister (2014).

I was also interested in whether the supervisor-directed outcomes of justice would carry over to the next day. First, I explored retaliation and found that justice perceptions predicted lower retaliatory behaviors on the same day, but not the next. However, when supervisor-directed OCBs were examined, justice perceptions predicted higher levels of supervisor-directed OCBs on the same day and the next. Thus, it appears that the positive outcomes associated with justice perceptions are longer-lasting than any negative outcomes of injustice perceptions. I
found that different levels of justice led to differential reactions from employees whereby those who perceived more justice were more likely to respond with OCBs and those who perceived less justice were more likely to respond with supervisor-directed retaliation. Therefore, employees who tend to perceive high levels of justice also tend to engage in more OCBs on a daily basis.

Individual Differences: Hostile Attribution Bias (HAB) and the Dark Tetrad

Next, I evaluated if any of the relationships were influenced by individual difference variables. While plenty of personality factors have been explored in the past, there has been a recent interest in dark personality traits and how those influence workplace interactions (Kiazad et al., 2010, Waldman et al., 2018; Wisse & Sleebos, 2016). Thus, I explored Hostile Attribution Bias (HAB) and the Dark Tetrad. Prior research has shown that HAB influences employee reactions to abusive supervision via the intent that is ascribed to the perpetrator. That is, those higher in HAB are more likely to see the world through a negative lens and think that others are being intentionally harmful (Crick & Dodge, 1996). I found that those with higher HAB perceived lower levels of justice. I also found that abuse and HAB interacted to predict higher levels of justice. This replicates what has been found in previous research (Milich & Dodge, 1984). At higher levels of abuse, there was no difference in perceptions of justice. At lower levels of abuse, those who had low HAB were more likely to perceive high justice, compared to those who had high HAB. Even at low levels of abuse, those high in HAB still perceive interactions in a negative light and assume that their colleagues intend to harm them and be unfair towards them.
I was also interested in the interaction that HAB would have with abusive supervision when predicting retaliatory behaviors, as this is a relationship has been demonstrated in cross-sectional studies (Hoobler & Brass, 2006). While HAB did not directly predict retaliation, it did interact with abusive supervision to predict higher levels of retaliation. When interacting with abusive supervision, higher levels of HAB predicted higher levels of retaliation, and this interaction also significantly predicted lower levels of retaliation. At low levels of abuse, there are no differences in retaliatory behaviors. Employees were not likely to retaliate when they perceived low levels of abuse, regardless of their HAB. However, at high levels of abuse, low HAB predicted less retaliation compared to those who are high in HAB. Those who are high in HAB might attribute more intentionality towards their supervisor, thus prompting retaliatory behavior. However, those who are low in HAB may not attribute such negative intentions towards their supervisor, thus they do not believe that retaliatory behavior is required to balance the scales once more.

I further explored the relationship between justice and HAB in predicting retaliatory behaviors. Those who perceived lower levels of justice were more likely to retaliate and those who had high HAB were also more likely to retaliate. The interaction between the two was also significant. At higher levels of justice perceptions, there were no differences between retaliatory behaviors. However, when employees perceived less justice, those high in HAB were more likely to retaliate compared to those who are low in HAB. Similar to the interaction with abuse, when employees perceive an unfair situation and attribute hostility towards the party that wronged them, they may attempt to amend that balance by retaliating. However, when this attribution of hostility is not present, there does not appear to be the same need to restore the balance of fairness. The relationship predicting OCBs were also explored but found to be non-
significant. While a hostile attribution might induce retaliation to restore the balance of fairness, it does not appear to prompt employees to change their positive extra-role behaviors.

Finally, I wanted to examine the moderating role that each of the Dark Tetrad traits plays in influencing the relationships in the current study. First, I assessed the relationship between abuse and each trait when predicting retaliation. Sadism was the only Dark Tetrad trait that influenced retaliation whereby those who were high in sadism were more likely to retaliate. When exploring the interactions, only psychopathy and abuse interacted to predict higher levels of retaliation. At higher levels of abuse, there were no differences in retaliation. Regardless of employees’ level of psychopathy, they were likely to retaliate if they were abused. However, at lower levels of abuse, there was a difference whereby those who were low in psychopathy were more likely to retaliate compared to those who were high in psychopathy. This is counter to what would be expected as those who are high in psychopathy tend to also behave aggressively compared to those who are low in psychopathy (Cornell et al., 1996). A potential explanation can be drawn when thinking about the nature of the crimes that those at varying levels of psychopathy engage in. Woodworth and Porter (2002) found that those high in psychopathy engage in violent behaviors for instrumental reasons, while those low in psychopathy engage in violence for reactive reasons. At low levels of abuse, those high in psychopathy may not see an instrumental reason to engage in such retaliatory behaviors and thus curb those behaviors, whereas those low in psychopathy may not consciously think about the instrumentality of workplace interactions to that extent.

Next, I wanted to assess the interaction with interactional justice when predicting retaliation. Narcissism and sadism both predicted higher levels of retaliation, both as main effects and when interacting with justice perceptions. At higher levels of justice, there was no
difference in retaliation for those at varying levels of narcissism or sadism. However, at lower levels of justice, those high in sadism and those high in narcissism were more likely to retaliate compared to those who were low in sadism and narcissism. This follows what could be expected with narcissism whereby those who feel like they have been wronged (i.e., are perceiving low justice) will retaliate to ensure that the balance of fairness is met again. As Bockler and colleagues (2017) posit, narcissists react with anger and punishment when they feel like the behaviors displayed towards them have been unfair. Similarly, with sadists being likely to engage in aggression whenever the opportunity arises (Buckels et al., 2013), perceptions of injustice may offer a justification for engaging in retaliatory behaviors. Both of these relationships were explored when predicting OCBs, and none of the Dark Tetrad traits were found to be significant. Given the negative nature of the Dark Tetrad, I did not expect any of them to be strongly associated with positive outcomes like supervisor-directed OCBs.

While there are some questions that remain unanswered, the data presented here offer evidence for some questions that have been previously posed in the literature. Once again, abusive supervision was found to vary on a daily basis, thereby offering evidence that this may not be a phenomenon that should be assumed to be constant. Replicating previous literature, there was a positive relationship between abusive supervision and retaliation and a negative relationship between abusive supervision and employee engagement in OCBs. In a temporal manner, the effects of abusive supervision did not influence retaliation or OCBs the next day, indicating that the effects may not be as long-lasting as previously thought. Finally, abuse also negatively predicted justice perceptions, and in turn was positively related to OCBs and negatively related to retaliation. Justice also fully mediated the relationships between abuse and the relevant outcomes (i.e., retaliation and OCBs). While exploring the individual difference
factors, HAB interacted with both justice and abuse to influence retaliation. Psychopathy interacted with abuse, and narcissism and sadism each interacted with justice to predict retaliation. However, none of the factors influenced OCBs.

Focusing specifically on the relationships that showed temporal consistency, some effects emerged. Those employees who engaged in retaliatory behaviors also tended to report that their supervisors engaged in abusive behaviors towards them the same day, and even the next day. Higher interactional justice led to lower rates of reporting abusive supervision on the same day and the next day. Similarly, higher interactional justice also led to employees engaging in more supervisor-directed OCBs on the same day. While abusive supervision demonstrated some effects that emerged on the same day, these effects did not carry forward to the next day.

Theoretical Implications

Newer work in the abusive supervision literature indicates that supervisory behavior may be more variable than initially thought (Barnes et al., 2015; Courtright et al., 2016), and in one study this variation was noticeable from subordinates’ perspectives (Troster & Quaquebeke, 2018; Vogel & Mitchell, 2017). The results of this study calls into question the assumption that abusive supervision has to be constant. The incivility literature has demonstrated fluctuations in abusive supervision and the reactions that accompany them based on the day of the week. Given the clear parallels that have been drawn between abusive supervision and incivility, I would have expected to see similar results. However, the data did not offer evidence for this expectation because it showed a distinction between the two areas. While there are similarities between the two constructs, abusive supervision focuses specifically on the organizational relationship
between the employee and their supervisor. This particular relationship may operate differently from simply experiencing incivility from others in the organization. Experiencing mistreatment at the hand of a supervisor carries a different meaning than experiencing mistreatment from others (Hershcovis, 2011).

Abusive supervision literature had not yet explored if supervisory abuse and employees’ reactions differed temporally. I expected to see a strong relationship between abusive supervision and the respective outcomes of retaliation and OCBs. I did not find evidence for reactions varying by day of the week. However, the current results suggest that behavioral responses, either positive or negative, are associated with abusive behaviors on that given day alone. That is, there is a positive relationship between abusive supervision and retaliation and a negative relationship between abusive supervision and supervisor-directed OCBs, replicating what has previously been found regarding same-day reactions (Hershcovis et al., 2007; Zellers et al., 2002).

A recent suggestion by Zellers and colleagues (2002) led to the exploration of the temporal relationship in the opposite direction. That is, is abusive supervision a cause, consequence, or both a cause and consequence of subordinates’ OCBs? While engaging in OCBs did predict reporting less abusive supervision on the same day, the relationship did not hold the following day. This leaves us unable to answer that question. However, employees engaging in more retaliatory behaviors reported more abusive supervision on the same day and the next day. Thus, supervisors may not respond positively to employees who engage in OCBs. Instead, they may respond negatively with even more abuse to those employees who retaliate, thereby leading to a cycle of negative interactions similar to the incivility spiral. Alternatively, employees may also engage in neutralization techniques by reporting that their supervisors are engaging in
abusive behaviors. These techniques are used to rationalize their own behavior in order to convince themselves that their deviant behaviors may actually be justifiable or excusable (Greenberg, 1998). Further, this justification ensures that employees can continue to maintain a positive self-image while engaging in deviant acts, thereby avoiding the potential guilt and blame associated with those acts (Robinson & Kraatz, 1998).

There was adequate variability in employees’ perceptions of justice, which allowed the assessment of relationships involving that variable. Tepper’s (2000) initial work suggests that being subject to abuse should lead to lower justice perceptions, which was replicated in the current study. This relationship does not carry over into the next day. Thus, employees may notice the divergence for the fairness norms on days that they have been abused, but that reaction may go away the next day. The inverse of this relationship offers potential evidence for the propositions made by Chan and McAllister (2014). They posit that abusive supervision has a cyclical relationship with employee paranoia whereby employees who perceive abusive supervision are likely to have more paranoid arousal, shown by distrust, anxiety, and a sense of threat. In turn, this paranoia leads to more paranoid cognitions such as hypervigilance, sinister attribution tendencies, and rumination, which then lead to perceiving more abusive supervision. The current study indicated that those employees who reported lower levels of justice perceptions also reported higher levels of abusive supervision on the same day. Interestingly, this relationship carried over to the next day. Thus, even though abuse may not impact next-day justice, justice perceptions do impact next-day abusive supervision. Thus, employees who perceive a sense of injustice in their workplace may be more likely to classify supervisor behaviors as abusive. While a lot of abusive supervision literature has provided cross-sectional
evidence for the connection between abusive supervision and justice, it may be more likely than previously anticipated that the relationship operates in the opposite direction.

Finally, as expected, hostile attribution bias had an impact on both justice perceptions and supervisor-directed retaliation, but not on OCBs. Given that those with HAB tend to attribute hostility towards the supposed perpetrator, they would be more likely to demonstrate negative behaviors, not helping behaviors. At higher levels of abuse, there were no differences in justice perceptions, but at lower levels of abuse, those who had high levels of HAB still perceived lower levels of justice compared to those who had lower HAB. This offers evidence for the idea that, even when employees are not subject to abusive behaviors, those who are high in HAB tend to perceive the people they interact with negatively. A similar interaction appeared when predicting retaliation to justice. At lower levels of abuse, there were no differences in retaliation. However, at higher levels of abuse, those who have higher HAB were more likely to retaliate compared to those with lower HAB. This could be driven by attributing the worst intentions to the perpetrator (Militch & Dodge, 1984), which would call for retaliation to remedy the wrongdoing (Hoobler & Brass, 2006). Thus, it seems like HAB may influence negative behaviors more than positive behaviors.

While all Dark Tetrad traits were included in the model to test for interactions with both abuse and justice, not all emerged as significant indicators of retaliation, and none emerged as indicative of OCBs. This follows what has been previously found as the Dark Tetrad tends to be more associated with negative behaviors than positive ones. Psychopathy and abuse interacted whereby, at higher levels of abuse, there was no difference in retaliation between those at varying levels of psychopathy. However, at lower levels of abuse, those who were low in psychopathy were more likely to retaliate compared to those higher in psychopathy. This
demonstrates the unique pattern that those high in psychopathy demonstrate when engaging in acts of violence. They tend to engage in violence and aggression in an instrumental manner, especially when involved in interpersonal situations (Blais, Solodukhin, & Forth, 2009). This, combined with the idea of corporate psychopaths doing what they have to do to get ahead, points to the idea that psychopaths may be aggressive in the workplace only when it is beneficial to them. Employees with high levels of psychopathy may not engage in such behaviors when they do not experience abuse and, thus, have no way to justify such negative behaviors.

Similarly, when interacting narcissism or sadism with justice, there was no difference in retaliation at higher levels of justice. However, at lower levels of justice, those with higher levels of narcissism and sadism responded with more retaliation compared to those lower in narcissism and sadism. Those who are narcissistic and sadistic tend to respond with retaliatory behaviors when they feel like they have been wronged. This supports the threatened-egotism hypothesis, which posits that narcissists tend to respond with anger and aggression when they feel like the situation was unfair. Specifically, Bushman and Baumeister (1998) found that narcissists do not react aggressively to everyone, but they are selective in their aggression. They do not respond with aggression to those who praise them or others who have not wronged them in some way; rather, their aggression is specifically directed towards those who have treated them wrongly. Thus, the current study offers evidence for the threatened-egotism hypothesis. As sadism tends to be associated with harming others to make oneself happy, it can be seen as a negative trait in the workplace. Thus, those who engage in sadistic acts generally try to rationalize them by framing them as revenge or righting a wrong to which they have been subject (Burris & Leitch, 2016). Perceiving lower levels of justice may provide an excuse for engaging in negative actions towards their supervisor.
Practical Implications

About 45% of employees in the U.S. report being subject to abusive behaviors from their supervisors, which ends up costing organization billions every year (Tepper et al., 2006). Given these costs, abusive supervision has been a heavily-studied phenomenon for the last twenty years. However, it appears that the assumption that abusive supervision is a constant situation may not be accurate. Thereby, current interventions meant to combat abusive supervision may not be appropriate. Abusive supervision did not appear to be tied to a specific time of the week, which indicates that perceptions of abuse tend to vary without a specific pattern. This deviates from what has been seen with incivility perceptions.

Employee reactions to abuse tend to be associated with reporting abuse on that particular day. Thus, it does not appear that employees let abuse from the previous day affect their behaviors on the following day. As this relationship did not carry forward to the next day, it is possible that employees may perceive their supervisor’s behaviors differently based on the behaviors they themselves engaged in that day. Specifically, in terms of negative behaviors, they may believe that being a victim of abusive supervision justifies their engagement in retaliatory behaviors. Thus, interventions designed to combat abusive supervision should probably focus on the employee as well as the supervisor. Brees and colleagues (2014) also suggested this in terms of exploring employee personality. However, their study indicated that it may be useful to also examine employee behavior and how it might influence their perceptions of others’ behaviors.

While the relationship of abusive supervision leading to lower interactional justice perceptions has been commonly thought to be accurate, this study takes a step back and
demonstrates that this relationship may simply be a smaller part of a circular relationship. While abusive supervision did not predict justice perceptions the next day, the inverse was true. That is, justice perceptions drove employees reports of abusive supervision. This may also occur when employees already have low justice perceptions. That is, they may look for negative behaviors from their supervisors to confirm existing expectations. To combat this, organizations want to have supervisors engage in interactional justice training, which has shown to influence employees’ reactions to inequality (Greenberg, 2006).

Finally, it is apparent that employees with certain traits are likely to react more negatively to situations of perceived abuse or injustice. Thus, it may be possible for organizations to ensure that these employees have training and resources available to them to ensure that these reactions are reduced. For instance, for employees high in HAB, a potential resource would be a peer-to-peer program, similar to what has been used in a school-based interventions to reduce aggression in students (Leff, Angelucci, Goldstein, Cardaciotto, Paskewich, & Grossman, 2007). Such interventions have been able to reduce such negative interactions by addressing the underlying social cognitive processes associated with aggressive behaviors, . In addition, although not an intended outcome of these interventions, they may provide increased social support. Social support ensures that employees have instances to interact with their co-workers, talk about situations, or even providing resources through the organization, all of which might help prevent attributions of hostility.

Regarding the Dark Tetrad, it appears that employees high in Machiavellianism, relative to those higher in other traits, do not react as negatively to justice violations or to perceived supervisory abuse. Employees high in sadism and narcissism are likely to react when they deem the situation to be unfairly biased against them, which might be alleviated by resources and
trainings such as interactional justice training. Reducing instances of perceived injustice should in turn lead to fewer instances of employees engaging in retaliatory behaviors. Similarly, because employees who are high in psychopathy tend to view their own aggressive behaviors in an instrumental manner, creating a climate of civility may help to emphasize that aggression would not be beneficial to their position and thus should not be undertaken. In addition, employees may not feel like they have to resort to retaliation if they believe that voicing their concerns will improve the situation.

Limitations and Future Directions

The goal of the current study was to explore daily variations in abusive supervision and the differential employee reactions that it evokes. This study employed a newer method by using daily diaries to examine abusive supervision, which has some advantages. However, there were also some limitations that could offer potential areas for future studies to explore. First, participants in the current study completed records towards the end of their day. While this offers an advantage over cross-sectional designs by not requiring employees to think back on a longer time period (Hedges, Jandorf, & Stone, 1985), there may still be some distortions that stem from retrospection. Thus, future studies can aim to measure abusive supervision in the moment with event-contingent signaling so that employees report behaviors and associated emotions as they occur.

Further, the focus of this study was to measure actual behaviors, which led to the decision to include the variables as dichotomous choices (e.g., yes it happened today vs. no, it did not happen today). Older research (Komorita & Graham, 1965; Peabody, 1962) indicates that a
binary answer format may actually work to capture the direction of the measurement while avoiding contamination of the data with intensity.

However, future studies should explore if the number of response options provided makes a difference in assessing the relationships of interest or the overall model at large. While the abusive supervision scale was initially intended to be a 5-point frequency scale, it required respondents to think about how frequently their supervisor engaged in such behavior ranging from “I cannot remember him/her ever using this behavior with me” to “He/she uses this behaviors very often with me”. Given that this study measured abuse on a daily basis, the dichotomization was intended to adapt Tepper’s (2000) original scale for daily use. For instance, would having all the scales share a 5-point Likert type scale lead to different results compared to the dichotomous options used in the current study? As an example, future studies could compare rating abuse on a 5-point scale ranging from ‘strongly agree’ to ‘strongly disagree’ as a large portion of research currently utilizes rating abuse as a dichotomous yes/no outcome. This would help to ascertain if there is any value to using one rating scale over the other. In a similar manner, using a dichotomous scale allowed me to ascertain how many different behaviors were employed or perceived. Thus, it should be noted that a higher number indicates more variety in terms of behaviors, as opposed to an increased intensity.

It must also be noted that the current study collected data online using a survey design and using a single source: the employee. These factors are important because the questions this study attempted to answer focused on the employee’s perceptions of being subject to abuse and their own reactionary behaviors. However, future studies can get a more complete view by using other raters of the employees’ behaviors such as supervisors or peers. Further, gaining additional information about the supervisor can help ascertain differences that employees may perceive
between themselves and their bosses. Tepper, Moss, and Duffy (2011) found that at employees who are dissimilar from their supervisors, in terms of sex, age, and race, tend to experience more abusive supervision. This follows the postulations from Chan and McAllister (2014) that certain contextual factors, such as minority status or members with stigmatized identities might be higher in state paranoia, and thus perceive more abusive supervision. Thus, future studies should explore these differences and how they influence the relationships that have been shown in this study.

Further, utilizing workers from varying industries tends to improve the validity and generalizability of findings (Kerlinger & Lee, 2000). While MTurk workers tend to be from various jobs and industries (Huff & Tingley, 2015), I did not explicitly ask for employment industry. Thus, it is not possible to ascertain if the current study’s findings are driven by any particular industries.

Finally, future studies should attempt to understand why employees are willing to admit that they engage in retaliatory behaviors, which would seem to imply an awareness of their own negative behavior. Employees who engaged in cyberloafing indicated that it was acceptable because they considered it justifiable (Lim & Teo, 2005). Their justifications for cyberloafing included superordination (a tit for tat mentality), minimization (it’s only for a little bit and it doesn’t actually hurt anyone), or normalization (everyone does it anyway). The excuses that employees provide for engaging in retaliatory behaviors would help to shed some additional light on to this relationship.
Conclusion

This study provides a within-person perspective of a two-week glimpse into an employee’s experience with their supervisor. Employee perceptions of abusive supervision and justice, along with their reactionary behaviors of retaliation and OCBs, all vary on a daily basis. While abusive supervision led to lower justice perceptions, more retaliation, and less OCBs, the effects did not carry forward to the next day. Rather, employees who retaliated more often reported more abusive supervision, which they potentially considered to be justification for their behavior. Interactional justice perceptions led to lower perceptions of abuse and engaging in more OCBs on subsequent days. In terms of individual differences, HAB interacted with perceptions of abuse and justice perceptions to increase retaliation. Machiavellianism did not seem to influence any effects in this study, but psychopathy interacted with abuse and narcissism, whereas sadism interacted with justice to increase retaliation. This study indicates the importance of studying this relationship in a within-subjects manner and opens the door to plenty of future research.
REFERENCES


Troster, C., & Van Quaquebeke, N. (2018). *Can abusive supervision lead to more supervisor-directed helping? Yes, the role of guilt!* Poster session presented at the meeting of the Society of Industrial and Organizational Psychology, Chicago, IL.


You are invited to participate in a study that assesses workplace interactions over the course of two weeks.

**Eligibility:** Only individuals older than 18 years old and are employed full time will be eligible for this study. You have to provide contact information to be eligible to participate and receive compensation. Please do not participate if you cannot complete 10 daily surveys following this survey.

**Procedures:** This study occurs over the period of 2 weeks. On the first day, you will complete some personality measures and fill in demographic information and provide your contact information. You will receive $1 in exchange for approximately 8-10 minutes of your time for the first survey. If you qualify for further testing, you will be invited to participate in daily surveys for 10 days (Monday through Friday for two weeks) that will take approximately 2-3 minutes every day. You will be compensated $0.40 for each daily survey for a chance to receive $5 in total.

**Risks and Benefits:** There are no reasonably foreseeable risks associated with this study.

**Compensation:** You will only be compensated $1 for the first survey. You will be compensated this full amount via Mechanical Turk. If you qualify for further testing, you will be invited to participate in daily surveys for 10 days (Monday through Friday for two weeks) that will take approximately 2-3 minutes every day. You will be compensated $0.40 for each daily survey for a chance to receive $5 in total.

**Right to Refuse or Withdraw:** You may refuse to participate by choosing “No, Exit Survey” below. Furthermore, you retain the right to withdraw from the study at any time without penalty.

**Questions:** If you have any questions or concerns about your rights as a research participant, you may contact the Northern Illinois University Office of Research Compliance. If you have questions about this research study, you can contact the principle investigator or faculty advisor below:

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**It is advised that you save or print a copy of this form.**

I understand the above and grant my consent to participate:

Yes, Continue with survey
No, Exit survey
APPENDIX B
SHORT DARK TRIAD
Short Dark Triad (Jones & Paulhus, 2014)

Please indicate how much you agree with each of the following statements:
Responses: disagree strongly (1) to agree strongly (5)

1. It’s not wise to tell your secrets.
2. I like to use clever manipulation to get my way.
3. Whatever it takes, you must get the important people on your side.
4. Avoid direct conflict with others because they may be useful in the future.
5. It’s wise to keep track of information that you can use against people later.
6. You should wait for the right time to get back at people.
7. There are things you should hide from other people to preserve your reputation.
8. Make sure your plans benefit yourself, not others.
9. Most people can be manipulated.
10. People see me as a natural leader.
11. I hate being the center of attention. (R)
12. Many group activities tend to be dull without me.
13. I know that I am special because everyone keeps telling me so.
14. I like to get acquainted with important people.
15. I feel embarrassed if someone complimentary me. (R)
16. I have been compared to famous people.
17. I am an average person. (R)
18. I insist on getting the respect I deserve.
19. I like to get revenge on authorities.
20. I avoid dangerous situations. (R)
21. Payback needs to be quick and nasty.
22. People often say I’m out of control.
23. It’s true that I can be mean to others.
24. People who mess with me always regret it.
25. I have never gotten into trouble with the law. (R)
26. I enjoy having sex with people I hardly know
27. I’ll say anything to get what I want.

Items 1-9: Machiavellianism; Items 10-18: Narcissism; Items 19-27: Psychopathy
APPENDIX C
SHORT SADISTIC IMPULSE SCALE
Short Sadistic Impulse Scale (O’Meara, Davies, & Hammond, 2011)

Please indicate how much you agree with each of the following statements:
Responses: disagree strongly (1) to agree strongly (5)
1. I enjoy seeing people hurt
2. I would enjoy hurting someone physically, sexually, or emotionally
3. Hurting people would be exciting
4. I have hurt people for my own enjoyment
5. People would enjoy hurting others if they gave it a go
6. I have fantasies which involve hurting people
7. I have hurt people because I could
8. I wouldn’t intentionally hurt anyone (R)
9. I have humiliated others to keep them in line
10. Sometimes I get so angry I want to hurt people
APPENDIX D
SATISFACTION WITH LIFE SCALE
Satisfaction with Life Scale (Diener et al., 1985)

Please indicate to what extent you agree with the following statements:
Responses: strongly disagree (1) to strongly agree (5)
1. in most ways my life is close to ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.
APPENDIX E
HOSTILE ATTRIBUTION BIAS
Hostile Attributional Style Survey (Bal & O’Brien, 2011)

Please indicate how much you agree with each of the following statements:
Responses: disagree very much (1) to agree very much (6)

1. When coworkers leave me out of social events, it is to hurt my feelings.
2. If coworkers do not appreciate me enough, it is because they are self-centered.
3. If coworkers work slowly on a task I assigned them, it is because they don’t like me.
4. If people are laughing at work, I think they are laughing at me.
5. If coworkers ignore me, it is because they are being rude.
6. Coworkers deliberately make my job more difficult.
7. When my things are missing, they have probably been stolen.
Demographics
  1. Gender
  2. Age
  3. Ethnicity
  4. Current employment status: Full-time (30hrs or more a week), Part-Time, Unemployed
  5. Please enter how many hours you work a week:
  6. Please enter your regular work schedule:
  7. Please enter how many direct supervisors you have:

Contact Information:
  1. Email:
  2. Phone number:
  3. MTurk ID:
APPENDIX G
SHORTENED ABUSIVE SUPERVISION SCALE
Shortened abusive supervision scale (Mitchell & Ambrose, 2007)
Please indicate if your boss engaged in the following behavior today:
Responses: Yes/No
1.  Ridiculed you
2.  Told you your thoughts or feelings were stupid
3.  Put you down in front of others
4.  Made negative comments about you to others
5.  Told you that you were incompetent
Justice scale (Colquitt, 2001)
Please rate how much you agree/disagree with the following statements:
Responses: Strongly disagree (1) to strongly agree (5)
1. Today, my boss treated me in a polite manner
2. Today, my boss treated me with dignity
3. Today, my boss treated me with respect
4. Today, my boss refrained from improper remarks or comments
APPENDIX I
SUPERVISOR-DIRECTED RETALIATION
Supervisor-directed retaliation (Mitchell & Ambrose, 2007)
Please indicate if you engaged in any of the following behaviors today:
Responses: Yes/No
1. Made fun of my supervisor at work
2. Made an obscene comment or gesture toward my supervisor
3. Acted rudely towards my supervisor
4. Gossiped about my supervisor
5. Publicly embarrassed my supervisor
6. Swore at my supervisor
7. Refused to talk to my supervisor
8. Said something hurtful to my supervisor at work.
APPENDIX J
ORGANIZATIONAL CITIZENSHIP BEHAVIOR
Organizational citizenship behaviors (Williams & Anderson, 1991)
Please indicate if you engaged in any of the following behaviors today:
Responses: Yes/No
1. Helped your supervisor who had a heavy work load
2. Assisted supervisor with his/her work (when not asked)
3. Took time to listen to your supervisors’ problems and worries
4. Went out of way to help your supervisor
5. Took a personal interest in your supervisor
6. Passed along information to your supervisor