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# AN APPROACH-AVOIDANCE FRAMEWORK OF WORKPLACE AGGRESSION

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The number of constructs developed to assess workplace aggression has flourished in recent years, leading to confusion over what meaningful differences exist (if any) between the constructs. We argue that one way to frame the field of workplace aggression is via approach—avoidance principles, with various workplace aggression constructs (e.g., abusive supervision, supervisor undermining, and workplace ostracism) differentially predicting specific approach or avoidance emotions and behaviors. Using two multi-wave field samples of employees, we demonstrate the utility of approach—avoidance principles in conceptualizing workplace aggression constructs, as well as the processes and boundary conditions through which they uniquely influence outcomes. Implications for the workplace aggression literature are discussed.

In the past two decades, the management literature has seen an increase in the number of constructs assessing workplace aggression (Hershcovis, 2011; Hershcovis & Reich, 2013; Tepper & Henle, 2011). This literature includes constructs such as abusive supervision (Tepper, 2000), workplace incivility (Andersson & Pearson, 1999; Chen, Ferris, Kwan, Yan, Zhou, & Hong, 2013), workplace ostracism (Balliet & Ferris, 2013; Ferris, Brown, Berry, & Lian, 2008), social undermining (Duffy, Ganster, & Pagon, 2002), and workplace victimization (Aquino & Bradfield, 2000), among others (for a more exhaustive list of constructs, see Hershcovis, 2011; Tepper & Henle, 2011). This wealth of constructs has led to

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a lively, thriving research community, but has also stimulated the repeated observation that many of these constructs seem similar (e.g., Hershcovis, 2011; Sackett, 2002; Spector & Fox, 2005; Tepper & Henle, 2011). Correspondingly, recent reviews of the literature have called for greater attention to differences among the various constructs (Hershcovis, 2011; Hershcovis & Reich, 2013; Tepper & Henle, 2011).

Unfortunately, empirical results to date have suggested that the effects of the various workplace aggression constructs are not different, but rather surprisingly similar. Although the constructs can be differentiated from each other via factor analyses or zero-order correlations (for example, workplace ostracism and undermining correlate .56 [Ferris et al., 2008]), this represents but one criterion for distinguishing constructs (Schwab, 1980), and other evidence is far less clear. For example, the various workplace aggression constructs relate in a remarkably similar way to other constructs, such as job satisfaction, turnover intent, and organizational commitment, in terms of both the direction and

magnitude of the relations (Aquino & Thau, 2009; Hershcovis, 2011).

Far from being an empirical oddity, these findings highlight a pressing problem in the workplace aggression literature: although there are an abundance of workplace aggression constructs, whether we need such abundance is an open question. Indeed, workplace aggression researchers seem to have devoted more energy to developing new workplace aggression constructs than to empirically comparing the workplace aggression constructs that already exist. The end result is that workplace aggression researchers have seemingly developed what amounts to a classification scheme distinguishing the various forms of workplace aggression, but the consequences of these distinctions are largely unknown (and, based on empirical data to date, unseen). As others have noted, if the workplace aggression literature is indeed full of largely similar constructs, this threatens the parsimony, interpretability, and ultimate progress of the literature as a whole (Tepper & Henle, 2011).

We remain optimistic, however, that meaningful distinctions between the various aggression constructs can be drawn. What is needed is a framework that highlights the important ways in which workplace aggression constructs differ, especially in terms of differential relations to various outcomes. Toward this end, we propose using an approach avoidance framework for understanding the effects of different workplace aggression constructs. An approach—avoidance framework is premised on one of the more fundamental distinctions seen in lifethat of moving toward or moving away from stimuli. Building from this simple premise, approachavoidance frameworks argue that most phenomena can be categorized according to whether they fa*cilitate* or *motivate* approach or avoidance motions.

Building upon an approach—avoidance framework, we argue that different forms of workplace aggression—in the present study, we examine abusive supervision, supervisor undermining, and workplace ostracism—differentially engender or facilitate emotions and behaviors that represent approach and avoidance tendencies. In particular, we argue that forms of workplace aggression that comprise unambiguously negative acts by others where the responsibility is clear (such as abusive supervision

and supervisory undermining) produce the approachbased emotion of anger, which leads to engaging in approach-oriented counterproductive workplace behaviors that involve actively engaging with the angerproducing context (e.g., direct retaliation toward the supervisor). On the other hand, forms of workplace aggression that comprise acts in which negative intent and responsibility for the acts is unclear (such as workplace ostracism) produce the avoidancebased emotion of anxiety, which leads to engaging in avoidance-oriented counterproductive workplace behaviors that involve avoiding the anxiety-producing context (e.g., avoiding others at work).

Importantly, owing to the orthogonal nature of approach-avoidance systems, an approach-avoidance framework points out both specific emotions and behaviors that workplace aggression constructs should engender, as well as what the constructs should not engender. Thus, the fact that abusive supervision and undermining engender approach emotions and behaviors does not imply they should not engender avoidance emotions and behaviors. By providing explicit predictions regarding what workplace aggression constructs should and should not relate to, an approach–avoidance framework provides a way in which to translate theoretical differences between workplace aggression constructs into observable empirical differences in what the workplace aggression constructs relate to. In so doing, we ultimately support the notion that workplace aggression constructs can be differentiated in theoretically and empirically meaningful ways.

Our use of an approach—avoidance framework to understand the differential effects of workplace aggression constructs provides a number of contributions to the literature. First and foremost, our work addresses the question of whether the workplace aggression literature is suffering from a proliferation of constructs without meaningful differences or whether there are indeed meaningful differences between the constructs. While others (e.g., Bowling & Beehr, 2006) have argued that the various forms of workplace aggression should be treated as interchangeable and redundant, we demonstrate how-via application of approach-avoidance principlestheoretically meaningful distinctions among workplace constructs can be drawn, and the consequences of those distinctions. In so doing, we provide initial support not only for an approach-avoidance framing of workplace aggression, but also for the utility of multiple types of workplace aggression constructs.

Second, using approach—avoidance principles to further our understanding of workplace aggression

<sup>&</sup>lt;sup>1</sup> Narrative comparisons of the differences among various workplace aggression constructs are more common (e.g., Hershcovis, 2011; Tepper, 2007; Tepper & Henle, 2011), though these are necessarily limited by a lack of empirical comparisons.

constructs also highlights how approach—avoidance can further our understanding of specific emotions and counterproductive workplace behaviors. With respect to the former, we illustrate how considering the approach—avoidance nature of emotions provides a complement to the traditional focus on emotion valence (i.e., positive or negative), ultimately resulting in differential relations with workplace aggression types and counterproductive workplace behaviors. With respect to the latter, we illustrate how consideration of the approach—avoidance nature of certain specific counterproductive workplace behaviors similarly enables the demonstration of differential relations with workplace aggression types and specific emotions.

Finally, and most broadly, our work uses approachavoidance principles to build a comprehensive framework for understanding the effects of workplace aggression. By integrating approach-avoidance principles with the workplace aggression literature, our work provides a uniquely generative framework for future research. Given that approach—avoidance distinctions represent fundamental elements of human existence, these distinctions are found in a broad cross-section of literature streams, including those pertaining to personality, emotion, motivation, and behavior (Elliot & Covington, 2001; Ferris, Rosen, Johnson, Brown, Risavy, & Heller, 2011). In using an approach-avoidance lens for aggression, our work allows for integration of approach-avoidance constructs from a variety of literatures with the workplace aggression literature.

#### WORKPLACE AGGRESSION

Workplace aggression refers broadly to negative acts that intentionally or unintentionally cause harm to their target(s) (Aquino & Thau, 2009; Neuman & Baron, 2005). Within the broad domain of workplace aggression, a number of different constructs have proliferated in the past 15 years, including constructs such as abusive supervision, incivility, undermining, and workplace ostracism. Researchers have generally argued that the different constructs represent distinct phenomena; moreover, the manner in which they differ is argued to hold meaningful consequences for their relation to other constructs (see, e.g., Andersson & Pearson, 1999; Bies & Tripp, 2005; Duffy et al., 2002; Ferris et al., 2008; Hershcovis, 2011; Tepper, 2007; Tepper & Henle, 2011; for an exception, see Bowling & Beehr, 2006).

Notwithstanding such claims of difference, the nomological networks surrounding aggression constructs are typically highly similar both in terms of the direction and magnitude of their relations with variables such as job satisfaction, turnover intent, commitment, and well-being. For example, consider abusive supervision—or the "sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (Tepper, 2000: 178) and workplace ostracism—or "the perception that one is being ignored or excluded" at work (Ferris et al., 2008: 1350). These two workplace aggression concepts can be theoretically differentiated in that abusive supervision involves interacting with the target of the abuse, while workplace ostracism requires refraining from interaction with the target of the abuse. Nevertheless, both exhibit similar relations with job satisfaction, affective commitment, and interactional justice (Ferris et al., 2008; Tepper, 2000). More broadly, such similar nomological networks are frequently seen for putatively different workplace aggression constructs (see Aquino & Thau, 2009, and Hershcovis, 2011, for reviews) and metaanalysts have even treated them as interchangeable indicators of a single construct (Bowling & Beehr, 2006). Thus, despite repeated assertions that workplace aggression constructs differ from each other, the empirical data to date would seem to suggest that their relations with other constructs are rather similar.

With that being said, it is possible that the extant literature has not demonstrated differential relations for workplace aggression constructs because it has been looking for such differences in the wrong place. For example, it is unlikely that any theoretical perspectives would suggest that being ostracized, abused, or undermined at work would not decrease job satisfaction and commitment; thus, these outcomes do not represent promising avenues for finding differences among workplace aggression constructs. Rather, what is needed is a theoretical framework that can signal to researchers both (a) which aggression constructs should differ in their relations to other variables, and (b) what these "other variables" should be. We propose that an approach-avoidance framework provides this for the workplace aggression literature.

### APPROACH-AVOIDANCE AND WORKPLACE AGGRESSION

Approach and avoidance motivation represent a tendency to approach or avoid stimuli (Elliot, 2006). Variously described as "core elements in the organization of behavior" (Carver & Harmon-Jones, 2009: 184) and present "at every level of phylogeny where behavior itself is present" (Davidson, 1992:

259), approach and avoidance represent fundamental distinctions in the human condition (Elliot, 2006; Elliot & Covington, 2001). Indeed, such distinctions appear to be elementary units that are "wired" into our neurological makeup (Cacioppo & Berntson, 1994; Gray, 1990), with separate brain structures dedicated to the detection of pleasure and punishment (Watson, Wiese, Vaidya, & Tellegen, 1999).

Given the biological and evolutionary underpinnings, it is not surprising that approach and avoidance remain primary forces that influence human functioning (Kenrick & Shiota, 2008). Indeed, the preeminence of approach—avoidance can be seen by way of the numerous disciplines that utilize approach—avoidance distinctions, including clinical psychology, personality, motivation, neuroscience, and human developmental research (see Elliot, 2006, for a review). In this sense, approach and avoidance are useful as "basic" or natural categorization schemes (Rosch, 1978; Shaver, Schwartz, Kirson, & O'Connor, 1987) in that they are easily learned (if not innate [Elliot, 2006]) and rapidly accessible (Lazarus, 1991).

In light of the preeminent and fundamental nature of approach-avoidance distinctions, we argue that incorporating these distinctions may be beneficial for workplace aggression as well. Given that approach—avoidance distinctions so frequently play a role in other domains of human functioning, it stands to reason that approach-avoidance distinctions may also play a role in the domain of workplace aggression. We therefore argue that approachavoidance distinctions can provide a theoretical framework for distinguishing the effects of different workplace aggression constructs by highlighting differences in the extent to which particular workplace aggression constructs engender either approach or avoidance tendencies in the victim. We focus on emotional and behavioral reactions to workplace aggression, in accordance with both theoretical perspectives highlighting emotional and behavioral reactions to workplace aggression (e.g., Lian, Ferris, Morrison, & Brown, 2014; Mayer, Thau, Workman, van Dijke, & de Cremer, 2012) and with extensive research highlighting approach and avoidance as key distinctions in emotional and behavioral reactions (e.g., Davidson, 1992; Lazarus, 1991; Lerner & Keltner, 2001). In particular, we suggest that different workplace aggression constructs will differentially (a) engender specific approach (anger) or avoidance (anxiety) emotions, and, consequently, (b) engender specific approach or avoidance behavioral action tendencies. We discuss each of these in turn.

#### APPROACH-AVOIDANCE AND EMOTIONS

Emotions represent organizing processes that quickly connect eliciting stimuli (e.g., a shark) with various appraisals of the eliciting stimuli (e.g., threatening, negative), which in turn facilitate various physiological, cognitive, and behavioral responses (e.g., fleeing) (Izard, 1991; Lazarus, 1991). While these changes are tailored to facilitate responses to the eliciting stimuli, the changes triggered "often persist beyond the eliciting situation...even in response to objects or events that are unrelated to the original cause of the emotion" (Lerner & Keltner, 2001: 146; see also Raghunathan & Pham, 1999; Weiner, 1986). In this manner, elicited emotions can have a broad impact on how an individual interacts with his or her environment because they influence thoughts, attitudes, and behavior long after the eliciting stimuli has departed.

One of the most common organizing frameworks for emotions considers the hedonic tone of the emotion, with emotions being categorized according to whether they represent positive or negative hedonic tone (e.g., joy and pride versus anger and anxiety) (Watson et al., 1999). Indeed, such frameworks are frequently used in the aggression literature, with negative emotions or negative affect viewed as mediating the process between being mistreated and engaging in negative actions (see, e.g., Barclay & Kiefer, 2014; Lian, Brown, Ferris, Liang, Keeping, & Morrison, 2014; Mayer et al., 2012; Nifadkar, Tsui, & Ashforth, 2012). Yet a hedonic tone framework may mask important differences among specific emotions that share the same valence but that nevertheless differ in other important aspects. In particular, emotions can also be differentiated depending on their capacity to elicit either approach or avoidance behavioral responses, or movement toward or away from stimuli (Crawford & Cacioppo, 2002; Roseman, 2008).

Historically, researchers have tended to confound approach and avoidance behavioral responses with the hedonic tone framework, in that researchers have viewed positive emotions (e.g., measures of general positive affect) as engendering approach motivation, and negative emotions (e.g., measures of general negative affect) as engendering avoidance motivation (see, e.g., Barclay & Kiefer, 2014; Nifadkar et al., 2012). While this perspective has a certain intuitive quality to it, it is not entirely accurate to state that the positive and negative valence of emotions is synonymous with the approach or avoidance motivation engendered by the emotion (Ferris, Johnson, Rosen, Djurdjevic, Chang, & Tan, 2013; Higgins, 1997).

For example, anger is viewed as unique in that it is both negative in valence but also strongly related to approach tendencies. This relation has been found using subjective (e.g., correlating self-reported anger with other self-report measures of approach motivation), behavioral (e.g., manipulating anger and examining its effects on approach behavior), and neurological methods (e.g., linking anger and approach motivation via examination and manipulation of the brain's cortical activity [for a review, see Harmon-Jones, Peterson, Gable, & Harmon-Jones, 2008). From a functionalist perspective (e.g., Youngstrom & Izard, 2008), anger's relation to approach motivation is beneficial, as anger's role is one of readying individuals to approach sources of aggression or to otherwise signal displeasure in an attempt to restore the desired positive conditions that existed prior to the elicitation of anger (Carver & Harmon-Jones, 2009; Shaver et al., 1987). Consequently, experiencing anger results in individuals experiencing approachoriented action tendencies that facilitate assertion of the self (Youngstrom & Izard, 2008). These approach tendencies are manifested in anger's relation to direct forms of aggression, as well as in other approachoriented cognitions and behaviors, from being optimistic (Lerner & Keltner, 2001; Lerner & Tiedens, 2006) to arm movements (Wilkowski & Meier, 2010).

In contrast to anger, other emotions may instead invoke motivation to avoid or withdraw from a situation. In particular, anxiety is a prototypical avoidance emotion that—albeit, like anger, having a negative valence—induces avoidance motivation (Spielberg, Heller, Silton, Stewart, & Miller, 2011).<sup>2</sup> From a functionalist perspective, anxiety is viewed as serving a defensive purpose, enabling withdrawal or submission in the face of negative stimuli (Lerner & Keltner, 2001). Consequently, experiencing anxiety results in individuals experiencing avoidanceoriented action tendencies that facilitate preservation of the self. In line with this perspective, studies have consistently demonstrated that the experience of anxiety is strongly related to subjective assessments of avoidance motivation (Carver & White, 1994), and anxiety disorders are characterized by extreme withdrawal or avoidance behaviors (American Psychiatric Association, 2013). Similarly, studies have demonstrated that anxiety causes individuals to perceive

threats and avoid risky choices (Lerner & Keltner, 2001), which is in line with avoidance motivation leading to a general focus on and withdrawal from negative stimuli.

# Workplace Aggression Constructs and the Differential Elicitation of Anger or Anxiety

An approach—avoidance framework of emotions thus suggests that emotions with similar valences may nevertheless give rise to distinct behavioral consequences, depending on whether the emotion is more fundamentally aligned with approach or avoidance motivation. Moreover, the nature of the situations that elicit approach or avoidance emotions are also thought to be fundamentally different. Various theories of emotion (e.g., Lerner & Keltner, 2001; Roseman, 2008; Smith & Ellsworth, 1985) suggest that anger arises when individuals are (a) certain something negative has happened and (b) believe that someone else has responsibility for the negative event. Thus, an individual feels anger if his or her accountant indicates he or she cannot find a \$100 receipt for reimbursement—unless it is uncertain whether the receipt is lost (e.g., if the accountant says he or she has not looked through the documents yet) or if the accountant is not at fault (e.g., if a thief broke in and stole all the office documents). On the other hand, anxiety arises when individuals are (a) uncertain whether something negative has happened and (b) believe that responsibility for the negative event may not lie with someone else (Lerner & Keltner, 2001). Extending the prior example, we are more likely to experience anxiety than anger when an accountant says the receipt for reimbursement may have been stolen in a robbery but the accountant has yet to check all the files (i.e., uncertainty that a negative outcome occurred and it is unlikely to be the accountant's fault).

We argue that the differential elicitation of approach—avoidance emotions such as anger and anxiety holds promise as one way to differentiate the effects of workplace aggression constructs. In particular, we posit that workplace aggression constructs can be categorized by whether they engender the approach emotion of anger or the avoidance emotion of anxiety. If anger is engendered by certainty that a negative event has happened and belief that responsibility for the negative event lies with someone else, we suggest that certain workplace aggression constructs may be particularly likely to evoke anger. As one example, abusive supervision represents hostile acts directed toward an individual

<sup>&</sup>lt;sup>2</sup> The other prototypical negative avoidance emotion is fear (Lerner & Keltner, 2001). However, we focus on anxiety as we judge anxiety to be more common in organizational environments (and more likely to be admitted to) than fear.

(Tepper, 2000); its measurement involves items that clearly indicate certainty that a negative event has occurred (e.g., invades my privacy; tells me I'm incompetent; ridicules me [Tepper, 2000]). Responsibility for the behaviors is ascribed to the supervisor's actions (e.g., "My supervisor..."); moreover, research on the fundamental attribution error suggests that we automatically perceive an individual's behaviors as being discretionary, volitional, or otherwise under their own control as the nature of the behavior becomes more threatening or aversive. Thus, the extremely aversive events captured by items assessing abusive supervision indicates that responsibility for the abusive actions will be perceived as residing with the abusive supervisor.

If abusive supervision is likely to be perceived as an unambiguously negative event that is under the control of the supervisor, then—following work on the elicitation of anger (Lerner & Keltner, 2001)—abusive supervision should be particularly likely to engender anger in the target of the abusive supervision. Supporting this logic, past work has demonstrated that abusive supervisors are more likely to engender hostility in their subordinates (Mayer et al., 2012). Consequently, we hypothesize the following:

Hypothesis 1. Abusive supervision will be positively related to experiencing anger in the workplace.

On the other hand, if anxiety is engendered by a lack of certainty that a negative event has happened and confusion over whether responsibility for the negative event lies with someone else, we suggest that certain workplace aggression constructs may be particularly likely to evoke anxiety. As one example, the hallmark of ostracism is that it is ambiguous with respect to whether one is intentionally being ostracized or what the cause of the ostracism is (Ferris et al., 2008; Robinson, O'Reilly, & Wang, 2013; Williams, 1997). For example, if an individual's greetings at work go unreciprocated, the cause of the lack of reciprocation may range from an intentional effort to ostracize the individual, to hearing the greeting but being unable to respond (e.g., due to being on the phone), to simply not hearing the greeting in the first place. As Robinson and colleagues (2013: 208) succinctly put it, "with ostracism there is ambiguity about not only why it happened but also, more important, whether it even happened at all."

Moreover, the cause of ostracism—i.e., who or what is responsible for the ostracism—is also

typically ambiguous. When an individual perceives (accurately or inaccurately) that he or she has been ostracized, the reason for the ostracism is not immediately apparent because nothing is said, leaving open the possibility that the ostracism is due to the ostracizer (e.g., having a bad day or being otherwise busy) or due to the ostracizee having done something to cause the ostracism (e.g., not working on a critical assignment). Ostracism has been argued to be uniquely aversive due to this ambiguity over the cause of ostracism; in contrast, with an argument the cause of the conflict is immediately apparent; that is, the cause is the topic of the argument itself (Williams & Zadro, 2001). Finally, even if one confronts someone they believe is ostracizing them, the ostracism can be easily denied or attributed to being all in the ostracizee's head (Williams, 2001)—again rendering responsibility for the ostracism unclear. In line with this ambiguity over the very presence or cause of ostracism, the items used to assess workplace ostracism are typically silent with respect to whether they represent unambiguously or intentionally negative acts (e.g., not being asked out for a coffee break, others not making eye contact with you, others leaving the area when you enter [Ferris et al., 2008]).

In sum, ostracism tends to be unclear with respect to whether the ostracism is indeed occurring, and if so, what the individual is being ostracized for. Given that workplace ostracism is likely to be perceived as ambiguous with respect to whether a negative event has occurred and with respect to the cause of the ostracism, then—following work on the elicitors of emotions (Lerner & Keltner, 2001)—workplace ostracism is particularly likely to engender a feeling of anxiety in the target who perceives workplace ostracism to be occurring. Along these lines, past work has found a relation between being ostracized at work and experiencing anxiety (Ferris et al., 2008). More formally, we hypothesize the following:

<sup>&</sup>lt;sup>3</sup> This lack of certainty over whether ostracism is in fact occurring may be taken to suggest that ostracism would have minimal impact on individuals. However, it has been argued that humans are exceedingly sensitive to indicators of actual or potential ostracism, given the evolutionary disadvantages associated with exclusion from social groups (Williams & Zadro, 2001). Correspondingly, being ignored or excluded typically has large effects on individuals even if the individuals are told the ostracism is unintentional (Zadro, Williams, & Richardson, 2004), the ostracism is from individuals not part of our in-group (Williams, Cheung, & Choi, 2000), or the ostracism is from individuals who are disliked (Gonsalkorale & Williams, 2007).

Hypothesis 2. Workplace ostracism will be positively related to experiencing anxiety in the workplace.

# APPROACH-AVOIDANCE EMOTIONS AND ACTION TENDENCIES

To this point, we have used approach—avoidance principles to characterize the types of emotions elicited by different workplace aggression constructs. As reviewed previously, one of the main distinctions between approach and avoidance emotions such as anger and anxiety is that the different emotions invoke distinct forms of action tendencies (also referred to as action readiness), or distinct predispositions to behave in certain ways (Frijda, 1986, 1993). In particular, approach emotions are particularly likely to motivate individuals to approach others, while avoidance emotions are particularly likely to motivate individuals to avoid others. This distinction in behavioral reactions is frequently used in other research domains, from simple reactions such as how individuals respond to apologies (e.g., McCullough, Worthington, & Rachal, 1997) to more complex behaviors in interracial interactions (Plant & Devine, 2008).

Distinguishing between approach and avoidance behaviors can be useful for distinguishing between certain types of counterproductive workplace behavior (CWB)—or behaviors that harm others in the organization or the organization itself (Fox & Spector, 1999; Spector & Fox, 2005; see also Bennett & Robinson, 2000)—as well. For instance, some CWBs involve moving toward stimuli, or what we refer to as approach-oriented CWBs. Such behaviors generally include any action that involves approaching or otherwise interacting with situations or individuals (usually in an antagonistic manner). Approachoriented CWBs occurring in measures of CWB include mocking, cursing, insulting or pranking others, and starting arguments or fights (Bennett & Robinson, 2000; Fox & Spector, 1999; Gruys & Sackett, 2003).

Similarly, behaviors that primarily involve moving *away* from stimuli represent *avoidance-oriented CWBs*. Such behaviors generally include any action that seeks to remove an individual from, or otherwise minimize, interaction with situations or individuals. Like approach-oriented CWBs, avoidance-oriented CWBs can occur in measures of CWB, including refusing to speak with, ignoring, or withholding information from fellow employees, among others (Fox

& Spector, 1999; Gruys & Sackett, 2003, Mitchell & Ambrose, 2007).<sup>4</sup>

Given that anger induces approach action tendencies, we argue that these tendencies are particularly likely to manifest in approach-oriented CWBs. As noted previously, approach-oriented CWBs inherently involve moving toward or otherwise taking on individuals (e.g., saying something rude or otherwise confronting others). To the extent that anger similarly primes individuals to move toward others, it is likely that anger gives rise to approach-oriented CWBs as these behaviors represent a good fit to the motivational orientation elicited by anger (Higgins, 1997). We therefore hypothesize the following:

Hypothesis 3. Anger at work will be positively related to approach-oriented CWBs.

Paralleling our argument regarding the relation of anger to approach-oriented CWBs, and given that anxiety induces avoidance action tendencies, we similarly argue that these tendencies are likely to manifest in avoidance-oriented CWBs. As avoidance-oriented CWBs are characterized by behaviors that involve avoiding others (either physically or verbally), it is likely that avoidance-oriented CWBs are consistent with the avoidance motivation that anxiety instills, rendering them more likely to be engaged in given their fit with the motivational orientation elicited by anxiety (Higgins, 1997). We therefore hypothesize the following:

Hypothesis 4. Anxiety at work will be positively related to avoidance-oriented CWBs.

The theoretical logic we have laid out to this point suggests a mediation model firmly enmeshed within approach—avoidance principles. Namely, we have argued that workplace aggression constructs differentially elicit emotions of anger or anxiety, depending on the workplace aggression construct: abusive supervision elicits anger, and workplace ostracism elicits anxiety. The elicitation of different emotions, in turn, is associated with differential approach or avoidance action

<sup>&</sup>lt;sup>4</sup> Approach-oriented and avoidance-oriented CWBs may be thought to bear some similarity to Buss' (1961) distinction between active and passive aggression. The main difference is that passive-aggressive acts are broader than avoidance-oriented CWBs, and can include aggressive acts that do not involve removing oneself from the situation. For example, some passive-aggressive acts include stalking a target, staring at the individual, causing a target delays, or failing to give a target information he or she needs (Baron & Neuman, 1996; Geddes & Baron, 1997).

tendencies: anger engenders approach-oriented CWBs, while anxiety engenders avoidance-oriented CWBs.

Two implications of our theoretical logic bear mentioning. First, consistent with the previously developed logic, we would expect anger and anxiety to mediate the indirect effects of being the target of workplace aggression on engaging in CWBs in a manner consonant with approach—avoidance principles: anger mediates the effect of abusive supervision on approach-oriented CWBs; anxiety mediates the effect of workplace ostracism on avoidance-oriented CWBs. More formally, we hypothesize the following:

Hypothesis 5. Anger will mediate the indirect effect of abusive supervision on approachoriented CWBs.

Hypothesis 6. Anxiety will mediate the indirect effect of workplace ostracism on avoidance-oriented CWBs.

Second, approach and avoidance represent unique, orthogonal systems in our neurological makeup (Cacioppo & Berntson, 1994; Gray, 1990). Consequently, the experience of approach and avoidance emotions, motivation, and behaviors are similarly unique and orthogonal. This suggests that approachoriented emotions and behaviors should systematically relate and that avoidance-oriented emotions and behaviors should systematically relate, but that approach-oriented emotions and behaviors should not systematically relate to avoidance-oriented emotions and behaviors, as the systems are orthogonal. Although the approach-oriented and avoidance-oriented variables in our study are likely to relate at a zero-order correlational level due to the shared evaluative nature of the constructs (i.e., anger and anxiety are both negatively valenced), once the approach-avoidance nature of consonant constructs are partialed out (e.g., in structural equation modeling [SEM]), the relations between approach-oriented and avoidance-oriented constructs should be minimized (Pettersson & Turkheimer, 2013). In other words, we do not expect anger to relate to workplace ostracism or avoidance-oriented CWBs (or to mediate that relation), nor do we expect anxiety to relate to either abusive supervision or approachoriented CWBs (or to mediate that relation).

#### STUDY 1 METHOD

#### **Participants and Procedure**

Participants were drawn from five companies working in information technology, banking, electronic commerce, and telecom service industries located in

Fujian and Guangzhou, China; initial contacts with the companies were made via connections to current and former students of MBA or DBA courses. Prior to participating, the second author discussed with company representatives whether ostracism and abusive supervision occurred in their company (to ensure variance on our key variables). In return for participating, companies received a summary report of the study findings for their company. A total of 495 employees were randomly contacted with a request to participate by their department heads; participants received 20 RMB in compensation for each questionnaire completed. The studies were conducted online; all questionnaires were translated from English into Chinese following Brislin's (1970) backtranslation procedure.

Questionnaires were administered by the second and fourth authors at three time points, with approximately four months separating each survey occasion. To ensure that participants had the same supervisor throughout the study period, the company HR departments were consulted to see whether any subordinates had changed supervisors since the last survey; those who had different supervisors were not surveyed. In the first survey, participants completed the measures of abusive supervision and workplace ostracism. We received responses from 427 employees (86% response rate). In the second survey sent out to these 427 respondents, measures of anger and anxiety were completed; we received 389 responses (approximately 79% overall response rate). In the third survey sent out to these 389 respondents, participants completed measures assessing approachand avoidance-oriented CWBs; we received 257 responses (approximately 52% overall response rate). Our final sample thus consisted of these 257 respondents. Participants (52% female) were on average 28.3 years old and had worked with their supervisor for approximately 20.4 months; participants worked in banking (35.4%), information technology (28.4%), telecom service (22.2%), and electronic commerce (14%).<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> To examine any effects of subject attrition, we used ttests to see whether those who stopped participating after our first survey differed from the final sample in our second and third surveys, and whether those who stopped participating after our second survey differed from the final sample in our third survey, with respect to our control variables or independent and mediating variables. Twenty-three such comparisons were made in total; when applying a Bonferroni correction to our statistical tests, the only significant difference was that those participants who stopped participating after our second survey were significantly older and had worked with their supervisor longer compared to our final sample in our third survey.

#### Measures

Abusive supervision. We assessed abusive supervision with Tepper's (2000) 15-item abusive supervision scale. To reduce overlap between the abusive supervision and ostracism scale, we deleted two items from the abusive supervision scale that assessed ostracism ("My supervisor gave me the silent treatment" and "My supervisor did not allow me to interact with my coworkers"), resulting in 13 items in our measure. Participants indicated the extent to which their supervisors had performed various behaviors directed at them in the past year (e.g., "Tells me my thoughts or feelings are stupid") on a fivepoint Likert scale (1 = not at all and 5 = all the time).

**Workplace ostracism.** We assessed workplace ostracism with Ferris et al.'s (2008) measure. Participants indicated the extent to which they experienced ostracism at work (e.g., "Others left the area when I entered") in the past year on a five-point Likert scale ( $1 = not \ at \ all$  and  $5 = all \ the \ time$ ).

**Anger.** Anger was measured with Spielberger, Reheiser, and Sydeman's (1995) 14-item scale. Participants indicated the extent to which they had experienced various emotions (e.g., "furious," "angry") when dealing with their supervisor over the past four months on a five-point Likert scale (1 = not at all and 5 = all the time).

**Anxiety.** We assessed anxiety with Spielberger's (1983) 20-item scale. Participants indicated the extent to which they agreed with statements such as "I feel nervous when I am dealing with my boss or supervisor" for the past four months on a five-point Likert scale ( $1 = strongly \ disagree$  and  $5 = strongly \ agree$ ).

Approach-oriented and avoidance-oriented CWBs. We assessed approach-oriented and avoidanceoriented CWBs using items adapted from two measures (see Appendix A for specific items and source of items). Primarily, approach-oriented CWBs were assessed using Mitchell and Ambrose's (2007) measure of supervisor-directed deviance; avoidanceoriented CWBs were assessed with McCullough et al.'s (1997) measure of avoiding someone who has offended you, except for one item ("I refused to talk to my boss or supervisor") that was from Mitchell and Ambrose's measure, as we felt it better represented avoidance-oriented CWBs. Participants indicated the extent to which they had engaged in the various behaviors using a seven-point Likert scale (1 = never and 7 = daily) over the past four months. As the items were taken from scales developed separately, we conducted a confirmatory factor analysis to ensure our use of the items as indicators of latent approach-oriented and avoidance-oriented CWBs was appropriate. Following Hu and Bentler's (1999) two-index presentation strategy, we evaluated model fit using the comparative fit index (CFI, where values approaching or surpassing .95 indicate good fit) and standardized root mean square residual (SRMR, where values approaching or below .09 indicate good fit).<sup>6</sup>

We compared the fit of three models. First, Model 1 had all Appendix items load on a single latent factor. This model provided a poor fit to the data (CFI = .67, SRMR = .22). Second, Model 2—which represents our conceptual distinction between approach-oriented and avoidance-oriented CWBs—had Appendix items 1-8 load solely on a latent approach-oriented CWB factor and Appendix items 9–12 load solely on a latent avoidance-oriented CWB factor. Model 2 provided a good overall fit to the data generally (CFI = .94, SRMR = .03); as Model 2 was not nested within Model 1, we also used the Akaike Information Criterion (AIC) for comparisons between models, with lower values indicating comparatively better fit. In comparison to Model 1, Model 2 provided a better fit (Model 1 AIC = 5361.75; Model 2 AIC = 4400.89). Finally, given that Appendix item 12, an avoidance-oriented CWB item, was taken from the Mitchell and Ambrose (2007) scale, which is the source of the approach-oriented CWBs, Model 3 tested whether this item is best conceptualized as an indicator of approach-oriented CWBs. Thus, Model 3 was similar to Model 2 but modeled Appendix item 12 as an indicator of the latent approach-oriented CWB factor. This model provided a worse fit to the data (CFI = .86, SRMR = .15), as well as in comparison to Model 2 (Model 3 AIC = 4689.29). Taken together, these findings support our distinction between approach-oriented and avoidance-oriented CWBs.

<sup>&</sup>lt;sup>6</sup> We also conducted an item-sort task to establish the substantive (or content) validity of our eight approach-oriented and four avoidance-oriented CWB items. In brief, the results of the item-sort task suggested that our items possessed substantive validity, in that participants assigned the items to the correct category (e.g., for our eight approach-oriented items, the approach-oriented behavior category) than to an incorrect category (i.e., the avoidance-oriented behavior category, a "both approach- and avoidance-oriented behavior" category, or a "neither approach- and avoidance-oriented behavior" category for our eight approach-oriented items) beyond chance levels. For more information, please contact the first author.

Control variables. We controlled for subordinate age, gender, tenure with the supervisor, position rank, and education level. Studies have suggested that gender, tenure, and education level are related to performance (Hoobler, Wayne, & Lemmon, 2009; Ng & Feldman, 2009, 2010) and that employees with greater tenure and rank have more positive relations with others at work (Cortina, Magley, Williams, & Langhout, 2001), both of which may influence the levels of ostracism and abusive supervision participants are exposed to (LePine & Van Dyne, 2001; Tepper, Moss, & Duffy, 2011).

#### **Tests for Nonindependence**

Our data were collected from five companies, raising the possibility that our data may not be independent. Following Nifadkar et al. (2012), we tested whether nonindependence was a problem by estimating the loss of power associated with nonindependence, using techniques outlined by Bliese and Hanges (2004). In particular, ICC(1) values were calculated for our constructs and we examined whether statistical approaches that control for nonindependence would be useful. Our ICC(1) values ranged from .02 (for workplace ostracism and anger) to .10 for approach-oriented CWB. In sum, these analyses indicated that the power loss associated with not controlling for independence was approximately 3%, comparing favorably with other studies using this technique (e.g., Nifadkar et al., 2012). Given these findings, nonindependence was unlikely to be an issue for our study.

#### **Analytic Strategy**

Our hypotheses were tested with SEM, using Mplus 6.1 (Muthén & Muthén, 1998–2010). We modeled our control variables (gender, age, education, position rank, and tenure with supervisor) as predictors of our dependent variables, and allowed correlations between abusive supervision and workplace ostracism, between anger and anxiety, and between approach-oriented and avoidance-oriented CWBs. Following Mathieu and Taylor (2006), we first modeled a more parsimonious full mediation model where ostracism and abusive supervision only related to anger and anxiety, while anger and anxiety related to approach-oriented and avoidance-oriented CWBs. Subsequently, we tested for partial mediation by evaluating the change in  $\chi^2$  ( $\Delta \chi^2$ ) and model AIC values when individual paths from all our antecedent variables to all our dependent variables were freed (Anderson & Gerbing, 1988).

Using the raw data as input, parameters were estimated using maximum likelihood estimation (Chou & Bentler, 1995). We created three item parcels to indicate each study construct except avoidance-oriented CWBs, where the four scale items were used as indicators. Following Landis, Beal, and Tesluk (2000), parcels were formed using the single-factor method. We used Anderson and Gerbing's (1988) two-stage analytic procedure to test our hypotheses, which involves first fitting the measurement model to the data and subsequently testing the underlying structural model. To assess the significance of the indirect effects, we employed bootstrapping procedures (Shrout & Bolger, 2002), resampling 1,000 times and using the bias-corrected percentile method to create 99% confidence intervals (Mooney & Duval, 1993).

#### STUDY 1 RESULTS

Table 1 presents the means, standard deviations, alphas, and correlations of the measured variables. An examination of the zero-order correlations provides initial support for our hypotheses, with abusive supervision being positively related to anger ( $r = .48, \ p < .01$ ) and workplace ostracism being positively related to anxiety ( $r = .43, \ p < .01$ ). In addition, anger was positively correlated with approachoriented CWB ( $r = .37, \ p < .01$ ) and anxiety was positively related to avoidance-oriented CWB ( $r = .30, \ p < .01$ ).

We first examined the fit of our six-factor measurement model to the data. The measurement model provided a good fit to the data (CFI = .99), SRMR = .03), allowing us to next assess the structural model fit. We then tested the fit of the aforementioned full mediation model; overall, this model provided a good fit to the data (CFI = .98, SRMR = .07, AIC = 12215.84). Subsequently, we compared the fit of the full mediation model to a partial mediation model where the paths between our independent variables (abusive supervision and ostracism) and dependent variables (approach-oriented and avoidanceoriented CWB) were freed. Compared to the full mediation model, the partial mediation model provided a superior fit to the data (CFI = .99, SRMR = .04, AIC = 12186.00;  $\Delta \chi^2$  (4) = 37.84, p < .05) and was retained for hypothesis testing.

Figure 1 presents the direct path estimates for our model. Consistent with Hypotheses 1 and 2, abusive supervision was significantly related to anger (B = .56,

TABLE 1
Descriptive Statistics, Zero-Order Correlations, and Alphas for study 1

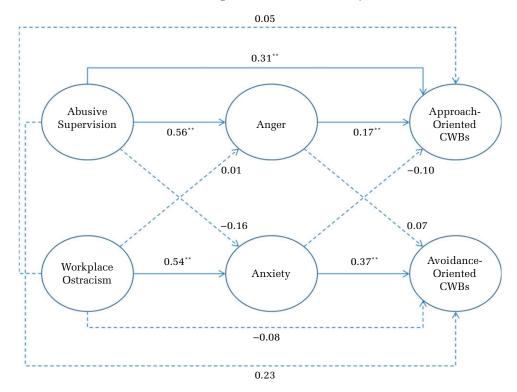
	Mean	SD	1	2	3	4	5	6
1. Abusive supervision	1.68	0.87	0.96					
2. Workplace ostracism	1.71	0.90	0.64**	0.97				
3. Anger	1.93	0.80	0.48**	0.33**	0.97			
4. Anxiety	3.34	0.84	0.19**	0.43**	0.32**	0.93		
5. Avoidance-oriented CWBs	4.21	0.96	0.22**	0.19**	0.21**	0.30**	0.94	
6. Approach-oriented CWBs	1.42	0.68	0.49**	0.34**	0.37**	0.04	0.13*	0.94

*Notes:* Numbers in bold on the diagonal represent Cronbach's  $\alpha$  values. n=257.

p<.01) while workplace ostracism was significantly related to anxiety ( $B=.54,\,p<.01$ ). Abusive supervision did not significantly relate to anxiety ( $B=-.16,\,p>.05$ ) and workplace ostracism did not significantly relate to anger ( $B=.01,\,p>.05$ ). Consistent with Hypotheses 3 and 4, anger was significantly related to approach-oriented CWB ( $B=.17,\,p<.01$ ) while anxiety was significantly related to avoidance-oriented CWB ( $B=.37,\,p<.01$ ). Anger did not significantly

relate to avoidance-oriented CWB (B = .07, p > .05), and anxiety did not significantly relate to approach-oriented CWB (B = -.10, p > .05). Additionally, abusive supervision had a significant direct effect on approach-oriented CWB (B = .31, p < .01) but not avoidance-oriented CWB (B = .23, p > .05). Workplace ostracism did not have a significant direct effect on either approach-oriented CWB (B = .05, p > .05) or avoidance-oriented CWB (B = .05, p > .05).

FIGURE 1 Structural Equation Model for Study 1



Notes: Estimates provided are unstandardized estimates. For simplicity, control variables are not shown.

<sup>\*</sup> p < .05

<sup>\*\*</sup>p < .01.

<sup>\*\*</sup> p < .01

Consistent with Hypothesis 5, anger partially mediated the effect of abusive supervision on approachoriented CWB, with a significant indirect effect emerging ( $B=.10,\ p<.01;\ 99\%$  CI: .02 to .22). Consistent with Hypothesis 6, anxiety fully mediated the effect of workplace ostracism on avoidance-oriented CWB, with a significant indirect effect emerging ( $B=.20,\ p<.01;\ 99\%$  CI: .04 to .43). No other significant indirect effects emerged.

#### STUDY 2

Taken as a whole, the results of our first study provide strong support for our hypotheses. In our second study, we sought to address a potential source of concern regarding our workplace ostracism measure, while constructively replicating our findings in a separate dataset using a different workplace aggression construct in place of abusive supervision. In particular, in Study 1 our workplace ostracism measure used the general referent (e.g., "Others left the area when I entered") that the scale was originally developed with (Ferris et al., 2008). This was in contrast to the rest of our measures, which all used the supervisor as a referent. Although work on emotions has shown that emotions can linger after the cause of the emotion departs, and in this way continue to affect behavior (Lerner & Keltner, 2001; Raghunathan & Pham, 1999; Weiner, 1986), the misalignment represents a concern. Thus, in Study 2, we altered the Ferris et al. (2008) measure of ostracism to specifically reference the employee's supervisor, to ensure that our results regarding ostracism were not idiosyncratic to the discrepant measure referent used.

We also sought to broaden the scope of our findings by employing a different measure of workplace aggression: supervisor undermining, or "behavior intended to hinder, over time, the ability to establish and maintain positive interpersonal relationships, work-related success, and favorable reputation" (Duffy et al., 2002: 332). Given the similarities between the two (Tepper, 2007), we expected effects for supervisor undermining to parallel the effects seen in Study 1 for abusive supervision. In particular, because the items in the supervisor undermining scale inherently reflect negative events occurring, and since such events are directly attributed to the supervisor (e.g., asking whether the supervisor has intentionally insulted, belittled, undermined, or spoken negatively about the employee, among other supervisor behaviors), we expected supervisor undermining to be related to experiencing anger (but not anxiety), and for that anger to mediate the effect of supervisor undermining on approach-oriented CWBs (but not avoidance-oriented CWBs). More formally, we hypothesize the following:

Hypothesis 7. Supervisor undermining will be positively related to experiencing anger in the workplace.

Hypothesis 8. Anger will mediate the indirect effect of supervisor undermining on approachoriented CWBs.

#### STUDY 2 METHOD

#### **Participants and Procedure**

Participants were drawn from six large companies working in banking, media, hospitality, retail, information technology, and real estate industries located in Guangzhou, China. As in Study 1, initial contacts with the companies were made via connections to current and former students of MBA or DBA courses, and the companies were consulted to see whether ostracism and abusive supervision occurred in their company, and received a summary report of the study findings for their company. A total of 500 employees were randomly contacted with a request to participate; each participant received 50 RMB in compensation after they completed all questionnaires. The studies were conducted online; all questionnaires were translated from English into Chinese following Brislin's (1970) back translation procedure.

Questionnaires were administered by the second and fourth authors at three time points, with approximately two months separating each survey. To ensure participants had the same supervisor throughout the study, the company HR departments were consulted to see whether any subordinates had changed supervisors since the last survey; those who had different supervisors were not surveyed. In the first survey, participants completed measures of supervisor undermining, workplace ostracism, and five control variables—namely, age, gender, tenure with the supervisor, position rank, and education level. We received responses from 486 employees (97% response rate). After two months, measures of anger and anxiety were completed in the second survey; we received responses from 438 employees (87.6% overall response rate). In the third survey, participants completed measures assessing their approach- and avoidance-oriented CWBs; we received 357 responses (approximately 71% response rate). Participants (48.7% female) were on average

24.8 years old and had worked with their supervisor for approximately 26.27 months; participants worked in banking (13.4%), media (12%), hospitality (13.2%), retail (31.4%), information technology (16.8%), and real estate (13.2%).

#### Measures

We assessed workplace ostracism with the same measure as Study 1, although we adjusted the ostracism measure to specifically reference ostracism from the supervisor (see Wu, Ferris, Kwan, Chiang, Snape, & Liang, 2015). We also altered the time frame referenced by our mediator and dependent variables to reflect two months, not four (as Study 2 used a two-month lag between surveys, while Study 1 used a four-month lag). We assessed anger, anxiety, approach-oriented CWBs, avoidance-oriented CWBs, and control variables, as in Study 1. Also in line with Study 1, we compared the fit of three models to ensure our use of items as indicators of latent approach-oriented and avoidance-oriented CWBs was appropriate. Model 1 (where all appendix items loaded on a single latent factor) provided a poor fit to the data (CFI = .60, SRMR = .22, AIC = 7423.58), while Model 2-our conceptual distinction between approach-oriented and avoidance-oriented CWBs—provided a good fit to the data (CFI = .98, SRMR = .03, AIC = 5556.64). Model 3—which had Appendix item 12 indicate the latent approachoriented CWB factor instead of the avoidanceoriented CWB factor—also provided a poor fit (CFI = .78, SRMR = .16, AIC = 6199.80). Taken together, these findings again support our distinction between approach-oriented and avoidance-oriented CWBs.

**Supervisor undermining.** We used Duffy et al.'s (2002) 12-item supervisor undermining scale to assess supervisor undermining; we removed one item from the original scale ("Gave me the silent treatment") because of its conceptual overlap with ostracism. Participants responded to items such as

"Undermined my effort to be successful on the job" on a five-point Likert scale (1 = strongly disagree and 5 = strongly agree).

#### **Tests for Nonindependence and Analytic Strategy**

Our data were collected from six companies, raising the possibility that our data may not be independent. As with Study 1, we calculated ICC(1) values for our constructs and examined whether statistical approaches that control for nonindependence would be useful. Our ICC(1) values ranged from .03 (for supervisor undermining) to .10 (for avoidance-oriented CWB). As with Study 1, these results suggest that nonindependence was unlikely to be an issue for our study. We followed the same analytic strategy as in Study 1 with SEM, using Mplus 6.1 (Muthén & Muthén, 1998–2010) to test our hypotheses.

#### STUDY 2 RESULTS

Table 2 presents the means, standard deviations, alphas, and correlations of the measured variables. An examination of the zero-order correlations provided initial support for our hypotheses, with supervisor undermining being positively related to anger (r = .38, p < .01) and workplace ostracism being positively related to anxiety (r = .39, p < .01). In addition, anger was positively correlated with approach-oriented CWB (r = .43, p < .01) and anxiety was positively related to avoidance-oriented CWB (r = .67, p < .01). We first examined the fit of our six-factor measurement model to the data. The measurement model provided a good fit to the data (CFI = .97, SRMR = .03), allowing us to proceed to assessing the fit of our structural model. Compared to the full mediation model, a partial mediation model provided a better fit to the data (CFI = .97, SRMR = .05, AIC = 12106.53;  $\Delta \chi^2(4) = 24.84$ , p < .001) and was retained for hypothesis testing.

Figure 2 presents the path estimates for our model. Consistent with Hypotheses 1 and 2, supervisor undermining was significantly related to anger (B = .34, p < .001) while workplace ostracism was significantly related to anxiety (B = .36, p < .001). Supervisor undermining did not significantly relate to anxiety (B = -.06, p > .05), and workplace ostracism did not significantly relate to anger (B = -.06, p > .05). Consistent with Hypotheses 3 and 4, anger was significantly related to approach-oriented CWB (B = .40, p < .001) while anxiety was significantly related to avoidance-oriented CWB (B = .61, p < .001).

<sup>&</sup>lt;sup>7</sup> To examine any effects of subject attrition, we again used t-tests to see whether those who stopped participating after our first survey differed from the final sample in our second and third surveys, and whether those who stopped participating after our second survey differed from the final sample in our third survey, with respect to our control variables or independent and mediating variables. Twenty-three such comparisons were made in total; when applying a Bonferroni correction to our statistical tests, no significant differences emerged.

TABLE 2
Descriptive Statistics, Zero-Order Correlations, and Alphas for Study 2

	Mean	SD	1	2	3	4	5	6
1. Supervisor undermining	1.39	0.66	0.98					
2. Workplace ostracism	1.45	0.68	0.21**	0.97				
3. Anger	1.56	0.68	0.38**	0.01	0.97			
4. Anxiety	2.95	0.64	0.07	0.39**	0.30**	0.94		
5. Avoidance-oriented CWBs	1.88	0.92	0.08	0.40**	0.24**	0.67**	0.96	
6. Approach-oriented CWBs	1.76	0.83	0.35*	0.07	0.43**	0.23**	0.16**	0.99

*Notes:* Numbers in bold on the diagonal represent Cronbach's  $\alpha$  values. n=357.

Anger did not significantly relate to avoidance-oriented CWB (B=.14, p>.05) and anxiety did not significantly relate to approach-oriented CWB (B=.14, p>.05). Additionally, supervisor undermining had a significant direct effect on approach-oriented CWB (B=.24, p<.01) but not on avoidance-oriented CWB (B=.01, p>.05). Workplace ostracism had a significant direct effect on avoidance-oriented CWB (B=.21, p<.01) but not on approach-oriented CWB (B=.21, p<.01) but not on approach-oriented CWB (B=.02, p>.05).

Consistent with Hypothesis 5, anger partially mediated the effect of supervisor undermining on approach-oriented CWB, with a significant indirect effect emerging (B=.13, p<.01;99% CI: .05 to .28). Consistent with Hypothesis 6, anxiety fully mediated the effect of workplace ostracism on avoidance-oriented CWB, with a significant indirect effect emerging (B=.36, p<.001;99% CI: .16 to .55). No other significant indirect effects emerged.

#### DISCUSSION

In an attempt to demonstrate differences among workplace aggression constructs, our study puts forth an approach-avoidance model of workplace aggression. In particular, we suggest that workplace aggression constructs (i.e., abusive supervision, supervisor undermining, and workplace ostracism) differ in the extent to which they elicit specific approach (anger) and avoidance (anxiety) emotions; in turn, anger and anxiety differ in the extent to which they elicit approach-oriented and avoidance-oriented CWBs. Our study found full support for our predictions: anger partially mediated the effect of abusive supervision (Study 1) and supervisor undermining (Study 2) on approach-oriented CWBs, while anxiety fully mediated the effect of workplace ostracism on avoidance-oriented CWBs (in Study 1 and

Study 2). Interestingly, the pattern of correlations differed between the two studies, with ostracism (undermining) being unrelated to anger (anxiety) in Study 2, despite significant relations in Study 1. Although such differences may be due to the different measures employed between studies (i.e., abusive supervision and a non-supervisor-referenced ostracism

<sup>\*</sup> p < .05

<sup>\*\*</sup>p < .01.

<sup>&</sup>lt;sup>8</sup> A reviewer raised the question of whether our approach-avoidance framework may itself be contained within a superordinate reciprocity or social exchange framework. That is, given that our study variables primarily focus on aggression by the supervisor and supervisor-directed emotional and behavioral reactions, it is possible that the approach-avoidance action tendencies engendered by abusive supervision or undermining and ostracism are limited to reciprocal reactions toward the supervisor. Given that emotions are generally thought to create action tendencies that influence behavior after a stimulus departs (Frijda, 1986, 1993; Lerner & Keltner, 2001), the framework we have developed should extend beyond reciprocal effects and should influence how, for example, displaced aggression behaviors toward other targets manifests itself as well. Although our studies were not designed to test this hypothesis, we did include a measure in Study 1 of what might be termed approachoriented deviant behavior at home. This measure, which is a personal aggression measure adapted to the home (Stewart, Bing, Davison, Woehr, & McIntyre, 2009), assessed approach-oriented deviant behaviors such as making fun of others, acting rudely toward others, or saying something hurtful to others at home. When we modeled this measure as an additional dependent variable, we found abusive supervision and anger predicted the measure, but workplace ostracism and anxiety did not. This provides preliminary evidence that our framework extends beyond reciprocity or social exchange principles, though more comprehensive testing (e.g., including a measure of avoidance-oriented deviant behaviors at home) is needed. For more details on these analyses, please contact the first author.

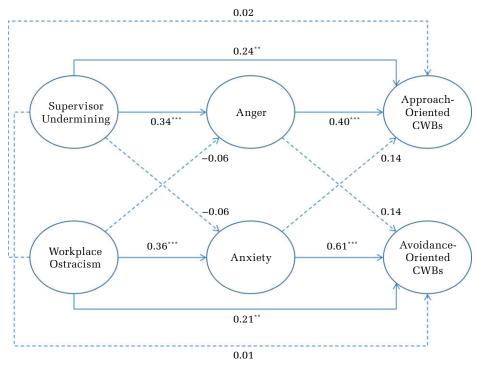


FIGURE 2
Study 2 Structural Equation Model for Mediation Analysis.

Notes: Estimates provided are unstandardized estimates. For simplicity, control variables are not shown.

measure in Study 1, and supervisor undermining and supervisor-referenced ostracism in Study 2), this may also suggest possible moderators of these effects (an issue we return to when discussing future research directions). Nevertheless, the consistent findings across the two SEM analyses demonstrates the importance of estimating the relationships simultaneously.

In what follows, we discuss three major contributions of our work. First, we discuss our approach—avoidance model of workplace aggression broadly, including how our model enmeshes workplace aggression within a generative approach—avoidance framework with ties to numerous other studies, as well as discussing how our model can be extended to other aggression constructs (e.g., petty tyranny, incivility). Second, we discuss how an approach—avoidance perspective on specific emotions extends past research that has equated positive or negative valence of affect with approach—avoidance motivation. Finally, we discuss how a consideration of the approach—avoidance nature of certain CWBs can provide novel insights into extant research,

helping our understanding of the literature as a whole.

# Approach–Avoidance as a Model for Workplace Aggression

One of the benefits of—and reasons for—adopting an approach-avoidance perspective on workplace aggression is that approach-avoidance represents a basic aspect of human existence whose influence is widespread across many different research domains (Elliot, 2006). Approach-avoidance has a fundamental influence on our lives; ergo, this influence should also be manifested in our theories of workplace phenomena, including workplace aggression. By adopting a framework whose explanatory power is used broadly-e.g., as a framework for entire fields such as personality (Elliot & Thrash, 2002; Ferris et al., 2011), attitudes (Carver, Sutton, & Scheier, 2000; Ferris et al., 2013), motivation (Elliot & Thrash, 2010), and emotion (Carver & Harmon-Jones, 2009)—as well as for specific individual constructs e.g., for power (Anderson & Berdahl, 2002), self-esteem

<sup>\*\*</sup> *p* < .01.

<sup>\*\*\*</sup> p < .001

(Tice & Masicampo, 2008), fairness (Cropanzano, Paddock, Rupp, Bagger, & Baldwin, 2008), and responses to compensation arrangements (Wowak & Hambrick, 2010)—we are placing workplace aggression within a theoretical framework whose scope is in many ways unsurpassed in the literature.

The benefits of using such a ubiquitous framework are numerous, including furthering the development of cross-discipline paradigms and simplifying the process of connecting constructs from different research domains. In other words, relations across constructs or research domains can be easily seen (and hypotheses generated accordingly) when common paradigms are used. As one simple example of the potential generative power of an approachavoidance framework, given that neurotic individuals tend to exhibit more avoidance motivation compared to nonneurotic individuals (Elliot & Thrash, 2002), our model would suggest that the type of counterproductive behavior neurotic individuals engage in should be limited to avoidance-oriented CWBs. Although this is simply one example, we believe that an approach-avoidance framework for workplace aggression has the potential to alter our perception of relations among workplace aggression constructs, thereby providing unique insights into aggression phenomena while connecting workplace aggression to a larger, generative literature.

While our work has focused empirically on abusive supervision, supervisor undermining, and workplace ostracism, we believe that the model we provide can be extended to other forms of workplace aggression. For example, petty tyranny (Ashforth, 1994) measures include a subdimension that reflects belittling subordinates (e.g., "yells at subordinates"), similar to abusive supervision. On the other hand, workplace incivility (Andersson & Pearson, 1999; Cortina et al., 2001) has a similar profile to workplace ostracism. For example, incivility is defined as "lowintensity conduct that lacks a clear intent to harm" (Cortina, 2008: 55) and many of its items can be interpreted as being unclear with respect to responsibility or hostility (e.g., items assessing whether others "doubted your judgment on a matter over which you have responsibility," or "made unwanted attempts to draw you into a discussion of personal matters" [Cortina et al., 2001: 70]). This suggests that from a definitional and measurement perspective, petty tyranny behaviors fit the profile of conditions that elicit anger (i.e., certainty over harm and responsibility ascribed to another) while uncivil behaviors fit the profile for conditions that elicit anxiety (i.e., uncertainty over harm and responsibility). We would therefore expect petty tyranny and incivility to exhibit a similar pattern of relations as seen in this study for abusive supervision or supervisor undermining and workplace ostracism, respectively.

With that being said, incivility measures—as well as abusive supervision and undermining measures—include items that may elicit anxiety or anger, respectively (e.g., abusive supervision and undermining measures also include an item assessing workplace ostracism [Ferris et al., 2008]). Thus, one implication of an approach—avoidance theoretical perspective on workplace aggression is that it brings attention to potential measurement issues in this literature. In particular, our findings suggest that not all forms of abusive supervision or undermining or incivility will have the same effects, and draws attention to the need for more fine-grain distinctions in how the constructs themselves are assessed.

# Approach-avoidance Emotions: Moving Beyond Valence

Aside from our use of approach—avoidance principles for the workplace aggression literature as a whole, our work also makes a contribution to the management literature on emotions by emphasizing the need to consider more than just the valence (i.e., positive or negative) of emotions. In particular, our work illustrates how specific emotions that have the same valence (e.g., anger and anxiety are negatively valenced) can be differentially related to approach and avoidance behaviors; thus, the effects of anger and anxiety should be considered separately (see Spector & Fox, 2005; Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006). This contribution is most apparent when juxtaposed with theory and results from recent research applying an approachavoidance framework to newcomer affect and behavior (Nifadkar et al., 2012). Using measures of overall positive and negative affect, Nifadkar and colleagues (2012: 1149) proposed that positive emotions should lead to approach behaviors and negative emotions should lead to avoidance behaviors, stating "the behavioral outcomes of positive and negative newcomer affect can be broadly categorized as either approach behavior directed toward a newcomer's supervisor or avoidance behavior directed toward a newcomer's supervisor."

Following this perspective, given that both anger and anxiety are representative of negative affect, we would predict that they should both be related to avoidance behaviors and unrelated to approach behaviors. Yet, as our results illustrate, valence alone is not enough to determine whether emotion will lead to approach or avoidance behaviors: anger predicted approach-oriented CWBs (but not avoidanceoriented CWBs), and anxiety predicted avoidanceoriented CWBs (but not approach-oriented CWBs). This is not to suggest that the work of Nifadkar and colleagues (2012) is wrong: indeed, considering broad measures of positive and negative emotions as representative of approach and avoidance tendencies is both justified and well established, because positive emotions (assessed broadly) tend to be associated with approach and negative emotions (assessed broadly) tend to be associated with avoidance (see, e.g., Barclay & Kiefer, 2014; Elliot & Thrash, 2002; Ferris et al., 2011; Gable, Reis, & Elliot, 2003). This simply reflects the reality that positive (or negative) emotions as a whole tend to be associated with approach (or avoidance) motivation, so when positive or negative emotions are aggregated together, the average tendency will persevere. However, the approach-avoidance consequences of specific emotions belie the notion that approach-avoidance corresponds directly to the positive or negative valence of the emotion. Thus, an individual who is in a bad mood may not necessarily always engage in avoidance behaviors—it depends on the specific nature of the bad mood. Our results thus signal the utility of considering specific emotions (e.g., anger and anxiety), as measures of overall affect may mask important differential relations that are obscured when emotions are grouped by valence.

A natural extension of this disentangling of approach-avoidance from positive or negative valence would be to examine whether, under certain circumstances, negative approach emotions (i.e., anger) may lead to beneficial approach behaviors. In particular, being energized or motivated via approach orientations is generally viewed as leading to more positive outcomes compared to being energized or motivated via avoidance-orientations (Elliot, 2008; Ferris et al., 2011). Thus, while feeling angry (and approach-oriented) predisposes an individual to engage in direct retaliation against the source of the anger, if such retaliatory behavior is not possible (e.g., due to the supervisor possessing coercive power [Lian et al., 2014a]), employees may redirect their approach-oriented energy into beneficial approach-related outcomes, such as increasing one's effort on the job or generating more creative ideas. Such a prediction would parallel Freudian notions of sublimation, albeit providing greater precision with respect to which emotions sublimate into

which behaviors, depending on their approach—avoidance nature.

#### CWBs: Benefits of an Approach-Avoidance View

Finally, our work also contributes to the literature on workplace deviance or CWBs. In particular, we used approach-avoidance principles to distinguish between approach-oriented and avoidance-oriented CWBs. Distinguishing between approach and avoidance measures of CWB has parallels in the literature; however, our work extends past research by placing these distinctions within a broader theoretical framework that can explain why such distinctions exist, and what the implications of such distinctions are. For example, Duffy and colleagues (2002) empirically differentiated between the two types of CWBs but made no predictions regarding differential relations for the two types. This approach was justified given that the purpose of their paper was not to address approach—avoidance distinctions, but our work suggests these represent meaningful distinctions, and provides a theoretical explanation for why these factors emerge, as well as outlining what implications the distinctions may have.

We also believe that differentiating between approach-oriented and avoidance-oriented CWB can advance our understanding of prior findings in the literature. For example, consider Fox and Spector's (1999) finding that trait anxiety did not relate to minor forms of interpersonal deviance (a type of CWB). Although this finding may appear perplexing, when applying an approach-avoidance perspective, new insights can be gleaned from this past work. In particular, given that the most frequently endorsed item in their measure of minor interpersonal deviance involved an approachoriented CWB (i.e., playing a joke on someone), the lack of a significant relationship with anxiety can be expected (and explained). In contrast, they did find that trait anxiety related to minor forms of organizational deviance (another type of CWB), some of whose most frequently endorsed items included avoidance-oriented CWBs (e.g., staying home when not sick, coming back late from breaks, and thinking of leaving); again, within an approachavoidance framework, this is to be expected.

With that being said, we should caution that not all forms of CWB may benefit from an approachoriented and avoidance-oriented distinction. Certain CWB items, such as "I dragged out work in order to get overtime," "I littered my work environment," and "I spent too much time fantasizing or daydreaming instead of working" (from Bennett & Robinson, 2000), do not seem to clearly tap into approachoriented or avoidance-oriented behavior. For example, spending time fantasizing may be a function of avoiding work or of approaching the item being fantasized about. As such, it is hard to predict whether CWBs like these should be best predicted by approach- or avoidance-eliciting mistreatment or emotions (although such items could be specifically modified to better reflect the underlying motivation the employee has; e.g., "To avoid work I spent time daydreaming"). Thus, an approach—avoidance perspective on CWBs should be viewed as applying to some, but not all, CWBs.

# **Practical Implications, Limitations, and Future Directions**

We believe our approach-avoidance framework provides a number of practical implications. First, our work highlighting the differential emotional consequences associated with different forms of workplace aggression is of use to workplace wellbeing initiatives. In particular, by outlining how anxiety or anger arise in response to different forms of workplace aggression, our research allows for the development of more targeted (and useful) interventions designed to ameliorate stressful situations. That is, interventions designed to reduce anxiety would have little practical impact when dealing with abusive or undermining supervisors, but would be particularly relevant when dealing with workplace ostracism. Second, by highlighting differential forms of CWB, our work similarly allows for more precise interventions to address CWB, depending on whether the CWB the organization is dealing with is primarily approach-oriented or avoidanceoriented CWB. Thus, an organization experiencing a rash of verbal harassment, taunting, or other forms of approach-oriented CWB may wish to implement anger-reducing interventions, as well as examining what in the workplace environment may be causing

One limitation of our work lies in the fact that our data were collected from one source, raising the possibility that common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) may account for the relations. Although it is often desirable to assess constructs with multiple sources, the nature of our research question was such that collecting data from other sources would be incompatible with the constructs or would introduce large amounts of error

variance. In particular, abusive supervision and workplace ostracism are defined as perceptual processes within an individual; thus, other rating sources of our independent variables would de facto no longer represent our independent variables. Similarly, it has been noted (e.g., Aquino & Douglas, 2003; Fox & Spector, 1999) that due to the subjective nature of the construct, self-reported data are most appropriate for measures of CWBs because only the individual engaging in the behaviors can accurately report what they have done or why (an argument we suggest applies to one's emotional state as well). Moreover, empirical reviews of the literature have suggested that other reports of CWBs add little beyond self-reports (Berry, Carpenter, & Barratt, 2012). When using a common source is unavoidable, procedural remedies can be used to mitigate the influence and plausibility of common method biases. To that end, we purposively employed temporal separation of the measurement of our key variables: our independent and mediator variables were assessed several months apart, as were our mediator and dependent variables. Because of this long period between measurements, we believe it is unlikely that, for example, consistency biases may have influenced the relation between our independent and mediator variables.

A second potential limitation lies in the crosssectional nature of our empirical data. Causality can only be demonstrated with experimental manipulation, so our results should be viewed as consistent with, but not definitively demonstrating, causality. (Beyond demonstrating causality, an additional benefit of experimental tests would be that they would allow direct manipulation of abusive supervision, undermining, and ostracism, which would reduce the correlations among the constructs). With that being said, we did employ appropriate temporal separation of our variables to increase confidence in our findings, and while our theoretical framework supports the ordering we have suggested, it is less apparent how, for example, avoidance-oriented CWBs might uniquely evoke workplace ostracism but not abusive supervision. Moreover, recent crosslagged research has suggested that it is not the case that, for example, abusive supervision causes CWB or CWB causes abusive supervision, but rather that both exhibit reciprocal effects on each other (Lian et al., 2014b).

Nevertheless, a stronger study design would utilize such a cross-lagged design in order to increase the internal validity of our findings; as a reviewer noted, such a design may also be interesting in that

the mediating mechanisms responsible for a reversed effect from (for example) avoidance-oriented CWB to ostracism may not necessarily be the same as the mediating mechanism from ostracism to avoidance-oriented CWB (see, e.g., Wu et al., 2015). To employ a cross-lagged design, researchers may consider using a within-person experience sampling study. Aside from allowing for the modeling of crosslagged effects, such a study would also allow for a more nuanced representation of the relationship among the abusive supervision (or ostracism) event, the approach (or avoidance) emotion that the event evokes in the employee, and the approach-oriented (avoidance-oriented) behavior that the employee engages in as a result. Moreover, such a design can examine what influence, if any, temporal separation between ostracism and abuse has. Although negative exclusion (i.e., ostracism) and inclusion (i.e., abusive supervision) cannot occur at the same time, they may occur in close proximity, and this proximity may influence reactions. For example, a supervisor who insults his or her subordinate and subsequently refuses to interact with the subordinate (i.e., abusive supervision followed closely by ostracism) may produce conflicting approach-avoidance motivations, compared to a supervisor who simply stops talking to a subordinate. Thus, we see much promise in such experience sampling designs for future research.

A third potential limitation of our work is that we assume that, for example, abusive supervision is likely to be interpreted as (a) a certain event that (b) is under the supervisor's control and that the supervisor is responsible for, or that workplace ostracism is likely to be interpreted as (a) an ambiguous event where (b) it is uncertain who is responsible. We believe that these assumptions are fair to make, for the reasons outlined previously; moreover, our work can also be interpreted as a strong inferential test (Platt, 1964) of these assumptions: if abusive supervision was not interpreted in such a manner, it would be unlikely to relate to anger—yet it clearly did. Nevertheless, the assumptions remain untested, and there are certainly situations in which the assumptions would not hold. For example, abusive behaviors can erupt for no apparent reason (e.g., if abusive supervision is the result of displaced aggression [Hoobler & Brass, 2006]), and ostracism can also vary in its causal clarity (Williams, 2001): sometimes it is ambiguous, but sometimes we know we are being ostracized as punishment for something we have done. For example, the Amish ostracism practice of Meidung is used to express displeasure with an act by a target, and the target is informed of the act they committed so that they can repent (Williams, 2001). We therefore call for more research on possible moderators that tap into our theoretical framework, both to test these assumptions of our model and to provide potentially interesting new research directions.

Finally, an interesting direction for future research would be to examine potential boundary conditions such as when (for example) abusive supervision does not invoke approach-oriented emotions or motivation. Recent work has highlighted how effects of abusive supervision depend on whether abusive supervisory behaviors are attributed to the supervisor's desire to promote performance or to cause injury (Liu, Liao, & Loi, 2012). If abusive behaviors are not attributed to a desire to cause injury, or are attributed to a desire to promote performance, it is possible that the conditions required to elicit anger may be mitigated (e.g., because the behaviors may be viewed as not negative and under the control of the supervisor, but rather as encouragement or due to the subordinate's own performance). We expect that our model can readily incorporate and inspire such research findings, and encourage future work that is firmly enmeshed within approach—avoidance principles.

#### REFERENCES

- American Psychiatric Association. 2013. *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Anderson, C., & Berdahl, J. L. 2002. The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, 83: 1362–1377.
- Anderson, J. C., & Gerbing, D. W. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103: 411–423.
- Andersson, L. M., & Pearson, C. M. 1999. Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24: 452–471.
- Aquino, K., & Bradfield, M. 2000. Perceived victimization in the workplace: The role of situational factors and victim characteristics. *Organization Science*, 11: 525–537.
- Aquino, K., & Douglas, S. 2003. Revenge attitudes and hierarchical status as moderators of the relation between identity threat and antisocial behavior in organizations.

- Organizational Behavior and Human Decision Processes, 90: 195–208.
- Aquino, K., & Thau, S. 2009. Workplace victimization: Aggression from the target's perspective. *Annual Review of Psychology*, 60: 717–741.
- Ashforth, B. 1994. Petty tyranny in organizations. *Human Relations*, 47: 755–778.
- Balliet, D., & Ferris, D. L. 2013. Ostracism and prosocial behavior: A social dilemma perspective. Organizational Behavior and Human Decision Processes, 120: 298–308.
- Barclay, L. J., & Kiefer, T. 2014. Approach or avoid? Exploring overall justice and the differential effects of positive and negative emotions. *Journal of Management*, 40: 1857–1898.
- Baron, R. A., & Neuman, J. H. 1996. Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes. *Aggressive Behavior*, 22: 161–173.
- Bennett, R. J., & Robinson, S. L. 2000. Development of a measure of workplace deviance. *The Journal of Applied Psychology*, 85: 349–360.
- Berry, C. M., Carpenter, N. C., & Barratt, C. L. 2012. Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta analytic comparison. *The Journal of Applied Psychology*, 97: 613–636.
- Bies, R. J., & Tripp, T. M. 2005. The study of revenge in the workplace: Conceptual, ideological, and empirical issues. In S. Fox & P. E. Spector (Eds.), Counterproductive work behavior: Investigations of actors and targets: 65–81. Washington, DC: APA Press.
- Bliese, P. D., & Hanges, P. J. 2004. Being both too liberal and too conservative: The perils of treating grouped data as though they were independent. *Organizational Research Methods*, 7: 400–417.
- Bowling, N. A., & Beehr, T. A. 2006. Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *The Journal of Applied Psychology*, 91: 998–1012.
- Brislin, R. W. 1970. Back translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1: 185–216.
- Buss, A. H. 1961. *The psychology of aggression*. New York: John Wiley and Sons, Inc.
- Cacioppo, J. T., & Berntson, G. G. 1994. Relationship between attitudes and evaluative space: A critical review, with emphasis on the separability of positive and negative substrates. *Psychological Bulletin*, 115: 401–423.

- Carver, C. S., & Harmon-Jones, E. 2009. Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin*, 135: 215–217.
- Carver, C. S., Sutton, S. K., & Scheier, M. F. 2000. Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulle*tin, 26: 741–751.
- Carver, C. S., & White, T. L. 1994. Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychol*ogy, 67: 319–333.
- Chen, Y., Ferris, D. L., Kwan, M., Yan, M., Zhou, M., & Hong, Y. 2013. Self-love's lost labor: A self-enhancement model of workplace incivility. *Academy of Management Journal*, 56: 1199–1219.
- Chou, C.-P., & Bentler, P. M. 1995. Estimates and tests in structural equation modeling. In R. H. Hoyle (Ed.), Structural equation modeling: Concepts, issues, and applications: 37–54. Thousand Oaks, CA: Sage.
- Cortina, L. M. 2008. Unseen injustice: Incivility as modern discrimination in organizations. *Academy of Management Review*, 33: 55–75.
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. 2001. Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, 6: 64–80.
- Crawford, L. E., & Cacioppo, J. T. 2002. Learning where to look for danger: Integrating affective and spatial information. *Psychological Science*, 13: 449–453.
- Cropanzano, R., Paddock, L., Rupp, D. E., Bagger, J., & Baldwin, A. 2008. How regulatory focus impacts the process-by-outcome interaction for perceived fairness and emotions. *Organizational Behavior and Human Decision Processes*, 105: 36-51.
- Davidson, R. J. 1992. Emotion and affective style: Hemispheric substrates. *Psychological Science*, 3: 39–43.
- Duffy, M. K., Ganster, D. G., & Pagon, M. 2002. Social undermining in the workplace. *Academy of Management Journal*, 45: 331–351.
- Elliot, A. J. 2006. The hierarchical model of approach-avoidance motivation. *Motivation and Emotion*, 30: 111–116.
- Elliot, A. J. 2008. Introduction and overview. In A. J. Elliot (Ed.), *Handbook of approach and avoid-ance motivation*: 3–16. New York, NY: Psychology Press.

- Elliot, A. J., & Covington, M. V. 2001. Approach and avoidance motivation. *Educational Psychology Review*, 13: 73–92.
- Elliot, A. J., & Thrash, T. M. 2002. Approachavoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal* of *Personality and Social Psychology*, 82: 804–818.
- Elliot, A. I., & Thrash, T. M. 2010. Approach and avoidance temperament as basic dimensions of personality. *Journal of Personality*, 78: 865–906.
- Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. 2008. The development and validation of the workplace ostracism scale. *The Journal of Applied Psychology*, 93: 1348–1366.
- Ferris, D. L., Johnson, R. E., Rosen, C. C., Djurdjevic, E., Chang, C.-H., & Tan, J. A. 2013. When is success not satisfying? Integrating regulatory focus and approach—avoidance motivation theories to explain the relation between core self-evaluation and job satisfaction. *The Journal of Applied Psychology*, 98: 342–353.
- Ferris, D. L., Rosen, C. C., Johnson, R. E., Brown, D. J., Risavy, S., & Heller, D. 2011. Approach or avoidance (or both?): Integrating core self-evaluations within an approach/ avoidance framework. *Personnel Psychology*, 64: 137–161.
- Fox, S., & Spector, P. E. 1999. A model of work frustration-aggression. *Journal of Organizational Behavior*, 20: 915–931.
- Frijda, N. H. 1986. *The emotions*. Cambridge, U.K.: Cambridge University Press.
- Frijda, N. H. 1993. Moods, emotion episodes, and emotions. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions*: 381–404. New York, NY: Guilford Press.
- Gable, S. L., Reis, H. T., & Elliot, A. J. 2003. Evidence for bivariate systems: An empirical test of appetition and aversion across domains. *Journal of Research* in *Personality*, 37: 349–372.
- Geddes, D., & Baron, R. A. 1997. Workplace aggression as a consequence of negative performance feedback. *Management Communication Quarterly*, 10: 433–454.
- Gonsalkorale, K., & Williams, K. D. 2007. The KKK won't let me play: Ostracism even by a despised outgroup hurts. *European Journal of Social Psychology*, 37: 1176–1186.
- Gray, J. A. 1990. Brain systems that mediate both emotion and cognition. *Cognition and Emotion*, 4: 269–288.

- Gruys, M. L., & Sackett, P. R. 2003. The dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment*, 11: 30–42.
- Harmon-Jones, E., Peterson, C., Gable, P., & Harmon-Jones,
   C. 2008. Anger and approach avoidance motivation. In
   A. J. Elliot (Ed.), *Handbook of approach and avoidance motivation*: 399-413. New York, NY: Psychology Press.
- Hershcovis, M. S. 2011. Incivility, social undermining, bullying... Oh my! A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, 32: 499–519.
- Hershcovis, M. S., & Reich, T. C. 2013. Integrating workplace aggression research: Relational, contextual, and method considerations. *Journal of Organizational Behavior*, 34: 26–42.
- Higgins, E. T. 1997. Beyond pleasure and pain. *The American Psychologist*, 52: 1280–1300.
- Hoobler, J. M., & Brass, D. J. 2006. Abusive supervision and family undermining as displaced aggression. *The Journal of Applied Psychology*, 91: 1125–1133.
- Hoobler, J. M., Wayne, S. J., & Lemmon, G. 2009. Bosses' perceptions of family-work conflict and women's promotability: Glass ceiling effects. Academy of Management Journal, 52: 939–957.
- Hu, L., & Bentler, P. M. 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6:1–55
- Izard, C. E. 1991. The psychology of emotions. New York, NY: Plenum.
- Kenrick, D. T., & Shiota, M. N. 2008. Approach and avoidance motivation(s): An evolutionary perspective. In A. J. Elliot (Ed.), *Handbook of approach and* avoidance motivation: 273–288. Mahwah, NJ: Lawrence Erlbaum.
- Landis, R. S., Beal, D., & Tesluk, P. E. 2000. A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, 3: 186–207.
- Lazarus, R. S. 1991. *Emotion and adaptation*. Oxford, UK: Oxford University Press.
- LePine, J. A., & Van Dyne, L. 2001. Peer responses to low performers: An attributional theory model of helping in the context of groups. *Academy of Management Review*, 26: 67–84.
- Lerner, J. S., & Keltner, D. 2001. Fear, anger, and risk. *Journal of Personality and Social Psychology*, 81: 146–159.
- Lerner, J. S., & Tiedens, L. Z. 2006. Portrait of the angry decision maker: How appraisal tendencies shape

- anger's influence on cognition. *Journal of Behavioral Decision Making*, 19: 115–137.
- Lian, H., Brown, D. J., Ferris, D. L., Liang, L., Keeping, L. M., & Morrison, R. J. 2014a. Abusive supervision and retaliation: A self-control framework. Academy of Management Journal, 57: 116–139.
- Lian, H., Ferris, D. L., Morrison, R., & Brown, D. J. 2014b. Blame it on the supervisor or the subordinate? Reciprocal relations between abusive supervision and organizational deviance. *The Journal of Applied Psychology*, 99: 651–664.
- Liu, D., Liao, H., & Loi, R. 2012. The dark side of leadership: A three-level investigation of the cascading effect of abusive supervision on creativity. Academy of Management Journal, 55: 1187–1212.
- Mathieu, J. E., & Taylor, S. R. 2006. Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior*, 27: 1031–1056.
- Mayer, D. M., Thau, S., Workman, K. M., Van Dijke, M., & De Cremer, D. 2012. Leader mistreatment, employee hostility, and deviant behaviors: Integrating selfuncertainty and thwarted needs perspectives on deviance. *Organizational Behavior and Human Decision Processes*, 117: 24–40.
- McCullough, M. E., Worthington, E. L., & Rachal, K. C. 1997. Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology*, 73: 321–336.
- Mitchell, M. S., & Ambrose, M. L. 2007. Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *The Journal of Applied Psychology*, 92: 1159–1168.
- Mooney, C. Z., & Duval, R. D. 1993. *Bootstrapping: A nonparametric approach to statistical inference*. Thousand Oaks, CA: Sage.
- Muthén, L. K., & Muthén, B. O. 1998–2010. *Mplus user's guide* (6th ed.). Los Angeles, CA: Muthén & Muthén.
- Neuman, J. H., & Baron, R. A. 2005. Aggression in the workplace: A social-psychological perspective. In S. Fox & P. E. Spector (Eds.), Counterproductive work behavior: Investigations of actors and targets: 13–40. Washington, DC: American Psychological Association.
- Ng, T. W. H., & Feldman, D. C. 2009. How broadly does education contribute to job performance? *Personnel Psychology*, 62: 89–134.
- Ng, T. W., & Feldman, D. C. 2010. Organizational tenure and job performance. *Journal of Management*, 36: 1220–1250.
- Nifadkar, S., Tsui, A. S., & Ashforth, B. E. 2012. The way you make me feel and behave: Supervisor-triggered

- newcomer affect and approach-avoidance behavior. *Academy of Management Journal*, 55: 1146–1168.
- Pettersson, E., & Turkheimer, E. 2013. Approach temperament, anger, and evaluation: resolving a paradox. *Journal of Personality and Social Psychology*, 105: 285–300.
- Plant, E. A., & Devine, P. G. 2008. Interractial interactions: Approach and avoidance. In A. J. Elliot (Ed.), *Handbook of approach and avoidance motivation*: 571–584. New York, NY: Psychology Press.
- Platt, J. R. 1964. Strong inference. Science, 146: 347-353.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88: 879–903.
- Raghunathan, R., & Pham, M. T. 1999. All negative moods are not equal: Motivational influences of anxiety and sadness on decision making. *Organizational Behavior and Human Decision Processes*, 79: 56–77.
- Robinson, S. R., O'Reilly, J., & Wang, W. 2013. Invisible at work: An integrated model of workplace ostracism. *Journal of Management*, 39: 203–231.
- Rosch, E. 1978. Principle of categorization. In E. Rosch, & B. B. Lloyd (Eds.), *Cognition and categorization*: 27–48. Hillsdale, NJ: Lawrence Erlbaum.
- Roseman, I. J. 2008. Motivations and emotivations: Approach, avoidance, and other tendencies in motivated and emotional behavior. In A. J. Elliot (Ed.), *Handbook of approach and avoidance motivation*: 343–366. New York, NY: Psychology Press.
- Sackett, P. R. 2002. The structure of counterproductive work behaviors: Dimensionality and relationships with facets of job performance. *International Journal of Selection and Assessment*, 10: 5–11.
- Schwab, D. P. 1980. Construct validity in organizational behavior. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*, vol. 2: 3–43. Greenwich, CT: JAI Press.
- Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. 1987.
  Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology*, 52: 1061–1086.
- Shrout, P. E., & Bolger, N. 2002. Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods*, 7: 422–445.
- Smith, C. A., & Ellsworth, P. C. 1985. Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, 48: 813–838.

- Spector, P. E., & Fox, S. 2005. The stressor-emotion model of counterproductive work behavior (CWB). In S. Fox & P. E. Spector (Eds.), Counterproductive work behavior: Investigations of actors and targets: 151–174. Washington, DC: AP Press.
- Spector, P. E., Fox, S., Penney, L., Bruursema, K., Goh, A., & Kessler, S. 2006. The dimensionality of counter-productivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68: 446–460.
- Spielberg, J. M., Heller, W., Silton, R. L., Stewart, J. L., & Miller, G. A. 2011. Approach and avoidance profiles distinguish dimensions of anxiety and depression. *Cognitive Research and Therapy*, 35: 359–371.
- Spielberger, C. D. 1983. *Manual for the state-trait anxiety inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Spielberger, C. D., Reheiser, E. C., & Sydeman, S. J. 1995.
  Measuring the experience, expression, and control of anger. In H. Kassinove (Ed.) Anger disorders: Definitions, diagnosis, and treatment: 207–232. Washington, DC: Taylor & Francis.
- Stewart, S. M., Bing, M. N., Davison, H. K., Woehr, D. J., & McIntyre, M. D. 2009. In the eyes of the beholder: A non-self-report measure of workplace deviance. *The Journal of Applied Psychology*, 94: 207–215.
- Tepper, B. J. 2000. Consequences of abusive supervision. *Academy of Management Journal*, 43: 178–190.
- Tepper, B. J. 2007. Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, 33: 261–289.
- Tepper, B. J., & Henle, C. A. 2011. A case of recognizing distinctions among constructs that capture interpersonal mistreatment in work organizations. *Journal of Organizational Behavior*, 32: 487–498.
- Tepper, B. J., Moss, S., & Duffy, M. K. 2011. Antecedents of abusive supervision: Supervisor perceptions of deeplevel dissimilarity, relationship conflict, and subordinate performance. *Academy of Management Journal*, 54: 279–294.
- Tice, D. M., & Masicampo, E. J. 2008. Approach and avoidance motivations in the self-concept and self-esteem.
  In A. Elliott (Ed.), *Handbook of approach and avoidance motivation*: 505–519. Mahwah, NJ: Lawrence Erlbaum.
- Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. 1999. The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, 76: 820–838.

- Weiner, B. 1986. An attributional theory of motivation and emotion. New York, NY: Springer Verlag.
- Wilkowski, B. M., & Meier, B. P. 2010. Bring it on: Angry facial expressions potentiate approach-motivated motor behavior. *Journal of Personality and Social Psychol*ogv, 98: 201–210.
- Williams, K. D. 1997. Social ostracism. In R. M. Kowalski (Ed.), Aversive interpersonal behaviors: 133–170. New York, NY: Plenum.
- Williams, K. D. 2001. *Ostracism: The power of silence*. New York, NY: Guilford Publications.
- Williams, K. D., Cheung, C. K. T., & Choi, W. 2000. Cyberostracism: Effects of being ignored over the internet. *Journal of Personality and Social Psychology*, 79: 748–762.
- Williams, K. D., & Zadro, L. 2001. Ostracism: On being ignored, excluded, and rejected. In M. R. Leary (Ed.), *Interpersonal rejection*: 21–53. New York, NY: Oxford University Press.
- Wowak, A. J., & Hambrick, D. C. 2010. A model of personpay interaction: How executives vary in their responses to compensation arrangements. *Strategic Management Journal*, 31: 803–821.
- Wu, L.-Z., Ferris, D. L., Kwan, H. K., Chiang, F., Snape, E., & Liang, L. H. 2015. Breaking (or making) the silence: How goal interdependence and social skill predict being ostracized. *Organizational Behavior and Hu*man Decision Processes, 131: 51–66.
- Youngstrom, E. A., & Izard, C. E. 2008. Function of emotions and emotion-related dysfunction. In A.J. Elliot (Ed.), *Handbook of approach and avoidance motivation*: 367–384. Mahwah, NJ: Lawrence Erlbaum.
- Zadro, L., Williams, K. D., & Richardson, R. 2004. How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, selfesteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40: 560–567.



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### APPENDIX A

#### TABLE A1

Items and item sources for dependent variables

I made fun of my supervisor at work<sup>a</sup>
 I played a mean prank on my

supervisor<sup>a</sup>

3. I made an obscene comment or gesture toward my supervisor<sup>a</sup>

- 4. I acted rudely toward my supervisor<sup>a</sup>
- 5. I made an ethnic, religious, or racial remark against my supervisor<sup>a</sup>
- 6. I publicly embarrassed my supervisor<sup>a</sup>
- 7. I swore at my supervisor<sup>a</sup>
- 8. I said something hurtful to my supervisor at work<sup>a</sup>
- 9. I kept as much distance from my boss/ supervisor as possible<sup>b</sup>
- 10. I withdrew from my boss/supervisor<sup>b</sup>
- 11. I avoided my boss/supervisor<sup>b</sup>
- 12. I refused to talk to my boss/supervisor<sup>a</sup>

Approach-oriented CWBs

Avoidance-oriented CWBs

 $<sup>^{\</sup>rm a}=$  From Mitchell and Ambrose's (2007) measure of supervisor-directed deviance.

 $<sup>^{\</sup>mathrm{b}}=\mathrm{From}\ \mathrm{McCullough},\ \mathrm{Worthington},\ \mathrm{and}\ \mathrm{Rachal}\ (1997)\ \mathrm{measure}$  of avoidance.