

# Discrete Negative Emotions and Counterproductive Work Behavior

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The current study investigates how seven discrete negative emotions are related to seven dimensions of counterproductive work behavior (CWB). We surveyed 240 employed students about the frequencies of their negative emotions and CWBs over a 1-month time frame. Correlational analyses revealed that almost all emotions correlated significantly with all forms of CWB, but there were significant differences in the magnitude of correlations between emotion–CWB pairs. Furthermore, a series of multiple regression analyses suggested that there were different patterns in the emotions that accounted for unique variance across different forms of CWB. This study suggests that the understudied emotions of boredom and shame might be particularly important to our understanding of CWB.

The role of emotions within the organizational setting has become an increasingly popular topic of research since the 1990s (Ashkanasy & Ashton-James, 2005). There is some evidence that emotions can influence workplace behaviors, attitudes (e.g., Judge, Scott, & Ilies, 2006; Kaplan, Bradley, Luchman, & Haynes, 2009), and well-being (Lazarus & Folkman, 1984). In particular, researchers have become interested in the role of negative emotion in displays of counterproductive work behavior (CWB), which consists of volitional acts that harm an organization or the organization's stake holders (Cohen-Charash & Mueller, 2007; Spector & Fox, 2005). Such findings are important because CWB can be a destructive element within the organization setting (Hollinger & Clark, 1983), and identifying potential precursors may help us to attenuate such behavioral displays.

Although there are an abundance of studies that have focused on the role of emotions within the organizational setting, the majority of these studies have conceptualized emotions as dispositional and global, such as trait negative affectivity or general upset. Such an emphasis has led researchers (i.e., Barsade & Gibson, 2007; Brief & Weiss, 2002) to suggest that more attention should be paid to the role of discrete emotions in the workplace. Discrete emotions can be described as temporary affective reactions to some specific event that is typically more intense

than general affective terms such as mood (Gooty, 2007; Lee & Allen, 2002). Barsade and Gibson (2007) argued that investigating specific emotions will yield more useful information regarding any potential differences there might be between distinct emotions (e.g., motivational tendencies and behavioral manifestations). In regards to CWB, several studies have reported evidence that a host of negative discrete emotions are positively associated with CWB and that, sometimes, the patterns of association differ in meaningful ways (e.g., Lee & Allen, 2002; Levine et al., 2011; Shockley, Ispas, Rossi, & Levine, 2012). Such studies underscore the importance of including discrete negative emotions when investigating CWB. In this article we describe a study that took a fine-grained approach to investigating the connection between seven discrete emotions and seven dimensions of CWB, testing hypotheses suggesting that correlations will differ depending upon the emotion–CWB match.

Unfortunately, almost all of the studies investigating discrete negative emotions and CWB have included only one emotion (Cohen-Charash & Mueller, 2007) or have combined discrete emotions that may be theoretically distinct (Spector et al., 2006). Not maintaining a specific and inclusive approach to the measurement of discrete negative emotions may have resulted in missing important patterns of association that occur between the two constructs. By including enough unique emotions to adequately cover the domain of negative emotions, we may be able to obtain additional information that is useful in understanding the link between discrete negative emotions and CWB. For instance, Levine et al. (2011) validated an emotion measure that assesses several negative and positive discrete emotions. According to their U.S. sample, feelings of anger and shame were more related to CWB directed toward the individual, whereas feelings of envy were more related to CWB directed toward the organization. Furthermore, these patterns of association were not maintained across different culture contexts (i.e., samples from China and Romania). Although Levine et al. acknowledged that their choices of discrete emotions were not exhaustive, their approach regarding discrete emotions enables them to detect differences across a wider range of the affective domain of discrete negative emotions.

The Levine et al. (2011) study conceptualized discrete emotions at a level that was both inclusive and specific. However, their conceptualization of CWB is similar to the majority of organizational studies that have maintained a relatively wide bandwidth. Researchers tend to report an overall measure of CWB (e.g., Judge et al., 2006; Miles, Borman, Spector, & Fox, 2002) or to divide CWBs into either organizational or interpersonal targets (e.g., Aquino, Lewis, & Bradfield, 1999; Smith, Cronin, & Kessler, 2008). Such a conceptualization may still be inclusive, but it is not specific. The construct of CWB includes a wide range of behaviors such as gossiping, taking home supplies without permission, and leaving work earlier than allowed. We may be reducing the fidelity of our assessment if we aggregate CWB into more global constructs while maintaining a narrow approach to the assessment of emotions. Similar to the logic of Hogan and Roberts (1996) regarding the bandwidth-validity dilemma, we expect that matching the bandwidth of CWB with the bandwidth of our measurement of negative emotions will yield the most accurate estimates of associations. We also are interested in taking a specific approach to measuring both constructs because differential patterns of associations at a specific level may have useful implications for the workplace. For instance, members of organizations dealing with a high prevalence of a specific type of CWB (e.g., theft or abuse) may find more utility in knowing what emotions are more closely associated with a particular form of CWB rather than a global conceptualization that may be comprised largely of less relevant behaviors.

Spector et al. (2006) took a specific approach to assessing CWB and identified five dimensions of CWB that could be classified by Buss's (1961) distinction between primarily active and primarily passive behaviors. Active forms of CWB require some type of behavior, whereas passive forms of CWB are defined by the employee's inaction. Abuse against others consists of both physical and verbal behaviors that are primarily active. Some examples are insulting a colleague or hitting another employee. Theft is an active CWB that includes taking home materials without permission or lying to get paid for hours that were not worked. Sabotage is actively destroying physical property that belongs to the employer. Production deviance is a passive CWB that is defined as the intentional failure to complete tasks correctly. Withdrawal behaviors are considered passive behaviors that amount to working less time than the organization requires one to work. Spector et al. (2006) found evidence that boredom and general negative emotions were associated with different dimensions of CWB.

Social undermining and horseplay are two additional dimensions of CWB that are not included in Spector et al. (2006) conceptualization but appear to have some emotional component. Social undermining consists of active behaviors that are intended to harm the reputation, success, and interpersonal relationships of the target employee (Duffy, Ganster, & Pagons, 2002). Dunn and Schweitzer (2006) developed a theoretical framework linking social undermining behaviors to feelings of envy. Horseplay is defined as a nonmalicious behavior intended to make the work environment livelier or more entertaining. Some examples of horseplay are using the Internet at work for non-work-related purposes, engaging in nonmalicious gossiping, or joking for the purposes of entertainment. Bruusema (2007) demonstrated that horseplay is associated with negative feelings such as boredom.

Models of general aggression (e.g., Berkowitz, 1998) and CWB (Spector & Fox, 2002) posit a central role of emotion in behavior. For example, Spector and Fox's (2002) stressor-emotion model of CWB posits that stressful situations elicit negative emotion that leads to CWB. A potential limitation to these models is that they ignore differences in the connection between different types of emotion and different forms of CWB. Similarly, studies that have reported evidence of a link between negative emotions in general and CWB (Dalal, Lam, Weiss, Welch, & Hulin, 2009; Lee & Allen, 2002; Levine et al., 2011; Shockley et al., 2012; Spector et al., 2006), have given limited attention to how discrete negative emotions may be differentially related to the specific dimensions of CWB. We argue that there is reason to expect that different emotions might lead to different forms of CWB.

The psychological constructionist approach to emotion assume there are basic psychological operations that underlie the emotional states that we experience and that it is possible to see similar patterns in the brain across discrete emotions. Lindquist, Wager, Kober, Bliss-Moreau, and Barrett (2012) recently conducted a meta-analysis on the neuroimaging research on emotions and concluded that the evidence, in general, was supportive of the psychological constructionist approach. In their conclusion, they stated that the presence of approach and avoidant motivational systems would be congruent with the results that they found regarding some of their specific emotions. Other emotional researchers have also found both theoretical and empirical justifications for describing discrete emotions based on their primary association with an underlying approach or avoidant motivational systems (Carver & Harmon-Jones, 2009, p. 155; Carver & Scheier, 1998; Johnson-Laird, 1987; Schmader & Lickel, 2006; Watson, Wise, Vaidya, & Tellegen, 1999).

Categorizing discrete emotions by their primary association with a motivational system has utility when attempting to predict differential associations among different dimensions of

emotions and CWB. The motivation to approach rewards or incentives is related to active forms of aggression (i.e., Smits & Kuppens, 2005). Conversely, the motivation to avoid threats is related to the inhibition of behavior (Gray, 1990). Thus, the motivational system that a discrete emotion is associated with is expected to predispose an individual to behave in a certain way (e.g., aggression or withdrawal). Previous literature has explicitly linked some negative emotions to a motivational system, such as anger, sadness, anxiety, and shame (i.e., Carver & Harmon-Jones, 2009; Keller & Nesse, 2005; Schamder & Lickel, 2006), but other emotions have been neglected (i.e., envy, jealousy, and boredom). In the following sections we briefly discuss several discrete negative emotions and identify each emotion as being primarily associated with either an avoidant or approach motivational system. We then use these motivational systems to create hypotheses regarding the associations between seven discrete negative emotions and seven dimensions of CWB.

## APPROACH-RELATED EMOTIONS

### Anger

Anger is a negative affective state that occurs when a threat is appraised as a “demeaning offense to me and mine” (p. 96; Lazarus, 1999). Anger is considered the most important emotion in predicting negative workplace behaviors such as aggression (e.g., Chen & Spector, 1992; Fitness, 2000; Lazarus & Cohen-Charash, 2001). It has been associated with an approach motivational system (Carver & Harmon-Jones, 2009). Several studies have found anger to be related to CWB and similar behaviors such as legal claiming, workplace deviance, and aggression (i.e., Douglas & Martinko, 2001; Fox & Spector, 1999; Fox, Spector, & Miles, 2001; Goldman, 2003; Lee & Allen, 2002). Anger is, therefore, associated with the approach motivational system and aggressive behaviors. Thus, anger is expected to explain more unique variance in active than passive forms of CWB.

- H1: Anger will be more strongly related to active forms of CWB (i.e., abuse against others, theft, sabotage, social undermining, and horseplay) than passive forms of CWB (i.e., withdrawal behaviors and production deviance).

### Envy

Lazarus’s core-relational theme for envy is “wanting what someone else has” (p. 96; Lazarus, 1999). Although there has been some discussion regarding the distinction between “nonmalicious envy” (Parrott, 1991) and envy proper, most scholarly research has focused on envy as a negative emotion that is partially defined by a sense of ill will toward the envied (Smith & Kim, 2007). Feelings of envy are thought to energize the envious to attenuate the perceived inequality between the envious and the envied (i.e., approach motivation). Feelings of workplace envy have been associated with job performance (Schaubroeck & Lam, 2004), as well as aggression and CWB (Cohen-Charash & Mueller, 2007; Miner, 1990). Feelings of envy are also associated with harming behaviors directed toward the envied (Cohen-Charash & Mueller, 2007; Kim & Glomb, 2014), as well as CWB in general (Levine et al., 2011). Envy is expected to energize approach

related and aggressive behaviors. Thus, envy is expected to explain more unique variance in active than passive forms of CWB.

- H2: Envy will be more strongly related to active forms of CWB (i.e., abuse against others, theft, sabotage, social undermining, and horseplay) than passive forms of CWB (i.e., withdrawal behaviors and production deviance).

## Jealousy

Jealousy is different from envy in that it requires a social relationship, and it often is more intense than feelings of envy (Boone, 2005). Lazarus's core-relational theme for jealousy is "resenting a third party for a loss or threat to another's affection or favor" (p. 96; Lazarus, 1999). Feelings of jealousy are thought to motivate an individual to protect a relationship from external threats such as a rival (DeSteno, Valdesolo, & Bartlett, 2006). Feelings of jealousy can elicit approach-related behaviors targeted at removing the rival from the situation and maintaining the relationship of interest. Unfortunately, few studies have been done on jealousy within the organizational setting (Vecchio, 2000). However, there is some evidence that jealousy can elicit aggressive behaviors (see DeSteno et al., 2006; Tangney & Salovey, 1999). Therefore, feelings of jealousy are expected to explain more unique variance in active than passive forms of CWB.

- H3: Jealousy will be more strongly related to active forms of CWB (i.e., abuse against others, theft, sabotage, social undermining, and horseplay) than passive forms of CWB (i.e., withdrawal behaviors and production deviance).

## Boredom

Boredom is an "unpleasant affective state in which the individual feels a pervasive lack of interest in and difficulty concentrating on the current activity" (p. 386; Fisher, 1993). Feelings of boredom have been related to low levels of arousal (Russell, 1980; Warr, 1987, 1990). A link between anger and boredom has also been reported in some clinical research (i.e., Lantz, 1988; McHolland, 1988). Lantz and McHolland argue that boredom is a less intense form of anger. Feelings of boredom are expected to motivate an individual to seek a greater state of stimulation. This motivation is thought to be more associated with approach than avoidant tendencies. Individuals experiencing feelings of boredom may engage in alternative behaviors (e.g., horseplay or gossiping) as a means of entertainment. In the workplace, boredom has been associated with aggressive behaviors (Dahlen, Martin, Ragan, & Kuhlman, 2004; Rupp & Vodanovich, 1997), sabotage (Ambrose, Seabright, & Schminke, 2002), withdrawal behaviors (Spector et al., 2006), and overall CWB (Bruursema, 2007; Hooff & Hooff, 2014; Skowronski, 2012). Feelings of boredom are expected to explain more unique variance in active than passive forms of CWB.

- H4: Boredom will be more strongly related to active forms of CWB (i.e., abuse against others, theft, sabotage, social undermining, and horseplay) than passive forms of CWB (i.e., withdrawal behaviors and production deviance).

## AVOIDANT-RELATED EMOTIONS

### Shame

Shame can be considered a negative emotional reaction that creates a negative global evaluation of the self (Hareli, Shomrat, & Biger, 2005). Lazarus's core-relational theme for shame is a threat that indicates the individual is "failing to live up to an ego ideal" (p. 96; Lazarus, 1991). Shame often contains a fundamental threat to the self, which can be strongly aversive (Tangney & Fischer, 1995; Tangney, Miller, Flicker, & Barlow, 1996). Feelings of shame have been associated with an avoidance motivational system (Schmader & Lickel, 2006). Individuals are often motivated to escape shame-invoking situations (Tangney & Dearing, 2002). Bagozzi, Verbeke, and Gavino (2003) reported that instances of experienced shame among Dutch employees when interacting with customers was associated with withdrawal-like behaviors directed toward the customers. There has not been much research focused on shame within the organization, but feelings of shame are expected to explain more unique variance in passive than active forms of CWB.

H5: Shame will be more strongly related to passive forms of CWB (i.e., production deviance and withdrawal behaviors) than active forms of CWB (i.e., abuse against others, theft, sabotage, social undermining, and horseplay).

### Anxiety

Anxiety is a negative emotion that is characterized by a sense of worry or fear (Lazarus & Lazarus, 1994). It is more related to the avoidant than approach motivational system (Carver & Harmon-Jones, 2009). This emotion is marked by a level of uncertainty in anticipating danger (Ohman, 1992). Trait-level anxiety is associated with CWB overall (i.e., Fox & Spector, 1999; Fox, Spector, & Miles, 2001). Because anxiety is associated with the avoidant motivational system, feelings of anxiety are expected to explain more unique variance in passive than active forms of CWB.

H6: Anxiety will be more strongly related to passive forms of CWB (i.e., production deviance and withdrawal behaviors) than active forms of CWB (i.e., abuse against others, theft, sabotage, social undermining, and horseplay).

### Sadness

Sadness can be conceptualized as an inactive state in which a person has determined that there is no way to prevent the loss of something important to the self (Lazarus & Lazarus, 1994; Stearns, 1993). Feelings of sadness often accompany a sense of hopelessness and resignation. These feelings may be associated more with avoidant rather than the approach tendencies (Adams & Kleck, 2005; Keller & Nesse, 2005; Watson et al., 1999). Thus, feelings of sadness are expected to predict more passive than active forms of CWB.

Unfortunately, there is a dearth of research that looks at the relationship between sadness and CWB within the organization. Lee and Allen (2002) reported a nonsignificant relationship between sadness and CWB. There are a few studies that provide indirect support for a link between sadness and passive forms of CWB. Specifically, Smith et al. (2008) found that group

levels of employee sadness are negatively related to organizational loyalty. They conceptualized organizational loyalty as the inverse of withdrawal intentions. Indeed, organizational commitment is negatively related to turnover (Cohen, 1993). Sadness is thought to be associated with detachment from the provoking event (Parrott, 2001). Thus, feelings of sadness in the workplace may elicit detachment from the workplace in the form of withdrawal behaviors or production deviance.

H7: Sadness will be more strongly related to passive forms of CWB (i.e., production deviance and withdrawal behaviors) than active forms of CWB (i.e., abuse against others, theft, sabotage, social undermining, and horseplay).

## CURRENT STUDY

The goal of the current study was to test hypotheses concerning relationships between seven discrete emotions and seven dimensions of CWB. To test our hypotheses a cross-sectional self-report survey was administered to employed students. Each emotion that was included in the current study represents a unique portion of the content domain and can be theoretically tied to CWB (i.e., anger, envy, jealousy, boredom, shame, anxiety, and sadness). Guilt was not included in the current set of emotions, because it has traditionally been associated with reparative behaviors (Hareli et al., 2005). Other emotions such as embarrassment or hostility were not included because they shared significant overlap with one of the seven emotions already mentioned (i.e., shame and anger, respectively). By including seven specific variables for each construct, we expect to increase the fidelity of our results and demonstrate relationships that would otherwise be neglected with more global measures of either emotions or CWB.

## METHOD

### Participants

The sample consists of 240 participants, employed at least 10 hours per week, who were recruited from psychology and business classes at a large public university in the southeastern U.S. Participants had to be currently employed and over the age of 18 to participate. One additional participant was deleted because of failure to meet the 10-hr-per-week criterion for inclusion. The mean age of the sample was 23 ( $SD = 6.6$ , range = 18–59). The majority (71.3%) of the participants was female. The employees worked between 10 and 60 hr a week with an average of 26.6 hr ( $SD = 10.7$ ). The average organizational tenure of the sample was 2.2 years ( $SD = 2.6$ , range = 3 months to 23 years). This sample is similar to other samples reported in publications focused on CWB (i.e., Spector et al., 2006; Spector & Zhou, 2013).

### Procedure

The survey required about 15 min to complete and included measures of discrete negative emotions, as well as the CWB. The survey was made accessible electronically on a survey hosting website (i.e., surveymonkey.com).

The data were collected in two ways. First, participants made an appointment through an electronic research management website (i.e., SONA) and completed the survey electronically in a laboratory. The second method of data collection was to recruit participants in the classroom. The first author went to classes in the business college and psychology department and gave a short explanation of the study's purpose, requirements, and instructions. After the presentation, instructional handouts that contained an electronic link to the survey were distributed.

## Measures

Most measures of emotion were not designed for the workplace. Thus, slight changes to the directions of these scales were made to reflect the job context. All of the emotion scales originally had an agree versus disagree response format. Thus, the response options of these scales were altered to reflect a 5-point frequency response scale. Participants were instructed to report how often they have experienced each feeling at work within the past month. We included a short time frame so that participants would be able to accurately recall how often they experienced emotions. A shorter time frame might have led to more accurate recall, but given that incidents of emotional upset for most people might not happen frequently, a shorter time frame might have produced too much restriction of range in emotional experience. The 1-month time frame is congruent with other research on workplace emotions (e.g., Spector, Dwyer, & Jex, 1988). The response scale for all of the measures ranged from 1 (*0 times*) to 5 (*6 or more times*). High scores on all scales represent a high frequency of the emotion or CWB facet that is being assessed.

### *Anger, Anxiety, and Sadness*

The 30 item State-Trait Personality Inventory (Spielberger, 1979) was used to assess depression, anxiety, and anger in the workplace. The Depression scale items reflect our conceptualization of sadness. For instance, "Felt blue," "Felt sad," and "Felt downhearted" can all be used to describe feelings of sadness. Examples of the anger items are "Felt furious" and "Felt mad." Finally, example anxiety items are "Felt Tense" and "Felt worried." An exploratory factor analysis with oblique rotation was conducted on all emotions items in the current study. This analysis revealed that all of the reverse-scored items in the Anxiety and Sadness scales loaded onto a single factor that did not reflect any specific emotion. Thus, reverse-scored items were removed from the anxiety and sadness measures. This resulted in a reduction from 10 to six items for the state anxiety measure and from 10 to seven items for the state sadness measure. Similar to other studies using the State-Trait Personality Inventory (e.g. Spector et al., 1988), the directions were altered to assess the frequency of emotions in the workplace over a 30-day period. The coefficient alphas were .92, .87, and .85, respectively.

### *Shame*

Andrews, Qian, and Valentine's (2002) Experience of Shame Scale comprises subscales that assess shame related to manner with others, the sort of person you are, personal ability, doing something wrong, saying something stupid, body issues, and personal habits. However, not all of these items are appropriate for the workplace, so the scale was reduced to six items by dropping

seven items. Shame items pertaining to overall manner, sort of person you are, personal ability, and doing something wrong were retained. The coefficient alpha for the present study was .81. “Felt ashamed of your ability to do things” is an example item from the Shame scale.

### *Envy and Jealousy*

A four-item version of Cohen-Charash’s (2005) Episodic Envy Scale was chosen to assess envy. This scale was altered because we were interested in the frequency of negative emotions in the workplace. The original items focused on a specific target of the emotions. An example item is, “I want what (some specific entity) has.” Employees who experience frequent feelings of envy may direct each instance toward different entities. Thus, the items were revised to reflect feelings directed toward others in general. However, this made the six-item feelings component of the Episodic Envy Scale hard to interpret. After altering the items, five of the six items that were part of the Envy scale no longer clearly assessed envy. For instance, “felt irritated or annoyed” seems to be assessing anger or frustration and does not appear to be directly assessing envious feelings. Thus, the five of the six items from the feeling component of the Envy scale were not included in the current study. The coefficient alpha of the altered scale was .83. “Felt that you lack what others tend to have” is an example item. To assess jealousy, a three-item Jealousy scale was created specifically for this study. The items were based on the definition of jealousy. Participants were asked the following questions: How often have you felt concerned that someone is becoming too close to someone who you think is important? How often have you felt that another person was going to replace you in an important relationship? How often have you felt jealous of someone else’s relationship? The coefficient alpha was .83.

### *Boredom*

Unfortunately most of the current job boredom measures confound affective states and perceptions of the organization. Thus, four items were constructed to assess boredom in the workplace (i.e., experienced feelings of boredom at work, became upset by a lack of variety on the job, became distressed by how slowly the workday passes, became sluggish due to the monotony of the job, suffered from a lack of mental stimulation). The coefficient alpha for the four items was .90.

### *CWB*

Three scales were used to measure CWB. First the 32-item five factor version of the CWB checklist was used (Spector et al., 2006). Three items measured sabotage (e.g., purposely dirtied or littered your place of work;  $\alpha = .47$ ), three items measured production deviance (e.g., purposely did your work incorrectly;  $\alpha = .50$ ), four items measured withdrawal behaviors (e.g., came to work late without permission;  $\alpha = .68$ ), five items measured theft (e.g., stolen something belonging to your employer;  $\alpha = .54$ ), and 17 items measured abuse (e.g., verbally abused someone at work;  $\alpha = .86$ ).

The second CWB scale was Bruusema’s (2007) five-item Horseplay scale ( $\alpha = .66$ ). “Played practical jokes on co-workers or customers to entertain myself and/or coworkers during work

time” is an example item from the Horseplay scale. Finally, eight items of the Duffy et al.’s (2002) 13-item scale were used to assess social undermining. Five items were removed because they were redundant with the CWB checklist. For instance, “ignored someone” or “insulted someone” directly overlapped with the CWB checklist. The coefficient alpha for social undermining was .79. “Delayed work to slow someone down or make them look bad” is an example item from the Social Undermining scale.

## RESULTS

### Correlational Analyses

Descriptive statistics and coefficient alphas of all variables are reported in Table 1. Correlations were computed between all pairs of the study variables (Tables 2–4). The discrete emotions were all significantly interrelated, but the magnitudes of the relationships differed in some cases when  $z$  tests for the equality of two correlations (Steiger, 1980) were conducted (see Table 2). For instance, jealousy and boredom ( $r = .17, p < .05$ ) were less strongly related ( $z = -4.24, p < .01$ ) than shame and envy ( $r = .49, p < .05$ ). In regards to the facets of CWB, a similar trend was observed. All the facets of CWB were interrelated, but the magnitudes differed. For instance, horseplay and production deviance ( $r = .24, p < .05$ ) were less strongly related ( $z = -6.98, p < .01$ ) than abuse toward others and social undermining ( $r = .68, p < .05$ ).

Almost all of the seven discrete emotions and the seven facets of CWB were significantly related (Table 4). The only exceptions were the relationship between jealousy and sabotage, jealousy and withdrawal, jealousy and production deviance, and sadness and production deviance.  $T$  tests for dependent correlations were conducted to test the hypotheses (Williams, 1959).

TABLE 1  
Descriptive Statistics (Means, Standard Deviations, Ranges, and Internal Consistencies)

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>Observed Range</i>	<i>Coefficient <math>\alpha</math></i>
Anger	2.07	0.98	1–5	.92
Anxiety	2.21	0.70	1–5	.87
Sadness	2.08	0.79	1–5	.85
Envy	1.71	0.88	1–4.75	.83
Jealousy	1.40	0.73	1–5	.83
Boredom	2.94	1.26	1–5	.90
Shame	1.33	0.46	1–3.13	.81
Sabotage	1.17	0.36	1–3	.47
Abuse	1.28	0.39	1–3.65	.86
Withdrawal	1.64	0.71	1–5	.68
Theft	1.16	0.32	1–2.80	.54
Production deviance	1.28	0.49	1–3.33	.50
Social undermining	1.46	0.55	1–5	.79
Horseplay	3.04	0.82	1–5	.66

*Note.*  $N = 240$ .

TABLE 2  
Correlation Matrix Among Discrete Emotions

Emotions	1	2	3	4	5	6	7
Anger	—						
Anxiety	.55**	—					
Sadness	.61**	.64**	—				
Boredom	.60**	.31**	.49**	—			
Envy	.41**	.38**	.45**	.34**	—		
Jealousy	.18**	.19**	.13*	.17**	.48**	—	
Shame	.35**	.42**	.31**	.27**	.49**	.30**	—

Note.  $N = 240$ .

\* $p < .05$ . \*\* $p < .01$ .

TABLE 3  
Correlation Matrix Among CWB Facets

CWB	1	2	3	4	5	6	7
Sabotage	—						
Abuse	.39**	—					
Withdrawal	.29**	.46**	—				
Theft	.48**	.50**	.58**	—			
Production deviance	.31**	.38**	.39**	.38**	—		
Social undermining	.23**	.68**	.42**	.38**	.33**	—	
Horseplay	.35**	.41**	.39**	.37**	.24**	.52**	—

Note.  $N = 240$ . CWB = counterproductive work behavior.

\*\* $p < .01$ .

TABLE 4  
Correlations Between Emotion and Counterproductive Work Behavior

Variable	Sabotage	Abuse	Withdrawal	Theft	Production Deviance	Social Undermining	Horseplay
Anger	.23**	.53**	.27**	.40**	.25**	.55**	.49**
Anxiety	.21**	.35**	.23**	.26**	.18**	.34**	.28**
Sadness	.16**	.39**	.21**	.26**	.12	.39**	.40**
Boredom	.23**	.42**	.30**	.28**	.31**	.43**	.58**
Envy	.14*	.37**	.24**	.24**	.17**	.47**	.36**
Jealousy	.06	.28**	.12	.16*	.08	.29**	.31**
Shame	.28**	.46**	.36**	.33**	.25**	.53**	.31**

Note.  $N = 240$

\* $p < .05$ . \*\* $p < .01$ .

Correlations with all seven facets of CWB were compared within each emotion (Tables 5 and 6). More specifically, the relationship between each emotion and each passive CWB (i.e., withdrawal behaviors and production deviance) was compared to the relationship between that same emotion

TABLE 5  
Correlations Between Emotion and Counterproductive Work Behavior

Variable	Production Deviance	Sabotage	Abuse	Theft	Social Undermining	Horseplay	t Test
Anger	.25**	.23**					0.27
	.25**		.53**				-4.51*
	.25**			.40**			-2.68*
	.25**				.55**		-4.71*
	.25**					.49**	-3.41*
Anxiety	.34**	.21**					1.81
	.34**		.35**				-0.15
	.34**			.26**			1.19
	.34**				.34**		0.00
	.34**					.28**	0.81
Sadness	.12	.16**					-0.53
	.12		.39**				-4.03*
	.12			.26**			-2.00*
	.12				.39**		-3.87*
	.12					.40**	-3.78*
Boredom	.31**	.23**					1.11
	.31**		.42**				-1.68
	.31**			.28**			0.44
	.31**				.42**		-1.62
	.31**					.58**	-4.09*
Envy	.17**	.14*					0.40
	.17**		.37*				-2.96*
	.17**			.24**			-1.00
	.17**				.47**		-4.47*
	.17**					.36**	-2.53*
Jealousy	.08	.06					0.26
	.08		.28**				-2.87*
	.08			.16*			-1.12
	.08				.29**		-2.91*
	.08					.31**	-3.01*
Shame	.25**	.28**					-0.41
	.25**		.46**				-3.25*
	.25**			.33**			-1.18
	.25**				.53**		-4.33
	.25**					.31**	-0.79

Note.  $N = 240$ .

\* $p < .05$ . \*\* $p < .01$ .

and each active form of CWB (i.e., abuse against others, sabotage, theft, social undermining, and horseplay).

The hypotheses regarding approach related emotions were supported in 21 of 40 comparisons. Congruent with H1, anger had larger associations with active CWBs than passive CWBs in eight of 10 comparisons. Anger was more strongly related to abuse against others ( $r = .53$ ), theft

TABLE 6  
Comparing Correlations Between Withdrawal Behaviors and Active Counterproductive Work Behavior

Emotion	Withdrawal	Sabotage	Abuse	Theft	Social Undermining	Horseplay	t Test
Anger	.27**	.23**					0.54
	.27**		.53**				-4.50*
	.27**			.40**			-2.38*
	.27**				.55**		-4.73*
	.27**					.49**	-3.49*
Anxiety	.23**	.21**					0.27
	.23**		.35**				-1.90
	.23**			.26**			-0.52
	.23**				.34**		-1.67
	.23**					.28**	-0.73
Sadness	.21**	.16**					0.66
	.21**		.39**				-2.88*
	.21**			.26**			-0.87
	.21**				.39**		-2.78*
	.21**					.40**	-2.87*
Boredom	.30**	.23**					0.95
	.30**		.42**				-1.96
	.30**			.28**			0.35
	.30**				.42**		-1.89
	.30**					.58**	-4.72*
Envy	.24**	.14*					1.33
	.24**		.37*				-2.07*
	.24**			.24**			0.00
	.24**				.47**		-3.57*
	.24**					.36**	-1.79
Jealousy	.12	.06					0.78
	.12		.28**				-2.46*
	.12			.16*			-0.68
	.12				.29**		-2.53*
	.12					.31**	-2.78*
Shame	.36**	.28**					1.11
	.36**		.46**				-1.68
	.36**			.33**			0.55
	.36**				.53**		-2.86*
	.36**					.31**	0.76

Note.  $N = 240$ .

\* $p < .05$ . \*\* $p < .01$ .

( $r = .40$ ), social undermining ( $r = .55$ ), and horseplay ( $r = .49$ ) than to withdrawal behaviors ( $r = .27$ ) or production deviance ( $r = .25$ ). Sabotage was the only active facet of CWB that was not more strongly related to anger ( $r = .23$ ) than passive forms of CWB. Similar support was found for H2. Envy was more strongly related to active CWBs than passive CWBs in five of 10 comparisons. Envy was more strongly related to abuse against others ( $r = .37$ ) and social undermining ( $r = .47$ ) than to withdrawal behaviors ( $r = .24$ ) or production deviance ( $r = .17$ ). Envy was more strongly related to horseplay ( $r = .36$ ) than to production deviance but

not withdrawal behaviors. In addition, the envy–sabotage relationship ( $r = .14$ ) and the envy–theft relationship ( $r = .24$ ) was not stronger than the relationships between envy and the passive forms of CWB.

H3 was supported with jealousy being more strongly related to active CWBs than passive CWBs in six of 10 comparisons. Jealousy was more strongly related to abuse against other ( $r = .28$ ), social undermining ( $r = .29$ ), and horseplay ( $r = .31$ ) than to production deviance ( $r = .08$ ) and withdrawal behaviors ( $r = .12$ ). Only the jealousy–sabotage relationship ( $r = .06$ ) and the jealousy–theft relationship ( $r = .16$ ) were not larger than the jealousy–production deviance relationship. Finally, there was less support for H4. Boredom was more strongly related to active CWBs than passive CWBs in two of 10 comparisons. Only the boredom–horseplay relationship ( $r = .58, p < .05$ ) was stronger than the passive CWBs ( $r = .30$ – $.31, p < .05$ ). For the approach-related emotions, there were no cases where the correlation with passive CWBs was significantly larger than the correlation with active CWBs.

The hypotheses regarding avoidant-related emotions were not supported in any of the 30 comparisons, and in nine cases, there were significant differences in the opposite direction. No evidence was found to support H5. Shame was more strongly related to active CWBs than passive CWBs in two of 10. Shame was more strongly related to abuse against others ( $r = .46$ ) than to production deviance ( $r = .25$ ). Similarly, shame was more strongly related to social undermining ( $r = .53$ ) than to withdrawal behaviors ( $r = .36$ ). H6 was also not supported. For all 10 comparisons, the correlations between sadness and both forms of CWB were not different from each other. Finally, H7 was also not supported. Sadness had larger associations with active CWBs than passive CWBs in seven of 10 comparisons. Sadness was more strongly related to abuse against other ( $r = .39, p < .05$ ), social undermining ( $r = .39$ ), and horseplay ( $r = .40$ ) than to production deviance ( $r = .12$ ) or withdrawal behaviors ( $r = .21$ ). Sadness was also more strongly related to theft ( $r = .26$ ) than to production deviance ( $r = .12$ ).

## Regression Analyses

Because many of the emotions were strongly intercorrelated, we conducted a series of multiple regression analyses to determine which emotions explained unique variance when compared with the other emotions (Tables 7–13). Each dimension of CWB was regressed onto all seven emotions. The emotions were entered into the first step of the regression. All of the regressions were statistically significant. See Tables 8 through 14 for overall model statistics (i.e.,  $F$  values and  $R^2$  values).

There were multiple negative emotions that explained unique variance in several dimensions of CWB. Shame and boredom both explained unique variance in sabotage. Anger, jealousy, and shame explained unique variance in abuse against others. Boredom, shame, and jealousy explained unique variance in the production deviance. Boredom and shame both explained unique variance in withdrawal behaviors. Anger and shame also explained unique variance in theft. Both anger and boredom explained unique variance in horseplay. Finally, anger and shame explained unique variance in social undermining.

Not all of the emotions explained unique variance in the CWB dimensions. Although anger, shame, boredom, and jealousy explained unique variance across several dimensions of CWB, envy, sadness, and anxiety failed to explain unique variance in any dimension of CWB when

TABLE 7  
Sabotage Regressed Onto Discrete Emotions

<i>Emotions</i>	B	SE B	$\beta$	
Anxiety	0.05	0.05	0.10	
Anger	0.02	0.03	0.06	
Sadness	-0.03	0.04	-0.07	
Jealousy	-0.02	0.04	0.03	
Envy	-0.02	0.03	-0.04	
Shame	0.17	0.06	0.22**	
Boredom	0.04	0.02	0.16*	
Model <i>F</i>				4.33**
Model <i>R</i> <sup>2</sup>				.12

Note. *N* = 240.

\**p* < .05. \*\**p* < .01.

TABLE 8  
Abuse Regressed Onto Discrete Emotions

<i>Emotions</i>	B	SE B	$\beta$	
Anxiety	-0.03	0.04	-0.05	
Anger	0.13	0.03	0.34**	
Sadness	0.02	0.04	0.05	
Jealousy	0.06	0.03	0.12*	
Envy	0.00	0.03	0.00	
Shame	0.24	0.05	0.29**	
Boredom	0.04	0.02	0.11	
Model <i>F</i>				21.71**
Model <i>R</i> <sup>2</sup>				.40

Note. *N* = 240.

\**p* < .05. \*\**p* < .01.

compared with all seven emotions. All of the regression analyses were also ran while controlling for gender, age, tenure, and hours worked per week. The patterns of significance changed in only two cases when adding these controls. Boredom no longer explained unique variance in sabotage, although the beta value did not change ( $\beta = .16$ , *ns*). In addition, jealousy no longer explained unique variance regarding abusive behaviors against others, and the beta value dropped from .12 to .11 (*ns*). Although significance was lost for these cases with the addition of the controls, the betas remained nearly identical, going from just significant to just missing significance.

It should also be noted that sadness explained significant variance in production deviance, but the beta value was negative ( $\beta = -.18$ ,  $p < .05$ ), whereas the correlation between sadness and production deviance was not significant ( $r = .12$ , *ns*). This reflects a case of classic suppression, so one should not interpret these findings to be support for the notion that sadness might be a precursor to production deviance.

TABLE 9  
Production Deviance Regressed Onto Discrete Emotions

<i>Emotions</i>	B	SE B	$\beta$	
Anxiety	0.07	0.06	0.09	
Anger	0.04	0.05	0.09	
Sadness	-0.11	0.06	-0.18*	
Jealousy	-0.03	0.05	-0.04	
Envy	0.02	0.05	0.03	
Shame	0.17	0.08	0.16*	
Boredom	0.10	0.03	0.27**	
Model <i>F</i>				5.44**
Model <i>R</i> <sup>2</sup>				.14

Note. *N* = 240.

\**p* < .05. \*\**p* < .01.

TABLE 10  
Withdrawal Behaviors Regressed Onto Discrete Emotions

<i>Emotions</i>	B	SE B	$\beta$	
Anxiety	0.05	0.09	0.04	
Anger	0.03	0.07	0.04	
Sadness	-0.03	0.08	-0.03	
Jealousy	-0.03	0.07	-0.01	
Envy	0.02	0.07	0.03	
Shame	0.42	0.11	0.27**	
Boredom	0.11	0.04	0.20*	
Model <i>F</i>				7.02**
Model <i>R</i> <sup>2</sup>				.18

Note. *N* = 240.

\**p* < .05. \*\**p* < .01.

## DISCUSSION

The goal of the current study was to investigate the nature of the relationships between seven discrete negative emotions and seven dimensions of CWB. This was accomplished by assessing the frequency of both variables over a specific time frame (i.e., 1 month). Overall, the data were congruent with literature on aggression and the stressor-emotion model of CWB (i.e., Spector & Fox, 2002). More specifically, all seven of the negative emotions measured in the current study were positively associated with CWB. These results are also congruent with previous meta-analytic data. Shockley et al. (2012) found positive effect sizes ( $\rho = .18-.39$ ) between several negative emotions (i.e., anxiety frustration, anger, sadness, hostility, envy, and guilt/shame) and CWB. One important difference between our study and Shockley et al. is that we conceptualized CWB at a more specific level and we observed greater variability in our effects sizes across different emotions and forms of CWB. We found greater differences in effect sizes when we

TABLE 11  
Theft Behaviors Regressed Onto Discrete Emotions

<i>Emotions</i>	B	SE B	$\beta$	
Anxiety	-0.01	0.04	-0.02	
Anger	0.11	0.03	0.33**	
Sadness	0.00	0.04	0.01	
Jealousy	0.02	0.03	0.06	
Envy	-0.02	0.03	-0.04	
Shame	0.15	0.05	0.21*	
Boredom	0.01	0.02	0.03	
Model <i>F</i>				8.53**
Model <i>R</i> <sup>2</sup>				.21

Note. *N* = 240.

\**p* < .05. \*\**p* < .01.

TABLE 12  
Horseplay Regressed Onto Discrete Emotions

<i>Emotions</i>	B	SE B	$\beta$	
Anxiety	-0.07	0.09	-0.05	
Anger	0.14	0.06	0.17*	
Sadness	0.06	0.08	0.06	
Jealousy	0.05	0.07	0.05	
Envy	0.07	0.06	0.08	
Shame	0.16	0.11	0.09	
Boredom	0.26	0.04	0.40**	
Model <i>F</i>				21.18**
Model <i>R</i> <sup>2</sup>				.39

Note. *N* = 240.

\**p* < .05. \*\**p* < .01.

matched the bandwidth of CWB to the narrow bandwidth of discrete negative emotions. Such findings can be viewed as indirect evidence of the importance of assessing variables along similar bandwidths, as well as direct evidence of the utility of assessing CWB at a specific level when investigating discrete emotions.

Although we found evidence for differential patterns of association across a range of negative discrete emotions and CWB, our expectations regarding the differential patterns of associations received mixed support. Approach-related emotions (i.e., anger, envy, and jealousy) had several associations with active CWB that were significantly higher than the associations between approach-related emotions and passive CWB. However, this pattern was also observed with an avoidant emotion (i.e., sadness). In addition, there were no cases in which a negative emotion had larger associations with passive forms of CWB than active forms of CWB. For all emotions except anxiety, there were some higher associations with active than passive forms of CWB regardless of the approach and avoidant classification.

TABLE 13  
Social Undermining Regressed Onto Discrete Emotions

<i>Emotions</i>	B	SE B	$\beta$	
Anxiety	-0.08	0.05	-0.11	
Anger	0.20	0.04	0.35**	
Depression	0.03	0.05	0.04	
Jealousy	0.05	0.04	0.12	
Envy	0.40	0.07	0.34	
Shame	0.40	0.07	0.34**	
Boredom	0.04	0.03	0.09	
Model <i>F</i>				28.73**
Model <i>R</i> <sup>2</sup>				.46

*Note.* *N* = 240.

\*\**p* < .01.

### Theoretical Implications

A possible explanation for the failure for us to support our hypotheses with the avoidant emotions is that perhaps all emotions are linked to the approach and avoidant motivational systems. This could explain why most of the emotions were associated with both active and passive forms of CWB. The differences in magnitudes of the correlations may reflect the extent to which the approach motivational system influences the emotion. For instance, anger, jealousy, and sadness had larger associations with active CWBs for more than half of the comparisons. Similarly, none of the correlations with anxiety were stronger for active CWBs than passive CWBs. Furthermore, only one correlation with shame and boredom was stronger for active CWBs than for passive CWBs. Thus, the extent to which the approach motivational system influences each emotion may be reflected in how many associations with active CWBs are significantly higher than the associations with passive CWBs.

The external environment may also explain the mixed support for our expectations. The workplace is often a strong situation that can have severe consequences for employees that display inappropriate behavioral reactions. Thus, motivational tendencies may not always translate into the expected workplace behaviors. For instance, employees in some organizations may perceive negative consequences associate with passive CWB as more likely to be enforced than more active forms of CWB. Employees experiencing negative emotions may avoid committing high levels of withdrawal and production deviance because organizations often track absence, lateness, and incomplete work. Employees may believe committing behaviors like gossip or theft can go undetected. Hence, passive forms of CWB may be more influenced by workplace perceptions and policies and less influenced by negative emotions.

The mixed support for our hypotheses may also be due to the theoretical lens that we chose to apply in attempting to generate expectations of the different patterns of association. We attempted to tie approach-related and avoidant-related emotions to active and passive forms of CWB. Roy, Bastounis, and Poussard (2012) applied the same lens and found support for their expectations. More specifically, an approach-related emotion (i.e., anger) was associated with active CWB and an avoidant-related emotion (i.e., anxiety) was more related to passive than active forms of

CWB. It is not clear how they categorized CWB into active and passive categories, so we are unable to compare our conceptualizations. Our results were not congruent with Roy, Bastounis, & Poussard (2012), as we did not find a single instance of associations between avoidant-related emotions and passive forms of CWB being significantly higher than associations between avoidant-related emotions and active forms of CWB. Although activation of the avoidant motivational system is associated with an increase in behavior inhibition (Gray, 1990), it may not follow that avoidant-related emotions should motivate employees to commit passive forms of CWB. The avoidant motivation system is thought to inhibit behaviors in order to prevent further exposure to some stressor. In regards to passive CWB, however, avoiding the workplace may result in more exposure to stressors in the form of disciplinary action.

Although expectations generated from pairing approach-avoidant related emotions with active/passive CWB were not fully supported, applying other theoretical lenses may not provide a clearer picture of the associations. For instance, the transactional theory of stress (Perrewé & Zellars, 1999) describes the importance of blame attributions in determining the target of a behavioral reaction. Pairing emotions and CWB by blame attributions and the target of CWB (i.e., interpersonally directed & organizationally directed) would be equally as difficult. Sadness is an emotion not thought to be associated with a blame attribution, but it is related to CWB directed toward other individuals and toward the organization. In addition, several negative emotions were highly related to horseplay (i.e., anger, sadness, and boredom), but it is not clear if horseplay is a CWB that is directed toward the organization or toward individuals. Furthermore, results are not consistent across databases that assess emotions and CWB directed toward individuals and the organization (Levine et al., 2011). Thus, attempting to predict patterns of associations by categorizing an inclusive list of discrete negative emotions and dimensions of CWB may prove difficult to accomplish without knowing more about the contextual factors and cognitive processes that underlie both the discrete emotions and the different dimensions of CWB. Future research on discrete emotions and CWB should include additional measures that may help us better understand these patterns of association (e.g., workplace factors, attributional processes, and motivational tendencies).

In addition, theoretical implications arise from the regression analyses. When all seven dimensions of CWB were regressed onto the seven discrete negative emotions, anger was not the only emotion that could explain variance in the dimensions of CWB. Other emotions such as boredom and shame also seem to be important. Anger explained unique variance in abuse, theft, horseplay, and social undermining. Boredom explained unique variance in production deviance, withdrawal behaviors, and horseplay. Shame explained unique variance in all facets except horseplay. These patterns of association demonstrate that anger does not explain any unique variance in some dimensions of CWB (i.e., sabotage, withdrawal, production deviance,) when compared to shame or boredom. Therefore, feelings of boredom and shame may be more relevant to displays of sabotage, withdrawal, and production deviance than feelings of anger. Although feelings of anger has been traditionally considered the negative emotion that is most closely related to displays of CWB, our results suggest that this is not true across all dimensions of CWB and that we should not continue to neglect other important emotions such as shame and boredom.

It was unexpected that shame explained unique variance in almost all of the active forms of CWB. Previous research has identified shame as being associated with an avoidance motivational tendency (i.e., Schmader & Lickel, 2006). Similarly, recent research has failed to establish a link

between shame and aggression (Roos, Hodges, & Salmivalli, 2014). Although we originally classified shame as an avoidant-related emotion some research has related shame to aggression (e.g. Stuewig, Tangney, Heigel, Harty, & McCloskey, 2010; Tangney & Fischer, 1995), this relation is often attributed to the displacement of shame to an external entity or some type of cognitive reappraisals. It is important to remember the cross-sectional nature of the current study. Although shame may lead to the externalization of blame and subsequent aggression, it is equally possible that displays of active forms of CWB may lead to feelings of shame given the design of our study. Research on emotions in the workplace has generally not focused on the role of shame, but the results presented here indicated that shame is a very important emotion in regards to a host of aggressive and passive dimensions of CWB.

### Practical Implications

By including a wide variety of both discrete emotions and specific dimensions of CWB in the current study, we are able to proffer several suggestions to practitioners. First, some researchers have begun to conceptualize negative emotion as a mediator between performance feedback and CWB (Belschak & Hartog, 2009). Based on our results, supervisors need to worry about evoking feelings of shame as well as anger when giving feedback to their subordinates. Both are associated with a host of different types of CWB. Thus, a high degree of sensitivity during the performance feedback process is recommended. Similarly, supervisors should be careful when assigning tasks that may be too difficult or that have high failure rates to employees. Such tasks may cultivate feelings of shame and energize displays of CWB. Furthermore, boredom explained significant variance in production deviance, horseplay, and withdrawal behaviors. We would like to thank an anonymous reviewer for pointing out that the large associations among CWB and boredom are likely due to our boredom items being more focused the job context than our other emotion scales. Such a difference in measurement may have led to larger associations than otherwise would have been observed. Regardless, it may still be beneficial for organizations to build some form of constructive enrichment into jobs to attenuate instance of boredom, for instance, having employees switch positions at regular intervals, providing frequent breaks, or introducing activities to break monotony such as monthly training sessions to attenuate feelings of boredom and subsequent horseplay.

### Limitations and Future Research Directions

The current study has several limitations. For instance, the design was cross-sectional. Although Spector and Fox (2002) discussed how the link between emotions and CWB may be bidirectional, the stressor-emotion model includes a causal link from negative emotions to CWB. However, the current study is unable to provide evidence of temporal order. It is possible that committing CWB leads to negative feelings (i.e., guilt and shame). Therefore, future research should include experimental or longitudinal designs to investigate temporal order and possible reciprocal effects.

The use of a sample of employed students may also be a limitation to the current study. The majority of the students in this sample was not full-time employees and may consider their current

place of employment a temporary job. This may limit the generalizability of the study, as full-time working professionals may report different frequencies of negative emotions and CWB. In regards to the use of an employed student sample, Spector et al. (2006) found few differences in correlations between stressors and their five dimensions of CWB across a nonstudent and student sample. They also found that the nonstudent employed sample reported less CWB than the employed student sample; however, the authors noted that the effect sizes for most of the differences among the samples were not large. Spector et al. did not report the comparison of negative emotions across samples. Bruusema (2007) compared an undergraduate sample to a nonstudent sample and found that undergraduates reported significantly more negative emotions (although the effect size was small), and they did not report significantly more CWB. Thus, it is not clear if there are significant differences between student sample and nonstudent sample when assessing negative emotions and CWB. If there are differences, the magnitude of the difference is not likely large.

Another limitation is that all of the measures were self-report, leading to possible concern regarding shared biases or common method variance. It is certainly possible that some participants responded in a way that maintained consistency between reports of behavior and emotion. People who engage in CWB might rationalize their behavior by falsely recalling that someone else upset them. The impact of common method bias might have affected our zero-order correlations, but method variance is unlikely to affect results of multiple regression analyses with multiple predictors as we had here (Siemsen, Roth, & Oliveira, 2010). Future research can control common method bias among the measures by implementing a longitudinal design or by collecting data from other sources (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), although it would be difficult to use other sources to assess emotions.

Finally, although our goal was to include dimensions of CWB that would adequately cover the domain space, there are likely important dimensions that we did not have room to include. For instance, sexual harassment and substance abuse are relatively unique dimensions that we did not assess. Future research should continue to explore the role of emotions to unique dimensions of CWB that were not included in the current study. Future research should also include shame and boredom when investigating discrete negative emotions and dimensions of CWB.

## Conclusion

The current study was one of the first to investigate the relationship between multiple discrete negative emotions and dimensions of CWB at a high level of specificity. In general, the results provide some evidence for theoretical models that suggest that negative emotional states relate to a host of counterproductive work behaviors. In addition, the evidence presented here suggests that other discrete emotions may be important correlates of CWB besides anger. More specifically, the neglected emotions of shame and boredom explained unique variance in a wide range of CWB dimensions when taking into account the role of anger and several other discrete negative emotions. Therefore, to control CWB, organizations should be concerned about several types of negative emotions and they should strive to create policies and cultures that are oriented toward attenuating such feelings.

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