



**Reactions to Negative Feedback:  
The Role of Workplace Resiliency  
and Implications for Counterproductivity**

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**Abstract**

We evaluated the effect of three self-regulatory processes on the relationship between affect and counterproductive workplace behavior intentions (CWBi) in the context of employees receiving performance feedback using a moderated mediation approach. Using vignettes, participants were given job performance feedback and completed measures of affect, workplace resiliency, and CWBi. Using 292 employed participants, we found that two self-regulatory components of workplace resiliency moderated the relationship between feedback type and CWBi, as mediated by negative affect. This suggests that the more one engages in self-regulation, the less likely they are to engage in counterproductive workplace behaviors following an adverse workplace experience.

*Keywords:* counterproductive work behavior, workplace resilience, self-regulation, feedback, job performance

### **Reactions to Negative Feedback: The Role of Workplace Resiliency and Implications for Counterproductivity**

Providing feedback to employees is an important part of motivational processes and improving performance in the workplace (Becker, 1978; Locke & Latham, 2002). However, receiving work performance feedback is often a negative experience for employees and often fails to result in productive behavioral outcomes (Adler et al., 2016; Ilgen & Davis, 2000; Kluger & DeNisi, 1996, 1998). There is compelling evidence that negative work performance feedback can lead to counterproductive work behavior (CWB; Belshack & Den Hartog, 2009). CWB is a broad term used to describe intentional, workplace behaviors that harm an organization or its employees, and it includes theft, workplace violence, and engaging in non-work activities while being paid (Spector et al., 2006).

Research has consistently demonstrated that CWB can have a devastating effect on organizations. It has been estimated that CWB costs employers anywhere between 4.2 and 54 billion USD in direct and indirect costs (e.g., lost productivity) each year (Camara & Schneider, 1994; Young, 2010). Research has identified that CWB is negatively associated with many desirable workplace behaviors such as task performance, organizational citizenship behaviors, employee engagement, job satisfaction, and both firm and work unit performance. Together, this contributes to the indirect costs CWB can have on organizations (Dalal et al., 2012; Detert et al., 2007; Dunlop & Lee, 2004). These findings make it clear that there is value in advancing our understanding of how to lessen CWB in the workplace.

Evidence suggests that CWB is often elicited by negative affect experienced at work (Koopman et al., 2021; Penny & Spector, 2005; Spector, 1975, 1978; Spector et al., 2006; Zhang et al., 2019). However, from a theoretical perspective, there is reason to believe that the self-regulatory components of workplace resiliency may help to reduce the incidence of CWB (King & Rothstein, 2010; Spector, 1975, 1978). Accordingly, we examined the extent to which each of the three self-regulatory components of workplace resiliency moderate the relationship

between negative performance feedback and intentions to engage in CWB, as mediated by negative affect.

### **Counterproductive Work Behavior and Negative Affect**

The Organizational Frustration Model suggests that individuals who have negative experiences at work, and in turn, experience negative affect such as anger, stress, and frustration, are more likely to engage in CWB (Spector, 1978). Based on this, Belshak and Den Hartog (2009) investigated whether individuals who received negative performance feedback would engage in CWBs in the future, and the extent to which negative affect mediated this relationship. In their study, participants across two different samples were given vignettes outlining a scenario where they were told to imagine they received either positive or negative performance feedback. The results showed that intentions to engage in CWB were the highest amongst those who received negative performance feedback, and negative affect mediated the relationship between type of feedback received and intentions to engage in CWB.

### **The Self-Regulatory Processes of Workplace Resiliency**

Broadly speaking, workplace resiliency refers to the process by which individuals deal with, and recover from, adverse experiences in the context of the workplace such as being fired, failing to meet a deadline, or receiving a negative performance evaluation (Fletcher & Sarker, 2013; King & Rothstein, 2010; McLarnon & Rothstein, 2013; McLarnon et al., 2020; McLarnon et al., 2021). Previous research examining the relationship between workplace resiliency and a variety of workplace attitudes and behaviors found a negative relationship between workplace resiliency and CWB ( $r = -.50$ ; Avey et al., 2010). The authors surmised that individuals with greater levels of workplace resiliency may be better equipped to regulate the way in which they respond to adverse workplace experiences, thereby reducing the amount of CWB they would subsequently engage in. This is consistent with the work of Fida et al. (2014). They suggest that workplace attitudes and individual differences can function as protective factors against negative affect, which in turn may reduce future CWBs.

Researchers sometimes treat resiliency exclusively like a personality trait (Hu et al., 2015; Luthans et al., 2007; Rees et al., 2015); however, the King and Rothstein (2010) model does not. Although it recognizes some trait-based elements, the King and Rothstein model predominantly presents workplace resiliency as a process that seeks to explain responses to adverse experiences (Rothstein et al., 2016). Moreover, it is argued that the process-oriented elements of the model are multifaceted and include affective, behavioral, and cognitive self-regulatory processes. Affective self-regulatory processes refer to one's awareness of and management over their emotions and related decision making. Behavioral self-regulatory processes refer to identifying and controlling undesirable behaviors. Finally, cognitive self-regulatory processes refer to one's ability to minimize maladaptive thinking, be optimistic, and be an open-minded thinker. It is important to note that the terms 'resiliency' and 'resilience' can be used to refer to similar, but different, psychological phenomenon (Richardson, 2016). For the purposes of this paper, we will predominantly use the term 'resiliency' and do so to be consistent with the language used to describe the process-oriented model and measure used in the present study (King & Rothstein, 2010; McLarnon & Rothstein 2013; McLarnon et al., 2020; McLarnon et al., 2021; Richardson, 2016).

According to the King and Rothstein (2010) model, one of the primary determinants of an individual's capacity to recover from an adverse workplace event is their ability to engage in self-regulation (McLarnon et al., 2021). The three types of self-regulatory processes are said to operate independently of one another and differentially facilitate workplace resiliency by addressing the affective, behavioral, and cognitive aspects of the adversity being experienced. That is, affective, behavioral, and cognitive self-regulation are unique and can operate in combination, or individually, depending on the nature of the adversity being experienced (Rothstein et al., 2016). In doing so, the self-regulatory processes facilitate an individual's feelings toward, and understanding of, what happened as well as how they respond to and move on from the experienced adversity (Rothstein et al., 2016). Thus, the extent to which an

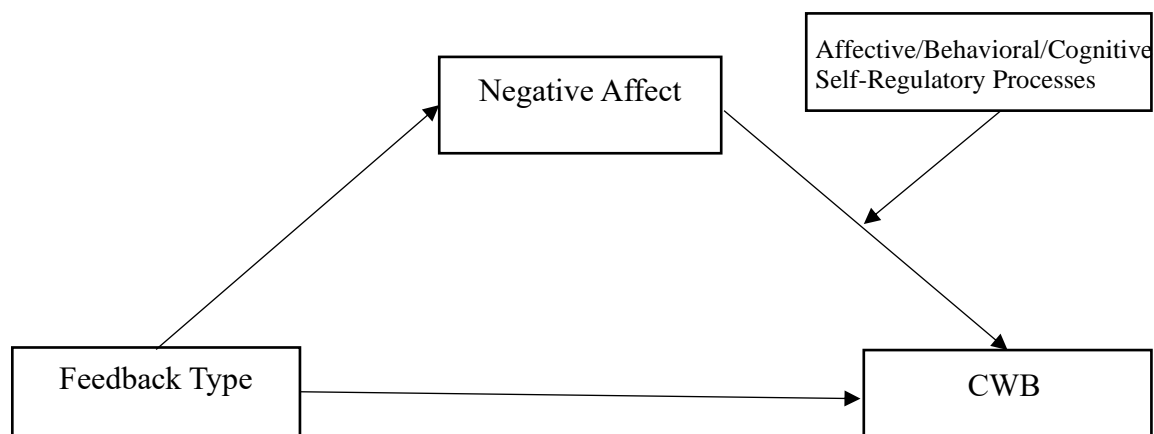
individual engages in self-regulatory processes should have an effect on their response to negative workplace experiences, such as negative performance feedback (McLarnon & Rothstein, 2013; Rothstein et al., 2016).

### Present Study

The goal of the present study is to test the moderating effects of the three self-regulatory processes on the link between affect and intentions to engage in counterproductive workplace behaviors (CWB) in the context of an employee receiving performance feedback. We propose that the three different types of self-regulatory processes operate in different ways to mitigate the degree to which one experiences negative affect following an adverse workplace experience (See Figure 1).

**Figure 1**

*Graphical Representation of Moderated Mediation Model*



*Note.* A graphical representation of the proposed moderated mediation of the three self-regulatory processes on the relationship between feedback type and CWB as mediated by affect.

Previous research has suggested that negative affect mediates the relationship between negative workplace experiences and CWB (Belschak & Den Hartog, 2009; Fox & Spector, 1999). That is, Spector (1975, 1978) argues that it is the decisions made as a consequence of the negative affect brought on by a negative workplace experience, not the negative

experiences themselves, that lead an individual to engage in CWB (Chen & Spector, 1992; Penney & Spector, 2002; Spector, 1975, 1978). Therefore, the extent to which an individual is able to mitigate their experience of negative affect by utilizing self-regulatory processes should be reflected in reduced tendency towards CWB. As mentioned, affective self-regulation specifically refers to one's ability to control their affective responses to a given situation. Consequently, we hypothesized that:

**H<sub>1</sub>:** Affective self-regulation will moderate the relationship between receiving negative performance feedback and CWBi, as mediated by negative affect. Specifically, the link between negative performance feedback and CWBi will be weaker to the extent that affective self-regulation is stronger.

Previous research has identified self-control as an important antecedent of CWB, and individuals who have a greater degree of control over their behavior are less likely to engage in CWB in response to negative affect (Marcus & Schuler, 2004; Storms & Spector, 1987). According to Marcus and Schuler (2004), all antecedents of CWB can be organized into one of four categories: individual differences, external influences, motivation, and self control. In a study seeking to identify the best individual predictors of CWB they found that self-control was highly correlated with CWB ( $r = -.63, p < .05$ ). Moreover, when entered last into a hierarchical regression containing variables associated with each of the other three categories of CWB antecedents, self-control accounted for 24% incremental variance in the prediction of CWB over and above the other antecedent variables. This implies that the degree to which an individual is capable of controlling themselves should be reflected in the extent to which they (intend to) engage in CWB.

It follows that the extent to which an individual actively engages in behavioral self-regulation should facilitate a reduction in CWB as a behavioral response to receiving negative performance feedback. For example, individuals high on behavioral self-regulation might be

more likely to engage in neutral or positive workplace behaviors in response to receiving negative performance feedback instead of CWB. Accordingly, we hypothesized that:

**H<sub>2</sub>:** Behavioral self-regulation will moderate the relationship between receiving negative performance feedback and CWBi, as mediated by negative affect. Specifically, the link between negative performance feedback and CWBi will be weaker to the extent that behavioral self-regulation is stronger.

Finally, we suggest that individuals who engage in greater amounts of cognitive self-regulation should have reduced CWBi after receiving negative performance feedback. We argue that they should have a greater ability to control the way they think about and frame a situation before responding to it. For example, these individuals are more likely to try to see the positive aspects of receiving negative performance feedback before deciding how to respond to it, such as viewing it as an opportunity to improve their performance in the future. As a result, we hypothesized that:

**H<sub>3</sub>:** Cognitive self-regulation will moderate the relationship between receiving negative performance feedback and CWBi, as mediated by negative affect. Specifically, the link between negative performance feedback and CWBi will be weaker to the extent that cognitive self-regulation is stronger.

## **Methods**

### **Participants**

Three hundred seventy-eight males were recruited through Amazon's Mechanical Turk (MTurk), of which 87 were removed for failing careless responding checks (see below for more detail), leaving 292 in our final sample. Previous research shows that there are gender differences in CWB (Bowling & Burns, 2015; Spector & Zhou, 2014). Accordingly, we elected to test our hypotheses with one gender first and exclusively sampled employed, male participants. Males typically engage in more CWB than females, and the predictor-CWB relationship is also stronger for males than it is for females (Bowling & Burns, 2015; Spector & Zhou, 2014).



Participants' age ranged from 19 to 77 years ( $M = 33.14$ ,  $SD = 10.00$ ), and they reported being employed (part-time = 35, full-time = 257). Almost all participants (94%) reported that they had undergone a formal performance evaluation, and 77.5% indicated that they had provided another employee with job performance feedback. Participants received compensation that was commensurate with typical MTurk rates (Buhrmester et al., 2011).

### ***Performance Feedback***

Following Aguinis and Bradley's (2014) recommendations for effective use of vignette methodology, vignettes were adapted from Belschak and Den Hartog (2009; See Appendix for full vignette) to immerse participants in the role of a subordinate receiving performance feedback. Participants were asked to imagine that they had completed their annual performance review at work; and in an email from their hypothetical supervisor, they were informed that they performed either very well or very poorly this year. They were also told that their supervisor now considered them to be among either the best or worst performers in the workplace.

### ***Negative Affect***

Participants completed the negative affect subscale from the Positive and Negative Affect Schedule (PANAS). The negative affect subscale uses 10, 5-point Likert items (1 = *Very slightly or Not at All*, 5 = *Extremely*) to measure negative affect (Watson et al., 1988). A sample item from the negative affect subscale asks participants "*to what extent do you presently feel upset?*" The authors of the scale reported that the internal consistency for the negative affect subscale ranged from .84 to .87 and provided evidence in support of the measure's validity.

### ***Counterproductive Work Behavior Intentions***

Participants completed a modified version of Spector et al.'s (2006) 45-item self-report measure of CWB. The items were adjusted to assess participants' CWBi as the participants were reacting to a vignette. A 5-point frequency scale (1 = *Never*, 5 = *Every Day*) was used, and a sample item from the scale asks, "*Would you purposely waste your employer's*

*materials/supplies?*" The authors of the scale found that the internal consistency ranged from .84 to .85, and they provided evidence of its validity (Spector et al., 2006).

### ***Self-Regulatory Components of Workplace Resiliency***

Participants completed the affective (4 items), behavioral (9 items), and cognitive (9 items) self-regulatory processes subscales from the Workplace Resilience Inventory (WRI; McLarnon & Rothstein, 2013) to measure the extent to which individuals engaged in each of the self-regulatory processes of workplace resilience. Participants responded to items using a 5-point Likert scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*) and items from this measure were adjusted to reflect a future orientation, and to specifically refer to the vignettes. Sample items from the affective, behavioral and cognitive self-regulatory subscales include: "*Since receiving feedback on my performance I am more likely to base my goals in life on feelings, rather than logic*", "*Since receiving feedback on my performance I am more likely to jump into things quickly without thinking them through*", "*Since receiving feedback on my performance I am more likely to question my ability to do my work properly.*" McLarnon and Rothstein (2013) reported that the internal consistency of the three subscales ranged from .76 to .86, and they provided evidence of its validity.

### ***Careless Responding***

Careless responders were identified in three ways based on best practice recommendations (Meade & Craig, 2012). Participants were asked to correctly identify which workplace behavior they received feedback on (job performance), and whether the feedback was positive, neutral, or negative. Participants were also asked whether they were able to honestly respond to all items as though they were the person receiving feedback. Finally, participants were asked to complete three directed-response items (e.g., "*please respond strongly disagree to this item*"), and to respond "yes" or "no" to the question: "*In your honest opinion, should we use your data in our analyses in this study?*". Participants who responded

“no” to the latter question, and participants who incorrectly answered any of the above careless-responding items, were removed from the analyses.

### **Procedure**

Participants were randomly assigned to one of two conditions: positive or negative performance feedback. Participants were then presented with a vignette corresponding to one of the feedback conditions, and they were asked to respond to all remaining questions in the study as if they were the individual who had just received the feedback. Participants then completed the measure of negative affect, the measure of CWBi, and the three subscales measuring self-regulation. The measure of negative affect was completed first due to the temporary nature of affect (Solomon & Corbit, 1974). Next, it was important that participants indicated their expected tendency toward CWBi while the feedback that they received was still salient. Finally, participants completed the three self-regulation subscales followed by content-related items assessing careless responding, as these items were the least likely to be impacted by participants' immediate reactions to the vignettes. Participants were then debriefed and received their compensation.

## **Results**

### **Manipulation check**

The mean negative affect item score of participants who received negative feedback ( $M = 2.70$ ,  $SD = 1.05$ ) was significantly higher than of those who received positive feedback ( $M = 1.34$ ,  $SD = 0.58$ ), and the effect size was large ( $t[290] = 13.78$ ,  $p < .001$ ,  $d = 1.60$ ), which implies that the feedback manipulation was effective.

### **Main Findings**

Means, standard deviations, correlations, and internal consistencies for all study variables are reported in Table 1.

**Table 1**

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1.CWBi	1.31	0.46	(.94)						
2.Feedback	0.49	0.50	.11	(-)					
3.PA	3.39	1.08	-.12*	-.67**	(.72)				
4.NA	2.00	1.09	.32**	.63**	-.48**	(.95)			
5.SRP-A	3.66	0.75	-.35**	-.13*	.19**	-.26**	(.74)		
6.SRP-B	3.65	0.61	-.56**	-.13*	-.26**	-.27**	.63**	(.75)	
7.SRP-C	3.54	0.99	-.38**	-.55**	.52**	-.63**	.44**	.52**	(.93)

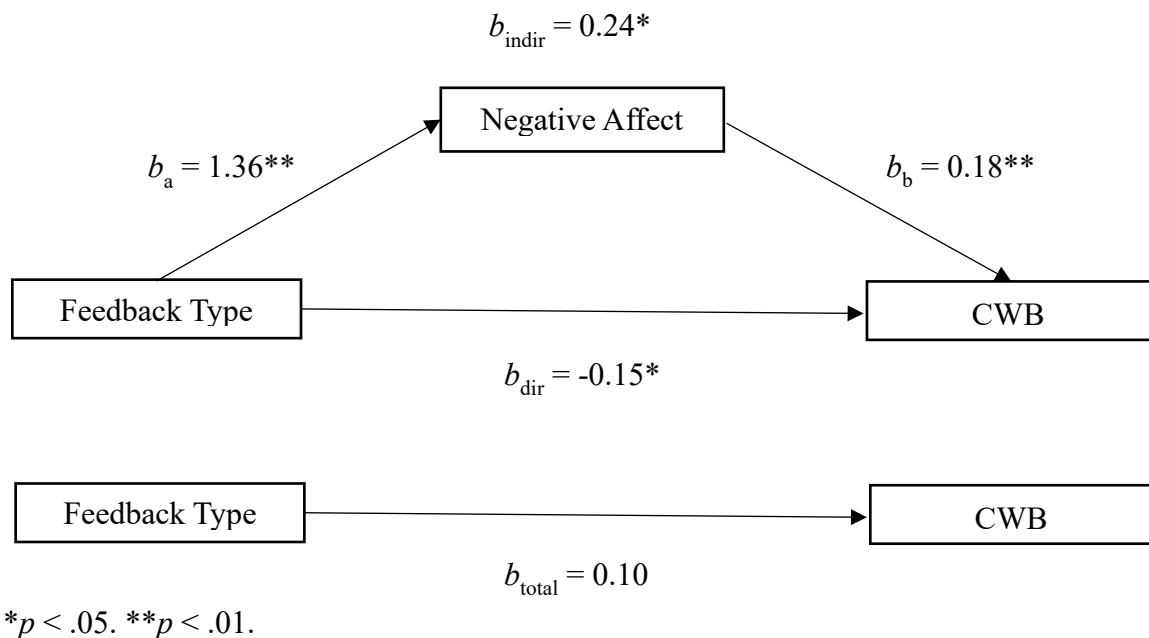
Moderated mediation was used to evaluate each of the hypotheses following the guidelines, procedures, and reporting format outlined by Preacher et al. (2007). First, we evaluated whether the relationship between feedback type and CWBi was mediated by negative affect. In lieu of the fact that, at present, there are currently no widely accepted means of evaluating the effect size for both mediation and moderated mediation models (Hayes, 2018; Preacher et al., 2007; Preacher & Kelly, 2011; Wen & Fan, 2015), we reported the results of our analyses as unstandardized regression coefficients and computed partially standardized indirect effects ( $ab_{ps}$ ). That is, we divided the strength of the indirect effect ( $ab$ ) by the standard deviation of the outcome variable ( $SD_{CWBi}$ ), which allowed us to interpret our findings in terms of units of standard deviations changed, given that our independent variable (feedback type) was dichotomous (Hayes, 2018; Preacher & Kelly, 2011).

To estimate the size of the indirect effect of the predictor (feedback type) on the criterion (CWBi) through the mediating variable (negative affect), we conducted mediation analysis using model 4 from the PROCESS macro for SPSS, where our 95% confidence intervals were constructed based on 10,000 bias-corrected bootstrapped samples (Hayes, 2009; Preacher & Hayes, 2004; Preacher et al., 2007). The total effect of feedback type (negative feedback = 1, positive feedback = 0) on CWBi ( $c = 0.10$ ) was not significant ( $p = .07$ ), and the indirect effect of feedback type on CWBi through negative affect was examined and was found to be  $ab = 0.24$  (95% CI [0.13, 0.38]). The indirect effect was not statistically significant because the confidence interval did not contain 0. In order to calculate the partially standardized indirect effect ( $ab_{ps}$ ), we

divided the indirect effect ( $ab = 0.24$ ) by the standard deviation of CWBi ( $SD_{CWB_i} = 0.46$ ), resulting in a value of  $ab_{ps} = 0.52$ . In sum, we found evidence that negative affect mediated the relationship between feedback type and CWB, such that those who received negative feedback were, on average, 0.52 standard deviations higher on CWBi as a result of the indirect effect of negative affect (see Figure 2).

**Figure 2**

*The Unstandardized Relationship Between Feedback Type and CWB as Mediated by Affect*

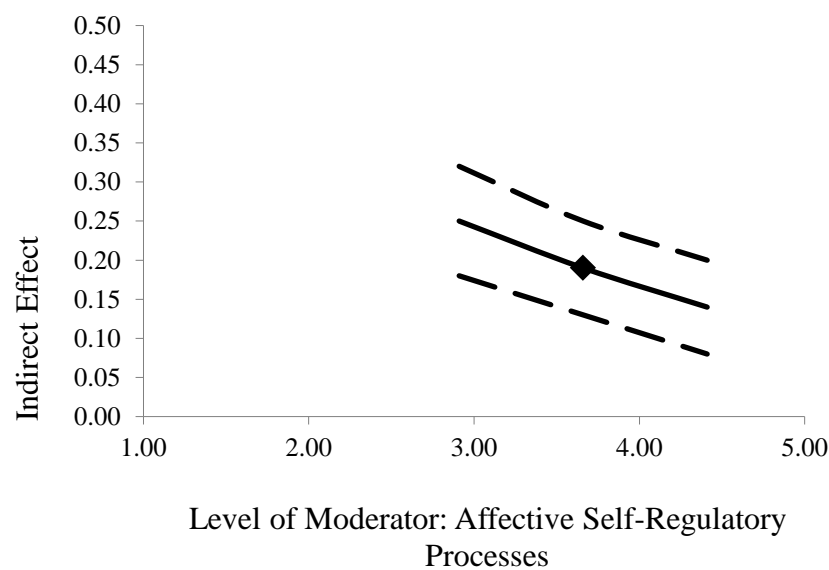


Our three hypotheses predicted that affective, behavioral, and cognitive self-regulatory processes, respectively, would moderate the relationship between feedback type and CWBi, as mediated by affect. In order to assess each of these three hypotheses, we used model 14 from the PROCESS macro to test for moderated mediation (Hayes, 2009; Hayes, 2015; Preacher & Hayes, 2004; Preacher et al., 2007).

To assess the first hypothesis, we examined the conditional effect of affective self-regulation on the indirect effect of feedback type on CWBi through negative affect, and it was found to be marginally significant (Index of Moderated Mediation [IMM] = -0.07; 95% CI [-0.17, 0.00]; see Figure 3).

### Figure 3

*A Graphical Representation of the Unstandardized Conditional Effect of Affective Self-Regulatory Processes on Indirect Effect of Feedback Type on CWBi Through Negative Affect*



Specifically, at higher levels of affective self-regulation (1 SD above the mean), the strength of the mediating effect was weaker ( $ab = 0.14$ ; 95% CI [0.03, 0.27],  $ab_{ps} = 0.30$ ; 95% CI<sub>ps</sub> [0.07, 0.59]). At lower levels of affective self-regulation (1 SD below the mean), the strength of the mediating effect was stronger ( $ab = 0.25$ ; 95% CI [0.12, 0.40],  $ab_{ps} = 0.54$ ; 95% CI<sub>ps</sub> [0.26, 0.87]). Thus, when affective self-regulation was high, those who received negative feedback were on average 0.30 standard deviations higher on CWBi as a result of the indirect effect of negative affect. On the other hand, when affective self-regulation was low, those who received negative feedback were on average higher still on CWBi ( $ab_{ps} = 0.54$ ) as a result of the indirect effect of negative affect.

To assess the second hypothesis, we examined the conditional effect of behavioral self-regulation on the indirect effect of feedback type on CWBi through negative affect. It was found to be significant ( $IMM = -0.13$ , 95% CI  $[-0.26, -0.03]$  see Figure 4).

**Figure 4**

*A Graphical Representation of the Unstandardized Conditional Effect Behavioral Self-Regulatory Processes on Indirect Effect of Feedback Type on CWBi Through Negative Affect*



At higher levels of behavioral self-regulatory processes, the strength of the mediating effect was weaker ( $ab = 0.07$ ; 95% CI  $[-0.01, 0.15]$ ,  $ab_{ps} = 0.15$ ; 95% CI  $[-0.02, 0.33]$ ). At lower levels of behavioral self-regulatory processes, the strength of the mediating effect was stronger ( $ab = 0.22$ ; 95% CI  $[0.09, 0.38]$ ,  $ab_{ps} = 0.48$ ; 95% CI  $[0.20, 0.83]$ ). This meant when behavioral self-regulation was high, those who received negative feedback were, on average, higher on CWBi ( $ab_{ps} = 0.15$ ) as a result of the indirect effect of negative affect. When behavioral self-regulation was low, those who received negative feedback were, on average, higher on CWBi

( $ab_{ps} = 0.48$ ) as a result of the indirect effect of negative affect. Therefore, hypothesis two was supported.

To test our third hypothesis, we evaluated the conditional effect of cognitive self-regulatory processes on the indirect effect of feedback type on CWBi through negative affect (IMM = 0.03, 95% CI [-0.04, 0.10]); however, the conditional effect was not statistically significant. Therefore, hypothesis three was not supported.

### Discussion

The goal of the present study was to test the moderating effects of the three self-regulatory processes on the link between affect and CWBi in the context of an employee receiving performance feedback. It was hypothesized that affective, behavioral, and cognitive self-regulation would moderate the relationship between receiving negative performance feedback and CWBi, as mediated by negative affect.

We found a marginally significant effect indicating that affective self regulatory processes moderates the relationship between receiving performance feedback and CWBi, as mediated by negative affect. Affective self-regulation refers to one's ability to control their affective reactions and subsequent decision making. As per the nature of the moderation, our finding suggests that the more control one has over their affective response, the lower their CWBi after a negative reaction to performance feedback. In line with previous research, one's ability to control their affective reactions in response to negative feedback should lessen the degree to which they subsequently engage in CWB (Belschak & Den Hartog, 2009). Although it is common practice in organizational psychology research to describe a relationship as marginally significant, it is important to interpret this finding with caution.

As predicted, we found a statistically significant effect indicating that behavioral self-regulatory processes moderated the relationship between receiving negative performance feedback and CWBi, as mediated by negative affect. Behavioral self-regulation refers to an individual's personal discipline and ability to control their own behavior. In accordance with the



nature of the moderation, this suggests that the greater extent to which an individual is able to exert control over their own actions, the lower their CWBi will be following a negative reaction to performance feedback (King & Rothstein, 2010; McLarnon & Rothstein, 2013).

This finding is in line with previous research which presents evidence that suggests self-control plays an important role in the degree to which individuals engage in CWB (Marcus & Schuler, 2004; Storms & Spector, 1987). On its own, self-control has previously been identified as the single best predictor of CWB amongst a variety of individual differences (Marcus & Schuler, 2004). Likewise, individuals who report a strong internal locus of control (i.e., a belief that they have control over their own behavior and outcomes in life) are less likely to engage in CWB in response to negative affect (Storms & Spector, 1987). This lends support to our findings and suggests that behavioral regulatory processes work to reduce the degree to which one will engage in CWB, at least in part, through the mechanisms of self-control.

Finally, cognitive self-regulation was not found to be a moderator of the relationship between receiving negative performance feedback and CWBi, as mediated by negative affect. The way in which humans cognitively process and regulate emotions, including those that are negative, may offer one plausible explanation as to why no significant moderation was found (Gross, 2002). According to previous research, there are two dominant strategies that humans use to regulate emotions: emotional reappraisal and emotional suppression. Emotional reappraisal is an emotion regulation strategy that characterizes emotions as antecedents to context-relevant behaviors (Gross, 1998; 2002). Specifically, emotions are modified or addressed before they elicit a physiological or behavioral response. On the other hand, emotional suppression is a response-focused emotion regulation strategy that works by limiting the degree to which one cognitively attends to undesirable emotions. Emotional suppression tends to get used after an emotion-inducing situation is over and after one has identified and begun to experience the impact of the emotion (Gross, 2002).

In the present study, the situation participants are presented with in the vignettes has already occurred. Consequently, any emotional regulation participants do engage in is most likely to take the form of emotional suppression. Although both emotion regulation strategies can influence how an individual behaviorally responds to the emotions they experience, emotional suppression is not an effective strategy for dealing with negative emotions, relative to reappraisal strategies (Gross, 2002). Moreover, according to a series of studies by Gross and John (2003), when faced with the need to engage in emotional regulation, males are more likely to engage in emotional suppression. Therefore, it is possible that no moderating effect was found because participants simply engaged in cognitive suppression and avoided thinking about the problem regardless of their ability to engage with it via cognitive self-regulatory processes (Gross, 2002; Gross & John, 2003).

### **Implications**

The results of our study have both theoretical and practical implications. The present study provides some evidence to suggest that workplace resiliency, at least in the form of affective and behavioral self-regulatory processes, may be involved in the relationship between receiving negative performance feedback and engaging in CWB, but perhaps only through the mechanisms of self-control. Although we do not make the bold claim that workplace resiliency as a whole should be made part of the Organizational Frustration Model (Spector, 1978), the present study certainly serves as a first step in evaluating the degree to which workplace resiliency could be involved in this process.

For practitioners, the results of this study imply that in certain situations, individuals higher on certain elements of workplace resiliency may have reduced levels of CWBi than others when receiving negative performance feedback. In the context of an applied setting, this finding can be used as the basis for interventions aimed at reducing CWB in the workplace. There is growing evidence suggesting that workplace resiliency can be developed in employees through training and other interventions (Fava & Tomba, 2009; Luthans et al., 2010; Luthans et

al., 2006; Robertson et al., 2015). Should training or an intervention manage to successfully increase affective and behavioral self-regulation in employees, CWB might be indirectly reduced within the organization as a result. An intervention aimed at increasing employee resiliency, in general, would also directly benefit the employer and the employees in other ways, as greater levels of resiliency are associated with reduced turnover intentions and reduced levels of job stress, increased levels of organizational citizenship behaviors, happiness, job satisfaction, optimism and organizational commitment (Avey et al., 2009; Avey et al., 2010; Youssef & Luthans, 2007). Given the extensive costs associated with CWB both in terms of productivity and financial loss (Camara & Schneider, 1994; Young, 2010; Young & Case, 2004), employers would stand to benefit from implementing an intervention aimed at increasing employee resiliency, reducing the impact of CWB, and generally benefiting their employees.

### **Limitations and Future Directions**

Although vignettes are highly praised by Aguinis and Bradley (2014), this methodology may be limited in its generalizability. Relatedly, asking participants to read about and immerse themselves into a situation they are presented with can be markedly different from experiencing it. However, in some contexts, vignettes are more ethical and practical manipulation. In our study, we believed it was more ethical to have participants imagine they were a character in a vignette receiving negative feedback rather than assign them real negative feedback based on their own performance on a task. In future, it would benefit researchers to conduct a field test of the present results to see if they generalize to an actual workplace. As alluded to above, for ethical reasons, a field study of this nature might lack control over whether employees receive negative or positive feedback; but the various effects of the process that we studied would have a higher degree of generalizability. It is worth noting, however, that findings from lab and field research typically converge (Andersen et al., 1999), and there has been specific evidence of this being the case with research on CWB (Belshack & Den Hartog, 2009).

A second limitation to the study is that only males were used as participants. Accordingly, future research needs to investigate this topic across genders. As previously mentioned, research suggests that predictor-CWB relationships should be studied separately for males (Bowling & Burns, 2015; Spector & Zhou, 2014). That is, males tend to engage in more CWBs, and the relationship between various predictors and CWB tends to be stronger in males than it is across other genders. Future research should test whether the moderated mediation models examined in the present study generalize across genders.

A third limitation of our study was that we chose to interpret our first hypothesis as marginally significant. Although this is common in organizational psychology research, some researchers argue against interpreting findings of any kind as marginally significant (Olsson-Collentine et al., 2019). Other scholars, however, have noted that research in psychology has increasingly adopted the practice of identifying findings with  $p$  values between .05 and .10 as marginally significant (Pritschet et al., 2016). In accordance with the fact that labelling results as marginally significant is common practice in organizational psychology research (Olsson-Collentine et al., 2019), and our tempered expectations with regards to the marginally significant findings in our study, we call on future researchers to revisit the relationship between these variables and to elucidate the precise strength and nature of the relationship.

Finally, a fourth limitation to the study was the way in which variables were measured, most notably CWB. Although CWBi are correlated with frequency of CWBs (Costantini et al., 2021), it would have been preferable to obtain self-reports of CWB instead of CWBi. Participants in our study roleplayed an employee receiving feedback; and, accordingly, we had them report CWBi in response to the feedback they received. This is consistent with how other researchers have examined CWBs in studies involving vignettes (e.g., Belschak & Den Hartog, 2009). However, future researchers may wish to replicate this study in an applied setting and collect a more direct measure of CWB. Relatedly, we employed a cross-sectional, self-report only design whereby all of our predictors were measured at the same time as our outcome

variables. In turn, our study may have been susceptible to common method variance (Conway & Lance, 2010; Lindell & Whitney, 2001; Spector, 2006). Although some researchers argue common method variance is less of an issue than others, future researchers interested revisiting the relationships in the present study should move beyond cross-sectional designs to mitigate against these potential concerns (Conway & Lance, 2010; Lindell & Whitney, 2001; Spector, 2006).

## **Conclusion**

In conclusion, the results of our study have implications for achieving a better understanding of reactions to employee feedback. We found that both affective and behavioral self-regulatory processes moderated the relationship between feedback type and CWBi, as mediated by negative affect. The findings from the present study suggest that it is possible to lessen the intensity of negative behavioral reactions to negative performance feedback. In future, researchers should examine how workplace resiliency and self-regulatory processes may interact with more general reactions to receiving negative performance feedback, not just behaviors such as CWB.

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## Appendix

### *Vignettes*

#### **Instructions**

Please take your time and read the following paragraph. Imagine that you are the individual described in the paragraph below and that it is you who is receiving job performance feedback. Please take some time to think about how you might feel and what you might be thinking after receiving feedback of this nature. Please answer all remaining questions while imagining that it was you who received the feedback outlined in the paragraph below.

#### **Positive Feedback Condition**

Following up on your annual performance review, your direct supervisor sends you a personal email telling you that you have been doing excellent work lately, and you are among the top performers in the department. Your supervisor also tells you in their e-mail that they are very happy with your performance.

#### **Negative Feedback Condition**

Following up on your annual performance review, your direct supervisor sends you a personal email telling you that your work has not been up to standards lately and you have been making a lot of mistakes. Your supervisor also tells you in the e-mail that they are disappointed with your performance and that you are now considered to be among the poorest performing employees in the department.