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### Being sensitive to positives has its negatives: An approach/ avoidance perspective on reactivity to ostracism

Ferris D. LANCE

*Michigan State University*

Shereen FATIMAH

*Singapore Management University, shereenf@smu.edu.sg*

Ming YAN

*Jinan University - China*

Lindie H. LIANG

*Wilfrid Laurier University*

Huiwen LIAN

*University of Kentucky*

*See next page for additional authors*

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**Author**

Ferris D. LANCE, Shereen FATIMAH, Ming YAN, Lindie H. LIANG, Huiwen LIAN, and Douglas J. BROWN

## **Being sensitive to positives has its negatives: An approach/avoidance perspective on reactivity to ostracism**

D. Lance Ferris, Eli Broad College of Business, Michigan State University, 632 Bogue Street, Room N437, East Lansing, MI 48824, United States

Shereen Fatimah, Lee Kong Chian School of Business, Singapore Management University, 50 Stamford Road, Singapore 178899, Singapore

Ming Yan,\* School of Management, Jinan University, Guangzhou, China

Lindie H. Liang, Lazaridis School of Business and Economics, Wilfrid Laurier University, 75 University Avenue West, Waterloo, ON N2L 3C5, Canada

Huiwen Lian, Department of Management, University of Kentucky, 550 S. Limestone, Lexington, KY 40506, United States and Department of Management, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong

Douglas J. Brown, University of Waterloo, Department of Psychology, 200 University Avenue West, Waterloo, ON, N2L 3G1, Canada

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### Abstract

Workplace mistreatment is typically conceptualized as being exposed to a negative stimulus – for example, a threat, verbal abuse, or other forms of harassment. Consequently, we expect workplace mistreatment will have the greatest effect on individuals who are sensitive to the presence and absence of negative stimuli – or those with a strong avoidance temperament. Although this may be the rule for most mistreatment constructs, we argue that ostracism may be the exception. Using an approach/avoidance framework to highlight unique elements of ostracism, we build on the definition of ostracism as being the absence of an expected positive stimulus (i.e., social interaction that is withheld) to argue ostracism should have the greatest impact on those who are sensitive to the presence and absence of positive stimuli – or those with a strong approach temperament. Across a scenario study, a study of student teams, and a field study, we found that a strong approach temperament exacerbated the effects of ostracism on citizenship behaviors, while a strong avoidance temperament did not. Implications for the ostracism and mistreatment literatures are discussed.

Keywords: Approach, Avoidance, Organizational citizenship behaviors, Ostracism

When we think about who reacts most unfavorably to mistreatment, we might intuitively think of people who are sensitive to the negative things in life (e.g., Andersson & Pearson, 1999). Our intuitions would be right: studies repeatedly show that individuals with high negative affectivity – or those who are sensitive to frustrations and irritations and prone to experience negative emotions – react unfavorably to workplace mistreatment such as interpersonal conflict, workplace incivility, unfair treatment, and customer mistreatment (Penney and Spector, 2005, Skarlicki et al., 1999, Wang et al., 2011). Similarly, highly neurotic individuals – or those who are prone to interpret events negatively and experience anxiety – react unfavorably to group undermining or unsupportive work environments (Colbert et al., 2004, Duffy et al., 2006), while those who try to avoid negative stimuli as a way of coping react most unfavorably to abusive supervision (Tepper, Moss, Lockhart, & Carr, 2007). In short, no shortage of evidence exists regarding the notion that sensitivity to negative stimuli exacerbates reactions to mistreatment.

The fact that mistreatment should affect those sensitive to negative stimuli is not just intuitively correct – it has a firm theoretical basis as well. Mistreatment is typically conceptualized as the presence of some negative stimuli, be it abusive language, slurs, or mean-spiritedly making someone the butt of a joke (Robinson, O'Reilly, & Wang, 2013). Consequently, those people who are dispositionally sensitive to the presence and absence of negative stimuli – including individuals who are neurotic or high in negative affectivity, among other personality traits – should be more reactive to the presence of negative mistreatment (Elliot and Thrash, 2002, Elliot and Thrash, 2010, Higgins, 1997). Rather less intuitive is the notion that people who are sensitive to the *positive* things in life might react unfavorably to mistreatment as well. As a rule, mistreatment does not involve the presence or absence of a positive stimulus, so there seems to be no real theoretical basis to expect those people who are dispositionally sensitive to the presence and absence of positive stimuli to react differentially to mistreatment.

Ostracism, however, may provide an exception to the rule. In particular, in an attempt to distinguish ostracism from the numerous other types of workplace mistreatment that exist, it has been argued that ostracism is unique among mistreatment concepts because rather than representing the presence of a negative stimulus, it represents the absence or omission of a positive stimulus: positive attention from others (Robinson et al., 2013; see also Ferris et al., 2008, O'Reilly et al., 2015, Williams, 2001). Consequently, given ostracism represents “the omission of positive attention from others” (Robinson et al., 2013, p. 208), it may also differ from other mistreatment concepts in that it may be most impactful for those sensitive to the presence and absence of *positive*, not negative, information. If true, this pattern of effects would help address how ostracism differs from other mistreatment constructs, which remains a pressing concern given the proliferation of mistreatment constructs in the literature (Ferris et al., 2017, O'Reilly et al., 2015, Robinson et al., 2013).

More fundamentally, however, such a pattern of effects would build on prior work (e.g., Ferris, Yan, Lim, Chen, & Fatimah, 2016) seeking to firmly enmesh ostracism within an *approach/avoidance* theoretical framework (Elliot and Thrash, 2002, Ferris et al., 2013, Higgins, 1997). An approach/avoidance framework is premised on the notion that individuals differ in their sensitivity to the presence and absence of positive stimuli (i.e., the extent to which they possess a strong *approach temperament*) and their sensitivity to the presence and absence of negative stimuli (i.e., the extent to which they possess a strong *avoidance temperament*). We use this framework to argue that if ostracism is indeed the absence of a positive stimulus, then its effects should be most pronounced for those individuals who are sensitive to the presence and absence of positive stimuli (i.e., those with a strong approach temperament) – not negative stimuli (i.e., those with a strong avoidance temperament). We test this argument across three studies.

In testing for this pattern of effects, our paper makes a number of contributions to the literature. First and foremost, our work highlights that ostracism differs from other forms of workplace mistreatment and that one cannot assume all forms of mistreatment are equal (e.g., Bowling & Beehr, 2006). Rather, ostracism is unique in its conceptualization as the omission of a positive stimulus (Robinson et al., 2013), and this can help in differentiating the various forms of mistreatment from each other. Indeed, our pattern of

findings are counterintuitive given the wealth of studies noted previously showing other forms of mistreatment disproportionately affects those sensitive to negative stimuli, and ultimately challenge current thinking regarding who mistreatment is most likely to adversely affect.

More broadly, our work serves to further integrate ostracism within an approach/avoidance framework (Elliot and Thrash, 2010, Ferris et al., 2013, Ferris et al., 2016, Higgins, 1997, Higgins, 2000). In particular, while our prediction that ostracism should interact with approach temperament is counterintuitive given what we know in the mistreatment literature, when ostracism is construed as the absence of a positive stimuli (Robinson et al., 2013), such a prediction becomes readily apparent within an approach/avoidance framework. Moreover, in so doing, our work provides a motivational home for a relatively atheoretical construct, in the sense that initial work on the ostracism construct focused on describing the behaviors captured by the ostracism construct rather than the “core characteristic shared by all of these behaviors” (Robinson et al., 2013, p. 206). In supporting Robinson and colleague’s notion that this core characteristic is the absence of a positive stimuli, our work provides a starting point for considering ostracism within an approach/avoidance framework that can be used to outline boundary conditions associated with ostracism’s effect, and to provide a generative framework for future research.

In the following sections, we briefly review key aspects of the ostracism and approach/avoidance literatures. Subsequently, we discuss how if ostracism represents the absence of a positive event, individuals with strong approach temperaments should be most reactive to ostracism. We then present the results of three studies demonstrating ostracism has a greater impact on those with strong approach, but not strong avoidance, temperaments. Finally, we discuss the implications of our research for differentiating various forms of mistreatment in general and the ostracism literature in particular.

## 1. Ostracism

Since the beginning of the 21st century, research on ostracism and exclusion has experienced explosive growth in social, developmental, and neuropsychology (Williams, 2007, Williams, 2009, Williams et al., 2000). Organizational research has similarly followed suit (Ferris et al., 2017, Robinson et al., 2013), with systematic research on workplace ostracism emerging following the development of a workplace ostracism measure (Ferris et al., 2008). Organizational researchers have frequently studied the effects of ostracism at work since then, finding that workplace ostracism is associated with negative outcomes such as decreased psychological well-being and workplace performance, unfavorable job-related attitudes, job withdrawal, and increased deviant behaviors (e.g., Balliet and Ferris, 2013, Ferris et al., 2008, Ferris et al., 2015, O’Reilly et al., 2015, Wu et al., 2012).

Taking the lead from social psychological research on ostracism (e.g., Williams, 1997, Williams, 2001), workplace ostracism research has generally been defined as being ignored or excluded in the workplace (see, e.g., Ferris et al., 2008). However, a recent review of the ostracism literature has noted this definition is somewhat tautological in that it simply substitutes behavioral synonyms of ostracism for its definition and fails to outline the “core characteristic shared by all of these behaviors” (Robinson et al., 2013, p. 206). Consequently, Robinson et al. (2013, p. 208) argued the ‘core characteristic’ of ostracism is the “omission of positive attention from others rather than the commission of negative attention.” That is, ostracism represents an absence of an expected positive social interaction – for example, our greetings are not returned; we see others leaving for lunch without being invited ourselves; we try to catch someone’s eye but they look away; or we speak to someone but fail to elicit a response from them. In this sense, ostracism is posited to be different from other forms of mistreatment which represent the presence of a negative interaction (e.g., abuse or threats).

Highlighting how ostracism represents the absence of a positive stimulus holds implications beyond a better definition of ostracism, however. In particular, this framing highlights the relevance that sensitivities to the presence or absence of positive stimuli may have for understanding who ostracism has

the largest effect on. This framing specifically allows the integration of the ostracism literature within a broader *approach/avoidance* theoretical framework (Chang et al., 2012, Elliot and Thrash, 2002, Elliot and Thrash, 2010, Ferris et al., 2011, Ferris et al., 2013; see also Higgins, 1997).<sup>1</sup>

## 2. Approach and avoidance

Approach and avoidance, or sensitivity to the presence and absence of positive and negative stimuli (respectively), represent one of the most fundamental distinctions seen in the human condition (Elliot, 2006). Given the biological underpinnings and evolutionary advantages conferred by distinguishing between positive and negative stimuli, it is not surprising that approach and avoidance remain primary forces that influence human functioning (Kenrick & Shiota, 2008). Indeed, such distinctions appear to be ‘wired’ into our neurological makeup with separate brain structures dedicated to the detection of pleasure and punishment (Gray, 1990, Watson et al., 1999). As a testament to the ubiquity of approach/avoidance as an organizing framework, numerous disciplines use approach/avoidance distinctions including clinical psychology, personality, motivation, neuroscience, and human developmental research (see Elliot, 2006, for a review).

Drawing on the notion that individuals differ in their chronic sensitivity to the presence and absence of positive and negative stimuli, Elliot and Thrash, 2002, Elliot and Thrash, 2010 have proposed an approach/avoidance framework for individual differences as a whole. In particular, they argued that many personality traits and individual differences are manifestations of *approach* and *avoidance temperaments*. These temperaments are orthogonal, biologically-based latent individual differences to the presence and absence of positive and negative stimuli. Thus, people who are generally positive and outgoing (i.e., high extraversion; McCrae & John, 1992), who frequently experience positive affect (i.e., high positive affectivity; Watson et al., 1999), and who are motivated by positive possibilities (i.e., a strong behavioral activation system; Carver & White, 1994) are said to have strong approach temperaments or to generally be highly sensitive to positive stimuli. For example, those with strong behavioral activation systems are more influenced by positive stimuli like rewards (Carver & White, 1994) while those who are extraverted display heightened reactivity to positive mood inductions (Larsen & Ketelaar, 1991).

On the other hand, people who are generally anxious and neurotic (i.e., high neuroticism; McCrae & John, 1992), who frequently experience negative affect (i.e., high negative affectivity; Watson et al., 1999), and who are motivated by negative possibilities (i.e., a strong behavioral inhibition system; Carver & White, 1994) are said to have strong avoidance temperaments or to generally be highly sensitive to negative stimuli. For example, those with strong behavioral inhibition systems are more influenced by negative stimuli like punishment (Carver & White, 1994) while those who are neurotic display heightened reactivity to negative mood inductions (Larsen & Ketelaar, 1991). Supporting their approach/avoidance framework, in a series of studies Elliot and Thrash (2002) found that measures of extraversion, positive affectivity, and the behavioral activation system all loaded on a common latent factor (i.e., an approach temperament) while measures of neuroticism, negative affectivity, and the behavioral inhibition system all loaded on a common latent factor (i.e., an avoidance temperament; see also Gable, Reis, & Elliot,

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<sup>1</sup> Approach/avoidance theory (Elliot & Church, 1997) has a high degree of overlap with regulatory focus theory (Higgins, 1997), albeit with different terminology for the same constructs (see Ferris et al., 2013; Scholer & Higgins, 2008). Although either theory can be used to support our predictions, we use approach/avoidance terminology because for our research question – examining dispositional differences in sensitivity to positive and negative stimuli as moderators of the effects of ostracism – approach/avoidance provides a broader theoretical framework. In particular, regulatory focus theory limits its discussion of individual differences in sensitivity to positive and negative stimuli to their specific measures of “chronic regulatory orientations,” while in approach/avoidance theory these measures of chronic regulatory orientations are considered, along with many other individual difference measures, as indicators of broader biologically-based approach/avoidance temperaments (Elliot & Thrash, 2002).

2003). More recently, measures designed to explicitly assess the latent approach and avoidance temperaments have also been developed (see Elliot & Thrash, 2010).

As orthogonal individual differences, it is also possible to have approach and avoidance temperaments that differ in their strength or weakness, or even to simultaneously have strong (or conversely, weak) approach and avoidance temperaments. In this manner, the various combinations of approach and avoidance temperaments have been argued to manifest in numerous personality traits, attitudes, and behaviors (Elliot & Thrash, 2010). For instance, narcissists are thought to simultaneously possess strong approach and avoidance temperaments, leading them to be highly sensitive to, and reactive to, both positive and negative statements about themselves (Morf & Rhodewalt, 2001). On the other hand, those with simultaneously weak approach and avoidance temperaments are generally insensitive to both positive or negative stimuli, which is thought to lead them to be generally neutral or indifferent to most matters (Cacioppo, Gardner, & Berntson, 1997). Finally, those with high core self-evaluations have been shown to possess both a strong approach temperament and a weak avoidance temperament (Chang et al., 2012, Ferris et al., 2013), suggesting the positivity of their self-evaluations may be driven by attention paid to the positive qualities they possess, as well as not noticing their own negative qualities. However, as we outline below, it is differences between strong and weak approach temperaments in particular which hold implications for reactions to ostracism.

### **2.1. Integrating ostracism and approach/avoidance: reactions to ostracism**

An approach/avoidance framework of individual differences has a straightforward implication for, and way to test the viability of, viewing ostracism as the absence of a positive stimulus. In contrast to the wealth of studies outlining how avoidance temperament (or indicators thereof, e.g., neuroticism, negative affect) exacerbates the effects of other forms of mistreatment, within an approach/avoidance framework we should instead see approach temperament exacerbates the effects of ostracism. Since ostracism represents the absence of a positive stimulus (i.e., social interaction when it is appropriate to do so; Robinson et al., 2013) it is people who are sensitive to the presence and absence of positive stimuli – or those who have a strong approach temperament – who should react most strongly to ostracism, not people who are sensitive to negative stimuli. In other words, approach temperament should moderate the effects of ostracism such that those with strong approach temperaments are most affected by ostracism.

In order to test whether ostracism has a greater effect on those with a strong approach temperament, we decided to examine approach temperament's ability to moderate the effects of ostracism on organizational citizenship behaviors, or OCBs. Organizational citizenship behaviors represent extra-role behaviors that are not formally required by organizations, but nevertheless serve to benefit the organization's members or the organization itself (e.g., assisting a colleague when he or she is overloaded with work; Organ, 1988). Based on principles of social exchange, being ostracized by others should lead to a decrease in OCB as a means of withdrawing more voluntary forms of performance, reducing the likelihood of punishment. However, past workplace studies of ostracism and OCB have been equivocal on the strength of the relation, with null relationships sometimes found (e.g., Ferris et al., 2008) or findings suggesting the relation is highly variable and dependent on other factors (e.g., Balliet & Ferris, 2013). We thus chose to examine approach temperament as a moderator of the relation between ostracism and OCB both because past work suggests this relation is variable (and hence one may be more likely to detect a moderating effect) and because finding a moderator of this relation may explain the reason why past studies have found such mixed effects. In line with the preceding logic presented, we hypothesize the following:

#### **Hypothesis 1**

*Ostracism and approach temperament will interact to predict OCB, such that ostracism has a stronger negative effect on OCB for those with a relatively stronger approach temperament.*

### 3. Study 1 method

#### 3.1. Participants and procedure

We recruited 114 university students to participate in the study in exchange for course credit (average age approximately 19 years; approximately 60% male). Participants came to the lab and completed a measure assessing approach and avoidance temperament (described below); subsequently, participants were randomly assigned to read a hypothetical scenario in which they were either depicted as being ostracized or as being included. Participants then indicated to what extent they would be likely to engage in citizenship behaviors towards those who had ostracized (or included) them. The scenarios used were previously developed and validated (Balliet & Ferris, 2013). To briefly summarize, the scenario described either how (in the ostracism condition) their fellow coworkers ignore them, exclude them from conversations, and freeze them out of meetings, or (in the inclusion condition) how their fellow coworkers include them in the above activities (see Balliet & Ferris, 2013, for more information).

#### 3.2. Measures

Materials and syntax for all studies and analyses used in this paper can be accessed at [https://osf.io/usqrt/?view\\_only=df73646de9334ed3ab445c93d9eedfb0](https://osf.io/usqrt/?view_only=df73646de9334ed3ab445c93d9eedfb0). Our institutional review board applications did not indicate we would post participant data publicly and so is not included with the materials and syntax; however, the data used in the study are readily available upon request to the first author.

##### 3.2.1. OCB intentions

We used Balliet and Ferris (2013) 7-item measure of interpersonal citizenship behavior intentions which asked participants to indicate on a 7-point Likert scale (1 = *strongly disagree* and 7 = *strongly agree*) to what extent they would be likely to engage in helping behaviors towards their coworkers (e.g., “Help your team members when they have been absent”).

##### 3.2.2. Approach and avoidance temperament

We used Carver and White (1994) 13-item Behavioral Activation System (BAS) and 7-item Behavioral Inhibition System (BIS) scales to assess approach and avoidance temperament (respectively); these scales are frequently used to assess approach and avoidance temperament as the BAS and BIS measures are viewed as indicators of latent approach and avoidance temperaments (e.g. Elliot and Thrash, 2002, Elliot and Thrash, 2010, Ferris et al., 2011). Participants indicated their agreement on a 5-point Likert scale (1 = *strongly disagree* and 5 = *strongly agree*) to questions such as “When good things happen to me, it affects me strongly” (BAS) and “I feel worried when I think I have done poorly at something” (BIS).<sup>2</sup>

##### 3.2.3. Extraversion

Following the suggestion of a reviewer, we also controlled for extraversion (and its interaction with our ostracism condition) in all of our studies to rule out the possibility that extraverts – i.e., those who are energized by the presence of others – may be responsible for any interaction we see between ostracism and approach temperament. We used the mini-IPIP four-item scale to assess trait extraversion (Donnellan, Oswald, Baird, & Lucas, 2006). Sample items include “I am the life of the party” and “I don’t talk a lot” (reverse coded; 1 = *strongly disagree* and 5 = *strongly agree*).

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<sup>2</sup> In the interest of transparency, we should note that we also included Elliot and Thrash (2010) measure of approach and avoidance temperament. However, our predicted interaction between ostracism and approach temperament was not significant when using this measure instead of Carver and White’s BAS/BIS measure, or a composite measure combining the Elliot and Thrash approach temperament measure with the Carver and White BAS measure. For more details regarding these findings, please contact the first author.



Across all of our studies, inclusion or exclusion of extraversion, extraversion's interaction with ostracism, age, and gender control variables did not affect our results, except as noted below for Study 1.

### 3.3. Data analysis strategy

We used hierarchical multiple regression to test our hypotheses. For our first step, we centered our age, gender, extraversion, approach temperament, and avoidance temperament variables, and entered these along with a dichotomous variable representing our ostracism condition manipulation as well as the two-way interactions between ostracism condition and avoidance temperament and ostracism condition and extraversion. Next, the two-way interaction between ostracism condition and approach temperament were entered in the second step. All significant interactions were plotted (and simple slopes tests were calculated) at high and low levels of the moderator (i.e., plus and minus one standard deviation, respectively) using programs provided by Dawson (2014).

## 4. Study 1 results and discussion

The upper part of Table 1 provides the means, standard deviations, and correlations for the Study 1 variables. Table 2 presents the results of the regression analysis examining the interaction between ostracism condition and approach and avoidance temperaments. As can be seen in Table 2, supporting Hypothesis 1, the addition of the interaction terms between ostracism condition and approach and avoidance temperaments explained an additional three percent of the variance in OCB intentions ( $\Delta R^2 = 0.03, p = 0.120$ ), and the interaction between ostracism condition and approach temperament was marginally significant ( $B = -0.944, p = 0.076$ ).<sup>3</sup> As expected, the interaction between ostracism condition and avoidance temperament was not significant ( $B = -0.475, p = 0.265$ ).

Table 1. Means, standard deviations, and correlations for Study 1 and Study 2.

Variables	Mean	SD	1	2	3	4	5	6	7	8
<b>Study 1: Somato</b>										
1. Ostracism (manipulated)	0.51	0.50	–							
2. Approach	3.85	0.53	0.13	(0.83)						
3. Avoidance	3.43	0.60	0.06	–0.08	(0.72)					
4. OCB Intentions	5.06	1.50	–0.52**	–0.04	–0.06	(0.95)				
5. Age	18.96	1.31	–0.05	0.09	–0.07	0.01	–			
6. Gender	1.39	0.49	0.15	0.21*	0.38**	–0.11	–0.16	–		
7. Extraversion	3.56	0.75	–0.07	0.44**	–0.16	0.04	–0.17	0.04	(0.77)	
<b>Study 2: Student Teams</b>										
1. Ostracism (measured)	1.52	0.98	(0.98)							
2. Approach	5.09	0.78	–0.15	(0.78)						
3. Avoidance	3.89	1.20	–0.01	–0.36**	(0.84)					
4. Self-Rated OCB (T3)	3.00	1.64	–0.23*	0.08	0.08	(0.95)				
5. Age	21.06	1.24	0.05	0.13	–0.26*	0.03	–			
6. Gender	1.26	0.44	0.10	–0.05	0.01	–0.09	0.17	–		
7. Extraversion	4.77	1.15	–0.24*	0.49**	–0.41**	0.12	0.25*	–0.12	(0.94)	
8. Self-Rated OCB (T2)	3.16	1.55	–0.28**	0.14	0.11	0.52**	–0.17	–0.29**	0.24*	(0.90)

Note. N = 114 and 94 for Study 1 and Study 2, respectively. For ostracism (manipulated), 0 = not ostracized and 1 = ostracized; for gender, 1 = male, 2 = female. Bracketed values on the diagonal are the Cronbach's alpha value of each scale.

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

The form of the interaction (see Fig. 1) is consistent with our prediction in that the relation between ostracism condition and OCB intentions was stronger when approach temperament was high. Tests of the simple slopes indicate that the relation between ostracism condition and OCB intentions was significant

<sup>3</sup> Inclusion of the interaction between extraversion and ostracism condition marginally impacted the significance of our results in Study 1. Specifically, when the interaction was excluded, the interaction between ostracism condition and approach temperament reached conventional levels of significance ( $B = -1.103, p = 0.022$ ), as did the overall F test ( $p = 0.052$ ). Given the interaction of extraversion and ostracism condition did not significantly predict our outcome, it is possible that its inclusion is decreasing our power to detect our effects (see Becker, 2005).

both when approach temperament was high ( $t = -5.74, p < 0.001$ ) and when approach temperament was low ( $t = -2.97, p = 0.004$ ). These results fully support Hypothesis 1.

Table 2. Interaction of ostracism and approach temperament predicting self-rated OCB intentions (Study 1).

	Self-rated OCB intentions
Constant	5.89** (0.18)
Age	-0.07 (0.10)
Gender	-0.10 (0.28)
Ostracism	-1.62* (0.25)
Extraversion	0.06 (0.25)
Ostracism × Extraversion	-0.25 (0.37)
Approach	0.63* (0.34)
Avoidance	0.26 (0.34)
Ostracism × Avoidance	-0.48 (0.42)
Ostracism × Approach	-0.94† (0.53)
Overall R <sup>2</sup>	0.33
ΔR <sup>2</sup> for Ostracism × Approach interaction term	0.03
Overall F	5.70**

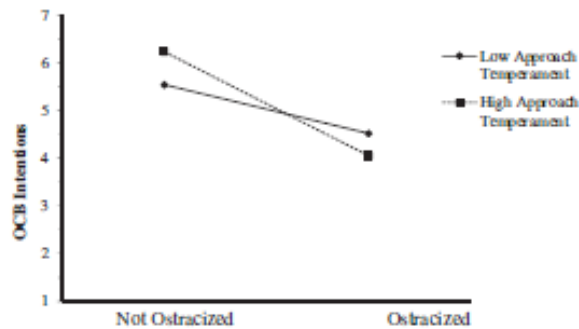
Note. Estimates provided are unstandardized coefficients; standard errors for each term provided in brackets.

†  $p = 0.076$ .

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

Fig. 1. Interaction of ostracism and approach temperament predicting OCB intentions (Study 1).



In sum, Study 1 provides preliminary evidence supporting our prediction that ostracism is likely to have the greatest impact on those with a strong approach temperament. However, a limitation of Study 1 may lie in its use of scenarios asking individuals to imagine being ostracized, and not actual ostracism. On the one hand, such scenarios are commonly used in research on rejection (Blackhart, Nelson, Knowles, & Baumeister, 2009) and it has been noted that ostracism impacts individuals even when it is not directly experienced (Williams & Sommer, 1997). Similarly, if the scenarios were truly artificial and uninvolved then one would be hard-pressed to explain the main effect observed of our ostracism manipulation, much less the moderating effect. On the other hand, scenario studies are necessarily low on psychological realism, so a field study examining actual experiences of ostracism would not only serve to constructively replicate our findings but also put to rest any concerns over the artificial nature of Study 1. Thus, in Study 2 we sought to replicate our findings using a sample of participants in student teams who rated their actual experience of ostracism within the team.

## 5. Study 2 method

### 5.1. Participants and procedure

We recruited 94 university students to participate in the study in exchange for course credit (average age approximately 21 years; approximately 75% male). Participants were students enrolled in an Organizational Behavior class at a large North American university, and the study was conducted as a part of an in-class team learning experience over one academic semester. At the beginning of the semester, all students were told that they would be assigned into groups of three or four, and engage in several group projects throughout the academic semester. They were asked to complete three questionnaires over the 12-week term. The first online questionnaire was administered in the third week of the term (T1), prior to students being assigned to teams. The questionnaire assessed students' demographic information and their trait approach and avoidance temperament, as well as trait extraversion. In the seventh week of class (T2), participants filled out an online survey assessing their perceived ostracism within their group, and their baseline level of OCB towards other team members. Finally, in the ninth week of class (which corresponded with the due date of the final group project; T3), participants filled out an online survey assessing their OCB towards other team members.

### 5.2. Measures

#### 5.2.1. Ostracism

We assessed the extent to which participants felt ostracized by members of their team using Ferris et al. (2008) 10-item workplace ostracism scale adapted to assess ostracism in teams, using items such as “Your team members ignored you” (1 = *strongly disagree* and 7 = *strongly agree*). Due to an error in coding the online survey, responses for two ostracism scale items were not recorded (leaving us with a 8-item scale); although not ideal, in Study 3 we replicate our findings using the full version of the scale.

#### 5.2.2. OCB

Participants used a six-item scale created by Dalal, Lam, Weiss, Welch, and Hulin (2009) to assess their OCB directed towards their team members (e.g., “Went out of my way to be nice to my fellow team members;” “Tried to help my fellow team members”). Participants indicated their agreement regarding the extent to which they have engaged in each behavior on a 7-point Likert scale (1 = *never* and 7 = *daily*).

#### 5.2.3. Approach and avoidance temperament

Approach and avoidance temperament were measured using Elliot and Thrash (2010) 12-item measure (six items per temperament); this measure was designed to directly assess approach and avoidance temperaments versus using other measures (e.g. neuroticism/extraversion, BIS/BAS, positive and negative affect) that act as indicators of the temperaments. Participants responded using a seven-point Likert scale (1 = *strongly disagree* and 7 = *strongly agree*) to questions such as “I’m always on the lookout for positive opportunities and experiences” (approach temperament) and “I react very strongly to bad experiences” (avoidance temperament).

#### 5.2.4. Extraversion

We assessed the control variable trait extraversion with the 10-item scale (Goldberg et al., 2006). Sample items include “I feel comfortable around people”, and “I don’t talk a lot” (reverse coded; 1 = *strongly disagree* and 7 = *strongly agree*).

### 5.3. Data analysis strategy

We used multilevel modeling (MLM) via Mplus version 7.4 (Muthén & Muthén, 1998, 2015) to estimate the within-individual relationships. Multilevel modeling was used because the nested nature of the data (i.e., individual students were nested within teams) would make the use of single-level regressions inappropriate due to the biasing of the standard errors (Raudenbush & Bryk, 2002).

To justify the use of MLM for our data, we first calculated the unconditional ICCs by running null models with no predictors on all studied variables (i.e., ostracism, approach temperament, avoidance temperament, and self-rated OCB). The results show substantial amount of variance in ostracism and in OCB can be explained by group membership ( $ICC1_{ostracism} = 0.25$ ;  $ICC1_{OCB} = 0.17$ ), justifying the use of MLM. However, the amount of variance in approach temperament and avoidance temperament that can be explained by group membership is very small ( $ICC1_{approach} = 0.03$ ;  $ICC1_{avoidance} = 0.05$ ). This was expected because student teams were randomly assigned, and therefore there is little reason to expect that participants' traits can be explained by group membership.

Because we were interested in predicting the relationship among the study variables at the individual level rather than how much individuals nested within teams deviate from the team's typical mean, we applied grand-mean centering to all study variables. In addition to including age, gender, extraversion, and extraversion's interaction with ostracism as control variables, we also controlled for T2 OCB. As in Study 1, inclusion or exclusion of our age, gender, extraversion, and extraversion's interaction with ostracism control variables did not affect our results. Moreover, inclusion or exclusion of T2 OCB did not affect our results.

## 6. Study 2 results and discussion

The lower portion of Table 1 provides the means, standard deviations, and correlations for the Study 2 variables. Table 3 presents the results of the MLM analysis examining the interaction between ostracism and approach temperament. Supporting Hypothesis 1, the interaction between ostracism and approach temperament was significant ( $\gamma = -0.48$ ,  $p = 0.019$ ) in predicting self-rated OCB at Time 3. As in Study 1, ostracism did not interact with avoidance temperament ( $\gamma = -0.05$ ,  $p = 0.696$ ). Moreover, ostracism did not interact with trait extraversion ( $\gamma = 0.20$ ,  $p = 0.168$ ).

Table 3. MLM results of the interaction between ostracism and approach temperament predicting self-rated OCB intentions (Study 2).

	Self-rated OCB (T3)	
	Model 1	Model 2
Constant	3.08** (0.17)	3.04** (0.16)
Age	0.17 (0.12)	0.19 (0.11)
Gender	0.19 (0.33)	0.16 (0.32)
Self-Rated OCB (T2)	0.53** (0.10)	0.52** (0.10)
Extraversion	-0.06 (0.15)	-0.08 (0.15)
Ostracism	-0.23 (0.18)	-0.27 (0.18)
Approach	0.04 (0.21)	0.06 (0.20)
Avoidance	0.07 (0.14)	0.08 (0.13)
Ostracism $\times$ Extraversion	0.12 (0.15)	0.20 (0.15)
Ostracism $\times$ Avoidance	-0.03 (0.13)	-0.05 (0.13)
Ostracism $\times$ Approach		-0.50* (0.20)
-2 log likelihood (ML)	508.796	315.908

Note. Estimates provided are unstandardized coefficients; standard errors for each term provided in brackets.

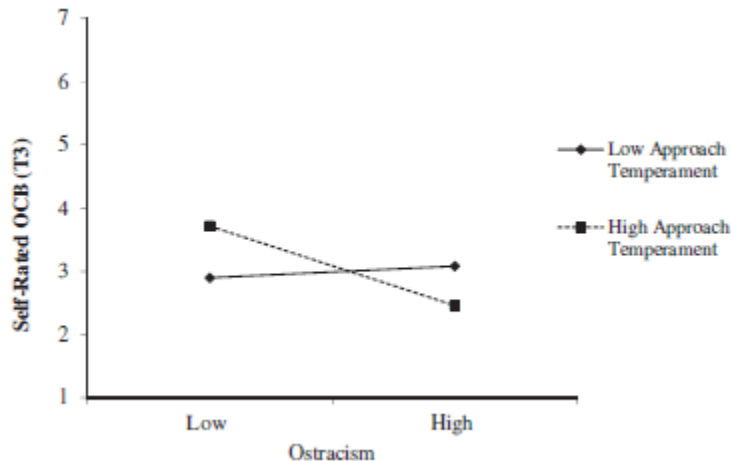
\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

The form of the interaction between ostracism and approach temperament (see Fig. 2) is consistent with our prediction in that the relation between ostracism and self-rated OCB (T3) is stronger when approach temperament was high. Tests of the simple slopes indicate that the relation between ostracism and self-rated OCB (T3) was significant when approach temperament was high ( $t = -2.72$ ,  $p = 0.007$ ) but not

significant when approach temperament was low ( $t = 0.40, p = 0.689$ ). These results fully support Hypothesis 1. The results of Study 2 thus constructively replicate those of Study 1, providing additional confidence in Study 1's results as well as the robustness of the effect.

Fig. 2. Interaction of ostracism and approach temperament predicting self-rated OCB (Study 2).



Nevertheless, Study 2 may be viewed as limited in that it uses a sample of student teams; although student teams are often used in the teams literature (e.g., Langfred, 2004), potential differences between students and employees may limit the generalizability of our findings to a work sample. A second potential limitation with Study 2 is our use of a self-rated measure of OCB. Although the weight of the empirical evidence suggests self-reported and other-reported (e.g., peers, supervisors) measures of OCB return similar results (for a meta-analysis, see Carpenter, Berry, & Houston, 2014), replicating our findings using a non-self-report measure of OCB would mitigate any concerns. To address these limitations, in Study 3 we sought to replicate our findings again using a sample of employees with ratings of the focal employee's OCB provided by a work supervisor.

An additional goal in Study 3 was to further support our argument that approach temperament should uniquely affect ostracism, but not other mistreatment constructs which represent the presence of negative stimuli. In particular, in Study 3 we examine whether approach temperament interacts with abusive supervision, or displays of hostility towards subordinates (e.g., telling subordinates that they are incompetent, ridiculing them, or making negative comments about them; Tepper, 2000, Mitchell and Ambrose, 2007). Since abusive supervision represents the presence of negative stimuli, we would expect that abusive supervision should not interact with approach temperament, but should interact with avoidance temperament, which would be a pattern of effects contrary to what is expected (and what was found in Study 1 and 2) for ostracism. To demonstrate this pattern of effects and further support our arguments, in Study 3 we included a measure of abusive supervision in addition to our measure of workplace ostracism.

Finally, in Study 3 we sought to broaden the scope of our findings by demonstrating our effects are not limited to OCB. In particular, it is possible that ostracism may limit the opportunities for engaging in interpersonal OCB, given ostracism involves the target of ostracism being isolated from others. In this sense, a reviewer suggested a dependent variable that is less dependent on social interaction may be appropriate. As such, in Study 3 we also examined in-role job performance, or an employee's performance on the tasks that comprise his or her job, in addition to OCB (which contribute to the social environment of the organization; Rotundo & Sackett, 2002). We would expect that our predictions would extend to non-social reactions such as in-role job performance, since the theorizing we have developed simply suggests that ostracism's effects should be stronger for those with an approach temperament; this

should apply regardless of the social (or nonsocial) nature of the dependent variable. More formally, we hypothesize the following:

## **Hypothesis 2**

*Ostracism and approach temperament will interact to predict in-role job performance, such that ostracism has a stronger negative effect on in-role job performance for those with a relatively stronger approach temperament.*

## **7. Study 3 method**

### **7.1. Participants and procedure**

We recruited 300 employees and their corresponding 300 supervisors from three large companies (located in Shenzhen, China) in media, hospitality, and retail industries as part of a larger data collection. Participants and their supervisors each received 70 RMB in exchange for completing three surveys conducted online; all questionnaires were translated from English into Chinese following Brislin (1970) back translation procedure. The three surveys were administered with approximately two months separating each survey. Subordinates completed a measure of approach and avoidance temperament and control variables (age, gender, education, tenure with the supervisor, and positive/negative affectivity) as part of their first survey, while supervisors provided their age, gender and team size as the control variables. After two months, subordinates completed measures of workplace ostracism and abusive supervision in the second survey. In the third survey, supervisors completed measures assessing their direct subordinate's OCBs and in-role job performance.

From our original 300 participants, we received responses from 287 matched subordinates and supervisors for the first survey (approximately 95.6% response rate); responses from 259 employees for the second survey (approximately 86.3% response rate); and responses from 191 supervisors for the third survey (approximately 63.7% response rate). Our focal participants (average age approximately 28 years; approximately 51.8% male, approximately 92% with college education or above) had worked with their supervisor for approximately 1.76 years. Their direct supervisors (57.1% male) were on average 42 years old. Participants worked in media (38.2%), hospitality (33.5%), and retail (28.3%).

### **7.2. Measures**

#### **7.2.1. Approach and avoidance temperament**

Approach and avoidance temperament were measured using the same measures as in Study 2.

#### **7.2.2. Workplace ostracism**

We assessed workplace ostracism with Ferris et al. (2008) 10-item workplace ostracism scale adapted to assess the extent to which one is ostracized by coworkers in the workplace (e.g., "My coworkers ignored me at work"; 1 = *strongly disagree* and 7 = *strongly agree*).

#### **7.2.3. Abusive supervision**

We assess abusive supervision with Mitchell and Ambrose (2007) five item measure of aggressive abusive supervision behaviors (e.g., "My direct supervisor tells me I'm incompetent"). Participants indicated their agreement on a 7-point Likert scale (1 = *strongly disagree* and 7 = *strongly agree*).

#### **7.2.4. OCBs**

We used Lee and Allen (2002) 16-item measure of organization citizenship behaviors (e.g., "Help his/her team members who have been absent"). Supervisors indicated their agreement regarding the extent to which their subordinates engaged in each behavior on a 7-point Likert scale (1 = *never* and 7 = *daily*).

### 7.2.5. In-role job performance

We use Williams and Anderson (1991) 7-item measure of in-role performance (e. g., “He/she adequately completes assigned duties”). Supervisors rated the extent to which their subordinates performed in each item on a 5-point Likert scale (1 = *strongly disagree* and 5 = *strongly agree*).

### 7.2.6. Extraversion

We measure subordinate’s extraversion personality with Rammstedt and John (2007) short two-item measure of extraversion (e. g., “I see myself as someone who is outgoing, sociable”). Participants indicated their agreement on a 7-point Likert scale (1 = *strongly disagree* and 7 = *strongly agree*).

## 7.3. Tests for nonindependence

Our data were collected from three companies, raising the possibility that our data may not be independent. Following Nifadkar, Tsui, and Ashforth (2012), we tested whether nonindependence was a problem by estimating the loss of power associated with nonindependence, using techniques outlined by Bliese and Hanges (2004). In particular, ICC(1) values were calculated for our constructs and we examined whether statistical approaches that control for nonindependence would be useful. Our ICC(1) values ranged from 0.00 (for approach temperament) to 0.01 for the other variables. Given these findings, nonindependence was unlikely to be an issue for our study (e.g., Nifadkar et al., 2012).

## 7.4. Data analysis strategy

We used the same data analysis strategy as in Study 1, although in Study 3 the main effect of ostracism and abusive supervision were centered prior to being entered in the second step (in contrast to Study 1, where ostracism was a manipulated and hence dichotomously-coded variable, and abusive supervision was not examined). As in Study 1 and Study 2, inclusion or exclusion of age, gender, extraversion, and extraversion’s interaction with ostracism as control variables did not affect our results.

## 8. Study 3 results and discussion

Table 4 provides the means, standard deviations, and correlations for the Study 3 variables. Table 5, Table 6 present the results of the regression analysis examining the interaction between ostracism and approach temperament as well as the interaction between abusive supervision and avoidance temperament.

Table 4. Means, standard deviations, and correlations for Study 3.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Gender	1.48	0.50									
2. Age	1.52	0.50	-0.12								
3. Extraversion	3.24	0.73	0.03	-0.11	<b>(0.72)</b>						
4. Approach	3.32	0.75	-0.05	-0.02	-0.00	<b>(0.91)</b>					
5. Avoidance	3.39	0.72	-0.00	0.12	-0.22**	-0.14	<b>(0.91)</b>				
6. Ostracism	2.29	0.92	-0.00	-0.05	-0.21**	-0.13	0.12	<b>(0.96)</b>			
7. Abusive supervision	2.30	1.08	0.01	-0.01	-0.38**	0.01	0.15*	0.64**	<b>(0.96)</b>		
8. OCB	2.98	1.01	-0.05	0.07	0.04	0.32**	0.01	-0.54**	-0.35**	<b>(0.97)</b>	
9. In-role performance	3.07	1.03	-0.08	0.12	-0.04	0.17*	0.18*	-0.61**	-0.43**	0.63**	<b>(0.94)</b>

Note. N = 191. Bracketed values on the diagonal are the Cronbach’s alpha value of each scale.

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

Table 5. Interaction between ostracism and approach temperament predicting OCBs (Study 3).

	Supervisor-rated OCBs
Constant	3.03*** (0.26)
Age	-0.02 (0.12)
Gender	-0.01 (0.12)
Extraversion	-0.07 (0.09)
Extraversion × Ostracism	-0.08 (0.09)
Ostracism	-0.47*** (0.08)
Abusive supervision	-0.08 (0.07)
Approach	0.28*** (0.08)
Avoidance	-0.06 (0.10)
Approach × Ostracism	-0.26* (0.12)
Approach × Abusive supervision	-0.05 (0.11)
Avoidance × Ostracism	-0.07 (0.11)
Avoidance × Abusive supervision	-0.31** (0.11)
Overall $R^2$	0.452
$\Delta R^2$ for interaction terms	0.074***
Overall $F$	12.23***

Note. Estimates provided are unstandardized coefficients; standard errors for each term provided in brackets.

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .

\*\*\*  $p < 0.001$ .

As can be seen in Table 5, supporting Hypothesis 1, the interaction between ostracism and approach temperament was significant ( $B = -0.26, p = 0.032$ ) and the interaction between abusive supervision and avoidance temperament was significant ( $B = -0.31, p = 0.004$ ). The two interactions explained an additional seven percent of the variance in OCB ( $\Delta R^2 = 0.07, p < 0.001$ ). The interaction between ostracism and avoidance temperament was not significant ( $B = -0.07, p = 0.541$ ) and the interaction between abusive supervision and approach temperament was not significant ( $B = -0.05, p = 0.604$ ). As can be seen in Table 6, supporting Hypothesis 2, the interaction between ostracism and approach temperament was significant ( $B = -0.41, p < 0.001$ ) and the interaction between abusive supervision and avoidance temperament was significant ( $B = -0.35, p < 0.001$ ). The two interactions explained an additional ten percent of the variance in in-role performance ( $\Delta R^2 = 0.10, p < 0.001$ ). The interaction between ostracism and avoidance temperament was not significant ( $B = 0.00, p = 0.993$ ) and the interaction between abusive supervision and approach temperament was not significant ( $B = 0.03, p = 0.718$ ).



Table 6. Interaction between ostracism and approach temperament predicting in-role performance (Study 3).

	Supervisor-rated in-role performance
Constant	3.21 <sup>***</sup> (0.23)
Age	-0.10 (0.10)
Gender	0.01 (0.10)
Extraversion	-0.21 <sup>**</sup> (0.08)
Extraversion × Ostracism	0.01 (0.08)
Ostracism	-0.56 <sup>***</sup> (0.07)
Abusive supervision	-0.18 <sup>**</sup> (0.06)
Approach	0.12 (0.07)
Avoidance	0.11 (0.09)
Approach × Ostracism	-0.41 <sup>***</sup> (0.11)
Approach × Abusive supervision	0.03 (0.09)
Avoidance × Ostracism	0.00 (0.10)
Avoidance × Abusive supervision	-0.35 <sup>***</sup> (0.09)
Overall $R^2$	0.589
$\Delta R^2$ for interaction terms	0.10 <sup>***</sup>
Overall $F$	21.26 <sup>***</sup>

Note. Estimates provided are unstandardized coefficients; standard errors for each term provided in brackets.

<sup>\*</sup> $p < 0.05$ .

<sup>\*\*</sup> $p < 0.01$ .

<sup>\*\*\*</sup> $p < 0.001$ .

The form of the interaction between ostracism and approach temperament (see Fig. 3) is consistent with our prediction in that the relation between ostracism and OCB is stronger when approach temperament is high. Tests of the simple slopes indicate that the relation between ostracism and OCB was stronger when approach temperament is high ( $t = -5.580, p < 0.001$ ) compared to when approach temperament was low ( $t = -2.285, p = 0.023$ ). The form of the interaction between abusive supervision and avoidance temperament (see Fig. 4) is also consistent with our prediction in that the relation between abusive supervision and OCB is stronger when avoidance temperament is high. Tests of the simple slopes indicate that the relation between abusive supervision and OCB was significant when avoidance temperament is high ( $t = -2.83, p = 0.005$ ), but not significant when avoidance temperament is low ( $t = 1.387, p = 0.167$ ). These results fully support Hypothesis 1.

Fig. 3. Interaction of ostracism and approach temperament predicting supervisor-rated OCBs (Study 3).

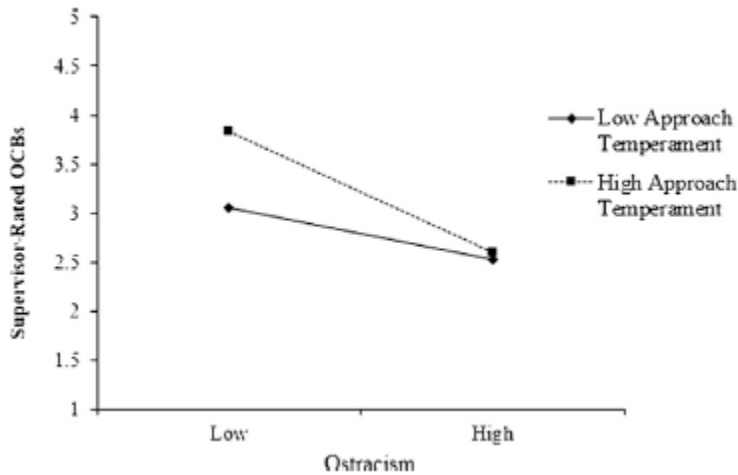
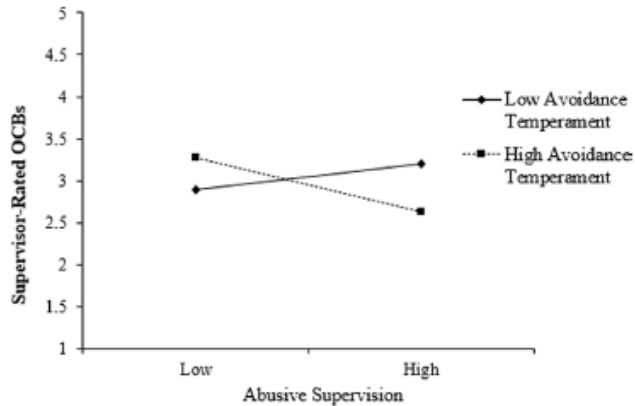
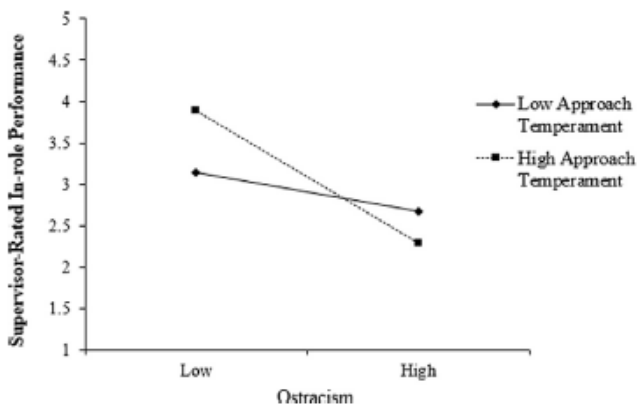


Fig. 4. Interaction of abusive supervision and avoidance temperament predicting supervisor-rated OCBs (Study 3).



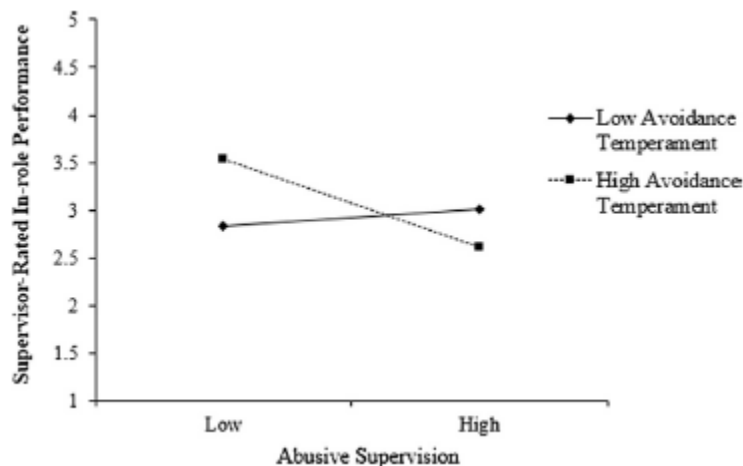
The form of the interaction between ostracism and approach temperament (see Fig. 5) is consistent with our prediction in that the relation between ostracism and in-role performance is stronger when approach temperament is high. Tests of the simple slopes indicate that the relation between ostracism and in-role performance was significant when approach temperament is high ( $t = -8.221, p < 0.001$ ) compared to when approach temperament was low ( $t = -2.313, p = 0.022$ ). The form of the interaction between abusive supervision and avoidance temperament (see Fig. 6) is also consistent with our prediction in that the relation between abusive supervision and in-role performance is stronger when avoidance temperament is high. Tests of the simple slopes indicate that the relation between abusive supervision and in-role performance was significant when avoidance temperament is high ( $t = -4.542, p < 0.001$ ), but not significant when avoidance temperament is low ( $t = 0.862, p = 0.390$ ). These results fully support Hypothesis 2. The results of Study 3 thus constructively replicate those of Study 1 and 2, providing additional confidence in our results as well as the robustness of the effect.<sup>4</sup>

Fig. 5. Interaction of ostracism and approach temperament predicting supervisor-rated in-role performance (Study 3).



<sup>4</sup> In a separate study not reported here, we also constructively replicated our findings using a different dependent variable commonly used in experimental ostracism research: satisfaction of the needs for belongingness, self-esteem, control, and a meaningful existence (see Williams, 1997, Williams, 2001). Specifically, we experimentally manipulated ostracism using the Cyberball paradigm (see Williams et al., 2000) and examined ostracism's interaction with Elliot and Thrash (2010) trait approach and avoidance measures. As in Studies 1–3, ostracism interacted with trait approach (but not avoidance) such that the effect of ostracism was stronger for those with strong approach temperaments. For more details on this study, please contact the first author.

Fig. 6. Interaction of abusive supervision and avoidance temperament predicting supervisor-rated in-role performance (Study 3).



## 9. General discussion

The notion that individuals who are sensitive to negative stimuli should be more reactive to mistreatment is a mainstay of the literature, having been demonstrated repeatedly across many forms of mistreatment and with different indicators of sensitivity to negative stimuli (Colbert et al., 2004, Duffy et al., 2006, Penney and Spector, 2005). Building on the idea that ostracism represents the omission of a positive stimuli rather than the presence of a negative stimuli (Robinson et al., 2013), we sought to demonstrate that ostracism may be most distressing for those who are sensitive to positive stimuli (i.e., those with a strong approach temperament). Across three different studies, we consistently found support for the idea that individuals with a strong approach temperament are more likely to react negatively to ostracism. By using scenarios, student teams, and employees, along with different operationalizations of our dependent variable (intentions, self-rated OCB, and supervisor-rated OCB) our studies constructively replicate our findings in such a way as to minimize concerns that our results are peculiar to any particular method or measure while also establishing the robustness and generalizability of the phenomenon.

### 9.1. An approach/avoidance framework for ostracism: integrating past findings and future research directions

Methodological niceties aside, a theoretical contribution of our work is to embed ostracism within an approach/avoidance framework. Our work provides strong support for conceptualizing ostracism as “the omission of positive attention from others” (Robinson et al., 2013, p. 208). Although it may seem counterintuitive, it is individuals who are sensitive to the presence and absence of positive, not negative, stimuli who are most reactive to ostracism – a pattern which was repeatedly found in our studies. Thus, it is those who possess a strong approach temperament who are most influenced by ostracism.

These findings may be considered particularly curious, not only in light of the prevailing tendency to view those who are sensitive to negative stimuli as being more reactive to mistreatment, but also because ostracism ultimately seems like it should be a “negative” event. However, within the approach/avoidance literature (and the related promotion/prevention literature; Higgins, 1997), although an event may be “negative” in the sense that it is unsatisfying (as ostracism presumably is), this does not mean that the event necessarily represents the presence of a negative. That is, although discovering one has cancer and that one has not won an award are both unsatisfying situations, approach/avoidance frameworks argue the former is the presence of a negative (i.e., one has cancer) while the latter is the absence of a positive (i.e., one did not win an award) and distinguishing between the two is important because individuals will react to the two situations differently, depending on their approach or avoidance temperaments. In other words,

although ostracism may be a “negative” in the sense that it is unsatisfying, it is not a “negative” in approach/avoidance terms, in the sense that it is not the presence of a negative.

Our results may also be considered surprising in light of recent work that also places ostracism within an approach/avoidance framework. Specifically, a paper by Ferris et al. (2016) argued and found that being ostracized is more likely to result in individuals experiencing *avoidance* emotions, such as anxiety or fear, than to experience approach emotions, such as anger. At a glance, demonstrating that ostracism induces avoidance emotions may seem at odds with the idea that ostracism affects those with approach temperaments. Upon closer examination, however, the findings are not contradictory. A key difference between our paper and Ferris et al. (2016) is that our paper uses approach/avoidance to examine who is *sensitive to* ostracism, while the Ferris et al. (2016) paper uses approach/avoidance to examine what the emotional *consequences* of ostracism are. In this sense, simply possessing an approach temperament does not rule out ever experiencing avoidance emotions or states any more so than being neurotic (an avoidance temperament) rules out ever experiencing anger (an approach emotion) or being extraverted (an approach temperament) rules out ever experiencing fear (an avoidance emotion). Indeed, this juxtaposition between one’s enduring approach/avoidance temperament and one’s momentary approach/avoidance (or regulatory) states is a key component of approach/avoidance frameworks (e.g., regulatory fit theory, Higgins, 1997, Higgins, 2000).

Moving on from considering our findings in light of past research, we also see value in an approach/avoidance framework for ostracism in that approach/avoidance represents a very large, broad framework that can be useful in generating hypotheses. For example, one straightforward extension of our proposition regarding ostracism and the moderating effect of approach (but not avoidance) temperament would be the ability to a priori predict what other specific constructs will, and will not, moderate the effects of ostracism. Consider the following: approach and avoidance temperaments influence a wide variety of observable personality traits, motivation systems, and other reliable individual differences. For example, core self-evaluations have been described as reflecting a strong approach temperament (paired with a weak avoidance temperament; Ferris et al., 2011). Given our findings, one would a priori expect any construct which represents a strong approach temperament – such as core self-evaluations – should therefore interact with ostracism, while any construct which uniquely represents a strong avoidance temperament should not.

The above would represent a straightforward extension of our findings, but approach/avoidance frameworks can be used for more novel predictions as well. Drawing on the aforementioned regulatory fit literature (Higgins, 1997, Higgins, 2000), approach/avoidance frameworks can also be used to derive predictions about who is most likely to engage in ostracism. In particular, individuals typically engage in behaviors that “fit” their chronic approach or avoidance temperaments, such that approach-oriented individuals favor the presence and absence of positive stimuli and avoidance-oriented individuals favor the presence and absence of negative stimuli (Higgins, 1997, Higgins, 2000). If ostracism represents the withdrawal of positive attention, the best behavioral “fit” for someone with a strong approach temperament who is trying to express displeasure with someone is to ostracize the individual, not argue with the individual. Put differently, this counterintuitively suggests extraverted individuals – i.e., those who are outgoing, but also with strong approach temperaments – may be most likely to engage in ostracism. Given research on antecedents of ostracism is relatively rare (for exceptions, see Scott et al., 2013, Wu et al., 2015), an approach/avoidance framework may prove useful in understanding why people engage in ostracism.

## **9.2. Contribution to the mistreatment and ostracism literatures**

Aside from integrating ostracism within an approach/avoidance framework, our paper also contributes in other ways to the mistreatment and ostracism literatures. In particular, conceptualizing ostracism as the absence of expected positive attention from others was originally intended to both highlight the core characteristic of ostracism as well as to differentiate ostracism from other workplace mistreatment

constructs characterized as the presence of negative attention from others (e.g., incivility). Consequently, our work can also be seen as providing preliminary support for differentiating ostracism within the mistreatment literature. In particular, while prior research typically finds that mistreatment is exacerbated by indicators of avoidance temperament (e.g., neuroticism, negative affect), we found no support for the idea that ostracism interacts with avoidance temperament. Similarly, in Study 3 we found no support for the idea that abusive supervision – the presence of negative stimuli – interacts with approach temperament, but did find evidence that it interacts with avoidance temperament. In this sense, our work is consistent with other studies which show neuroticism (another indicator of avoidance temperament) does not interact with ostracism (Boyes and French, 2009, Hitlan and Noel, 2009; cf. Leung, Wu, Chen, & Young, 2011). Although more work remains to be done using alternate conceptualizations of approach and avoidance temperaments, we believe an approach/avoidance line of inquiry may represent an important way to differentiate different workplace mistreatment constructs.

By demonstrating that ostracism's effects are moderated by indicators of approach temperament, our work also provides one explanation for why ostracism's effects can be variable, particularly with respect to OCB (Ferris et al., 2008). The implications of our findings for ostracism researchers are straightforward: if researchers wish to examine the effects of ostracism on outcomes, such effects are most likely to be detected among approach-oriented individuals. Thus, we suggest ostracism researchers also include measures of approach temperament in their studies.

### **9.3. Strengths, limitations, and future research directions**

Taken as a whole, our studies provide strong support for the notion that ostracism is most impactful for those with strong approach temperaments. One of the largest strengths of our work is that we demonstrate this effect across three different studies – a scenario study, a student teams study, and a field study using employed participants – where the shortcomings of any one study is addressed by the strengths of another study. For example, while our scenario study may be constrained in its ability to accurately represent the experience of being ostracized, as well as only assessing intentions to engage in OCB and not actual OCB, these limitations are rectified by our student and field samples (which examine self and peer reports of actual OCB behaviors and accurately capture the *in vivo* experience of being ostracized). On the other hand, while field studies are limited in their ability to establish causality and rule out alternate explanations, our scenario study allow us greater confidence in the causal relation we purport while also – due to random assignment of participants – allowing us to more confidently rule out the possibility that alternate moderators (other than the measured approach temperament) are responsible for any moderation effects found. Thus, our use of complementary methods provides greater confidence in the pattern of our findings.

One possible limitation with our research may be that while we argue that those who have relatively weak approach temperaments should be relatively insensitive to ostracism, for our scenario study the slope of the line representing those individuals with weak approach temperaments was still significant. We do not view this as invalidating our hypotheses, however, as we argue that those who have weaker approach temperaments should demonstrate a weaker relation between ostracism and our outcome variables; even in the scenario study, this pattern of effects is clearly seen. As such, our results still provide strong support for the notion that ostracism should have minimal impact for those who are truly insensitive to positive stimuli (i.e., those with weak approach temperaments).

In terms of future research directions, one possibility lies in delving deeper into our theorized mechanisms. In particular, we argue that those with stronger approach temperaments are more sensitive to the presence and absence of positive stimuli. This sensitivity is generally thought to occur at the neurobiological level, where different brain structures are activated in response to positive and negative stimuli (Gray, 1990), suggesting it is possible to examine how the activation of such structures mediate the moderating effect of approach temperament. Although such neurological studies are generally outside the scope of organizational research, recent advances in organizational neuroscience (for an overview,

see Murray & Antonakis, 2019) may indicate such studies will be possible sooner rather than later. An alternate direction would be to follow a person-situation interaction paradigm, and examine situations which either enhance or limit reactivity to positive stimuli. For example, the self-control literature discusses how external constraints (e.g., close supervision) can limit behavioral options individuals have to engage in Lian, Yam, Ferris, and Brown (2017). Such situations should in turn influence the effects outlined in our studies.

#### **9.4. Practical implications**

Drawing on the key takeaway of our research (i.e., individuals are differentially affected by ostracism) there are two main implications of our research for practitioners. First, our work suggests approach-oriented individuals may be particularly sensitive to being excluded from workplace events (e.g., meetings or social events). As such, organizations and employees may benefit by conducting self-awareness trainings or workshops for employees to raise awareness of their approach/avoidance tendencies and the consequences of being highly sensitive or insensitive to positive and negative stimuli. This may involve informing employees that they may be particularly sensitive (or insensitive) to exclusion, but also raising awareness that they be detecting ostracism when it may not be intentional (as ostracism may sometimes arise by mistake or from unintended slights). Being aware of employee approach/avoidance orientations will allow these employees to maximize the strengths while minimizing the limitations that follow an approach orientation.

Second, our research also suggests that certain supervisors may be more likely to downplay ostracism as a problem in organizations – specifically, supervisors who have weak approach temperaments. Such supervisors may overlook ostracism at work, which would be problematic given the well-documented negative effects of ostracism on outcomes important to both individuals (e.g., attitudes and well-being) and the organization (e.g., job performance; for a review, see Robinson et al., 2013). Consequently, organizations may wish to ensure all supervisors are informed about the negative effects ostracism can have, even if they themselves do not consider it to be that bothersome.

Finally, our work also suggests that managers may need to re-evaluate who they may consider to be sensitive to mistreatment. As noted in the opening of our paper, it is almost intuitive that people with negative dispositions will react poorly to mistreatment – an intuition backed up by much of the existing literature. As such, a typical manager may particularly worry about how dispositionally negative individuals will react to mistreatment from coworkers (or more broadly, any presence of a negative stimuli at work, such as problems or crises) – while expecting that generally positive employees with cheerful dispositions will figuratively roll with the punches and generally be flexible, adaptive, or untroubled. However, our results suggest that sometimes, it is the dispositionally positive, not negative, who may react more negatively to trials and tribulations at work – depending on whether such trials and tribulations involve the presence or absence of positive, not negative, stimuli.

#### **9.5. Summary**

Drawing on the perspective that ostracism represents the omission of a positive stimulus, we integrated the ostracism literature within an approach/avoidance framework and proposed that ostracism is most likely to affect individuals who are sensitive to the presence and absence of positive, not negative, stimuli. Our work helps differentiate ostracism from other forms of mistreatment, while simultaneously supporting an interaction which would otherwise be considered counterintuitive by the mistreatment literature. We believe our work provides an initial step in supporting the uniqueness of ostracism from other forms of mistreatment.

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Data not available / Data will be made available on request

## References

- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24, 452–471.
- Balliet, D., & Ferris, D. L. (2013). Ostracism and prosocial behavior: A social dilemma perspective. *Organizational Behavior and Human Decision Processes*, 120, 298–308.
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8, 274–289.
- Blackhart, G., Nelson, B., Knowles, M., & Baumeister, R. (2009). Rejection elicits emotional reactions but neither causes immediate distress nor lowers self-esteem: A meta-analytic review of 192 studies on social exclusion. *Personality and Social Psychology Review*, 13, 269–309.
- Bliese, P. D., & Hanges, P. J. (2004). Being both too liberal and too conservative: The perils of treating grouped data as though they were independent. *Organizational Research Methods*, 7, 400–417.
- Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *Journal of Applied Psychology*, 91, 998–1012.
- Boyes, M. E., & French, D. J. (2009). Having a Cyberball: Using a ball-throwing game as an experimental social stressor to examine the relationship between neuroticism and coping. *Personality and Individual Differences*, 47, 396–401.
- Brislin, R. W. (1970). Back translation for cross-cultural research. *Journal of Cross Cultural Psychology*, 1, 185–216.
- Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1997). Beyond bipolar conceptualizations and measures: The case of attitudes and evaluative space. *Personality and Social Psychology Review*, 1, 3–25.
- Carpenter, N. C., Berry, C. M., & Houston, L. (2014). A meta-analytic comparison of self and other-reported organizational citizenship behavior. *Journal of Organizational Behavior*, 35, 547–574.
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology*, 67, 319–333.
- Chang, C.-H., Ferris, D. L., Johnson, R. E., Rosen, C. C., & Tan, J. A. (2012). Core self evaluations: A review and evaluation of the literature. *Journal of Management*, 38, 81–128.
- Colbert, A. E., Mount, M. K., Harter, J. K., Witt, L. A., & Barrick, M. R. (2004). Interactive effects of personality and perceptions of the work situation on workplace deviance. *Journal of Applied Psychology*, 89, 599–609.
- Dalal, R. S., Lam, H., Weiss, H. M., Welch, E. R., & Hulin, C. L. (2009). A within-person approach to work behavior and performance: Concurrent and lagged citizenship counterproductivity associations, and

- dynamic relationships with affect and overall job performance. *Academy of Management Journal*, 52(5), 1051–1066.
- Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, 29, 1–19.
- Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18, 192–203.
- Duffy, M. K., Shaw, J. D., Scott, K. L., & Tepper, B. J. (2006). The moderating roles of self esteem and neuroticism in the relationship between group and individual undermining behavior. *Journal of Applied Psychology*, 91, 1066–1077.
- Elliot, A. J. (2006). The hierarchical model of approach-avoidance motivation. *Motivation and Emotion*, 30, 111–116.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72, 218–232.
- Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82, 804–818.
- Elliot, A. J., & Thrash, T. M. (2010). Approach and avoidance temperament as basic dimensions of personality. *Journal of Personality*, 78, 865–906.
- Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the workplace ostracism scale. *Journal of Applied Psychology*, 93, 1348–1366.
- Ferris, D. L., Chen, M., & Lim, S. (2017). Comparing and contrasting workplace ostracism and incivility. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 315–338.
- Ferris, D. L., Johnson, R. E., Rosen, C. C., Djurdjevic, E., Chang, C.-H., & Tan, J. A. (2013). When is success not satisfying? Integrating regulatory focus and approach/avoidance motivation theories to explain the relation between core self-evaluation and job satisfaction. *Journal of Applied Psychology*, 98, 342–353.
- Ferris, D. L., Lian, H., Brown, D., & Morrison, R. (2015). Ostracism, self-esteem, and job performance: When do we self-verify and when do we self-enhance? *Academy of Management Journal*, 58, 279–297.
- Ferris, D. L., Rosen, C. R., Johnson, R. E., Brown, D. J., Risavy, S. D., & Heller, D. (2011). Approach or avoidance (or both?): Integrating core self-evaluations within an approach/avoidance framework. *Personnel Psychology*, 64, 137–161.
- Ferris, D. L., Yan, M., Lim, V. K. G., Chen, Y., & Fatimah, S. (2016). An approach/avoidance framework of workplace aggression. *Academy of Management Journal*, 59, 1777–1800.
- Gable, S. L., Reis, H. T., & Elliot, A. J. (2003). Evidence for bivariate systems: An empirical test of appetition and aversion across domains. *Journal of Research in Personality*, 37, 349–372.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The international personality item pool and the future of public domain personality measures. *Journal of Research in Personality*, 40, 84–96.
- Gray, J. A. (1990). Brain systems that mediate both emotion and cognition. *Cognition and Emotion*, 4, 269–288.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280–1300.
- Higgins, E. T. (2000). Making a good decision: Value from fit. *American Psychologist*, 55, 1217–1230.



- Hitlan, R. T., & Noel, J. (2009). The influence of workplace exclusion and personality on counterproductive work behaviours: An interactionist perspective. *European Journal of Work and Organizational Psychology*, 18, 477–502.
- Kenrick, D. T., & Shiota, M. N. (2008). Approach and avoidance motivation(s): An evolutionary perspective. *Handbook of approach and avoidance motivation* (pp. 273–288). NY: Psychology Press.
- Langfred, C. W. (2004). Too much of a good thing? Negative effects of high trust and individual autonomy in self-managing teams. *Academy of Management Journal*, 47, 385–399.
- Larsen, R. J., & Ketelaar, T. (1991). Personality and susceptibility to positive and negative emotional states. *Journal of Personality and Social Psychology*, 61, 132–140.
- Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87, 131–142.
- Leung, A. S. M., Wu, L. Z., Chen, Y. Y., & Young, M. N. (2011). The impact of workplace ostracism in service organizations. *International Journal of Hospitality Management*, 30, 836–844.
- Lian, H., Yam, K. C., Ferris, D. L., & Brown, D. J. (2017). Self-control at work. *Academy of Management Annals*, 11, 703–732.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175–215.
- Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology*, 92, 1159–1168.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196.
- Murray, M. M., & Antonakis, J. (2019). An introductory guide to organizational neuroscience. *Organizational Research Methods*, 22, 6–16.
- Muthén, L. K., & Muthén, B. O. (1998–2015). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Nifadkar, S., Tsui, A. S., & Ashforth, B. E. (2012). The way you make me feel and behave: Supervisor-triggered newcomer affect and approach-avoidance behavior. *Academy of Management Journal*, 55, 1146–1168.
- O'Reilly, J., Robinson, S. L., Berdahl, J. L., & Banki, S. (2015). Is negative attention better than no attention? The comparative effects of ostracism and harassment at work. *Organization Science*, 26, 774–793.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA, England: Lexington Books.
- Penney, L. M., & Spector, P. E. (2005). Job stress, incivility, and counterproductive work behavior (CWB): The moderating role of negative affectivity. *Journal of Organizational Behavior*, 26, 777–796.
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41, 203–212.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Newbury Park, CA: Sage.
- Robinson, S. L., O'Reilly, J., & Wang, W. (2013). Invisible at work: An integrated model of workplace ostracism. *Journal of Management*, 39, 203–231.

- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, 87, 66–80.
- Scholer, A. A., & Higgins, E. T. (2008). Distinguishing levels of approach and avoidance: An analysis using regulatory focus theory. In A. J. Elliot (Ed.). *Handbook of approach and avoidance motivation* (pp. 489–503). New York, NY, US: Psychology Press.
- Scott, K. L., Restubog, S. L. D., & Zagenczyk, T. J. (2013). A social exchange-based model of the antecedents of workplace exclusion. *Journal of Applied Psychology*, 98, 37–48.
- Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal*, 42, 100–108.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178–190.
- Tepper, B. J., Moss, S. E., Lockhart, D. E., & Carr, J. C. (2007). Abusive supervision, upward maintenance communication, and subordinates' psychological distress. *Academy of Management Journal*, 50, 1169–1180.
- Wang, M., Liao, H., Zhan, Y., & Shi, J. (2011). Daily customer mistreatment and employee sabotage against customers: Examining emotion and resource perspectives. *Academy of Management Journal*, 54, 312–334.
- Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, 76, 820–838.
- Williams, K. D. (1997). Social ostracism. In R. M. Kowalski (Ed.), *Aversive interpersonal behaviors*, pp. 133–170.
- Williams, K. D. (2001). *Ostracism: The power of silence*. New York: Guilford Press.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425–452.
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. P. Zanna (Ed.). *Advances in experimental social psychology*, Vol 41. *Advances in experimental social psychology* (pp. 275–314). San Diego, CA, US: Elsevier Academic Press.
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the internet. *Journal of Personality and Social Psychology*, 79, 748–762.
- Williams, K. D., & Sommer, K. L. (1997). Social ostracism by coworkers: Does rejection lead to loafing or compensation? *Personality and Social Psychology Bulletin*, 23, 693–706.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601–617.
- Wu, L.-Z., Ferris, D. L., Kwan, H. K., Chiang, F., Snape, E., & Liang, L. H. (2015). Breaking (or making) the silence: How goal interdependence and social skill predict being ostracized. *Organizational Behavior and Human Decision Processes*, 131, 51–66.
- Wu, L.-Z., Yim, F. H., Kwan, H. K., & Zhang, X. (2012). Coping with workplace ostracism: The roles of ingratiation and political skill in employee psychological distress. *Journal of Management Studies*, 49, 178–199.