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The Antecedents and Outcomes of Workplace Ostracism: A Meta-Analysis

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Researchers have shown great interest in the antecedents and outcomes of workplace ostracism, which has led to an expansive body of research. In light of this work, the current article fulfills the need for a comprehensive review and meta-analysis of the antecedents and outcomes associated with workplace ostracism. We begin our review by adapting a victimization perspective to understand ostracism as a triadic social process between the victim, perpetrator, and the environment. The meta-analytic results then support that leadership characteristics are the strongest related antecedents of workplace ostracism, followed by certain aspects of personality (e.g., Big Five) and contextual characteristics (e.g., social support). The results also show that workplace ostracism very strongly relates to deviance, and it strongly relates to other performance outcomes (e.g., core-performance, helping, voice), well-being outcomes (e.g., psychological well-being, emotions, self-perceptions), and organizational perceptions (e.g., job satisfaction, commitment, justice). We also show that the relationship of performance, well-being, emotions, and self-perceptions when measured after ostracism was comparable to their relationship when measured before ostracism. These results suggest that the outcomes of ostracism are less certain than previously thought, as they may instead be antecedents of ostracism. Finally, we call for future research to investigate this notion, along with further integration of the victimization perspective as well as the study of contextual predictors and moderators.

Keywords: workplace ostracism, victimization, mistreatment, deviance, meta-analysis

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Ostracism is a painful experience—quite literally. When confronted with ostracizing behaviors from others, the same regions of the brain are activated as when enduring physical pain (DeWall & Baumeister, 2006; Eisenberger, Lieberman, & Williams, 2003; MacDonald & Leary, 2005) and people report noticeable physiological reactions, such as feeling physically colder (Williams, 2007; Zhong & Leonardelli, 2008). Even when experiencing temporary and minor forms of ostracism, such as being excluded from tossing a ball, people report significant levels of psychological discomfort and sadness (Hartgerink, van Beest, Wicherts, & Wil-

liams, 2015; Williams & Jarvis, 2006). Given its power, it is no surprise that ostracism is a popular research topic, and the study of ostracism in the workplace has particularly grown in recent years (Peng & Zeng, 2017; Quade, Greenbaum, & Petrenko, 2017; Robinson, O'Reilly, & Wang, 2013; Wu, Liu, Kwan, & Lee, 2016; Wu, Yim, Kwan, & Zhang, 2012; Yang & Treadway, 2018).

Due to this rapid growth, several streams of research have carved a fragmented body of knowledge across the workplace ostracism literature. In the predominant stream, scholars investigate the outcomes associated with being ostracized by focusing on the victim (or target; Ferris, Chen, & Lim, 2017; Robinson et al., 2013). Chief concerns among these researchers are the harm to victims' psychological well-being and their potential reactionary behaviors (Williams, 2007), which has resulted in the discovery that workplace ostracism has a notable influence on the victim's personal outcomes (e.g., stress, reduced self-esteem; Eickholt & Goodboy, 2017; Scott et al., 2015) and work-related outcomes (e.g., in-role performance, turnover; Leung, Wu, Chen, & Young, 2011; Scott, Zagenczyk, Schippers, Purvis, & Cruz, 2014). A second, smaller stream of research has focused on the antecedents of ostracism. Studies within this stream have shown that ostracism is systematically predicted by both attributes of the victim (e.g., personality, individual differences; Halevy, Cohen, Chou, Katz, & Panter, 2014; Hitlan & Noel, 2009) and environmental factors (e.g., leadership, job climate; Ng, 2017; Zhao, Xia, He, Sheard, &

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Wan, 2016). In the antecedent-focused stream, scholars have further specified conceptual models of ostracism by partitioning the antecedents that (a) lead someone to be ostracized or perceive themselves as being ostracized (Ng, 2017; Quade et al., 2017); and (b) lead someone to ostracize others (Hales, Wesselmann, & Williams, 2016; Nezlek, Wesselmann, Wheeler, & Williams, 2015). The former again focuses on the victim, whereas the latter represents an emergent focus on the perpetrator(s).

Subsequently, a host of theoretical frameworks have been applied to explain either the antecedents or outcomes of workplace ostracism, but some recent efforts have begun to apply holistic theoretical frameworks to explain both the antecedents and outcomes together (Ferris et al., 2017; Robinson et al., 2013; Scott & Duffy, 2015; Zheng, Yang, Ngo, Liu, & Jiao, 2016). Unfortunately, most theories and frameworks explain a certain subset of relationships but provide little insight into the holistic dynamics of ostracism, resulting in an imposing obstacle when forcing all extant research on ostracism into one conceptual perspective. For instance, models seeking to explain why some individuals are more likely to perceive themselves as being ostracized are commonly built upon individual differences or affective variables (Halevy et al., 2014), while theories applied to explain why people ostracize others elicit models that identify contextual pressures for doing so (curbing poor performance or deviance; Quade, Greenbaum, & Mawritz, 2018). Ultimately, it is critical to discern the perspective from which ostracism is being studied (e.g., victim or perpetrator; antecedent or outcome) or we risk misapplying theory and misinterpreting empirical evidence (Hershcovis & Reich, 2013). In the current study, we follow the most common practice of viewing ostracism from the victim's perspective due to its widespread popularity and demonstrated importance, and we study both the antecedents and outcomes of *felt* ostracism.

Given the extensive and complex nature of current research, a quantitative review is needed to extend prior qualitative review efforts (Ferris et al., 2017; Robinson et al., 2013). We begin our review by distinguishing conceptualizations of ostracism both in terms of construct definitions and the implied perspectives. This discussion also addresses the concern of construct proliferation in the larger mistreatment literature, which we meta-analytically assess by testing the uniqueness of ostracism among other forms of mistreatment. We then review prior literature investigating when certain people are more likely to perceive ostracism, followed by a review of outcomes that result from these experiences. In doing so, we propose a conceptual model of ostracism based in Aquino and Lamertz's (2004) target-centric victimization framework, which aligns with the most common operationalization of ostracism—felt ostracism. This framework speaks to both predictors and consequences of being victimized (Aquino & Thau, 2009; Jensen, Patel, & Raver, 2014), making it apt to holistically explain the broader dynamics of workplace ostracism. This discussion is followed by a meta-analytic test of 16 antecedents and 20 outcomes of ostracism, providing a substantial investigation into our applied framework. Lastly, we analyze several moderating factors that provide insight into whether the common outcomes of ostracism should be reconceptualized as antecedents—or perhaps both antecedents and outcomes.

Through these efforts, the current article provides three primary contributions. First, we provide the first quantitative review of the workplace ostracism literature, which advances research by em-

pirically assessing assertions made in recent qualitative reviews and uncovers many new research questions. Second, we apply and test a conceptual framework in victimization that considers ostracism as a triadic social process between the victim, perpetrator, and the environment. This framework thereby offers a theoretical basis to expand ostracism research beyond the current focus on victims to incorporate the role of the perpetrator and other organizational factors, which can also provide explanatory justifications for antecedents and outcomes of felt ostracism. Finally, we suggest that the three most promising directions for future research are (a) the continued integration of the victimization framework into the study of ostracism, (b) the investigation of contextual antecedents and moderators, as well as (c) causal effects in the opposite directions than typically assumed (e.g., performance predicts ostracism).

Background

Workplace ostracism is defined as "the extent to which an individual perceives that he or she is ignored or excluded by others at work" (Ferris, Brown, Berry, & Lian, 2008, p. 1348), as well as "when an individual or group omits to take actions that engage another organizational member when it is socially acceptable to do so" (Robinson et al., 2013, p. 206). These two definitions reflect that ostracism could be caused by both action (excluding) as well as inaction (omission of inclusion), but they also reflect that ostracism can be defined by perceptions, in the case of the former, or behaviors, in the case of the latter. Typically, authors who apply perceptual definitions take a victim-focused perspective, whereas those who apply behavioral definitions take an environmental- or perpetrator-focused perspective (Jahanzeb, Fatima, & Malik, 2018; Quade et al., 2018; Yang & Treadway, 2018). While it is recognized that studying ostracism from the perspective of the perpetrator(s) is important, the current meta-analysis instead analyzes ostracism from the victim's perspective. In other words, we study the antecedents and outcomes of *felt ostracism*, which imposes two common assumptions of the victim-focused perspective.

First, the primary determinant of felt ostracism is actual ostracism. While other factors may have a direct influence on felt ostracism, this approach typically assumes that antecedents predominantly influence felt ostracism through actual ostracism. That is, these antecedents cause people to be ostracized more, which causes them to perceive themselves as being ostracized more. Second, the outcomes of ostracism are primarily due to the perception of ostracism. People may experience few negative outcomes of ostracism if they are unaware of being ostracized, and they may experience many negative outcomes if they perceive themselves as being ostracized—even in the absence of actual ostracism. In the current article, we draw upon these assumptions when developing our hypotheses, but we also draw them into question and discuss when they may not necessarily hold across all relationships of ostracism.

Additionally, ostracism is believed to be a unique experience, but it is closely related to other forms of experienced mistreatment and incivility (Hershcovis, 2011). As Ferris, Chen, and Lim (2017) note, regarding the similarities between ostracism and experienced incivility:

> Both are focused on low-intensity counternormative behavior of an ambiguous nature; both tend to relate negatively to several outcomes;

both are argued to be common in the workplace. The constructs are so similar that most operationalizations of incivility include 'the silent treatment' as a specific type of incivility (p. 316).

Given this overlap, it should be considered exactly how workplace ostracism differs from mistreatment and incivility that occurs at work.

Workplace mistreatment is any interpersonal situation in which an employee initiates counternormative negative actions or desists normative positive actions toward another employee (Cortina & Magley, 2003; Skarlicki & Rupp, 2010; Yang, Caughlin, Gazica, Truxillo, & Spector, 2014). These behaviors are wide-ranging, and they can be directly aggressive (i.e., verbal and physical harassment) or subtle (i.e., dirty looks and gossiping). On the other hand, incivility includes workplace behaviors that specifically violate norms, have an ambiguous intent, and have a low intensity (Blau & Andersson, 2005; Estes & Wang, 2008; Ferris et al., 2017). Incivility behaviors are typically less overt and aggressive than other forms of mistreatment, and these behaviors generally include the subtler forms of mistreatment (i.e., dirty looks and gossiping).

Prior authors have suggested that workplace ostracism is both a form of mistreatment and incivility (Ferris et al., 2017; Robinson et al., 2013; Scott & Duffy, 2015). Ostracism could be considered initiating counternormative negative actions or desisting normative positive actions, depending on the situation. This suggests that ostracism fits the criteria for mistreatment. Workplace ostracism is also a low-intensity behavior that violates norms and typically has an ambiguous intent, which fits the criteria for incivility. However, not all forms of mistreatment and incivility are examples of ostracism. For example, physical assault by a coworker is an example of mistreatment but not ostracism, and gossiping about someone is an example of incivility but not necessarily ostracism. Figure 1 presents a Venn diagram of workplace mistreatment, incivility,

and ostracism. While they overlap, incivility includes more behaviors than ostracism, and mistreatment includes more behaviors than both incivility and ostracism.

We begin our meta-analysis by investigating whether workplace ostracism is empirically distinct from other forms of experienced mistreatment and incivility. It is possible that ostracism frequently co-occurs with experienced mistreatment and/or incivility in the workplace (Ferris et al., 2017; Robinson et al., 2013), such that the study of ostracism may provide few theoretical insights beyond studying the broader conceptualizations of mistreatment and incivility. If this is the case, then these broader conceptualizations should be studied in favor of ostracism. In proposing our hypothesis, it should be emphasized that the current article reports meta-analytic findings between constructs. The reported relationships are averaged correlations between variables, and we do not report analyses that test the discriminant validity of measures (e.g., confirmatory factor analysis; Voorhees, Brady, Calantone, & Ramirez, 2016) or the relationships of individual items (e.g., item-level meta-analysis; Carpenter, Son, Harris, Alexander, & Horner, 2016). Therefore, our first hypothesis specifies a range within which the relationship of workplace ostracism with mistreatment and incivility may fall.

> **Hypothesis 1.** Workplace ostracism is very strongly related ($\bar{p} = .50–.70$) to other forms of experienced (a) mistreatment and (b) incivility, but not to an extent that suggests that the constructs are repetitive (e.g. $\bar{p} > .70$).

The current article also provides another, stronger test of the distinctness of ostracism from other forms of mistreatment and incivility. Even if ostracism has a moderate correlation with experienced mistreatment and incivility, the relationships of ostracism with other variables may largely overlap with these two forms of experienced deviance. That is, when accounting for experienced mistreatment and incivility, the relationships of ostracism may no longer be significant. For this reason, the current article also analyzes meta-analytic structural equation models (SEM) to determine whether ostracism has a significant relationship with the variables specified in the hypotheses below when accounting for experienced mistreatment and incivility.

> **Hypothesis 2.** The relationships of workplace ostracism remain consistent when accounting for experienced mistreatment and incivility.

Antecedents

We adapt Aquino and Lamertz's (2004) victimization framework to identify and explain the antecedents and outcomes of felt ostracism. This framework suggests that victims and perpetrators of mistreatment partake in roles and statuses with associated characteristics and behaviors, which can be used to discern the personal and environmental antecedents of mistreatment. To establish personal predictors, Aquino and Lamertz (2004) distinguish two types of victims with commonly associated characteristics: submissive victims and provocative victims.

Submissive victims are "extremely passive, insecure, frequently rejected by peers, and unwilling to defend against attack" (Aquino & Lamertz, 2004, p. 1025). These individuals are often abused because their characteristics signal low social positioning and
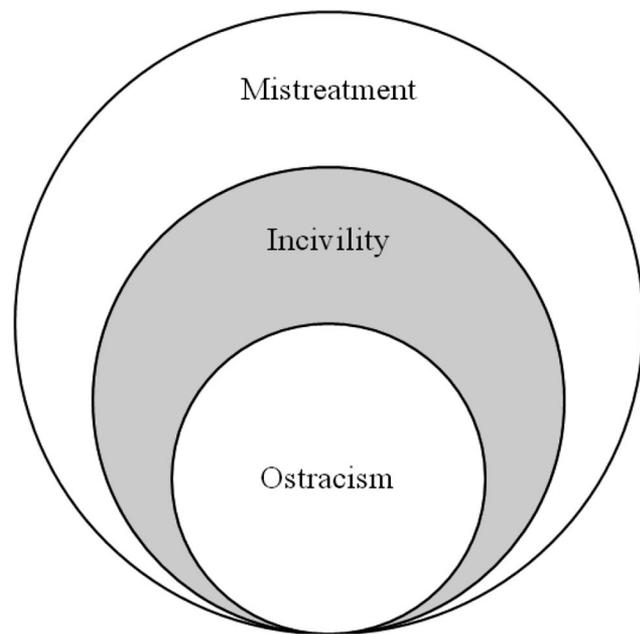

Figure 1. Venn diagram of workplace mistreatment, incivility, and ostracism.

support, as explained by behavioral decision-making theories integrated into the applied framework. People weigh the costs and benefits of their actions, and rational people perform behaviors with the most ideal cost-to-benefit ratios among alternatives (Leung et al., 2011; Ng, 2017; Zimmerman, Carter-Sowell, & Xu, 2016). Submissive victims refrain from retaliation, and they are more likely to internalize their experienced mistreatment and blame themselves (Katz, Moore, & Tkachuk, 2007; Neves, 2014; Tepper, Duffy, Henle, & Lambert, 2006). Perpetrators may be less fearful of ostracizing these individuals because they see fewer costs of doing so. Thus, characteristics typical of submissive victims—as well as characteristics that prevent submissive victim status—are believed to predict experienced ostracism.

Alternatively, provocative victims are "highly aggressive, hostile, or irritating" (Aquino & Lamertz, 2004, p. 1025). Their behaviors cause others to retaliate against them, which the victimization framework draws from norm theories to explain (Chatman & Flynn, 2001; Cialdini, Reno, & Kallgren, 1990). Social norms are standards of behavior that are expected of group members, and these norms are believed by members (whether implicitly or explicitly) to be important for group functioning. Due to their perceived importance, group members will go to great lengths to reinforce these norms via rewards or punishments. This perspective suggests that workplace ostracism may be initiated in response to a norm violation, such that people experience ostracism as punishment for their behaviors (Hitlan & Noel, 2009; Renn, Allen, & Huning, 2013; Robinson et al., 2013). Retaliatory ostracism may be in response to deviant norm violations to "keep people in line," but retaliatory ostracism may also be in response to nondeviant norm violations. The ostracizing behaviors may be intended to spur a behavioral change, such as ostracizing a poorly performing employee. Although the employees may unintentionally perform poorly, others may ostracize them to improve the performance of their workgroup or they misinterpret the poor performance as intentional deviance (e.g., social loafing; Karau & Hart, 1998; Williams & Sommer, 1997). Characteristics typical of provocative victims—as well as characteristics that prevent provocative victim status—are believed to predict experienced ostracism.

Further, the adapted victimization framework also identifies environmental predictors by distinguishing two types of perpetrators, one of which we discuss: domineering perpetrators. Individuals in the domineering perpetrator role and status are described as abusive, self-serving, and/or unempathetic (Aquino & Lamertz, 2004; Aquino & Thau, 2009). In general, domineering perpetrators use their power to mistreat others and obtain desired outcomes. They systematically devalue associated risks or value associated benefits of mistreatment behaviors, including ostracism, and are more likely to perform these behaviors. For example, a workplace may have a strict no-mistreatment policy that prevents most mistreatment (due to associated costs), but a domineering perpetrator may ostracize another employee seen as a threat to their upward mobility (due to perceived benefits). Those with domineering perpetrators as coworker are more likely to experience ostracism, which serves as an environmental predictor of ostracism.

At the same time, the work environment dictates the risks and benefits of ostracizing others, and environments can encourage (discourage) ostracism because the associated benefits are high (low) and/or the costs are low (high). For example, employees in competitive work environments have been shown to ostracize others to "get ahead," whereas cooperative work environments have been shown to reduce workplace ostracism (Halevy et al., 2014; Wu et al., 2015). Employees in the former may feel that the benefits of "pushing out" others outweigh the loss of social resources, whereas employees in the latter may place a higher value on social inclusiveness. Similarly, in toxic work environments, employees may be particularly at risk for being ostracized due to their surface-level characteristics (i.e., race, gender) and small deviations from the norm. This increased risk may be due to the lower costs of ostracism, such as the lack of punishments (Leung et al., 2011; Ng, 2017). Even yet, ostracism may be more frequent in geographically dispersed teams with low task interdependence, because ostracizing others may result in almost no changes to employees' work routine (and thereby no endured costs). In these cases, ostracism may even occur accidentally (nonpurposeful ostracism; Robinson et al., 2013).

Ultimately, environmental factors, in addition to characteristics of the victim and perpetrator, are expected to play a key role in explaining the occurrence of felt ostracism, and the victimization framework elicits various factors that lead potential targets of ostracism to either be ostracized or feel as though they have been ostracized. Below, we assess antecedents of ostracism that include personal variables (e.g., personality), social variables (e.g., leadership), and environmental factors (e.g., perceived support). We selected these variables because of their pervasiveness in the literature and relevance to the victimization framework.

Personal.   The most commonly studied personal predictors of workplace ostracism are the Big Five personality dimensions (Halevy et al., 2014; Leung et al., 2011; Wu, Wei, & Hui, 2011), most of which cause employees to avoid the provocative victim status. Extraversion, agreeableness, and conscientiousness have been found to negatively relate to workplace ostracism (Sulea, Filipescu, Horga, Ortan, & Fischmann, 2012; Wang & Li, 2018). Extraverted individuals are socially oriented and likely to value their social connections, which may cause them to avoid negative behaviors that could result in ostracism. Agreeable individuals tend to be more passive and less likely to initiate conflict that may result in being ostracized. Conscientious individuals are hardworking and duty-focused. These individuals are less likely to perform negative behaviors that disrupt workflow and subsequently result in ostracism. Therefore, extraversion, agreeableness, and conscientiousness are all believed to significantly and negatively relate to workplace ostracism.

On the other hand, neuroticism is positively related to ostracism, perhaps because it causes employees to adopt the provocative victim status. Neurotic individuals are moody and more often experience socially oriented, negative emotions—including anger, envy, jealousy, and guilt. Neurotic individuals may perform social behaviors to address these negative emotions, which may produce conflict. Also, neurotic individuals tend to be more susceptible to negative aspects of their environment. While neurotic individuals may be more likely to endure ostracism, it is also possible that they are more likely to perceive being ostracized—even in the absence of ostracizing behaviors (Leung et al., 2011; Wu et al., 2011). Lastly, no connection has typically been made in prior research regarding openness and ostracism, although it has been included in prior studies with other Big Five dimensions. We do not hypothesize a relationship between openness and workplace ostracism, but we include it in the current meta-analysis.

Hypothesis 3. (a) Extraversion, (b) agreeableness, and (c) conscientiousness are negatively related to workplace ostracism. (d) Neuroticism is positively related to workplace ostracism.

Beyond the Big Five, workplace ostracism has been studied in conjunction with the individual differences of (a) need to belong, (b) future orientation, and (c) political skill. Need to belong describes the tendency to value social connections and feelings of belonging (Scott et al., 2014; Yang & Treadway, 2018), which may also cause employees to avoid the provocative victim status. Those with a need to belong are more likely to be cognizant of their social connections and less likely to perform behaviors that cause conflict resulting in ostracism. Need to belong is believed to be negatively related to workplace ostracism. Similarly, future orientation is the tendency of a person to consider their temporally distal outcomes (Balliet & Ferris, 2013), which may also prompt employees to avoid the provocative victim status. Those with a strong future orientation may be more careful with their behaviors to ensure that they do not produce negative ramifications—such as being ostracized. Future orientation is expected to also negatively relate to workplace ostracism. Lastly, those with political skill effectively navigate their social environments (Cullen, Fan, & Liu, 2014; Wu et al., 2012; Zhao, Peng, & Sheard, 2013), which may allow them to avoid the submissive victim status. These people may be more effective at identifying those who are most inclined to ostracize others and then perform behaviors to minimize the opportunity to be ostracized (e.g., avoiding aggressive coworkers, ingratiating with others). Political skill is believed to be negatively related to workplace ostracism.

Hypothesis 4. (a) Need to belong, (b) future orientation, and (c) political skill are negatively related to workplace ostracism.

It is important to understand the demographic characteristics of people who are most likely to endure ostracism, as these people may be systematically vulnerable due to their overt characteristics (i.e., age, race, gender). If significant relationships are found, it may be necessary to develop interventions that can preemptively address ostracism that may occur to these people.

Gender is frequently studied alongside workplace ostracism, but few justifications have been provided for this relationship. Ferris et al. (2017) directly note, "the ostracism literature has typically not examined the topic of gender in depth" (p. 326). In empirical studies, gender is often included as a control variable, and any variance that it explains is treated as unimportant (Chen, Takeuchi, & Shum, 2013; Quade et al., 2017; Scott et al., 2015). The gender–ostracism relationship, however, may fit with the broader gender-victimization hypothesis (Cortina, 2008; Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013; Miner, Pesonen, Smittick, Seigel, & Clark, 2014). Women often face disparities in the labor force (e.g., job roles, pay), in part due to stereotypes of female employees being incompetent and/or female employees possessing characteristics (e.g., nurturing) that are incompatible with schemas of high performers (e.g., domineering; Cortina, Rabelo, & Holland, 2018; MacKinnon, 1979). These stereotypes may lead to female employees being mistreated due to perceptions of inferiority, and thereby women are often forced into a submissive victim status. At the same time, women who possess charac-

teristics of high performers (e.g., assertiveness) are often seen as a threat to those entrenched in the upper hierarchies, and typically positive behaviors and characteristics of these female employees may be misconstrued as counternormative. For example, assertive female employees are often labeled as "bossy" and other negative adjectives, suggesting that high-performing female employees are forced into a provocative victim status. These women may be mistreated to serve as a corrective punishment, enabling those occupying the upper echelons to remain entrenched (Berdahl, 2007; Cortina, 2008; Cortina et al., 2018). Ostracism may serve as a punishment in both of these instances, and we predict that women report more ostracism than men.

Hypothesis 5. Gender is related to workplace ostracism, such that women report more ostracism than men.

Leadership. Employees working in certain environments may be predisposed to ostracism (Chen et al., 2013; Ferris et al., 2008; Robinson et al., 2013; Scott, Restubog, & Zagenczyk, 2013), whether due to exposure to domineering perpetrators or environments that promote mistreatment. Both of these aspects may be influenced by leadership. Leaders themselves may be domineering perpetrators, and leaders can also inhibit or prohibit mistreatment in their workplaces (i.e., reduce benefits and amplify costs; Ferris, Yan, Lim, Chen, & Fatimah, 2016; Halevy et al., 2014; Kim, Cohen, & Panter, 2015). Three aspects of leadership have been commonly studied in conjunction with ostracism: abusive supervision, supervisors' ostracizing behaviors, and leader-member exchange (LMX).

Abusive supervision refers to the extent to which supervisors engage in hostile behaviors (Ferris et al., 2016; Halevy et al., 2014; Kim et al., 2015). Abusive supervisors tend to mistreat their employees, causing abusive supervisors to be domineering perpetrators themselves. Abusive supervisors can also create a trickle-down effect in organizations (Aryee, Chen, Sun, & Debrah, 2007; Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012), such that mistreatment, including ostracism, is seen as the norm within a workplace. These supervisors may allow their subordinates to mistreat others or fail to punish employees that engage in such behaviors, which could promote ostracism because employees may see few costs associated with the behavior. Similarly, supervisors who ostracize subordinates send a message to others that ostracism is acceptable. Subordinates may even feel that interacting with the ostracized employee will result in mistreatment directed toward themselves, and thereby they may engage in ostracism themselves because they fear the risks of not ostracizing the individual. For these reasons, abusive supervision and supervisors' ostracizing behaviors are believed to be positively related to feelings of workplace ostracism.

LMX refers to the two-way relationship between leaders and followers, such that leaders may treat certain followers as part of the in-group and others as part of the out-group (Arshadi, Zare, & Piryaei, 2012; Chen et al., 2013; Foster, 2012; Nelson, 2013). Leaders with high-quality LMX with their followers ensure that those followers feel a part of a workgroup, but these relationships also signal that social relationships are valued by the leader. In turn, other employees may be less likely to ostracize others due to fears of punishment from the leader, especially if the leader has a high-quality relationship with the potential victim of ostracizing

behaviors. On the other hand, leaders with low-quality LMX may cause followers to feel disconnected from each other. Other employees may believe that relationships are not valued and ostracism incurs few associated risks, especially if they intend to ostracize an employee with a low-quality relationship with the leader. For this reason, LMX is believed to be negatively related to workplace ostracism.

> *Hypothesis 6*. (a) Abusive supervision and (b) supervisors' ostracizing behaviors are positively related to workplace ostracism. (c) LMX is negatively related to workplace ostracism.

Environment. While most discussions of ostracism recognize the importance of work environments (Robinson et al., 2013; Scott & Duffy, 2015; Williams, 2007), few studies have empirically investigated the environment's influence on ostracism. One aspect of the work environment that has been included in multiple studies is perceived social support. Employees are embedded within their workplace social networks. If their social support is strong within this network, then any attempt to ostracize the employee will likely fail, because the victim can rely on their network to prevent this attempted mistreatment. On the other hand, if the employee is only weakly embedded within this network, then attempts to ostracize the employee will be more likely to succeed, because the employee does not have others to help defend them. Thus, employees' social networks can prevent or contribute to their submissive victim status, and perceived social support is believed to be negatively related to workplace ostracism.

> *Hypothesis 7*. Perceived social support is negatively related to workplace ostracism.

Outcomes

To identify the outcomes of ostracism, our integration of the victimization framework also elicits needs-based theories that stress the importance of social connections (O'Reilly, Robinson, Berdahl, & Banki, 2014; Scott et al., 2015; Thau, Derfler-Rozin, Pitesa, Mitchell, & Pillutla, 2015). Needs-based theories propose that humans have certain needs, ranging from those essential to survival (e.g., food, water), to psychological well-being (e.g., relationships), to self-actualization (e.g., autonomy; Deci & Ryan, 2012; Hardré, 2003; Ryan, 2014). When a survival or psychological need is denied, people may enter a state of distress, anxiety, depression, and possibly even meaninglessness (O'Reilly et al., 2014; Wu et al., 2012). Because social connections are a psychological need, they are a powerful resource that is necessary for positive functioning (Fatima, 2016; Ferris, Lian, Brown, & Morrison, 2015; Thau et al., 2015). Therefore, denying social connections (i.e., ostracism) has powerful ramifications, even if it only occurs in a certain life domain (e.g., work; O'Reilly et al., 2014; Scott et al., 2015).

Several commonly studied aspects of well-being are meta-analyzed in the current article. These include: psychological well-being, which includes positive orientations and modes of being (e.g., psychological capital, life satisfaction; Xu, Huang, & Robinson, 2017; Zhang & Shi, 2017); belongingness, defined as a desirable state of fulfillment due to positive social connections (O'Reilly & Robinson, 2009; O'Reilly et al., 2014); emotional exhaustion, defined as a state of physical and emotional depletion

(Sulea et al., 2012; Wu et al., 2012); job tension, defined as a state of mental or emotional strain arising from work (Haq, 2014; Zhu, Lyu, Deng, & Ye, 2017); and depression, defined as extended feelings of low mood, loss of interest, feelings of worthlessness, and other negative perceptions and/or experiences (Ferris et al., 2008; Scott et al., 2015).

> *Hypothesis 8*. Workplace ostracism is negatively related to (a) psychological well-being and (b) belongingness. It is positively related to (c) emotional exhaustion, (d) job tension, and (e) depression.

Similarly, it is expected that workplace ostracism significantly worsens the victim's emotional states as well as self-perceptions. We separate emotional states as positive and negative emotions, as done in ample prior work (Watson, Clark, & Tellegen, 1988), and self-perceptions are studied as a single outcome that includes self-esteem, self-efficacy, and other constructs.

> *Hypothesis 9*. Workplace ostracism is negatively related to (a) positive emotions, and it is positively related to (b) negative emotions.

> *Hypothesis 10*. Workplace ostracism is negatively related to favorable self-perceptions.

Due to these negative associations with well-being, ostracized individuals may, in turn, resent their organization and coworkers for significantly decreasing their quality of life. For this reason, it is expected that workplace ostracism worsens job perceptions, and five separate categories of job perceptions are meta-analyzed in the current article. These include: job satisfaction, defined as an overall assessment of contentment with one's job (Clark, Halbesleben, Lester, & Heintz, 2010; Eickholt & Goodboy, 2017); identification, defined as the extent to which an employee considers their job as a part of their personal schema (Gkorezis et al., 2016; Wu et al., 2016); commitment, defined as being dedicated to one's job (O'Reilly et al., 2014; Zheng et al., 2016); engagement, defined as a positive state that is characterized by vigor, absorption, and a sense of fulfillment by one's job (Leung et al., 2011; Zhao et al., 2016); and justice perceptions, defined as an employee's sense of fairness at work (Scott et al., 2014; Verbos & Kennedy, 2015).

> *Hypothesis 11*. Workplace ostracism is negatively related to job (a) satisfaction, (b) identification, (c) commitment, (d) engagement, and (e) justice perceptions.

This developed resentment may also lead employees to withdraw from their organizations and allocate less efforts to their work-life (Fatima, 2016; Thau et al., 2015). These employees may also lash out against their organization and enact in deviant behaviors due to their distress (Hitlan & Noel, 2009; Zhao et al., 2013; 2016), thereby engaging in a spiral of incivility in response to their ostracism. While some authors have identified "up-sides" of workplace ostracism in certain circumstances (i.e., increased prosocial behaviors; Ferris et al., 2015; Scott et al., 2015; Wu et al., 2016; Xu et al., 2017), ostracism is generally believed to produce negative personal and organizational outcomes. While it is also likely that certain moderating effects may determine which employees withdraw and which employees lash out (e.g., personality, supervisor relationships, organizational perceptions), it is nevertheless expected that ostracism has a significant main

effect on outcomes relating to both allocating less effort and lashing out. In the current meta-analysis, we therefore hypothesize that workplace ostracism has a negative relationship with in-role behaviors, helping, and voice (allocating less efforts) as well as a positive relationship with deviance and employee silence (lashing out)

> **Hypothesis 12.** Workplace ostracism is negatively related to (a) in-role behaviors, (b) helping, and (c) voice. It is positively related to (c) deviance and (d) silence.

Lastly, prior research has repeatedly shown that experienced mistreatment and incivility causes employees to seek alternative employment opportunities (Houshmand, O'Reilly, Robinson, & Wolff, 2012; Penhaligon, Louis, & Restubog, 2013). Workplace ostracism is believed to be no different, and those that experience ostracism are believed to have higher turnover intentions and actual turnover.

> **Hypothesis 13.** Workplace ostracism is positively related to (a) turnover intentions and (b) turnover.

Methodological Hypotheses and Research Questions

Many studies include the same three control variables when testing the effects of ostracism: age, tenure, and education. Some studies include full- or part-time employment status as a control variable. These researchers may be "blindly trying to purify the relationship[s]" of ostracism by controlling for demographic characteristics (Spector & Brannick, 2011, p. 295). These authors should explicitly justify the inclusion of control variables and identify whether the control variables affect ostracism, another variable, or both. Readers should refer to prior sources to aid in this former requirement (Becker, 2005; Spector & Brannick, 2011), but the current article tests these relationships to aid in this latter requirement. Because they have so commonly been used as control variables in prior studies, we predict that age, tenure, education, and full- or part-time status have significant relationships with workplace ostracism.

> **Hypothesis 14.** (a) Age, (b) tenure, (c) education, and (d) full- or part-time status have significant relationships with workplace ostracism.

Further, most of the discussed antecedents and outcomes have a consistent measurement method. For instance, the Big Five personality dimensions are almost always measured via self-report scales. Performance, on the other hand, is measured via self-reports, peer-reports, or supervisor-reports. The measurement of performance influences its observed relationships (Heidemeier & Moser, 2009), and we suggest that the same is true for the relationship of ostracism with performance (core performance, helping, deviance, silence, and voice).

> **Hypothesis 15.** The relationship of workplace ostracism is stronger with self-reported performance than other-reported performance.

The victim-focused perspective of ostracism assumes that perceptions of ostracism and actual ostracism incur similar effects, but perceptions of ostracism may be more strongly affected by—and more strongly affect—other variables. Perceived ostracism is in-

fluenced by both actual ostracism and psychological biases. Individual differences that cause people to be ostracized more often (e.g., neuroticism) may be the same that cause people to believe that they are ostracized more. Likewise, outcomes of ostracism are assumed to be due to victims' perceptions and attributions, which would cause these perceptions to have a larger effect on outcomes than actual ostracism. We propose that the relationships of ostracism are stronger when measured via self-reports than other-reports, which we consider as a proxy for actual ostracism.

> **Hypothesis 16.** The relationships of workplace ostracism are stronger when it is measured via self-reports than other-reports.

We also consider two other factors regarding the measurement of ostracism. The most commonly applied measure of workplace ostracism is likely Ferris et al.'s (2008) measure, but other measures have been used in multiple studies (Hitlan & Noel, 2009; Leary, Tambor, Terdal, & Downs, 1995), and some authors apply self-created measures. The relationship of ostracism may differ based on its measurement method. Also, when applying these measures, the researcher must specify whether the participants must respond in general or regarding a specified timespan. The relationships of ostracism may differ based on this distinction. We analyze these two factors in the current article, but we do not provide a priori hypotheses regarding their effects.

Research Question 1. Do the relationships of ostracism differ based on the applied measurement approach?

Research Question 2. Do the relationships of ostracism differ based on whether participants respond in general or regarding a specified timespan?

Lastly, while the proposed hypotheses are nondirectional, the variables included in the current meta-analysis have been commonly distinguished as either antecedents or outcomes. Recent studies have questioned the direction of these casual effects (Quade et al., 2017; Scott et al., 2013). Authors of these studies have suggested that workplace ostracism may be an outcome of performance, and people may experience retaliatory ostracism in an attempt to curb problematic behaviors (Quade et al., 2017; Scott et al., 2013). Likewise, our application of the victimization framework suggests that submissive victims tend to have poor well-being, emotions, and self-perceptions, which causes these individuals to be victims of ostracism; however, well-being, emotions, and self-perceptions are more often treated as outcomes in research. We test whether the relationship of workplace ostracism with performance (core performance, helping, deviance, silence, and voice), well-being, emotions, and self-perceptions is stronger when ostracism is measured before or after performance, which can help suggest whether workplace ostracism is indeed an antecedent or outcome of these variables.

Research Question 3. Is the relationship of workplace ostracism stronger when it is measured before or after performance, well-being, emotions, and self-perceptions? A visual representation of our hypotheses and research questions are presented in Figure 2.

Method

To test our hypotheses, a meta-analysis is performed following the preferred reporting for systematic reviews and meta-analyses (PRISMA) standards, the meta-analysis reporting standards (MARS), and the suggestions of prior authors (APA, 2008; Aytug, Roth-
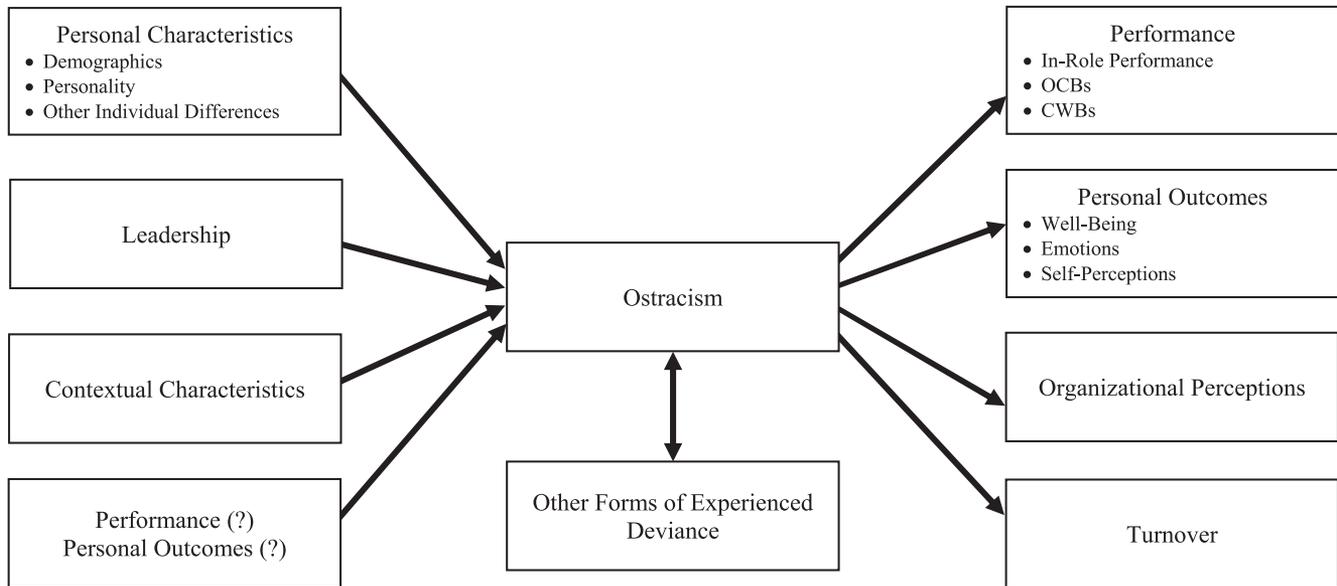
Figure 2.   Model of Workplace Ostracism.

stein, Zhou, & Kern, 2012; Duval & Tweedie, 2000; Hunter & Schmidt, 2000; Liberati et al., 2009; Schmidt & Hunter, 2014).

Identifying Sources

Multiple strategies were used to identify all studies, both published and unpublished, that empirically analyzed workplace ostracism. Searches were conducted in August 2018 in the following databases: PsycINFO, EBSCO, Dissertation Abstracts International, and Google Scholar. Relevant keywords were pairings of the words "workplace," "employee," "manager," followed by "exclusion," "ostracism," "rejection," "alienation," and "marginalization." E-mails were sent to authors discovered through the search process to obtain unpublished data or results.

Inclusion Criteria

Initially, 3,807 sources were identified, which consisted of articles, dissertations, theses, presentations, and unpublished data. The authors reviewed each of these sources to determine whether a sample was collected, workplace ostracism was measured, and quantitative statistics were reported. This resulted in a list of 127 sources, after removing three articles that entirely overlapped with a previously published dissertation. Most excluded sources referenced prior research on ostracism but did not include ostracism within their studies. Two trained researchers coded and recorded the effect sizes of the desired relationships from 20 sources at a time. Once interrater agreement reached an ICC(2,2) of 0.8 (as recommended by prior authors: de Vet, Terwee, Knol, & Bouter, 2006; Hunter & Schmidt, 2000), they coded sources independently. This resulted in 93 sources that included an appropriate effect size for a relationship of interest, and thereby 34 studies that were excluded because they did not report a statistic that could be included.

Analyses

Results were calculated using Comprehensive Meta-Analysis V3 and R 3.4.1. While attempts were made to reduce publication bias (e.g., contacting researchers), analyses were performed to estimate the extent of publication bias in the current meta-analytic estimates. These analyses were fail-safe k, Egger's test, random-effects trim-and-fill method, and weight-function model analysis (Coburn & Vevea, 2015; Egger, Davey Smith, Schneider, & Minder, 1997; Vevea & Hedges, 1995; Vevea & Woods, 2005). The results of these analyses are provided and fully discussed in Supplemental Material A and B.

Eight methods were used to identify outlier sources, but interpretations were based on studentized detected residuals, Cook's distance, and covariance ratios (Viechtbauer & Cheung, 2010). These methods are visual approaches, such that statistics are calculated, results are plotted as line charts, and sources with notably larger values for multiple statistics are considered outliers. These results are presented in Supplemental Material B. One study was removed from primary analyses because it caused significant publication bias results, was identified as a clear outlier effect, and was considered to be unreasonably large ($r = .92$, ostracism and deviance).

To calculate the meta-analytic effects, a random effects model was used. Meta-analytic estimates were calculated only if the relationship of interest was represented by three or more studies. Because most effect sizes were reported as correlations in their original sources, the meta-analytic estimates are likewise reported as correlations; however, we included effect sizes reported as other statistics (e.g., mean and standard deviation, t test) in our calculated effects. We did not include any effect sizes that represent the relationship of more than two variables (e.g., partial correlations), due to concerns detailed by prior authors (Anderson et al., 2010; Boxer, Groves, & Docherty, 2015; Rothstein & Bushman, 2015).

Effects were corrected for unreliability with an artifact distribution method, which is preferred in favor of an individual correction method (Barrick & Mount, 1991; Schmidt & Oh, 2013). Reliability estimates used to make these corrections were the average reported Cronbach's alphas for each variable across the coded articles (Supplemental Material A). No other corrections were applied, such as correcting for range restriction.

Multiple effect sizes for the same relationship within a single study were averaged together before conducting analyses. For example, if a study tested the relationship of workplace ostracism with three different types of OCBs (i.e., OCB-O, OCB-I, and OCB-Change; Wu et al., 2016), then these three effect sizes would be averaged together to prevent the study from being weighted three times. Some authors have noted that averaging effects from the same study may produce biased results (Van den Noortgate, López-López, Marín-Martínez, & Sánchez-Meca, 2013). For this reason, we also conducted a three-level meta-analysis. This method can identify sources of dependence within and across studies, such as the variance attributed to multiple effects recorded from the same source, thereby reducing the bias associated with multiple effects from a single study (Cheung, 2015; Jak, 2015; Van den Noortgate et al., 2013). Results of this three-level meta-analysis are provided in Supplemental Material B. In including these three-level meta-analytic results, we satisfy the recommendations of prior authors to provide sensitivity analyses when conducting meta-analyses, such that the robustness of results can be ensured by calculating effects using multiple different approaches (Hunter & Schmidt, 2000; Schmidt & Hunter, 2014).

We also analyzed several meta-analytic SEMs to test for the incremental relationships of experienced ostracism beyond other forms of experienced mistreatment, following the guidelines provided by Cheung (2015) and Jak (2015). The full reporting and complete results of these analyses are provided in Supplemental Material C.

Lastly, we investigated several moderating effects. We first calculated separate meta-analytic effects for each relationship at each category of the moderator, allowing for the comparison of confidence intervals. These results are provided in Supplemental Material D (antecedents) and E (outcomes). We also performed several random-effects, dummy-coded metaregressions to further probe the significance of these moderating effects, such that each moderating variable was separately entered as the sole predictor in the metaregression. The metaregression results can be provided upon request, and they are briefly summarized below.

Results

Primary Analyses

All effect sizes of our primary analyses are reported as correlational effects $(\bar{r}, \bar{p})$. We first tested whether workplace ostracism was related to, but distinct from, both experiencing other forms of mistreatment and incivility. We considered a corrected correlation of .70 or below to indicate whether the constructs were distinct (Bosco, Aguinis, Singh, Field, & Pierce, 2015; Henseler, Ringle, & Sarstedt, 2015; Paterson, Harms, Steel, & Credé, 2016; Voorhees et al., 2016). Workplace ostracism had a very strong and signifi-

cant relationship with experiencing other forms of mistreatment $(\bar{r} = .60, \bar{p} = .69, 95\%$ CI [.51, .68]) and incivility $(\bar{r} = .56, \bar{p} = .64, 95\%$ CI [.45, .65]).

We were able to test meta-analytic SEMs for five antecedent effects: gender, age, tenure, abusive supervision, and perceived social support. When analyzed together, neither ostracism nor other forms of mistreatment were significantly predicted by gender, age, and tenure. Both were significantly predicted by abusive supervision, and ostracism—but not other forms of mistreatment—was significantly predicted by social support (Supplemental Material C).

We were also able to test meta-analytic SEMs for four outcomes: core performance, deviance, negative emotions, and favorable self-perceptions. When analyzed together, neither ostracism nor other forms of mistreatment were significant predictors of core performance. Ostracism—but not other forms of mistreatment—significantly predicted deviance, negative emotions, and favorable self-perceptions (Supplemental Material C).

Antecedents

Table 1 includes the meta-analytic estimates of workplace ostracism's relationships with antecedents. To interpret all effects, we applied the guidelines of recent authors (Bosco et al., 2015; Gignac & Szodorai, 2016; Paterson et al., 2016). Of demographics, workplace ostracism had a small but significant relationship with gender $(\bar{r} = -.06, \bar{p} = -.06, 95\%$ CI $[-.08, -.03])$, with men reporting more experienced ostracism, and whether the employee was working full- or part- time $(\bar{r} = -.11, \bar{p} = -.12, 95\%$ CI $[-.22, -.00])$, with part-time employees reporting more experienced ostracism. Ostracism had a very small but significant relationship with education $(\bar{r} = .04, \bar{p} = .04, 95\%$ CI [.01, .07]), but it did not have a significant relationship with age $(\bar{r} = .01, \bar{p} = .01, 95\%$ CI $[-.02, .04])$, or tenure $(\bar{r} = .00, \bar{p} = .00, 95\%$ CI $[-.02, .03])$.

Workplace ostracism had a significant relationship with four of the Big Five personality dimensions. Its relationship was moderate and negative with extraversion $(\bar{r} = -.25, \bar{p} = -.29, 95\%$ CI $[-.31, -.18])$ and conscientiousness $(\bar{r} = -.20, \bar{p} = -.23, 95\%$ CI $[-.32, -.08])$, whereas it was large and negative with agreeableness $(\bar{r} = -.26, \bar{p} = -.30, 95\%$ CI $[-.37, -.14])$. Ostracism had a positive and large relationship with neuroticism $(\bar{r} = .26, \bar{p} = .30, 95\%$ CI [.08, .42]), and a nonsignificant relationship with openness $(\bar{r} = -.10, \bar{p} = -.12, 95\%$ CI $[-.21, .01])$. In regards to other individual differences, workplace ostracism had a nonsignificant relationship with future orientation $(\bar{r} = .01, \bar{p} = .01, 95\%$ CI $[-.13, .16])$, political skill $(\bar{r} = -.14, \bar{p} = -.16, 95\%$ CI $[-.31, .04])$, and need to belong $(\bar{r} = -.08, \bar{p} = -.10, 95\%$ CI $[-.26, .10])$.

Workplace ostracism was very strongly and significantly related to each leadership-related predictor: negatively with LMX $(\bar{r} = -.40, \bar{p} = -.45, 95\%$ CI $[-.57, -.19])$ and positively with abusive supervision $(\bar{r} = .55, \bar{p} = .60, 95\%$ CI [.37, .68]) and supervisor's ostracism behaviors $(\bar{r} = .53, \bar{p} = .59, 95\%$ CI [.35, .66]). It also had a moderate and significant relationship with the contextual predictor, perceived social support $(\bar{r} = -.18, \bar{p} = -.20, 95\%$ CI $[-.32, -.04])$.

Table 1

Meta-Analytic Results of Ostracism Antecedents

Variable	# of sources	k	N	$\bar{r}$	$\bar{p}$	95% CI	z-value	Sig.
Demographic characteristics								
1. Gender (0 male, 1 female)	53	63	18,006	−.06	−.06	[−.08, −.03]	−4.539	**<.001**
2. Age	51	58	18,450	.01	.01	[−.02, .04]	.847	.397
3. Tenure	40	46	15,072	.00	.00	[−.02, .03]	.238	.812
4. Education	27	28	7,612	.04	.04	[.01, .07]	2.388	**.017**
5. Full- or part-time	3	3	335	−.11	−.12	[−.22, −.00]	−2.032	**.042**
Personality								
6. Extraversion	4	4	888	−.25	−.29	[−.31, −.18]	−7.393	**<.001**
7. Agreeableness	5	5	1,141	−.26	−.30	[−.37, −.14]	−4.104	**<.001**
8. Neuroticism	8	8	2,265	.26	.30	[.08, .42]	2.868	**.004**
9. Conscientiousness	5	5	1,229	−.20	−.23	[−.32, −.08]	−3.195	**.001**
10. Openness	3	3	806	−.10	−.12	[−.21, .01]	−1.726	.084
Other individual differences								
11. Political skill	5	5	999	−.14	−.16	[−.31, .04]	−1.531	.126
12. Need to belong	4	4	664	−.08	−.10	[−.26, .10]	−.889	.368
13. Future orientation	4	4	747	.01	.01	[−.13, .16]	.175	.861
Leadership								
14. LMX	9	9	3,194	−.40	−.45	[−.57, −.19]	−3.552	**<.001**
15. Abusive supervision	7	7	2,961	.55	.60	[.37, .68]	5.413	**<.001**
16. Supervisor ostracism	5	5	1,078	.53	.59	[.35, .66]	5.352	**<.001**
Context								
17. Perceived social support	9	9	1,865	−.18	−.20	[−.32, −.04]	−2.527	**.012**
Convergent validity								
18. Other forms of mistreatment	16	18	9,263	.60	.69	[.51, .68]	10.150	**<.001**
19. Other forms of incivility	15	16	6,915	.56	.64	[.45, .65]	8.658	**<.001**

Note. LMX = leader-member exchange. Bold values indicate statistically significant results at a .05 level.

Outcomes

Table 2 includes the meta-analytic estimates of workplace ostracism's relationship with outcomes. Ostracism had a significant relationship with all four outcomes in the domain of performance. Its relationship was the strongest and positive with silence ($\bar{r} = .51$, $\bar{p} = .57$, 95% CI [.20, .73]) and deviance ($\bar{r} = .40$, $\bar{p} = .45$, 95% CI [.31, .47]), but it also had moderate and negative relationships with core performance ($\bar{r} = −.22$, $\bar{p} = −.25$, 95% CI [−.26, −.17]) helping ($\bar{r} = −.20$, $\bar{p} = −.23$, 95% CI [−.25, −.15]), and voice ($\bar{r} = −.21$, $\bar{p} = −.24$, 95% CI [−.34, −.07]).

Workplace ostracism also had a significant relationship with all well-being outcomes. It had strong relationships with emotional exhaustion ($\bar{r} = .34$, $\bar{p} = .39$, 95% CI [.21, .46]), depression ($\bar{r} = .36$, $\bar{p} = .41$, 95% CI [.27, .45]), psychological well-being ($\bar{r} = −.24$, $\bar{p} = −.28$, 95% CI [−.34, −.13]), and job tension ($\bar{r} = .30$, $\bar{p} = .34$, 95% CI [.22, .38]). It had a very strong and negative relationship with belongingness ($\bar{r} = −.42$, $\bar{p} = −.48$, 95% CI [−.59, −.22]). Workplace ostracism also had a significant and large relationship with negative emotions ($\bar{r} = .34$, $\bar{p} = .38$, 95% CI [.29, .39]) as well as a significant but small relationship with positive emotions ($\bar{r} = −.15$, $\bar{p} = −.17$, 95% CI [−.22, −.08]). Its relationship with favorable self-perceptions was also significant and moderate ($\bar{r} = −.29$, $\bar{p} = −.32$, 95% CI [−.34, −.23]).

Like well-being outcomes, workplace ostracism also had a significant relationship with all organizational perceptions, and each of these relationships were moderate to large in strength. It had significant and negative relationships with satisfaction ($\bar{r} = −.35$, $\bar{p} = −.40$, 95% CI [−.44, −.25]), identification ($\bar{r} = −.22$, $\bar{p} = −.25$, 95% CI [−.31, −.13]), commitment ($\bar{r} = −.24$, $\bar{p} = −.27$, 95% CI

[−.33, −.16]), engagement ($\bar{r} = −.22$, $\bar{p} = −.26$, 95% CI [−.31, −.13]), and justice perceptions ($\bar{r} = −.32$, $\bar{p} = −.37$, 95% CI [−.50, −.12]).

Workplace ostracism had a large and significant relationship with turnover intentions ($\bar{r} = .29$, $\bar{p} = .33$, 95% CI [.22, .36]), and a small but significant relationship with turnover ($\bar{r} = .09$, $\bar{p} = .10$, 95% CI [.04, .14]).

Moderator Analyses

We tested whether the rating source of performance influenced observed relationships, which was coded as "self-reported" or "other-reported" (Supplemental Material E). Across each type of performance (core performance, helping, deviance, silence, and voice), the confidence intervals greatly overlapped and the dummy-coded metaregressions did not produce any significant coefficients. Next, we tested whether the rating source of ostracism influenced relationships, which was coded as "self-reported" or "other-reported" (Supplemental Material D and E). No relationship of ostracism had more than a single article use a measure of ostracism that was not self-reported, which prevented a test of this hypothesis for all relationships.

We analyzed whether the measures of ostracism influenced observed relationships (Supplemental Material D and E) using three categories: Ferris et al.'s (2008) scale, a modified version of Ferris et al.'s (2008) scale, and all other scales (e.g., Hitlan & Noel, 2009; Leary et al., 1995). Ferris et al.'s (2008) scale was the most commonly used. Only two of eight antecedents had relationships that varied by the ostracism measurement method, as determined by confidence intervals and dummy-coded metaregressions.

Table 2
Meta-Analytic Results of Ostracism Outcomes

Variable	# of sources	k	N	$\bar{r}$	$\bar{p}$	95% CI	z-value	Sig.
Performance								
1. Core performance	17	20	5,312	−.22	−.25	[−.26, −.17]	−9.403	**<.001**
2. Helping	21	25	6,785	−.20	−.23	[−.25, −.15]	−7.855	**<.001**
3. Deviance	27	33	8,554	.40	.45	[.31, .47]	8.481	**<.001**
4. Silence	6	7	1,864	.51	.57	[.20, .73]	3.072	**.002**
5. Voice	4	4	1,652	−.21	−.24	[−.34, −.07]	−2.987	**.003**
Well-being								
6. Emotional exhaustion	6	6	1,381	.34	.39	[.21, .46]	4.905	**<.001**
7. Depression	8	8	3,359	.36	.41	[.27, .45]	7.050	**<.001**
8. Psychological well-being	7	8	3,296	−.24	−.28	[−.34, −.13]	−4.229	**<.001**
9. Job tension	8	8	1,589	.30	.34	[.22, .38]	7.357	**<.001**
10. Belongingness	4	5	4,243	−.42	−.48	[−.59, −.22]	−3.823	**<.001**
Emotions								
11. Negative emotions	18	19	5,107	.34	.39	[.29, .39]	12.497	**<.001**
12. Positive emotions	8	9	2,306	−.15	−.17	[−.22, −.08]	−4.310	**<.001**
Self-perceptions								
13. Favorable self-perceptions	14	16	4,451	−.29	−.32	[−.34, −.23]	−9.778	**<.001**
Organizational perceptions								
14. Satisfaction	12	15	4,590	−.35	−.40	[−.44, −.25]	−6.676	**<.001**
15. Identification	4	5	1,306	−.22	−.25	[−.31, −.13]	−4.574	**<.001**
16. Commitment	10	11	5,081	−.24	−.27	[−.33, −.16]	−5.406	**<.001**
17. Engagement	5	5	1,233	−.22	−.26	[−.31, −.12]	−4.360	**<.001**
18. Justice perceptions	7	7	2,387	−.32	−.37	[−.50, −.12]	−3.027	**.002**
Turnover								
19. Turnover intentions	12	12	4,457	.29	.33	[.22, .36]	7.772	**<.001**
20. Turnover	3	3	1,567	.09	.10	[.04, .14]	3.436	**.001**

Note. Bold values indicate statistically significant results at a .05 level.

Two of 12 outcomes had relationships that varied by the ostracism measurement method. Given the small number and varied nature of significant results, the applied measure did not have a notable or consistent influence.

We then tested the moderating effect of whether the ostracism measure specified a timespan, which was coded as "not specified" or "specified" (Supplemental Material D and E). Most articles did not specify a timespan, but five of 12 antecedent and three of 12 outcome relationships had a significant moderating effect: age, tenure, abusive supervision, other mistreatment, other incivility, helping, psychological well-being, and belongingness. Each of these effects were stronger when the timespan was specified. The average change in the corrected correlation ($\bar{p}$) was .18, indicating a small-to-moderate moderating effect.

We tested whether the relation between workplace ostracism and performance differ when the methodological design measured performance before ostracism, measured performance after ostracism, or measured performance and ostracism simultaneously (see Table 3). Because some studies only specified that "a survey was administered," we assumed that these instances were cross-sectional study designs. A modest number of sources investigated performance as an antecedent to ostracism: one for core performance, two for helping, three for deviance, and none for silence or voice. Nevertheless, the meta-analytic effects from these sources are comparable to studies that investigated performance as an outcome as well as cross-sectionally. Core performance had a moderate effect, whether studied as an antecedent ($\bar{r} = -.19$, $\bar{p} = -.22$, 95% CI [−.28, −.09]), outcome ($\bar{r} = -.21$, $\bar{p} = -.24$, 95% CI [−.28, −.14]), or

cross-sectionally ($\bar{r} = -.24$, $\bar{p} = -.27$, 95% CI [−.31, −.17]). Helping had a small effect when studied as an antecedent ($\bar{r} = -.11$, $\bar{p} = -.12$, 95% CI [−.20, −.02]), but it was comparable to the moderate effect when studied as an outcome ($\bar{r} = -.17$, $\bar{p} = -.20$, 95% CI [−.25, −.09]) or cross-sectionally ($\bar{r} = -.20$, $\bar{p} = -.23$, 95% CI [−.27, −.14]). Deviance had a strong effect, whether studied as an antecedent ($\bar{r} = .34$, $\bar{p} = .38$, 95% CI [.21, .46]), outcome ($\bar{r} = .37$, $\bar{p} = .42$, 95% CI [.27, .46]), or cross-sectionally ($\bar{r} = .42$, $\bar{p} = .47$, 95% CI [.29, .54]). The confidence intervals of each compared effect greatly overlapped, and dummy-coded metaregressions did not find significant results when likewise comparing these effects (with the exception of silence). Therefore, the size of these relationships does not greatly differ whether studied as an antecedent or outcome, although the meta-analytic effects were always strongest when studied cross-sectionally (with the exception of voice).

We performed similar analyses with well-being, emotions, and self-perceptions (Supplemental Material E). No indicator of well-being had more than a single source measure it as an antecedent, and the confidence intervals greatly overlapped whether measured as an outcome or cross-sectionally (with the exception of depression). The confidence intervals of negative emotions likewise greatly overlapped whether measured as an antecedent, outcome, or cross-sectionally. Only one study investigated positive emotions not as an outcome, preventing analyses regarding positive emotions. Self-perceptions' confidence intervals overlapped whether measured as an antecedent, outcome, or cross-sectionally. Lastly, only three dummy-coded metaregressions produced significant coefficients when comparing the effects when measured cross-

Table 3

Meta-Analytic Comparisons of Variables Studied as Antecedent and Outcome Effects

Variable	# of sources	k	N	$\bar{r}$	$\bar{p}$	95% CI	z-value	Sig.
Performance								
1a. Core performance as antecedent	1	3	673	−.19	−.22	[−.28, −.09]	−3.767	**<.001**
1b. Core performance as outcome	9	10	2,351	−.21	−.24	[−.28, −.14]	−5.757	**<.001**
1c. Core performance as cross-sectional or unknown	7	7	2,288	−.24	−.27	[−.31, −.17]	−6.200	**<.001**
2a. Helping as antecedent	2	2	426	−.11	−.13	[−.20, −.02]	−2.285	**.022**
2b. Helping as outcome	9	11	2,732	−.17	−.20	[−.25, −.09]	−3.964	**<.001**
2c. Helping as cross-sectional or unknown	13	17	4,692	−.20	−.23	[−.27, −.14]	−6.106	**<.001**
3a. Deviance as antecedent	3	5	948	.34	.38	[.21, .46]	4.771	**<.001**
3b. Deviance as outcome	12	14	3,306	.37	.42	[.27, .46]	6.955	**<.001**
3c. Deviance as cross-sectional	14	17	4,869	.42	.47	[.29, .54]	5.768	**<.001**
4a. Silence as antecedent	0	0	0	—	—	—	—	—
4b. Silence as outcome	3	4	1,228	.20	.22	[−.02, .41]	1.813	.070
4c. Silence as cross-sectional	3	3	636	.78	.87	[.59, .89]	5.612	**<.001**
5a. Voice as Antecedent	0	0	0	—	—	—	—	—
5b. Voice as outcome	2	2	578	−.29	−.33	[−.50, −.05]	−2.389	**.017**
6c. Voice as cross-sectional	2	2	1,074	−.14	−.16	[−.20, −.08]	−4.710	**<.001**

Note. Bold values indicate statistically significant results at a .05 level.

sectionally compared with when measured as an outcome (depression, belongingness, and job tension). Overall, these relationships do not greatly differ whether studied as an antecedent or outcome, and most all meta-analytic effects were again strongest when studied cross-sectionally.

None of the meta-analytic results above notably differed when applying a three-level meta-analytic approach (Supplemental Material B), supporting the robustness of our results.

Discussion

The current article had three primary goals. The first was to provide a conceptual and empirical synthesis of extant research, which would identify the strongest and most commonly studied relationships of workplace ostracism. The second was to appraise the current application of theory and offer the victimization framework as an approach to holistically study workplace ostracism. The third was to propose future directions for the study of ostracism in the workplace.

Our results supported that workplace ostracism is a unique form of mistreatment and incivility. While the meta-analytic effects of ostracism with mistreatment and incivility were very strong (corrected correlation = .69 and .64, respectively), over half of workplace ostracism's variance is still unique from other forms of experienced mistreatment and incivility $(1 - .69^2 = .52 \ \& \ 1 - .64^2 = .59$, respectively). These results were not strong enough to suggest that ostracism is completely repetitive with other forms of mistreatment and incivility. Further, testing the relationships of ostracism when accounting for other experienced mistreatment was a stronger test of ostracism's uniqueness, which we did for nine relationships via meta-analytic SEM. Of these, four did not have a significant relationship with either, one had a significant relationship with both, and four had a significant relationship with ostracism but not mistreatment. These results suggest that ostracism is unique from other experienced mistreatment, which is especially true when considering the outcomes of ostracism (discussed further below).

Workplace ostracism was shown to be influenced by antecedents from several domains. Significant antecedents included gen-

der, education, full- or part-time status (demographic characteristics), extraversion, agreeableness, neuroticism, conscientiousness (personality), LMX, abusive supervision, supervisor ostracizing behaviors (leadership), and social support (context). No other individual differences had a significant relationship with ostracism, which included age, tenure, openness, political skill, need to belong, and future orientation. Demographic characteristics tended to have small effects on workplace ostracism; the Big Five facets tended to have large effects; other individual differences tended to have small effects; leadership tended to have very large effects; and the single contextual predictor had a moderate effect.

Workplace ostracism also influenced outcomes across many domains. Workplace ostracism significantly related to each studied outcome variable, which included core performance, helping, deviance, silence, voice (performance), emotional exhaustion, depression, psychological well-being, job tension, belongingness (well-being), negative emotions, positive emotions (emotions), favorable self-perceptions (self-perceptions), satisfaction, identification, commitment, engagement, justice perceptions (organizational perceptions), turnover intentions, and turnover (turnover). These significant effects tended to be large in strength, but very strong effects were observed for the effects of workplace ostracism on deviance, silence, and belongingness. A small effect was observed between workplace ostracism and turnover.

The moderating effects had varied results, two of which we note here. The relationship between ostracism and performance did not greatly differ whether performance was measured via self- or other-reports. Whether the authors specified a timespan for the measurement of ostracism did have a notable effect. It was significant for five of 12 tested relationships, and each of these significant results indicated that specifying a timespan produces larger outcomes.

The conceptualized division of antecedents and outcomes of workplace ostracism is clear in the present literature, but our results suggested that this division is not as clear as assumed. Performance is most often studied as an outcome of workplace ostracism, but its relationship when measured after ostracism was comparable to its relationship when measured before. The same

results were true for the outcomes of well-being, emotions, and self-perceptions. This suggests that these variables may either be an antecedent or outcome of workplace ostracism—a consideration that is infrequently made in research with important theoretical implications.

Theoretical Implications

Our meta-analysis supports some, but not other, tenets of commonly applied theories pervasive throughout the workplace ostracism literature. We found leadership constructs to be more strongly related to ostracism than personal antecedents. This suggests that theories explaining relationships between leaders and followers (e.g., LMX) may offer insight in determining who will experience ostracism, and the occurrence of someone being ostracized may be more due to their supervisor than themselves (Arshadi et al., 2012; Sulea et al., 2012; Wan, Chan, & Chen, 2016). Abusive supervision and supervisors' ostracizing behaviors had almost identical effects on ostracism, indicating that abusive supervisors may regularly enact in such behaviors. These large effects also suggest that employees may view supervisors' ostracizing behaviors as signaling effects, such that employees should likewise enact in ostracizing behaviors.

Environmental factors also appear to be critical in explaining ostracism. Particularly, norms are established both by leadership and the collective perception of the social environment (Cohen, Vandello, Puente, & Rantilla, 1999; DeBono, Shmueli, & Muraven, 2011). Certain work environments (e.g., toxic workplace) are conducive to deleterious behaviors because employees perceive these behaviors as normative (Hitlan & Noel, 2009; Renn et al., 2013; Robinson et al., 2013). While related to theories of exchange, we see value in evoking theoretical perspectives that better explain instances in which ostracism is not only perceived to be a normative behavior but also the byproduct of seemingly innocuous environments (e.g., competitive climate, leaderless groups). In these contexts, the one environmental predictor studied in the current meta-analysis, social support, may prove to be even more so important to stave off ostracism. Social support may even prove to be an important resilience factor. Those with ample social support could rely on their resources to recover after being ostracized, which provides an avenue to study postostracism dynamics.

Further, the victimization framework may be useful in understanding these environmental dynamics. Both abusive supervisors and supervisor ostracizing behaviors may be indicative of domineering perpetrators who aggress against others because they value benefits or devalue risks. When paired with domino or spiral perspectives (Andersson & Pearson, 1999; Hoel, Sheehan, Cooper, & Einarsen, 2011), domineering perpetrators may spark a chain reaction of ostracism against an employee, thereby explaining how the communal event may begin. Likewise, the victimization framework suggests that more than domineering perpetrators weigh the benefits and risks of ostracism; the employees in the broader workplace make similar mental comparisons. In toxic or innocuous environments, employees may have greater benefits and fewer risks from ostracizing others.

At the same time, we do not suggest disregarding the roles of personal constructs. Cortina, Rabelo, and Holland (2018) recently criticized research investigating the victim's characteristics as antecedents of mistreatment, arguing that these studies send inappro-

priate messages (i.e., victim blaming) and observed effects are small in magnitude. Cortina et al. (2018) was generally correct regarding ostracism. Many personal characteristics indeed have small and/or nonsignificant relationships with ostracism, and characteristics of the victim appear to be a secondary antecedent of ostracism. Certain aspects of the Big Five, however, had notable relationships with ostracism. Generally, these aspects could be justified via their conceptual association with submissive victim and provocative victim status, but further research is needed to solidify these associations.

Furthermore, gender had a small but statistically significant relationship with ostracism, and men are more likely to report being a victim of ostracism than women. This surprising finding goes against broader hypotheses of the gender–mistreatment relationship, which proposes that women are more likely victims of mistreatment (Cortina, 2008; Cortina et al., 2013; Miner et al., 2014). It is possible that role-based feminine characteristics (e.g., nurturing) cause women to be mistreated more in the workplace but ostracized less and/or typically masculine characteristics of men (e.g., aggressiveness) cause them to be mistreated less but ostracized more. Further research is needed, particularly regarding the mediating mechanisms that may explain the relationship of gender, ostracism, and broader workplace mistreatment.

The surprising finding regarding gender also suggests that the personal predictors of workplace ostracism may differ from the personal predictors of general mistreatment. Researchers should also not assume that theories and findings regarding mistreatment generalize to experiences of ostracism. This notion is further supported by the meta-analytic SEM results. Overall, much of the variance between experienced ostracism and other forms of experienced mistreatment overlapped, but the relationships of ostracism remained significant more often than those of other forms of mistreatment. This finding lends further support to the notion that no attention is worse than negative attention (O'Reilly et al., 2014), and the effects of experienced ostracism may both differ and be stronger than those of other forms of experienced mistreatment.

Regarding the outcomes of workplace ostracism, some trends also stood out among our findings. The results clearly articulated the deleterious effects that ostracism exhibits on a variety of employee outcomes. Many perspectives propose that ostracism is often a response to norm violation by the victim (e.g., provocative victim; Hitlan & Noel, 2009; Renn et al., 2013; Robinson et al., 2013), and it is thereby perceived to be a possible strategy to curb problematic behaviors. However, ostracism had detrimental relationships with all five types of performance. These results suggest that ostracism is a relatively ineffective method to encourage performance improvements or reinforce norms, or the result may also suggest that ostracism is rarely performed to correct the behavior of a provocative victim and instead is most commonly performed against a submissive victim without the intent to alter behaviors.

The results also reinforced that ostracism has a negative influence on well-being, emotions, and self-perceptions. Those experiencing ostracism feel worse emotionally and feel worse about themselves. Ostracism also worsened organizational perceptions and encouraged turnover, likely due to its negative effects on well-being, emotions, and self-perceptions. These results provide inferences regarding why ostracism results in worse performance.

Those being ostracized are less committed and withdraw from their organization, which may be due to poor well-being and/or perceiving that they are unwanted. In turn, these employees may allocate less efforts into their work, causing any performance concerns to worsen further. This perspective coincides with the victimization framework, which suggests that ostracism results in the denial of needs. Together, ostracism seems to be negatively related to most all desirable personal and organizational outcomes, although some authors have supported that it can lead to positive outcomes in certain circumstances (Ferris et al., 2015; Wu et al., 2016; Xu et al., 2017).

The moderation results shed some uncertainty on these results, however. Because the relationship of ostracism with these outcomes were similar whether ostracism was measured before or after the outcomes, these outcomes may also be antecedents to ostracism; or rather, they may even be *better* conceptualized as antecedents. The adapted victimization framework suggested that submissive victims have poor well-being, emotions, self-perceptions, which causes them to be less likely to fight back against ostracism and instead blame themselves for their mistreatment. If true, then these individuals may naturally elicit ostracism, which would cause ostracism to be predicted by—but not necessarily predict—these variables. Likewise, these individuals may also naturally demonstrate poor performance, which would also cause performance to be better conceptualized as an antecedent of ostracism as well as an outcome. Further investigation into this finding can determine whether the submissive victim, thwarted needs, or both proposals of the victimization framework are ideal for understanding ostracism.

The current article also poses some methodological implications for the study of ostracism. The typical control variables of age and education had very small relationships with workplace ostracism, and full- or part-time status had only a small relationship. Future research should reconsider using these demographics as controls. Only when these variables have theoretical justifications for their contaminating effects should they be included, and it should be expected that they will have a small effect on relationships (Becker, 2005; Spector & Brannick, 2011). Authors should also carefully consider whether their theories better conceptualize ostracism as a general phenomenon or a discrete behavioral event, as ostracism demonstrated different relationships when conceptualized in general or over a specific timespan.

Future Research Directions

Our review and meta-analysis offers numerous opportunities for future research. We noted the fragmented nature of the ostracism literature, leading to the use of various theoretical perspectives. Subsequently, we call authors to further explore the victimization framework in relation to ostracism, which could better explain prior findings but also uncover new research questions. For instance, researchers could examine the differences in how submissive and provocative victims become more vulnerable to ostracism, perhaps leading to the person-oriented study of victim types and their relationship to ostracism (Howard & Hoffman, 2018).

Further, although the framework has been commonly applied in a target-centric manner (i.e., felt mistreatment: Aquino & Thau, 2009), there may be opportunities to flip the perspective to the perpetrator in ostracism research. This shift in perspective would

be particularly useful to combat concerns for victim blaming or victim precipitation (Cortina et al., 2018; Jensen & Raver, 2018), such that studying characteristics of the perpetrator would remove the burden on researchers to avoid revictimizing the victim. This shift also poses a new set of methodological considerations (e.g., measurement issues), but the potential contribution to theory and practice is difficult to overestimate. Thus, we encourage researchers to also conceptualize ostracism from the perspective of the ostracizer and consider the theoretical implications of understanding why and when people feel compelled to engage in ostracism. For instance, future research might explore how the use of ostracism differs between domineering perpetrators and reactive perpetrators—the other type of perpetrator not discussed in the current article.

Perhaps the most beneficial future direction of the victimization framework may be the study of the victim-perpetrator dyad (Jensen & Raver, 2018). Refocusing research on the dyad would offer great opportunities to capture the factors driving people to engage in ostracizing behaviors, and the victimization framework again stands to inform us of how perpetrator characteristics and environmental factors may be conducive to or hindrances to one ostracizing another. Aquino and Lamertz's (2004) victimization framework suggested that unique dynamics occur when specific types of victims are paired with specific types of perpetrators. For example, ostracism could occur as a norm corrective strategy for provocative victims, but certain situations (e.g., work climates/environments) may amplify (or mitigate) the effectiveness of such strategies. Positive workplace characteristics might inhibit the acceptance of ostracism, such as strong social support, causing the behaviors of reactive perpetrators against provocative victims to be disapproved. In studying such topics, researchers would not only be advancing the study of ostracism, but they may also identify effects regarding the broader concept of mistreatment.

Future researchers should also consider new methodological means of studying ostracism, especially when investigating the phenomenon from the perpetrator-focused or dyad approach. Almost all sources apply self-report measures of ostracism, although actual ostracism may have different effects than perceived ostracism. As mentioned, perceived ostracism is influenced by actual ostracism and perceptual biases, which may cause it to have larger relationships with both antecedents and outcomes. We call for authors to measure both objective and perceived ostracism in future research to determine the true effects of ostracism, which can be done in a similar manner as Yang and Treadway (2018). These authors showed that a perpetrator-reported network approach to measuring ostracism had a very small relationship with self-reported ostracism, supporting the need for these alternative approaches.

In using these novel research designs, researchers should reconsider the traditional categorization of ostracism antecedents and outcomes. Performance, well-being, emotions, and self-perceptions may be both antecedents and outcomes of ostracism, but it is difficult to disentangle cause from effect (and vice versa) using designs applied in current studies. Future research should use intensive longitudinal and/or experimental designs to identify whether, in relation to ostracism, performance is best conceptualized as an antecedent, outcome, or both.

Likewise, researchers should further investigate the differences in ostracism reported in general and reported in specific timespans. General ostracism may more strongly reflect these cognitive biases, as participants base their general perceptions on heuristics and feelings about their workplace. Asking participants to report ostracism over a specific timespan may force participants to consider the actual behaviors performed over that time span, representing a better depiction of ostracism. Further research is needed before this claim can be supported.

Limitations

We aggregated similar relationships together to obtain a sufficient number of studies to report certain effects. While it is believed that each of the aggregated constructs have meaningful similarities, some differences may exist among these relationships. Supplemental Material F includes the labels and representative constructs used in the current meta-analysis, and readers can infer whether any categories included variables that may produce differing relationships.

Also, while we believe the applied approach was most ideal for the current analyses, Supplemental Material B provides a replication of these analyses using a three-level meta-analytic approach, which may be more resistant to biases produced by aggregating heterogeneous effects (Cheung, 2015; Jak, 2015). None of these three-level meta-analytic estimates provided notably different estimates from the reported random-effects meta-analyses.

Conclusion

We supported that ostracism is due to both personal and environmental antecedents, and that ostracism is related to an array of negative outcomes, including poor well-being, organizational perceptions, and performance. We urge future research to (a) further integrate the victimization framework into the study of ostracism, (b) investigate contextual antecedents and moderators, as well as (c) study causal effects in the opposite directions than typically assumed.

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All references included in meta-analysis are provided in Supplemental Material G and are marked with an (*) asterisk.

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