A meta-analytic comparison of why workplace ostracism relates to discretionary behavior

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Abstract

It is well established that the victims of workplace ostracism (WO) engage in *fewer* organizational citizenship behaviors (OCB) and *more* counterproductive workplace behaviors (CWB). However, significant gaps remain in our knowledge of *why* these relationships exist. To advance current comprehension of intermediary processes within this domain, we investigate the leading conceptual account, belongingness theory, alongside two theoretically compelling alternatives: social exchange and self-regulatory resources. Drawing on meta-analytic structural equation modeling (MASEM) and data generated from 160 samples, we investigate two possible mediational models: (a) a competitive model that directly pits the three mechanisms against one another, and (b) a sequential integrative model that combines them. Overall, our findings indicate that even though belongingness is a key mediating process, social exchange and resource mechanisms are critical and complement it. Furthermore, our results suggest the nature of the explanatory mechanisms is nuanced and depends not only on the outcome under investigation (i.e., OCB versus CWB), but also the mediational model tested (i.e., competitive mediation versus sequential mediation). Secondarily, in our study, we control for other forms of mistreatment, such as workplace incivility, and demonstrate that the effect of WO is incremental and independent of other forms of mistreatment. Findings are discussed in terms of how they advance WO theory as well as our understanding of why WO relates to CWB and OCB.

Keywords:

Workplace ostracism; discretionary behaviors; belonging; resources; exchange; meta-analysis.

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Introduction

Workplace ostracism (WO) is a form of mistreatment where individuals are ignored and excluded by their colleagues, resulting in feelings of being unwanted and unworthy of social attention (Ferris et al., 2008; Robinson & Schabram, 2017). Rather than behave in ways that facilitate their social acceptance however, victims of WO more typically do the opposite (Bolino, 1999; DeWall et al., 2011; Pletzer et al., 2019). Prior research has shown that WO victims engage in fewer organizational citizenship behaviors (OCB), which benefit organizations and people (Organ, 1997; Organ et al., 2006), and more counterproductive workplace behaviors (CWB), which harm organizations and people (Marcus et al., 2016). For instance, WO victims frequently avoid volunteering for projects, engage in fewer helping behaviors, spread gossip, and display aggressive behavior. Although previous meta-analytic studies have established that WO is significantly related to OCB (ρ = -.23, Bedi, 2020; ρ = -.24, Howard et al., 2020; ρ = -.26, Li et al., 2021) and CWB (ρ = .54, Bedi, 2020; ρ = .45, Howard et al., 2020), why these relationships exist remain unclear.

My primary aim was to move beyond the question of *whether* such associations exist and to tackle the more fundamental scientific question of *why* they exist (Bacharach, 1989; Mathieu et al., 2008). To do so, I contrast the dominant conceptual account in the WO literature, belongingness theory (Baumeister & Leary, 1995), with two alternative theoretical explanations: self-regulatory resources (Baumeister & Vohs, 2007) and social exchange (Blau, 1964; Emerson, 1976). Belongingness theory suggests that the impact of WO on OCB and CWB stems from a victim's thwarted sense of belonging (e.g., Baumeister & Leary, 1995; Williams, 1997). In contrast, self-regulatory resource theory proposes that these relationships arise because WO reduces victim's self-regulatory resources (e.g., Leung et al., 2013) while social-exchange theory

suggests that the relationships are mediated by reciprocity and reductions in felt obligation (e.g., Balliet & Ferris, 2013). Although belongingness theory is the most frequently invoked explanation of WO (Ferris et al., 2017), strong theoretical rationale and a handful of primary investigations point to self-regulatory resources and social exchange as plausible alternatives (e.g., Leung et al., 2011; Wu et al., 2016; Yan et al., 2014). However, despite sound arguments, there is limited direct evidence to support any of these three mechanisms. Additionally, it remains unclear how they might combine (or whether they do) to impact discretionary behavior. In the current paper I sought answers to fundamental gaps in our understanding of these intermediary processes: Do self-regulatory resource and social exchange mechanisms complement the historically dominant belonging perspective, or do they displace it? Do all three mechanisms operate similarly across outcomes or does it depend on the outcome? What is the relative strength of each mechanism?

In addition to my primary objectives, I also examine WO while simultaneously considering other forms of workplace mistreatment, such as incivility, which are often observed alongside it (Ferris et al., 2017; Howard et al., 2020; Robinson et al., 2013). Previous work has shown significant overlap between these constructs (e.g., Howard et al., 2020: WO and Incivility $\rho = .64$ and WO and other forms of mistreatment $\rho = .69$) and similarities in their nomological networks (Ferris et al., 2017; Schilpzand et al., 2016). Given the conceptual and operational parallels between workplace mistreatment constructs like WO and incivility, these findings are not surprising (Andersson & Pearson, 1999; Ferris et al., 2017). Although arguments supporting WO's ontological distinctiveness (Ferris et al., 2017) and incremental validity have been advanced (e.g., Howard et al., 2020; O'Reilly et al., 2015), other data cast doubt as to whether this is universally the case (e.g., Martin & Hine, 2005). If continued research attention on WO is

warranted, it is important to demonstrate that it is not simply new wine in an old bottle, which I sought to do within the context of WO's relationship with OCB and CWB. Relatedly, because WO, incivility, and other forms of mistreatment have evolved independently, it is unclear whether the intermediary processes for these various constructs overlap or are unique. As but one example, while belongingness theory is the most frequently invoked explanation of WO, it has garnered little interest from incivility researchers (Ferris et al., 2017) or those investigating other forms of mistreatment (Yang et al., 2020). Thus, to further advance WO research, I sought answers to the following questions: Does WO incrementally predict OCB and CWB beyond incivility and other forms of mistreatment? Are the mediational mechanisms similar or unique across these mistreatment constructs within the context of discretionary behavior?

To arrive at robust answers to these fundamental theoretical questions and avoid potential methodological pitfalls of primary studies, I leveraged the advantages of meta-analytic structural equation modelling (MASEM; Becker, 1992; Shadish & Sweeney, 1991; Viswesvaran & Ones, 1995). While the conclusions of primary investigations are limited by research design, operationalizations, sample size, power, and measurement error (Leavitt et al., 2010; Schmidt, 1992), MASEM capitalizes on the entire literature by relying on meta-analyses to obtain the best estimate of each relationship, creating a single meta-analytic correlation matrix, and analyzing the matrix using structural equation modelling (SEM) (Cheung & Chan, 2005). In combining the strengths of meta-analysis with SEM, MASEM allows researchers to utilize latent variables to correct for unreliability and estimate indirect and direct effects of individual mediational mechanisms while simultaneously considering alternative explanations (Cheung & Chan, 2005). The insights derived from MASEM are particularly useful when evaluating the explanatory power of alternative theoretical mechanisms and in uncovering potential theoretical gaps (Bergh

et al., 2016). As such, MASEM is an ideal empirical approach for addressing my research questions and advancing WO theory as it relates to OCB and CWB.

Our work makes several key contributions to the current literature. First, in line with a strong inference approach (Platt, 1964), I sought to concurrently assess alternative theoretical mechanisms that might explain the relationship between WO and discretionary behaviors. Although studies that add novel conceptual mechanisms enrich theoretical conversations, the unnecessary inclusion of intermediary processes undermines parsimony and impedes scientific and practical progress (Edwards, 2010; Pfeffer, 1993). To date, our understanding of WO, OCB, and CWB is hampered by a siloed research approach in which only a single perspective is considered at a time. Such an approach is overly simplistic and creates ambiguity as to whether the addition of new intermediary perspectives adds anything novel beyond a single theory. Moreover, if it is true that multiple intermediary processes are necessary, considering each in isolation results in model misspecification and questionable conclusions. In redressing this issue using MASEM by simultaneously considering alternative mechanisms as well as the potential overlap amongst these mechanisms, my study advances the state of the science. I identify potential boundaries on each theoretical mechanism and shift the conversation towards those intermediary processes that matter most as well as when they matter (Leavitt et al., 2010). In determining the relative merit and interrelationship amongst these mechanisms, my study advances the field towards a more precise understanding of underlying processes, which in turn is necessary when making applied recommendations to practitioners and managers (Williams & MacKinnon, 2008)

Second, in examining WO alongside incivility and other forms of mistreatment, I address ongoing worries regarding WO's redundancy with other mistreatment constructs. There is a

longstanding debate as to whether it is (Tepper & Henle, 2011) or is not (Hershcovis, 2011) beneficial to investigate individual forms of mistreatment. Concerns here center around unnecessary construct proliferation, which, among other problems, threatens the development of useful theories and impedes cumulative knowledge generation (Le et al., 2010). Examining WO, incivility, and other forms of mistreatment on conceptual, operational, and empirical grounds highlights a realistic possibility that it is redundant with other mistreatment constructs. As such, it is not surprising that calls have been made for researchers to conduct comparative studies that simultaneously consider WO with incivility (Ferris et al., 2017) and other forms of mistreatment (Howard et al., 2020). While not intended to settle this debate, in concurrently modeling WO, incivility, and other forms of mistreatment, my findings do inform it. In this respect, evidence for incremental validity bolsters the claim that WO is conceptually (Ferris et al., 2016) and empirically unique and, thus, worthy of independent consideration (Howard et al., 2020).

WO and Belongingness

Research on ostracism and exclusion has grown exponentially over the past 25 years, encompassing both basic psychological and organizational studies (Williams, 2007a; Ferris et al., 2017; Robinson et al., 2013). This interest has paved the way for systematic investigations of WO, which has predominantly been examined from a victim-focused perspective (Howard et al., 2020) and defined as "the extent to which an individual perceives that he or she is ignored or excluded by others at work" (Ferris et al., 2008, p. 1348). Approached in this manner, WO is subjective and characterized by the omission of positive attention, reflecting the absence of normative positive social interactions in the workplace rather than the commission of negative attention (Ferris et al., 2017; Robinson et al., 2017). Notably, although ostracism can in extreme instances be obvious and severe (e.g., banishment), more typically WO lacks clear intent on the

part of a perpetrator (e.g., avoiding eye contact), which renders victims uncertain as to both why and whether it has occurred (Williams, 1997; Robinson et al., 2013).

Conceptually, WO can be differentiated from workplace mistreatment and incivility, two concepts with which it shares theoretical and operational overlap (Ferris et al., 2017; Robinson et al., 2013). Mistreatment is defined as "any interpersonal situation in which an employee initiates counter-normative negative actions or desists normative positive actions towards an employee" (p. 3, Howard et al., 2020), while incivility refers to low intensity social interactions that violate workplace norms of respect but are performed with ambiguous intent (Andersson & Pearson, 1999; Blau & Andersson, 2005). Following upon prior work, I consider their interrelationships as nested (Ferris et al., 2017; Howard et al., 2020; Robinson et al., 2013). At the broadest level, incivility and WO are related forms of mistreatment that share overlapping features. Both WO and incivility are relatively common and encompass low intensity negative counternormative behaviors that are ambiguous in their intent to harm (Schipzand et al., 2016). This distinguishes them from more rare, intense, and less ambiguous forms of mistreatment, such as physical assault, explicit racism, and abusive supervision (Ferris et al., 2017). At an operational level, most incivility measures incorporate ostracism, but not all forms of incivility involve ostracism and ostracism is typically conceptualized as a distinct form of incivility. Notably, while incivility entails the commission of overtly rude and disrespectful actions, such as belittling comments or insults, WO is solely characterized by subtle displays of rudeness that omit social interaction, such as being excluded from social events (Ferris et al., 2013; Robinson et al., 2013). Omitting social interactions arguably makes WO more insidious and more harmful to its victims who feel isolated and powerless to prevent it (Ferris et al., 2017).

Indeed, ostracism is universally regarded as an aversive and painful experience for

victims regardless of context or individual differences (Williams & Nida, 2011). Neuroscientific findings have established that ostracism quickly and automatically triggers neural brain signatures associated with physical pain (Eisenberger et al., 2003) and gives rise to intense negative emotional states such as anger, sadness, anxiety, and feelings of worthlessness (Williams, 2009). In fact, seemingly mild and innocuous forms of ostracism, such as being excluded during a virtual ball-toss game, causes significant psychological discomfort and sadness (Hartgerink et al., 2015; Zadro et al., 2004).

Theoretically, ostracism impacts victims because it thwarts fundamental human motivations that regulate group living (Ferris et al., 2017; Williams, 2009), posing a threat to reproductive and survival success according to evolutionary logic (Leary et al., 2013). Specifically, ostracism thwarts humans from fulfilling their fundamental need to belong. Defined as an innate, universal motivation to develop and maintain some minimum number of stable, caring, positive interpersonal relationships and interactions with others (Leary et al., 2013), the need to belong evolved to regulate and facilitate group inclusion and social connection (Baumeister & Leary, 1995). This need drives humans to seek inclusion and foster a sense of belongingness by developing enduring relationships with others. Driven by the need to belong, humans spend a substantial portion of their daily lives interacting, forming bonds, and maintaining relationships with other human beings (Leary et al., 2013). However, ostracism thwarts this fundamental need (Baumeister & Leary, 1995) because it separates the victim from the social group (Williams, 2009), prevents social interactions and connections (Einarsen & Mikkelsen, 2003), and hinders the formation of positive interpersonal relationships (Williams, 2009). Not surprisingly, ostracism diminishes a victim's sense of belonging and creates feelings that one does not fit in (Lambert et al., 2013).

Discretionary Behaviors and WO

Discretionary behaviors, defined as voluntary actions that extend beyond formal job descriptions or organizational policies (Yu et al., 2023), consist of two broad forms: OCB and CWB. OCB are employee behaviors that are not explicitly acknowledged by the formal reward system, but in the aggregate, promotes the organization's effective functioning (Organ, 1988). This encompasses many positive workplace behaviors including, but not limited to, helping (Organ et al., 2006), organizational loyalty (Organ, 1988), and voice (LePine & Van Dyne, 1998). In contrast, CWB are employee behaviors that violate the legitimate interests of the organization or does harm to the organization and/or its stakeholders (Marcus et al., 2016). Like OCB, CWB is an umbrella term that encompasses several workplace behaviors but unlike OCB, CWB are negative actions, such as harassment (Bowling & Beehr, 2006), unethical behavior (Umphress et al., 2010), workplace aggression (Hershcovis et al., 2007), and workplace deviance (Robinson & Bennett, 1995). Despite both being discretionary behaviors, they differ fundamentally. While CWB violates organizational and societal norms governing appropriate employee conduct (Robinson & Bennett, 1995), OCB adheres to informal norms governing appropriate employee behavior (Williams & Anderson, 1991). Empirical research supports their distinction, with meta-analyses finding a moderate negative correlation between the two (ρ = -.32; Dalal, 2005), suggesting they are distinct, orthogonal forms of discretionary behavior.

Research demonstrates the contrasting impact of OCB and CWB on other employees and the organization. For instance, evidence indicates that receiving OCB is associated with positive outcomes, including experiencing more positive affective states (Lyons & Scott, 2012), trust (Halbesleben & Wheeler, 2015), and higher well-being (Mathieu et al., 2019). Moreover, OCB extends significant benefits to organizations, including increased productivity, efficiency,

customer satisfaction, and reduced operational costs as well as employee turnover (Podsakoff et al., 2009). Conversely, CWB is linked to adverse outcomes for recipients and the organization. For example, receiving CWB is associated with experiencing negative emotions (Lyons & Scott, 2012; Scott & Judge, 2013) and diminished well-being (Robinson et al., 2014). For organizations, CWB is associated with higher turnover, as well as lower productivity, customer satisfaction, and profit (Carpenter et al., 2021). Given the detrimental consequences of CWB and benefits of OCB, CWB is widely discouraged while OCB is encouraged within organizations.

Due to the impact of OCB and CWB, and their discretionary nature (Organ & Ryan, 1995), observers pay careful attention to these actions and consider them when forming perceptions of coworkers (Hall et al., 2009). The beneficial outcomes linked to OCB sway coworkers to view OCB actors in a positive light. OCB not only makes other people's jobs easier (Podsakoff et al., 1993) but fosters good relationships with others (Turner & Connelly, 2021) and demonstrates commitment to the organization and group's success. Consequently, employees engaging in OCB are viewed as good citizens (Bolino, 1999; Bolino et al., 2006; Grant & Mayer, 2009) and are well-liked by their peers (Turner & Connelly, 2021) and supervisors (Bolino et al., 2006). This positive perception results in favorable treatment (Deckop et al., 2003), higher performance evaluations, and more rewards (Podsakoff et al., 2009). In contrast, individuals who engage in CWB are perceived poorly due to the harm they inflict. Performing CWB damages interpersonal relationships (Robinson et al., 2014) and hinders organizational success (Carpenter et al., 2021). As a result, CWB actors are viewed as bad apples (Dunlop & Lee, 2004) and are generally disliked (Robinson et al., 2014). This unfavorable perception results in lower performance evaluations (Choi et al., 2019), negative emotional reactions (Weiss & Cropanzano 1996), as well as an escalating cycle of revenge, retaliation, and negative workplace behavior

(Hung et al., 2009; Robinson et al., 2014). Given this, it is surprising that WO victims respond by reducing their OCB (ρ = -.23, Bedi, 2020; ρ = -.24, Howard et al., 2020; ρ = -.26, Li et al., 2021) and increasing their CWB (ρ = .54, Bedi, 2020; ρ = .45, Howard et al., 2020), as such a pattern of behavior likely further hinders their integration into the social fabric of the organization (Fiset et al., 2017). I suggest that such a pattern demands understanding of the intermediary explanatory mechanisms–a topic I turn to next.

Mechanisms Linking WO and Discretionary Behaviors

In the present paper, I consider three possible intermediary mechanisms. First, despite WO and belongingness being conceptually closely intertwined and belongingness serving as the dominant theoretical lens within the broader WO literature, surprisingly little research has examined its role within the context of WO and discretionary behavior (e.g., Fatima et al., 2017; Ferris et al., 2008; O'Reilly et al., 2015; Peng & Zeng, 2017; Wu et al., 2018). Hence, in the current paper I sought to establish belongingness as a key mechanism. Beyond belongingness, I propose two additional mechanisms: social exchange and self-regulatory resources. Below, I elaborate on the conceptual rationale for each of these three mechanisms.

The Dominant Perspective: Belongingness

As highlighted previously, humans possess a fundamental need to belong which induces them to both seek out and maintain high quality, lasting interpersonal relationships with others (Baumeister & Leary, 1995). In line with this, individuals wish not only to maintain their status and position within groups, but also to feel secure and actively participate in group life (Lind & Tyler, 1988). Unsurprisingly, acts of social acceptance and relational valuation signal to an individual that they are important, valued, and accepted group members while acts of social rejection conversely signal the opposite and evoke intense negative feelings of relational

devaluation, isolation, and social rejection (Leary et al., 1995). Given the evolutionary survival value of maintaining social inclusion, intrapsychic mechanisms have evolved to track and monitor levels of social acceptance/rejection, which in line with the literature I refer to here as one's *sense of belonging* (Leary et al., 1995). Theories such as sociometer theory (Leary et al., 1995) and hierometer theory (Mahadevan et al., 2019), for instance, suggest that self-esteem serves this function, signaling to social actors their social value, status, and position within social networks. Indeed, past research shows that real or imagined rejection by others lowers self-esteem while acceptance enhances it (Leary & Baumeister, 2000). Pertinent to the current paper, it has been previously shown that ostracism not only negatively impacts sense of belonging, but also established intrapsychic markers of it, such as self-esteem (Williams & Nida, 2011).

Beyond influencing sense of belonging, direct and indirect evidence has also established that WO decreases prosocial behavior (Twenge et al., 2007) and increases antisocial behavior (Twenge et al., 2001). Numerous individual laboratory studies, for instance, have documented that victims of ostracism engage in aggressive actions against perpetrators; forcing them to consume hot sauce, exposing them to uncomfortable sound blasts, and providing harmful ratings of their employability for a research position to name a few (Twenge et al., 2001; Williams et al., 2002). Meta-analytic summaries of this literature indicate that social rejection potentiates aggressive, antisocial behavior and attenuates prosocial behavior (Quarmley et al., 2022) and as previously noted, direct examinations of discretionary work behavior reveal a negative relationship between WO and OCB and a positive relationship with CWB (Bedi, 2020; Howard et al., 2020; Li et al., 2021). Most commonly these findings are understood as originating from the fact that by its very nature ostracism thwarts a fundamental need to belong, which itself is carefully tracked and registered by victims (i.e., sense of belonging or self-esteem).

When one's sense of belonging is diminished, victim's experience the self and their identity as under attack and concomitantly experience intense emotional distress, frustration, and anger (Leary et al., 2006; Leary et al., 1998). This intense emotional agitation and hostility energizes destructive desires (Frijda, 2007) and motivates behavior that might alleviate these aversive feelings. Indeed, individuals anticipate (Knutson, 2004) and feel pleasure (De Quervain et al., 2004) at the prospect of harming perpetrators of thwarted belonging and frequently do so to validate the self (Baumeister et al., 1996). Beyond this, a diminished sense of belonging reorients the self to that of a peripheral outgroup member with limited enthusiasm to benefit or contribute to the group or its members (De Cremer & Van Knippenberg, 2002; Den Hartog et al., 2007). On the contrary, individuals who experience a sense of belonging, form deep bonds, identify with the group, and view themselves as central, valued group members (Greco et al., 2022). These identification processes assimilate individual identity into group identity, which given the inherent desire to maintain a positive self-image (Greco et al., 2022) and minimize damage to it (Cichocka et al., 2016; Golec de Zavala et al., 2013), leads individuals to act in ways that simultaneously elevate and protect the group and its members as well as limit harm to them (Tajfel & Turner, 1979). Indeed, such individuals would be expected to protect group members from harm (Bernhard et al., 2006; Everett et al., 2015), and display positive prosocial treatment towards them (Tajfel, 1970), such as by cooperating (Balliet et al., 2014) and engaging in various forms of prosocial behavior (Everett et al., 2015). Based on this logic I suggest that belongingness should mediate the relationship between WO and discretionary workplace behaviors (i.e., CWB and OCB).

Hypothesis 1. Belongingness will mediate (a) the relationship between WO and OCB and (b) the relationship between WO and CWB.

Two Alternative Mediational Mechanisms

Although belongingness is the dominant theoretical narrative explaining WO, I propose two additional plausible alternatives, neither of which has received as much consideration within the WO literature: self-regulatory resources and social exchange. Considering these perspectives is crucial because they address the intrapersonal and interpersonal processes triggered by WO. Specifically, while the self-regulatory resources perspective focuses on employees' internal capacity for coping with WO, the social exchange perspective focuses on employees' reciprocal interpersonal relationships. These intrapersonal and interpersonal processes are fundamental components that drive human behavior. Below, I outline my rationale for each of these alternative mechanisms.

Self-Regulatory Resources. One alternative mechanism that can account for the relationship between WO and discretionary workplace behaviors are *self-regulatory resources*, which are humans supply of energy or strength available for modifying one's affect, cognition, or behavior to align with a goal (Baumeister & Vohs, 2007; Baumeister et al., 1998). This perspective argues that individuals draw upon their resources, such as energy, attention, and self-control capacity (Deng et al., 2018; Rosen et al., 2016) to self-regulate (Baumeister & Vohs, 2007). Acts of self-regulation involve exerting self-control, such as resisting temptations, inhibiting impulses, and performing goal consistent behavior (Baumeister et al., 2006; Johnson et al., 2018; Muraven & Baumeister, 2000; Schmeichel & Baumeister, 2004), which consumes the self-regulatory resources people draw upon. These resources are limited as humans possess a finite capacity for cognitive and emotional processing. Consequently, engaging in self-regulation–a resource-consuming activity, leads to depletion (Baumeister et al., 1998) marked by an inability to concentrate, a perceived lack of self-control, and a reduced ability for volitional

action (Hagger et al., 2010). In turn, depleted individuals tend to struggle to perform resource-demanding behavior (Baumeister et al., 1998; Johnson et al., 2018; Muraven & Baumeister, 2000; Vohs et al., 2005).

Research suggests that work-related stressors, such as job demands (e.g., workload, role conflict) and negative workplace events (e.g., mistreatment), deplete self-regulatory resources as employees expend significant emotional and cognitive energy to process and cope with these stressors (Hockey, 1997; Lesener et al., 2019; Reknes et al., 2019; Xu et al., 2015). Drawing upon this logic, I propose that WO drains employees' self-regulatory resources (Baumeister et al., 2002; Baumeister et al., 2005). Individuals who experience ostracism experience sadness and anger (Chow et al., 2008; Williams, 2007b), triggering emotional distress. Indeed, research has found WO to be more distressing than harassment (O'Reilly et al., 2015). More problematic, the distress and pain caused by WO is ambiguous and consumes cognitive and emotional energy. Specifically, ostracized employees engage in sensemaking, dwelling on the uncertainties surrounding the event, questioning its occurrence, contemplating the intentions behind the ostracizer(s)' actions, and interpreting its implications (Ferris et al., 2008; Robinson et al., 2013). I argue that this effortful processing drains WO victims' self-regulatory resources (Steele et al., 2015; Williams, 2007a; Williams, 2007b; Williams, 2009; Wu et al., 2012).

In turn, victims of WO will have a diminished capacity to perform OCB and refrain from CWB. Research indicates that performing prosocial behaviors (Lockwood et al., 2017; Osgood & Muraven, 2015) and inhibiting counternormative impulses (Strucke & Baumeister, 2006) requires self-regulatory resources. OCB is time-consuming (Van Dyne, Cummings, & McLean, 1995) and requires self-control to initiate and sustain it (de Boer, Van Hooft, & Bakker, 2015), thus demanding additional resources beyond those expended on formal job requirements (Rapp,

Bachrach, & Rapp, 2013)–resources that employees may not possess. Refraining from CWB also requires employees to exert self-control to stop themselves from engaging in CWB (de Boer, Van Hooft, & Bakker, 2015), demanding emotional and cognitive resources to resist temptations and inhibit impulses. However, due to resource depletion, victims of WO will lack the necessary resources to initiate and maintain OCB as well as inhibit CWB. Thus, consistent with past research (e.g., Chung, 2018; Riaz et al., 2019; Wu et al., 2016; Zhang et al., 2017), I expect self-regulatory resources to mediate the relationship between WO and OCB and CWB. More precisely, I hypothesize that WO will deplete resources, which in turn will result in a reduction in OCB and increase in CWB.

Hypothesis 2. Resources will mediate (a) the relationship between WO and OCB and (b) the relationship between WO and CWB.

Social Exchange. A second alternative perspective that I propose mediates the relationship between WO and discretionary behaviors is *social exchange*. Broadly, social exchange involves a series of interdependent interactions that produces obligations (Blau, 1964; Emerson, 1976). These obligations are created by obeying "rules" of exchange in social relationships (Cropanzano & Mitchell, 2005), namely the norm of reciprocity (Gouldner, 1960), which states that a person should reciprocate in kind what another person has provided. Consequently, people tend to reciprocate good-with-good (i.e., positive reciprocation) and bad-with-bad (i.e., negative reciprocation) (Gouldner, 1960). Through positive reciprocation, individuals within organizations develop social exchange relationships characterized by mutual trust, loyalty, and commitment, while negative reciprocation harms social exchange relationships, lowering trust, commitment, and exchange quality between parties (Cropanzano & Mitchell, 2005). These social exchange relationships have been studied across a variety of

literatures, including the trust, perceived organizational support, exchange quality (e.g., leader member exchange; LMX), and organizational commitment literatures (Colquitt et al., 2013).

Drawing on social exchange theory, I propose WO can lower the quality of social exchange relationships and diminish feelings of support, trust, and commitment. When an employee is ostracized, the intentions of the ostracizer are often ambiguous (Ferris et al., 2008). Consequently, victims of WO are frequently suspicious of the perpetrators' motives, questioning whether their intentions were to cause harm (Liu, 2019). In turn, victims often become wary and untrusting of the ostracizer. Moreover, being ostracized cuts the employee off from mutually beneficial exchanges with others, such as help and assistance, which are necessary for an employee to feel supported (Ferris et al., 2008) and perceive that the organization and its members care about their well-being and contributions (Eisenberger et al., 1986). Further, in limiting one's interactions with other employees, victims of WO will be restricted in their opportunity to develop high quality social exchange relationships (Chung, 2020; Green & Uhl-Bien, 1995). Indeed, victims of WO may resent their coworkers and the organization for the mistreatment (Howard et al., 2020) and detach themselves from their organization (Zheng et al., 2016) and thereby invest little effort in developing social exchange relationships in the workplace.

In turn, WO victims will likely reciprocate in kind by reducing or refusing to perform OCB, or engaging in CWB (Robinson et al., 2014). Because WO causes harm to the victim, an imbalance to the exchange relationship can be created if the mistreatment is not reciprocated (Cropanzano et al., 2017). Such an imbalance can cause distress (van dem Knesebeck & Siegrist, 2003), thereby motivating individuals to alleviate this imbalance (Bies & Tripp, 2001) by causing harm to the perpetrators of the ostracism. Specifically, to repay the negative treatment

and balance the exchange, victims of WO may engage in CWB, or reduce OCB, as CWB directly harms (e.g., theft, sabotage), and reducing OCB indirectly harms (e.g., lower productivity; Podsakoff et al., 2009), other employees and the organization. Repaying the negative treatment can right a perceived harm and restore equity (Bies & Tripp, 2001; Greco et al., 2019) and victims may feel satisfaction and enjoyment from retaliating (Knutson, 2004; Tripp et al., 2002). Therefore, consistent with the important but limited literature adopting this perspective (e.g., Wu et al., 2016), I expect social exchange will explain why victims of WO perform less OCB and more CWB. In particular, I hypothesize that:

> *Hypothesis 3.* Exchange will mediate (a) the relationship between WO and OCB and (b) the relationship between WO and CWB.

Two Models for the Mediating Effects

Simultaneous Competing Mechanism Model

Thus far, I have suggested that although belongingness is the dominant perspective, resources and exchange offer conceptually plausible and compelling alternatives. However, whether exchange and resources perspectives mediate beyond belongingness, as well as their relative importance, remains uncertain. As highlighted previously, theoretically, each mechanism emerges from a different theoretical paradigm and are commonly viewed as representing distinct, independent, psychological processes. Belongingness theory emphasizes the need for social connection and inclusion and draws upon need fulfillment, social exchange theory focuses on reciprocal relationships and exchanges, and the self-regulatory resource perspective highlights the limited capacity for self-control and cognitive processing. Based on their conceptual distinctiveness, I suggest that resources and exchange should explain the association between WO and discretionary behaviors above and beyond belongingness. However, given past work

suggests that belongingness is the dominant intermediary process underlying WO, I suggest that it should be the strongest explanatory account. Specifically, I hypothesize that:

Hypothesis 4: (a) Belongingness, (b) resources and (c) exchange will uniquely explain the relationship between WO and OCB in a competing mechanism model.

Hypothesis 5: a) Belongingness, (b) resources and (c) exchange will uniquely explain the relationship between WO and CWB in a competing mechanism model.

Hypothesis 6: Belongingness will serve as the strongest explanation of (a) the relationship between WO and OCB, and (b) the relationship between WO and CWB.

Sequential Mediation Model

While simultaneously pitting competing mechanisms can reveal the unique role of each mediator, it is theoretically feasible that the three mechanisms combine to explain the effect of WO. In this respect, I suggest that the indirect effect of WO on discretionary behavior via belongingness might itself be mediated by social exchange and self-regulatory resources (i.e., sequential mediation). By its very nature ostracism thwarts belonging and laboratory studies manipulating belonging frequently do so by manipulating ostracism. As such, it seems theoretically reasonable to consider belongingness as the most proximal consequence of WO. Moreover, as previously highlighted, sense of belonging should affect trust, loyalty, and mutually beneficial social interactions (Baumeister & Leary, 1995), which foster social exchange relationships. Employees feeling a diminished sense of belonging due to WO will experience low trust and loyalty towards the workgroup that mistreated them, they may detach themselves from the workgroup and organization (c.f., Baumeister & Leary, 1995), actions that likely undermine the development of social exchange relationships. Moreover, the diminished feelings of belonging caused by WO produces anxiety and distress (Baumeister & Leary, 1995), which,

drawing on my previous logic, should deplete regulatory resources. Given the above I suggest that rather than simply serving as independent competing mechanisms, it is intuitively plausible that the three mechanisms can be integrated into a sequential mediation framework. Thus, I propose a serial indirect effect between WO and discretionary behaviors.

Hypothesis 7: There will be a serial indirect effect of WO on OCB via (a) belongingness and then resources and (b) belongingness and then exchange.

Hypothesis 8: There will be a serial indirect effect of WO on CWB via (a) belongingness and then resources and (b) belongingness and then exchange.

Controlling for Other Mistreatment Constructs

WO is often contrasted with workplace incivility (Ferris et al., 2017) and other mistreatment constructs (Howard et al., 2020). As mentioned previously, WO is often regarded as a specific type of workplace incivility (Ferris et al., 2017; Howard et al., 2020), but WO only involves the absence of positive behavior while incivility also includes the presence of negative behavior, such as making demeaning remarks. Both WO and workplace incivility are forms of workplace mistreatment, with WO and incivility falling under the low-intensity subtle end of the mistreatment spectrum while more direct intense forms–such as sexual harassment and physical assault–stand at the opposite extreme (Ferris et al., 2017). These distinctions position WO as similar yet distinct from both workplace incivility and other forms of mistreatment. To examine the unique influence of WO, I examined its impact controlling for experienced incivility as well as other forms of mistreatment. Based on prior theoretical work (e.g., Ferris et al., 2017) and empirical findings (e.g., Howard et al., 2020) that suggest that WO is a unique form of mistreatment, I anticipated that these controls would not impact on my findings.

Method

Literature Search

We conducted a comprehensive search for primary studies on February 10, 2020 using Scopus, PsycINFO, Web of Science, and ABI/Inform Global databases. Keywords included ostraci*, rejection, exclusion, social exclusion, alienation, marginalization, and shunning, each of which was paired with a workplace-related keyword, such as work*, coworker, leader*, manag*, supervis*, subordinate, organization*, and employe*. I also searched for articles that cited Ferris et al.'s (2008) article introducing the WO scale to the literature, as well as articles that were included in recently published meta-analyses (i.e., Bedi, 2020; Howard et al. 2020). To obtain unpublished data, I searched ProQuest's Dissertation and Theses with the phrase "workplace ostracism". The search yielded 9342 records. In total, 6526 records remained after removing duplicates. Following this, the author and a trained coder screened out articles that did not mention WO in the abstract or title (n = 4621) to ensure that the coded studies were written on the topic of WO.

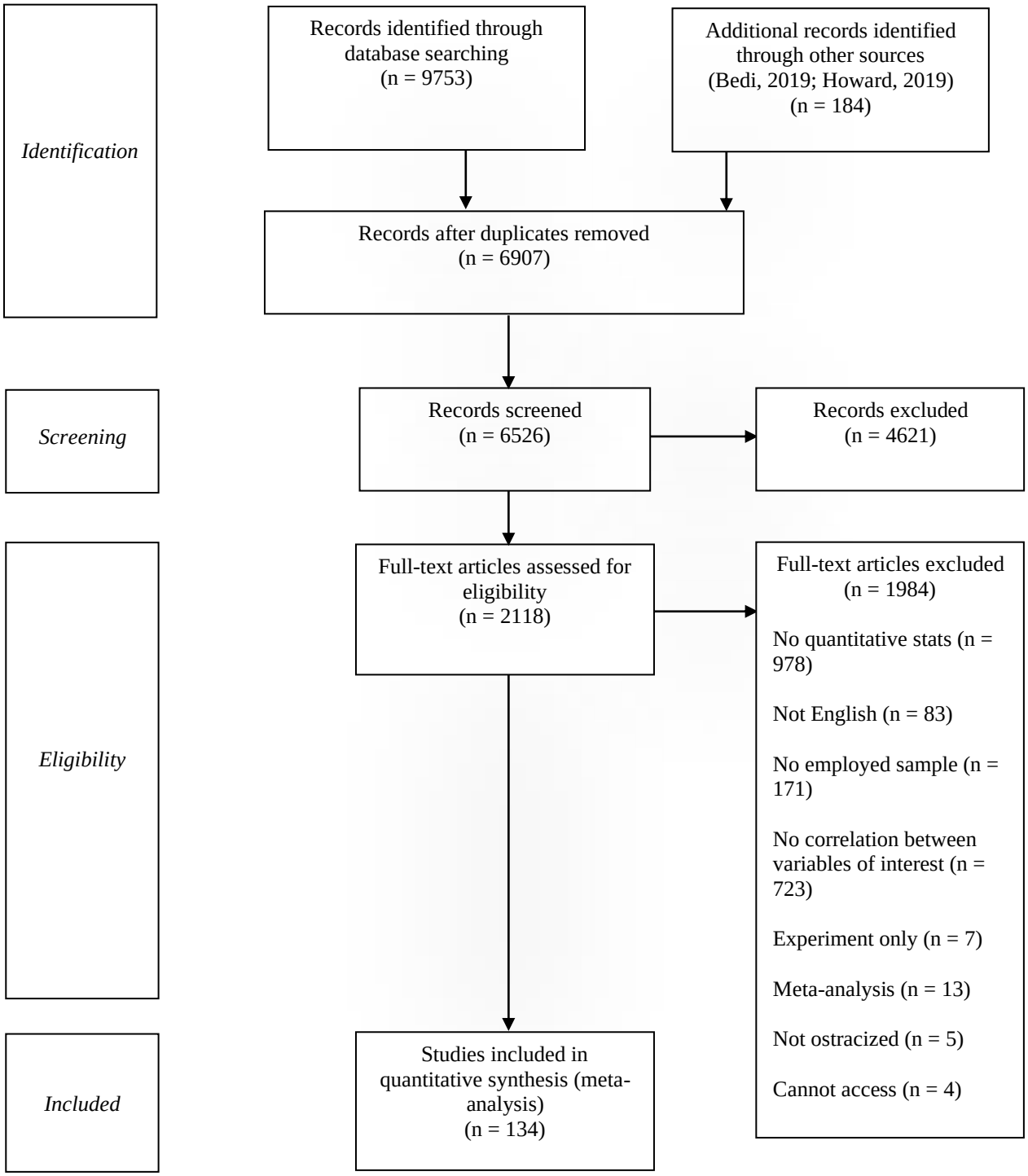
While WO was the primary focus of my meta-analysis, my analyses required me to assess additional effects that were not fully addressed by using WO as the focus of my search. Consequently, I had to conduct an additional search to estimate the relationship between belongingness and mistreatment. The search was conducted on April 7, 2021, using ABI/Inform Global databases and Proquest's Dissertation and Theses with the phrase, "belonging" paired with a mistreatment-related word (i.e., "abusive supervision", "incivility", "bullying", "discrimination", "harassment", "interpersonal conflict, "aggression"). The search yielded 411 records, with 381 remaining after removing duplicates. The author and a trained coder screened out articles that did not mention belongingness or mistreatment in the title or abstract (n = 168)

to ensure the coded studies were on the topic of belonginess and mistreatment.

Criteria for Inclusion

The remaining 2118 articles were assessed for eligibility. Studies were included if the article was written in English, the participants were employed, and the study reported or contained enough information to calculate a zero-order correlation between my variables of interest. In total, 134 papers (162 studies) met these criteria and were included (see Figure 1).

Figure 1. Flow Chart of Literature Search, Screening, and Eligibility Assessment



Coding

The author and a trained coder created a coding manual that outlined the inclusion/exclusion criteria (i.e., criteria for inclusion described above and variable information described in the next subsection). Afterwards, the author and the trained coder randomly selected ten articles, coded each article independently using the coding manual, and then met to discuss the codes extracted to ensure common understanding of the manual. Then the author and the trained coder independently coded the remaining articles. The effect size, sample size, and reliabilities were recorded. Studies that reported a correlation between WO and a variable of interest at the aggregated (e.g., OCB comprised of OCBI and OCBO) or subfacet level (e.g., OCB-I) were recorded. If the same variable was assessed at different timepoints, we recorded the correlation in the temporal order consistent with the models (e.g., WO at Time 1 and OCB at Time 2). The ICC(2) was .94, $p < .001$, suggesting excellent interrater reliability (Bliese, 2000). We resolved any disagreements through discussion.

Variables

Predictor. *WO* is the extent to which an employee perceives they are excluded or ignored by other organizational members (Ferris et al., 2008). Studies measuring WO were coded. For studies that investigated a similar construct (e.g., workplace bullying), the measure was reviewed and compared with the definition of WO to determine inclusion. For example, studies that investigated workplace bullying as measured via the Negative Acts Questionnaire-Revised (Einarsen et al., 2009) were excluded because less than 15% of the items captured WO, but studies that measured linguistic ostracism (i.e., ostracism due to not speaking or understanding the same language as other organizational members) were included as it is a subfield of WO (Ferris et al., 2017). Furthermore, because employees can be ostracized from any organizational

member (Ferris et al., 2008), studies that investigated a specific source of ostracism (e.g., supervisor ostracism) were coded. Studies that measured anticipated levels of WO were not included, such as how much ostracism employees expect they will experience in the future.

Control Variables. *Workplace incivility* is low intensity social interactions that violate workplace norms of respect but have ambiguous intent (Andersson & Pearson, 1999; Blau & Andersson, 2005); studies that measured workplace incivility were coded. *Other forms of mistreatment* included any other mistreatment construct, such as abusive supervision, harassment, and physical aggression.

Outcomes. OCB is employee behaviors that contribute to the effective functioning of organizations and facilitate the social and psychological environment within the organization (Organ, 1997; Organ et al., 2006). Studies that measured subfacets of OCB (e.g., OCB-O, altruism) and OCB at the aggregate level were coded, but studies measuring OCB intentions were not. *CWB* refers to any volitional employee behavior that violates the legitimate interests of the organization or does harm to the organization and/or its stakeholders (Gruys & Sackett, 2003; Marcus et al., 2016). Studies that measured CWB at the subfacet (e.g., interpersonal deviance, CWB-O, social undermining) or aggregated level (e.g., CWB, workplace deviance) were coded.

Mediators. Employee's *belongingness* was defined as the extent to which they feel connected, have formed high quality and lasting relationships with others, and consider themselves a member of a group (Baumeister & Leary, 1995). Studies that measured satisfaction/thwarted belongingness needs were coded, as well as studies that measured self-esteem because belongingness is tracked by self-esteem (Leary, 2005; Leary, 2012; Leary & Baumeister, 2000; Leary et al., 1995). Self-regulatory *resources* are the supply of energy or strength available for modifying one's affect, cognition, or behavior to facilitate goal attainment

(Baumeister & Vohs, 2007; Baumeister et al., 1998). Studies that measured self-regulatory resources, such as emotional exhaustion, burnout, sleep, well-being, and energy were coded. *Social exchange* involves interdependent interactions that produces obligations (Blau, 1964; Emerson, 1976) and high-quality interpersonal relationships characterized by mutual trust, loyalty, and commitment (Cropanzano & Mitchell, 2005). Studies that measured indicators of social exchange relationships were coded (Colquitt et al., 2013), including support, leader-member exchange, and organizational commitment.

Data Analysis

We adopted a random-effects model (Hunter & Schmidt, 2004) to calculate the meta-analytic estimates, correcting for sampling and measurement error. I corrected each effect size individually for unreliability in the predictor and criterion measures using reliability information reported by each study (i.e., Cronbach's alpha). For studies with missing reliabilities[1] (k = 7 for WO, k = 3 for resources, k = 4 for exchange, and k = 4 for OCB), I inputted the average reliability for that construct; average α was .89 for WO, .74 for resources, .83 for exchange, and .79 for OCB, which were based on 148, 70, 65, and 41 independent samples that had reliability information, respectively. If a study reported multiple correlations for the same relationship, such as the correlation between WO and two types of OCB (e.g., OCBI, OCBO), I calculated an equally-weighted composite correlation and the composite's reliability (see Hunter & Schmidt, 2004 for formulas). Using these newly calculated effect sizes and reliabilities allowed me to ensure the samples were independent in the final estimates of the "true" correlations.

Using MASEM, I tested all the theoretical perspectives in a single model, which allowed

[1] Note, studies measuring CWB, incivility, or other mistreatment constructs did not have missing reliability information.

me to consider their intercorrelations. Considering the intercorrelations allowed me to isolate the unique effect of each mechanism, allowing me to test Hypotheses 4 through 6. I computed a pooled meta-analytic correlation matrix that included all the variables of interest that was analyzed using MPlus 8.4 (see Table 1). The correlation matrix was used to estimate the path coefficients in the model. As each meta- analytic estimate utilized a different sample size, I used the harmonic mean of all relationships in the correlation matrix when testing the path model (Viswesvaran & Ones, 1995).

Results

Table 1 shows the meta-analytic correlation matrix. I found a significant positive correlation between WO and CWB (ρ = .46, k = 61, 95% CI [.39, .53]), and significant negative correlations between WO and OCB (ρ = -.26, k = 38, 95% CI [-.32, -.21]), and CWB and OCB (ρ = -.44, k = 19, 95% CI [-.51, -.36]). WO had a significant positive correlation with incivility (ρ = .66, k = 11, 95% CI [.53, .80]) and other mistreatment (ρ = .68, k = 29, 95% CI [.60, .77]). I also found significant positive correlations between belongingness and social exchange (ρ = .50, k = 8, 95% CI [.37, .62]), belongingness and self-regulatory resources (ρ = .51, k = 5, 95% CI [.43, .59]), and exchange and resources (ρ = .45, k = 20, 95% CI [.31, .60]). These findings align with other meta-analyses reporting the correlation between WO and OCB (ρ = -.23, Bedi, 2020; ρ = -.24, Howard et al., 2020; ρ = -.26, Li et al., 2021), WO and CWB (ρ = .54, Bedi, 2020; ρ = .45, Howard et al., 2020),WO and incivility (ρ = -.64, Howard et al., 2020), WO and other mistreatment (ρ = -.69, Howard et al., 2020), OCB and CWB (ρ = -.51, Colquitt et al., 2013; ρ = -.32, Dalal, 2005), and resources and exchange (ρ = .43, Liang et al., 2022).

Table 1. Meta-Analytic Correlation Matrix

Variable	1	2	3	4	5	6	7	8
1. Workplace ostracism								
k (*N*)								
$\overline{r}$ (SD_r)								
ρ (SD_ρ)								
95% CI								
80% CV								
2. Incivility								
k (*N*)	11 (2103)							
$\overline{r}$ (SD_r)	.58 (.16)							
ρ (SD_ρ)	.66 (.22)							
95% CI	[.53, .80]							
80% CV	[.38, .94]							
3. Other Mistreatment								
k (*N*)	29 (10202)	6 (1403)						
$\overline{r}$ (SD_r)	.60 (.22)	.62 (.13)						
ρ (SD_ρ)	.68 (.23)	.81 (.17)						
95% CI	[.60, .77]	[.67, .96]						
80% CV	[.38, .98]	[.59, 1.03]						
4. Belongingness								
k (*N*)	9 (4598)	3 (1023)	3 (2481)					
$\overline{r}$ (SD_r)	-.39 (.28)	-.36 (.13)	-.37 (.07)					
ρ (SD_ρ)	-.44 (.34)	-.44 (.22)	-.42 (.09)					
95% CI	[-.67, -.22]	[-.71, -.18]	[-.53, -.31]					
80% CV	[-.88, -.01]	[-.73, -.16]	[-.53, -.31]					

5. Resources							
k (*N*)	61 (15249)	8 (1538)	12 (4327)	5 (2457)			
$\overline{r}$ (SD_r)	-.35 (.15)	-.41 (.05)	-.38 (.13)	.44 (.06)			
ρ (SD_ρ)	-.42 (.18)	-.49 (.07)	-.46 (.18)	.51 (.08)			
95% CI	[-.47, -.37]	[-.56, -.42]	[-.57, -.36]	[.43, .59]			
80% CV	[-.65, -.19]	[-.58, -.40]	[-.70, -.23]	[.41, .62]			
6. Exchange							
k (*N*)	55 (14323)	6 (1460)	12 (5017)	8 (2760)	20 (5680)		
$\overline{r}$ (SD_r)	-.32 (.19)	-.37 (.20)	-.33 (.18)	.41 (.13)	.36 (.25)		
ρ (SD_ρ)	-.37 (.20)	-.44 (.25)	-.40 (.24)	.50 (.17)	.45 (.32)		
95% CI	[-.43, -.32]	[-.65, -.23]	[-.54, -.26]	[.37, .62]	[.31, .60]		
80% CV	[-.63, -.12]	[-.76, -.11]	[-.71, -.09]	[.16, .83]	[.04, .86]		
7. OCB							
k (*N*)	38 (9997)	2 (464)	5 (962)	5 (1959)	14 (3774)	17 (4089)	
$\overline{r}$ (SD_r)	-.22 (.14)	-.20 (.10)	-.22 (.12)	.33 (.13)	.26 (.15)	.26 (.12)	
ρ (SD_ρ)	-.26 (.16)	-.23 (.14)	-.27 (.10)	.43 (.19)	.32 (.18)	.32 (.14)	
95% CI	[-.32, -.21]	[-.45, -.01]	[-.38, -.16]	[.26, .61]	[.22, .42]	[.25, .40]	
80% CV	[-.47, -.06]	[-.41, -.04]	[-.40, -.14]	[.19, .68]	[.09, .56]	[.14, .50]	
8. CWB							
k (*N*)	61 (16312)	7 (1857)	16 (5080)	5 (1518)	20 (4427)	20 (5750)	19 (3914)
$\overline{r}$ (SD_r)	.38 (.22)	.47 (.13)	.32 (.31)	-.25 (.22)	-.36 (.22)	-.24 (.14)	-.37 (.15)
ρ (SD_ρ)	.46 (.27)	.57 (.15)	.37 (.41)	-.30 (.28)	-.43 (.31)	-.28 (.20)	-.44 (.15)
95% CI	[.39, .53]	[.45, .69]	[.17, .58]	[-.56, -.05]	[-.57, -.29]	[-.38, -.19]	[-.51, -.36]
80% CV	[.12, .80]	[.38, .76]	[-.15, .90]	[-.66, .05]	[-.83, -.03]	[-.56, -.03]	[-.63, -.24]

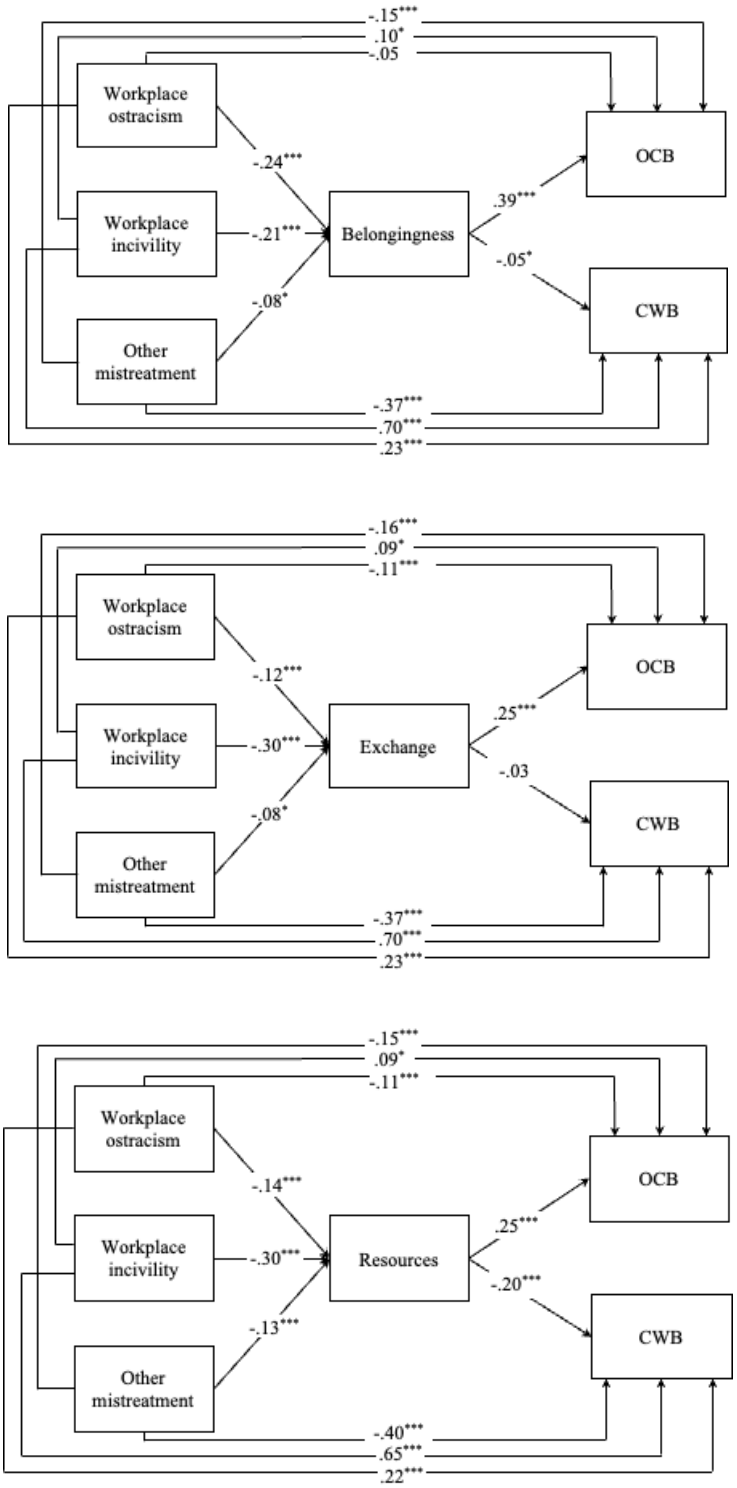
Note. *k* = number of independent samples; *N* = sample size; $\overline{r}$ = sample size-weighted mean uncorrected correlation; SD_r = standard deviation of uncorrected correlation; ρ = mean correlation corrected for sampling error and unreliability in predictor and criterion; SD_ρ = standard deviation of corrected correlation; CI = confidence interval; CV = credibility interval.

Next, I entered WO, incivility, other mistreatment, and discretionary behaviors with each mediator into their own separate models to test how well each mediator explains the relationship between WO and discretionary behavior without accounting for the shared variance between mediators using MASEM (Hypotheses 1 through 3). The harmonic Ns for models with belongingness, self-regulatory resources, and exchange relationships as mediators were 1786, 2121, and 2141, respectively, and the path models are presented in Figure 2.

Hypothesis 1 predicted that belongingness will mediate (a) the effect of WO on OCB and (b) the effect of WO on CWB. I found that controlling for other mistreatment constructs, WO had a significant negative effect on belonging (*b* = -.24, 95% CI [-.30, -.19]), and belonging had a significant positive effect on OCB (*b* = .39, 95% CI [.34, .43]) and a significant negative effect on CWB (*b* = -.05, 95% CI [-.09, -.01]). Belongingness significantly mediated the effect of WO on OCB (*b* = -.09, 95% CI [-.12, -.07]) and CWB (*b* = .01, 95% CI [.01, .02]), which supports Hypothesis 1a and 1b. Hypothesis 2 predicted that resources will mediate (a) the effect of WO on OCB and (b) the effect of WO on CWB. WO had a significant negative effect on resources (*b* = -.14, 95% CI [-.19, -.09]), and resources had a significant positive effect on OCB (*b* = .25, 95% CI [.20, .29]) and a significant negative effect on CWB (*b* = -.20, 95% CI [-.24, -.17]). Resource significantly mediated the effect of WO on OCB (*b* = -.03, 95% CI [-.05, -.02]) and CWB (*b* = .03, 95% CI [.02, .04]), which supports Hypotheses 2a and 2b. Hypothesis 3 predicted that exchange will mediate (a) the effect of WO on OCB and (b) the effect of WO on CWB. There was a significant negative relationship between WO and exchange (*b* = -.12, 95% CI [-.18, -.07]), and exchange had a significant positive effect on OCB (*b* = .25, 95% CI [.21, .30]) but the effect of exchange on CWB was not significant (*b* = -.03, 95% CI [-.07, .01]). Thus, exchange significantly mediated the effect of WO on OCB (*b* = -.03, 95% CI [-.05, -.02]), but not on CWB

(*b* = .01, 95% CI [-.01, .01]). Thus, Hypotheses 3a was supported but 3b was not. Together, these findings suggest that for the most part, each mechanism independently explains the relationship between WO and discretionary behavior. However, it is important to note that the direct effect of WO on OCB and CWB largely remained significant across these various analyses, which suggests that multiple mechanisms may be at play. Next, I modelled multiple mechanisms in a competing mechanism model and following this, I tested my proposed serial mediation model.

Figure 2. Explaining WO-Discretionary Behaviors with Mediators in Separate Models



Note. Belonging mediation model harmonic N = 1786; exchange mediation model harmonic N = 2121; and resources mediation model harmonic N = 2141. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Two Models for the Mediating Effects

Competing Mechanism Model

We sought to test the extent to which the various mechanisms mediated the effect of WO when examined simultaneously in a single model. I entered WO, incivility, mistreatment, all mediators, and discretionary behaviors into one model using MASEM with a harmonic N of 2303 (see Figure 3), which allowed me to test Hypotheses 4 through 6.

Hypothesis 4a and Hypothesis 5a predicted that belongingness will uniquely explain the relationship between WO and OCB and the relationship between WO and CWB in a competing mechanism model, respectively. I found that after controlling for other mistreatment constructs, WO had a significant negative effect on belonging (b = -.24, 95% CI [-.29, -.19]), belonging had a significant positive effect on OCB (b = .31, 95% CI [.27, .35]) but the effect of belonging on CWB was not significant (b = .02, 95% CI [-.02, .06]). Thus, the indirect effect of WO on OCB via belongingness was significant (b = -.08, 95% CI [-.09, -.06]), but belongingness did not significantly mediate the relationship between WO and CWB (b = -.01, 95% CI [-.01, .01]), which supports Hypothesis 4a but not Hypothesis 5a.

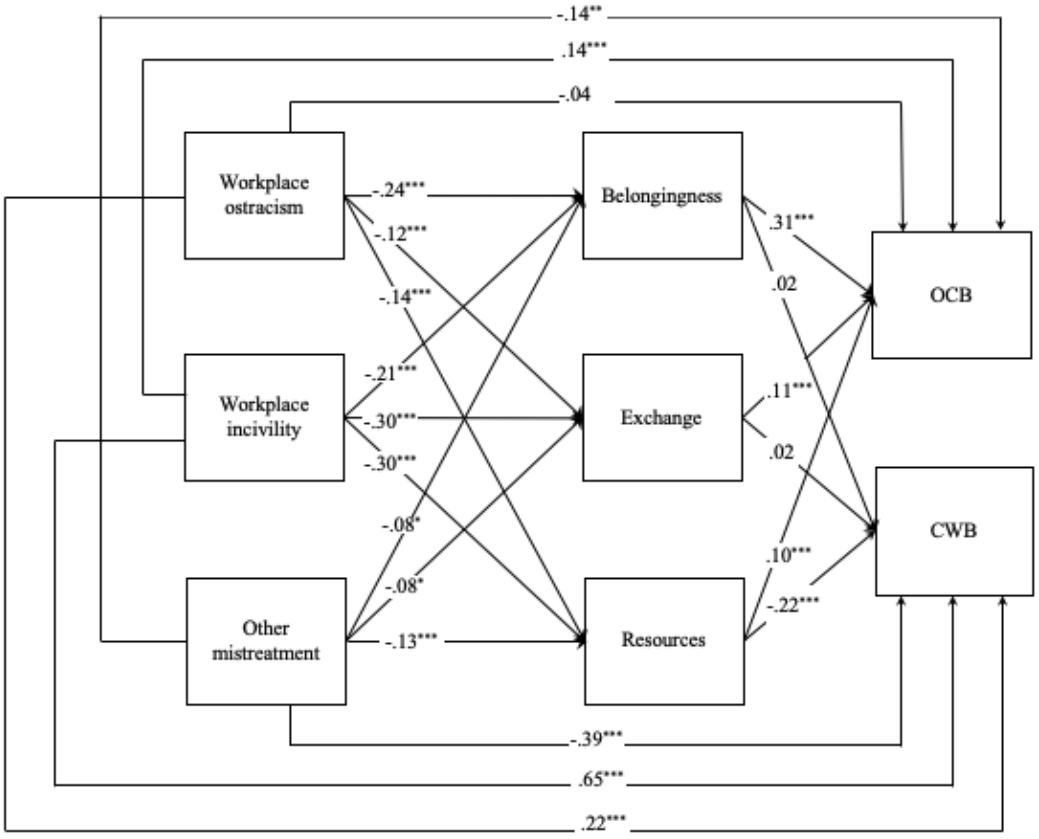
Hypothesis 4b and Hypothesis 5b predicted that resources will uniquely explain the relationship between WO and OCB and the relationship between WO and CWB in a competing mechanism model, respectively. After controlling for other mistreatment constructs, I found a significant negative effect of WO on resources (b = -.14, 95% CI [-.19, -.09]), a significant positive effect of resources on OCB (b = .10, 95% CI [.06, .14]) and a significant negative effect of resources on CWB (b = -.22, 95% CI [-.25, -.18]). Resources mediated the effect of WO on OCB (b = -.02, 95% CI [-.02, -.01]) and the effect of WO on CWB (b = .03, 95% CI [.02, .04]). which supports Hypothesis 4b and 5b.

Hypothesis 4c and Hypothesis 5c predicted that exchange will uniquely explain the relationship between WO and OCB and the relationship between WO and CWB in a competing mechanism model, respectively. After controlling for other mistreatment constructs, I found the negative effect of WO on exchange was significant (*b* = -.12, 95% CI [-.17, -.07]), exchange had a significant positive effect on OCB (*b* = .11, 95% CI [.07, .15]) but the effect of exchange on CWB was not significant (*b* = .02, 95% CI [-.02, .06]). Thus, exchange significantly mediated the impact of WO on OCB (*b* = -.01, 95% CI [-.02, -.01]), but not the impact of WO on CWB (*b* = -.02, 95% CI [-.01, .01]), supporting Hypothesis 4c but not 5c.

These results indicate that with all mediators entered in the same model, all three mechanisms uniquely explained the relationship between WO and OCB. Thus, social exchange and self-regulatory resources explained the relationship between WO and OCB above and beyond belongingness. However, for CWB, only self-regulatory resources significantly explained the relationship between WO and CWB, and belongingness did not operate as a significant mediator. These results suggest that whether both social exchange and resources offer unique explanations above and beyond belongingness, and whether belongingness serves as a significant explanation, depends on the form of discretionary behavior. These findings underscore the importance of considering multiple perspectives in the same model, as perspectives that previously explained the relationship between WO and discretionary behaviors may be no longer significant after accounting for their shared variance with other perspectives. Next, I sought to test Hypothesis 6, which predicted that belongingness would serve as the strongest explanation of (a) the relationship between WO and OCB, and (b) the relationship between WO and CWB. To test this hypothesis, I compared the three indirect effects to identify the strongest mechanism. For OCB, I found that the indirect effect of WO on OCB via

belongingness was significantly different from the indirect effect via resources (IE difference = -.06, 95% CI [-.08, -.04]) and exchange (IE difference = -.06, 95% CI [-.08, -.05]), but the indirect effect via resources was not significantly different than the indirect effect via exchange (IE difference = .00, 95% CI [-.01, .01]). These difference tests, along with the magnitude of the indirect effects (see Figure 3), suggest that belonging provided the strongest explanation of the relationship between WO and OCB, followed by both resources and exchange tied as second. Thus, Hypothesis 6a was supported. A similar analysis was not conducted for CWB because only self-regulatory resources explained the relationship between WO and CWB, suggesting that Hypothesis 6b was not supported.

Figure 3. Competing Mechanism Model

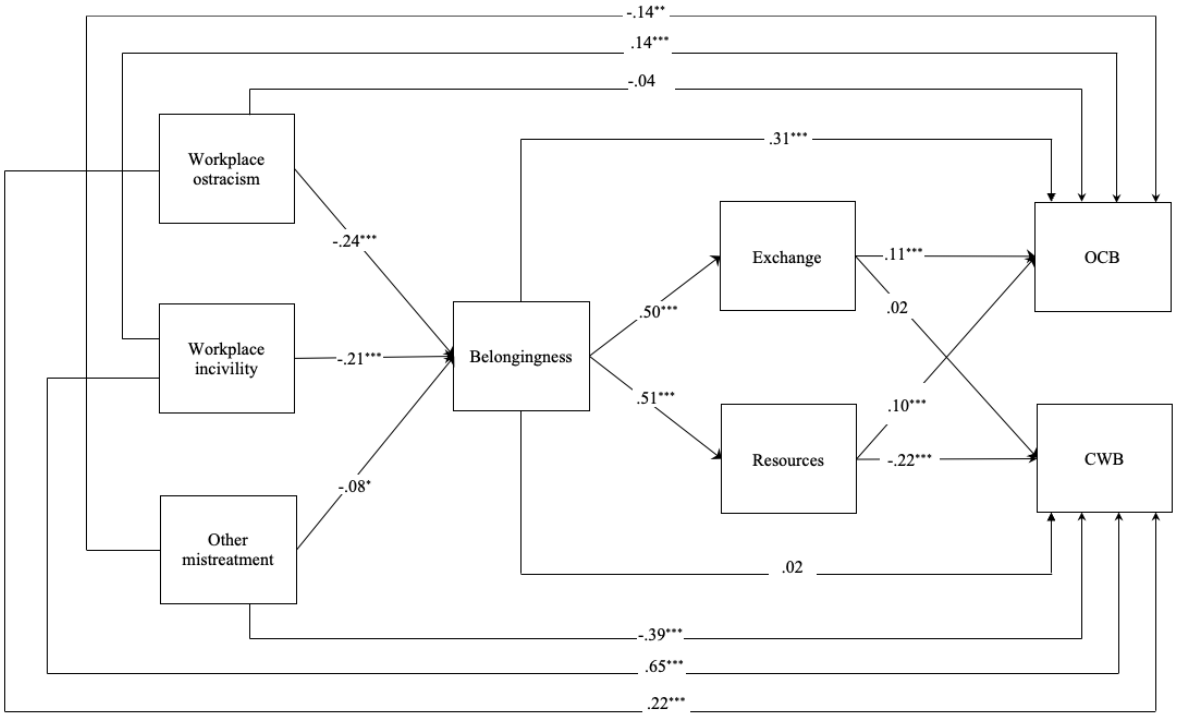


Note. Harmonic N = 2303. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Serial Mediation Model

Next, I sought to test the serial mediation model. I regressed OCB and CWB on social exchange and self-regulatory resources, then regressed social exchange and self-regulatory resources on belongingness, and then belongingness on WO, incivility and other mistreatment using a harmonic N of 2303 and testing Hypothesis 7 and 8 (see Figure 4). Hypothesis 7 predicted there would be a serial indirect effect of WO on OCB via (a) belongingness and then resources and (b) belongingness and then exchange. Controlling for other mistreatment constructs, I found the indirect effect of WO on OCB was significantly mediated by belongingness and resources (b = -.01, 95% CI [-.02, -.01]) and by belongingness and exchange quality (b = -.01, 95% CI [-.02, -.01]), which supports Hypothesis 7a and 7b. Hypothesis 8 predicted there would be a serial indirect effect of WO on CWB via (a) belongingness and then resources and (b) belongingness and then exchange. Controlling for other mistreatment constructs, I found the indirect effect of WO on CWB was significantly mediated by belongingness and resources (b = .03, 95% CI [.02, .03]), but not belongingness and exchange (b = -.01, 95% CI [-.01, .01]), which supports Hypothesis 8a but not 8b.

Figure 4. Serial Mediation Model



Note. Harmonic N of 2303. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Table 2 shows a summary of whether my hypotheses were supported.

Table 2. Summary of Hypothesis Testing

Hypothesis	Supported?
1a: Belongingness will mediate the effect of WO on OCB	Supported
1b: Belongingness will mediate the effect of WO on CWB	Supported
2a: Resources will mediate the effect of WO on OCB	Supported
2b: Resources will mediate the effect of WO on CWB	Supported
3a: Exchange will mediate the effect of WO on OCB	Supported
3b: Exchange will mediate the effect of WO on CWB	Not supported
4a: Belongingness will uniquely explain the effect of WO on OCB	Supported
4b: Resources will uniquely explain the effect of WO on OCB	Supported
4c: Exchange will uniquely explain the effect of WO on OCB	Supported
5a: Belongingness will uniquely explain the effect of WO on CWB	Not supported
5b: Resources will uniquely explain the effect of WO on CWB	Supported
5c: Exchange will uniquely explain the effect of WO on CWB	Not supported
6a: Belonging will be the strongest explanation of the WO-OCB link	Supported
6b: Belonging will be the strongest explanation of WO-CWB link	Not supported
7a: Belonging and resources will serially mediate the WO-OCB link	Supported
7b: Belonging and exchange will serially mediate the WO-OCB link	Supported
8a: Belonging and resources will serially mediate the WO-CWB link	Supported
8b: Belonging and exchange will serially mediate the WO-CWB link	Not supported

Supplemental Analyses

We conducted several supplemental analyses to highlight the similarities and differences between WO and other forms of mistreatment, as well as to demonstrate the robustness of my findings. In Appendix A, I show how the relative importance of the mediators is similar and differs for other mistreatment constructs. Appendix B tests the target of the discretionary behavior as a moderator of the indirect effects. The remaining analyses in Appendix C through E show my focal findings are largely robust. Specifically, I demonstrate my results are largely

robust when I test the mediating effects separately for OCB and CWB, removing mistreatment controls (Appendix C). Additionally, I show my results are largely consistent when I do not control for other mistreatment constructs in the single mechanism, competing mechanism, and serial mediation models (Appendix D). Also, given that the number of studies used to estimate of rho for the relationship between experienced incivility and OCB did not meet the recommended minimum of 2, I inputted an estimate of rho for this relationship from the published literature, and again, my results did not change (Appendix E).

Discussion

Recent meta-analyses indicate that victims of WO tend to perform fewer OCB and more CWB (Bedi, 2020; Howard et al., 2020; Li et al., 2021). Paradoxically, rather than act in ways to improve their inclusion in the workplace, victims of WO act in a manner that will likely further harm their social acceptance. As such, I investigated the reasons why WO relates to discretionary workplace behaviors. One dominant perspective has permeated the WO literature–the belongingness hypothesis, which has been examined as a mediating mechanism for various outcomes of WO in two meta-analyses (Bedi, 2020; Li et al., 2021). However, there are at least two other compelling perspectives that can explain the link between WO and discretionary behaviors–self-regulatory resources and social exchange. Although each perspective is grounded in sound theory, very few primary studies have examined these relationships and in the rare instances in which these relationships have been examined, only a single intermediary process has been modeled. Consequently, it is unclear whether the various intermediary processes uniquely explain the impact of WO on OCB and CWB, and which perspective yields the most promising explanation. Answering these questions advances our understanding of why WO relates to OCB and CWB, and offers insight into the most promising targets of interventions aimed at eliminating these patterns of behaviors.

To address these issues, I employed MASEM to test all perspectives simultaneously in a competing mechanism model, allowing me to reveal the unique explanatory power of each perspective with great statistical power. Consistent with published meta-analyses (e.g., Bedi, 2020; Howard et al. 2020), I found WO to be positively related to OCB, but negatively related to CWB, which suggests that employees who perceive themselves to be excluded or ignored by other organizational members tend to engage in less helping behaviors that would benefit the

organization and/or its members and they tend to engage in more destructive behaviors that harm the organization and/or its members. Belonging, self-regulatory resources, and social exchange were all significant mediators of the relationship between WO and OCB, with belonging providing the strongest explanation. In contrast, only self-regulatory resources explained the relationship between WO and CWB. Thus, the reason victims of WO perform more CWB can be largely attributed to their self-regulatory resources, whereas the reason victims perform more OCB can be largely attributed to their level of belongingness.

We also considered the possibility of serial mediation whereby WO lowers employee's belongingness and the impact of belongingness on discretionary behaviors operates through self-regulatory resources and social exchange. In doing so, I reveal how the perspectives work together in a chain-like manner, providing a nuanced understanding of the process linking WO and discretionary behaviors. I found that belongingness and resources serially mediated the impact of WO on both OCB and CWB. Moreover, belongingness and social exchange serially mediated the impact of WO on OCB but not on CWB. These findings suggest that the reason belongingness explains the relationship between WO and OCB is that belongingness impacts both social exchange and self-regulatory resources, while the reason why belongingness explains the relationship between WO and CWB is that belongingness impacts self-regulatory resources rather than social exchange. The conclusions drawn from the serial mediation model differ from those of the competing mechanism model, particularly regarding the importance of belongingness in explaining the WO-CWB relationship. While the competing mechanism model suggests that belongingness does not matter in explaining this relationship, the serial mediation model reveals that belongingness does matter and that it plays an indirect role.

Theoretical and Practical Implications

There are several theoretical implications of the present research. First, while belongingness has been the dominant perspective adopted in the WO literature, my findings suggest there are at least two other perspectives worthy of research attention–namely, self-regulatory resources and social exchange. In my competing mechanism model, all three mechanisms uniquely explained the relationship between WO and OCB, with belongingness providing the strongest explanation. However, belongingness did not significantly mediate the WO-CWB relationship, which was instead explained by self-regulatory resources. Controlling for resources in the competing mechanism model likely diminished the mediating role of belongingness–a more distal variable–and concealed the process linking belongingness to CWB. Indeed, from my serial mediation model, I found belongingness operated through resources to explain the relationship between WO and CWB. These results suggest that the dominant perspective remains pivotal for explaining the impact of WO on OCB but for the effect of WO on CWB, the dominant perspective plays a more indirect role. Thus, WO does not influence all outcomes through the same mechanisms and for certain outcomes, belongingness does not offer a direct explanation. This highlights the importance of considering other perspectives beyond belongingness in the WO literature.

Second, although almost all indirect effects were significant when each mechanism was tested in their own separate models, my findings suggest that there may be some conceptual overlap between the mechanisms to the point of redundancy. I found self-regulatory resources was the only significant mediator that consistently explained the relationship between WO and CWB across the models I tested while social exchange provided a nonsignificant and sometimes weak explanation. These findings suggest that social exchange potentially overlaps with self-regulatory resources to the point of redundancy when explaining the WO-CWB relationship.

However, this potential redundancy in social exchange was not observed when explaining the impact of WO on OCB. For the relationship between WO and OCB, all three perspectives served as significant mediators in a competing mechanism model, suggesting they offered unique explanations. These findings suggest that social exchange may at times be an influential perspective, but it may be less important in explaining certain outcomes, particularly negative workplace behaviors, at least in the context of WO.

Third, my test of the serial mediation highlights that the process linking WO and discretionary behaviors may occur in a sequential, chain-like manner. In this proposed sequence, WO leads to a proximal consequence, belongingness, which subsequently impacts social exchange and self-regulatory resources, and in turn, discretionary behaviors. However, it is essential to note that no statistical evidence of the superiority or inferiority of this model over to the competing mediation model can be presented because that the two models are nonnested. Therefore, the question of which model offers a more accurate representation of the process linking WO and discretionary behaviors remains open for debate. At the very least, the competing mediation model permitted the assessment of each perspective's unique explanatory power by positioning them as equally compelling, while the serial mediation model provided a more nuanced understanding of where the three mechanisms may operate to explain the relationship between WO and discretionary behaviors. However, it is crucial to determine which of these models offers the more accurate depiction of the process linking WO and discretionary behavior. If the competing model is more accurate, it upends a fundamental assumption regarding the central importance of belonging in explaining WO, whereas if the serial mediation model is more accurate, it simply generates a more nuanced understanding of how belonging operates in this context. Future research is needed to disentangle these two possibilities.

Fourth, my findings suggest that WO is related yet distinct from other mistreatment constructs, including experienced incivility. For example, I found each mistreatment construct's unique path showed the same pattern of significant results as WO. This suggests that WO and other mistreatment constructs have similar processes through which they impact discretionary behaviors and thus, WO and other forms of mistreatment are related. However, I also present evidence suggesting that WO is distinct from other forms of mistreatment, as the significant paths linking WO to discretionary behaviors largely remained significant after controlling for other forms of mistreatment. Moreover, the relative importance of each perspective slightly differed depending on the form of mistreatment. Together, my research indicates that the different forms of mistreatment are related but they are not redundant. These findings add to discussions of WO as related yet distinct from other forms of mistreatment. Conceptually, scholars have argued that like other forms of mistreatment, WO can cause harm, but WO is distinct in that it involves getting no social attention, whereas other forms of mistreatment, such as incivility and abusive supervision, involve getting negative social attention. Thus, WO and other forms of mistreatment has been treated as unique constructs. Likewise, my findings suggest WO cannot be treated as the same as experienced incivility or other forms of mistreatment. Instead, WO needs its own separate literature.

Fifth, my findings suggest that OCB and CWB are distinct constructs, as I not only found a moderate correlation between OCB and CWB ($\rho = .43$), but I also found the process through which WO relates to discretionary behaviors differed depending on the type of discretionary behavior. These findings add to the scholarly debate regarding whether OCB and CWB are opposite ends of the same continuum or whether they are orthogonal constructs (Dalal, 2005; Henderson et al., 2020; Lee & Allen, 2002). Specifically, my findings lean towards the latter

position, suggesting that OCB and CWB are distinct. Thus, based on my findings, I advise researchers to consider OCB and CWB to be orthogonal constructs.

Sixth, although I considered three perspectives in explaining the relationship between WO and discretionary workplace behaviors, for the most part, the direct effect of WO on discretionary behaviors remained significant. This suggests that my model linking WO on discretionary behaviors is likely incomplete. There may be an alternative mechanism that accounts for unique variance in explaining the relationship between WO and discretionary behaviors. Thus, future research should consider and incorporate alternative mechanisms that may explain why victims of WO perform less OCB and more CWB, in addition to belongingness, self-regulatory resources, and social exchange. I propose a couple of potential mechanisms in the section below. It is my hope that this work will stimulate further research on the link between WO and discretionary workplace behaviors, building a more comprehensive understanding of the mechanisms at play.

Practically, my findings reveal a variety of negative consequences associated with experiencing WO. Thus, it is imperative that workplaces try to diminish the prevalence of WO. Leaders play a pivotal role in this endeavor. For example, supervisors can perform ostracism interventionary behaviors, such as seeking harmony or resolving interpersonal conflict between employees, which can improve positive social relationships and thereby reduce WO (Fiset & Boies, 2018). Other research has found that spiritual leadership (Ali et al., 2020), through the demonstration of altruistic values and behaviors (e.g., job support), can increase employees' feelings of being valued and respected, ultimately reducing employees' ostracizing behaviors. Beyond the actions taken by supervisors, employees themselves are crucial for curtailing WO. For instance, practicing mindfulness can reduce the tendency to ostracize others by increasing

attention and awareness of the needs of others, especially mitigating unintentional forms of ostracism that often occurs without the instigators' awareness of their surrounding environment (Ramsey & Jones, 2015). From the victim's end, offering to perform favors for others, a form of ingratiation, can enhance one's popularity and subsequently reduce the likelihood of being ostracized (Wu et al., 2021). Thus, there are numerous ways in which employees, including both ostracizers and victims themselves, and their supervisors, can reduce the occurrence of WO.

However, myself and other researchers alike, recognize that it may not be possible to fully prevent WO from occurring, as WO can be accidental (Ma et al., 2022; Robinson et al., 2013). Thus, managers should be aware of the detrimental impact of WO and try to reduce its impact. Based on my findings, particular attention should be paid towards victims' self-regulatory resources because it largely explains why victims of WO perform less CWB, while also focusing on belongingness and social exchange, alongside self-regulatory resources, as they can explain why victims of ostracism perform less OCB.

Given that belongingness served as the strongest explanation of the WO-OCB link, managers concerned about mitigating WO's impact on OCB should focus on victims' belongingness. This could involve recommending therapy or designing interventions aimed at enhancing employees' sense of belonging. For example, research has demonstrated the role of company musical events (e.g., live classical music) in fostering a sense of belongingness in employees, as music provides a bonding opportunity among employees (Güsewell et al., 2022). Other research (Gao et al., 2022) suggest that implementing activity-based workspaces, which integrate open-plan offices and flexible seating arrangements, can enhance employees' sense of belongingness, as these workspaces allow for more communication, collaboration, and social interaction between employees. Moreover, a number of experimental studies using the Cyberball

paradigm to induce ostracism has shown the benefits associated with a variety of interventions following ostracism. For example, focused breathing, a form of mindfulness training (Molet et al., 2013), has been shown to increase ostracized victims' belonging need satisfaction because focused breathing allows thoughts and emotions to flow in and out without becoming entangled in them, resulting in a state of calmness and acceptance. Other Cyberball studies (Tamplin-Wilson et al., 2019) reveal the benefits of playing certain video games, such Grow Your Chi (which involves clicking on smiling faces and one's own name while avoiding frowns and other names) or FreeRice (a word-definition matching game where each correct match results in a real portion of rice donated to people in need). Playing these games directs attention towards positive social information rather than negative social information, which has been shown to target victim of WOs' self-esteem and thus, their level of belonging. By enhancing employees' sense of belonging, the detrimental effect of ostracism on OCB can be minimized.

Managers should also be aware of the detrimental impact of WO on the relationship between the victim and other employees. Although social exchange did not significantly explain the relationship between WO and CWB nor was it the strongest mechanism that explained the relationship between WO and OCB, it still mediated the latter relationship, controlling for the strongest explanation. These findings suggest that managers interested in increasing OCB among victims of WO should implement interventions aimed at enhancing social exchange among ostracism victims. As an example of an intervention, research (Mok & De Cremer, 2015) has shown that activating thoughts of money in ostracized individuals, such as imagining counting a stack of cash and then listing its attributes, reinforces the notion that spending money (e.g., buying gifts for coworkers) can build positive interpersonal relationships. Gratitude interventions may also be promising, as receiving help with a task can elicit feelings of gratitude and in turn,

increase relationship building behaviors towards the helper (Bartlett et al., 2010). By activating thoughts of money or eliciting gratitude, victims of WO may exhibit more positive relationship-oriented behaviors, which may protect against decreases in social exchange and thus foster OCB.

It is also crucial to target victim of WO's self-regulatory resources because it significantly explained the negative relationship between WO and OCB. Moreover, resources emerged as the strongest explanation that mediated the relationship between WO and CWB, and it explained why the dominant perspective in the WO literature relates to CWB. Thus, managers should be aware of these effects and consider interventions. For example, promoting self-compassion can diminish the effect of WO on resource depletion, as viewing WO as a universal human experience rather than a personal attack, an aspect of self-compassion (Neff, 2003), minimizes the perceived individual importance of WO, thereby reducing psychological strain (Ma et al., 2022). Moreover, fostering a future time orientation, characterized by emphasizing and valuing future goals, can motivate victims to recognize the potential harm WO poses to their future goal attainment and proactively take action to replenish their diminished self-regulatory resources (Qian et al., 2019). A future time orientation can also encourage them to prioritize reinclusion as a goal, ultimately driving engagement in prosocial behaviors to increase their chances of reinclusion in the workplace (Haldorai et al., 2022). Additionally, nature exposure research (Poon et al., 2016) has found that compared to victims of WO shown urban pictures (e.g., buildings, apartment), victims of WO shown photos of nature scenes (e.g., lake, forest) exhibited less aggressive responses (e.g., assigned less hot sauce to a person who hated spicy food), as nature exposure can help victims restore depleted self-regulatory resources, positively impacting their well-being and helping them cope with stress. Implementing these resource-targeting interventions can help mitigate the impact of WO on discretionary behaviors.

Limitations and Future Research Directions

As with all research, my work should be interpreted in light of its limitations. First, I opted to employ MASEM in my research because it can test multiple perspectives simultaneously with great statistical power and I was interested in how WO unfolds in the "real world". However, each theoretical perspective claims causality, so my findings should be interpreted with caution because, like other meta-analyses, causality cannot be confidently claimed due to the nature of field data. Whenever possible, I preserved the temporal order outlined by each theoretical perspective when coding articles. I recognize it is possible that engaging in discretionary workplace behavior impacts employees' belongingness, self-regulatory resources, and social exchange, which in turn, impacts the likelihood of being ostracized, Additionally, the relationships may be observed due to the influence of third variables not included in my models (i.e., spuriousness). Thus, to supplement my findings, future research should employ an experimental design to test causality and rule out third variables or a cross-lagged longitudinal design to uncover directional influences.

A second limitation of the present research is that the direct effect of WO on discretionary behaviors largely remained significant, suggesting my models may be incomplete. Thus, future research should consider other mechanisms. One avenue for future research is to adopt an affective lens. Previous research suggests that due to the pain associated with experiencing WO, victims may feel negative emotions (Howard et al., 2020), such as sadness and anger (Chow et al., 2008). In turn, victims may dwell on their negative treatment and emotions, and form negative perceptions of their coworkers, making victims less inclined to help their coworkers or contribute positively to the organization (Brown et al., 2005; Geiger et al., 2019), instead seeking retaliation to relieve negative emotions (c.f., Liang et al., 2022).

Moreover, because WO is distressing, WO can decrease positive emotions (Gerber & Wheeler WO; Howard et al., 2020; Williams, 2007a). In turn, positive affective states can increase favorable perceptions of others, and thereby increase desire to help (Williams & Shiaw, 1999) and reduce desire to harm. Thus, feeling more negative affect and less positive affect may explain why victims of WO perform more CWB and less OCB. Another perspective is social learning theory, which suggests that WO can teach victims that it is acceptable to mistreat others, which reinforces norms endorsing negative workplace behaviors, such as aggressive norms (c.f., Restubog et al., 2011). Consequently, victims of WO may model the negative behavior of other organizational members by engaging in more CWB. Moreover, given that victims of WO tend to receive few to no supportive behaviors from their coworkers and the organization (Howard et al., 2020), victims may perceive weak OCB norms or low levels of OCB within the organization (Ferris et al., 2008). In turn, victims may imitate the absence of supportive behaviors and consequently exhibit less OCB. Thus, future research should consider affective and social learning to understand the relationship between WO and discretionary behaviors.

As with several published MASEMs, another limitation of my research is that some estimates of rho in the matrix were based on a small number of independent samples (i.e., k). Although a minimum of two samples is required to calculate rho, it is recommended to have at least three samples to obtain a more accurate estimate, with the underlying assumption that the more samples the better. Only one estimate of rho suffered from this–namely, the rho for the relationship between experienced incivility and OCB. To address this limitation, I conducted a supplemental analysis (see Appendix E, Figures 20 and 21). For this analysis, I inputted an estimate of rho for the relationship between incivility and OCB from a recently published meta-analysis (ρ = -.10, k = 7, N = 1,831; Han et al., 2021), which is a common practice for MASEM

papers (e.g., Chiaburu et al., 2022). Then I reran my analysis with experienced incivility and other mistreatment as control variables. Importantly, none of my substantive conclusions changed. While this provides some confidence in the stability of my findings as the number of samples increases, whether it is appropriate to input existing meta-analytic estimates is, to my knowledge, still an unanswered question, as scholars may have different inclusion/exclusion criteria. For this reason, I opted not to do so for my main analyses, but I find reassurance in my findings as they remained consistent through this additional analysis.

A fourth limitation of my research is that I only explored one moderator of the relationship between WO and discretionary behaviors – namely, the target of the discretionary behavior. However, there are likely other moderators of the mediating effects that are worthy of research attention. One potential moderator is culture. For example, a recently published meta-analysis (Li et al., 2021) found that WO's relationships with belongingness, emotional exhaustion, and deviance were stronger in individualistic cultures, while WO's relationships with organizational identification and OCB were stronger in collectivist cultures, and culture did not moderate the relationship between WO and organizational commitment. These results provide initial evidence suggesting that indirect effect of WO on CWB via self-regulatory resources (based on emotional exhaustion findings) may be stronger in individualistic cultures, whereas the indirect effect of WO on OCB via social exchange may perhaps be stronger in collectivist cultures – a strong emphasis on *perhaps* as this inference is based on their findings with both organizational identification and organizational commitment. However, emotional exhaustion and organization identification (and organizational commitment) are only a tiny snippet of the many constructs that capture self-regulatory resources and social exchange, respectively. Thus, more research is needed to test these relationships more comprehensively.

Conclusion

"*Pain can be alleviated by morphine but the pain of social ostracism cannot be taken away*" – Derek Jarman. My research reiterates this quote by revealing the undeniable amount of pain that not only ostracized employees experience, but also the impact on other employees and the organization. Specifically, using MASEM, I examined why victims of WO are more likely to engage in discretionary behaviors that harm the organization and its members, as well as why they are less likely to perform discretionary behaviors that benefit the organization and its members. I pitted two alterative perspectives– self-regulatory resources and social exchange– against the dominant perspective in a competing mechanism model, and together with the dominant perspective in a chain-like manner to explain the impact of WO on OCB and CWB. My findings offer support for all three perspectives, with the dominant perspective operating as the strongest for explaining the WO-OCB, but it did not provide a significant direct explanation of the WO-CWB link. More research is needed to fully understand the effects of WO.

References

References marked with an asterisk (*) indicate studies included in the meta-analysis.

Ali, M., Usman, M., Pham, N.T., Agyemang-Mintah, P., & Akhtar, N. (2020). Being ignored at work: Understanding how and when spiritual leadership curbs workplace ostracism in the hospitality industry. *International Journal of Hospitality Management, 91*, 1–11. https://doi.org/10.1016/j.ijhm.2020.102696

Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *The Academy of Management Review*, *24*(3), 452–471. https://doi.org/10.2307/259136

*Ahmed, I., Khairuzzaman Wan Ismail, W. & Mohamad Amin, S. (2014). Overcoming ostracism at work: The remedial role of positive exchange relations. *Nankai Business Review International*, *5*(3), 275–289. https://doi.org/10.1108/NBRI-02-2013-0002

*Anjum, A., Ming, X., Siddiqi, A. F., & Rasool, S. F. (2018). An empirical study analyzing job productivity in toxic workplace environments. *International Journal of Environmental Research and Public Health*, *15*(5), 1–15. https://doi.org/10.3390/ijerph15051035

*Anjum, A., & Xu, M. (2018). Combating toxic workplace environment. *Journal of Modelling in Management*, *13*(3), 675–697. https://doi.org/10.1108/JM2-02-2017-0023

*Anjum, M. A., Liang, D., Durrani, D. K., & Ahmed, A. (2019). Workplace ostracism and discretionary work effort: A conditional process analysis. *Journal of Management and Organization*. 1–18. https://doi.org/10.1017/jmo.2019.14

Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. *The Academy of Management Review*, *14*(4), 496–515. https://doi.org/10.2307/258555

*Balliet, D., & Ferris, D. L. (2013). Ostracism and prosocial behavior: A social dilemma

perspective. *Organizational Behavior and Human Decision Processes*, *120*(2), 298–308. https://doi.org/10.1016/j.obhdp.2012.04.004

Balliet, D., Wu, J., & De Dreu, C. K. (2014). Ingroup favoritism in cooperation: A meta-analysis. *Psychological Bulletin, 140*(6), 1556–1581. https://doi.org/10.1037/a0037737

Bartlett, M. Y., Condon, P., Cruz, J., Baumann, J., & Desteno, D. (2012). Gratitude: prompting behaviours that build relationships. *Cognition & Emotion, 26*(1), 2–13. https://doi.org/10.1080/02699931.2011.561297

Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology, 74*(5), 1252–1265. https://doi.org/10.1037/0022-3514.74.5.1252

Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology, 88*(4), 589–604. https://doi.org/10.1037/0022-3514.88.4.589

Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality: how interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of Personality*, *74*(6), 1773–1801. https://doi.org/10.1111/j.1467-6494.2006.00428.x

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review, 103*(1), 5–33. https://doi.org/10.1037/0033-295X.103.1.5

Baumeister, R. F., Twenge, J. M., & Nuss, C. K. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology, 83*(4), 817–827. https://doi.org/10.1037/0022-3514.83.4.817

Baumeister, R. F., & Vohs, K. D. (2007). Self-regulation, ego depletion, and motivation. *Social and Personality Psychology Compass, 1*(1), 115–128. https://doi.org/10.1111/j.1751-9004.2007.00001.x

Becker, B. J. (1992). Using results from replicated studies to estimate linear models. *Journal of Educational Statistics, 17*(4), 341–362. https://doi.org/10.2307/1165128

Bedi, A. (2020). No Herd for Black Sheep: A Meta-Analytic Review of the Predictors and Outcomes of Workplace Ostracism. *Applied Psychology*, *0*(0), 1–44. https://doi.org/10.1111/apps.12238

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*(3), 349–360. https://doi.org/10.1037/0021-9010.85.3.349

*Benos, T., Kalogeras, N., Ko de Ruyter, & Wetzels, M. (2018). Diagnosing member-customer ostracism in co-operatives and counterpoising its relationship-poisoning effects. *European Journal of Marketing, 52*(9/10), 1778–1801. https://doi.org/10.1108/EJM-11-2016-0634

Bentler, P. M., & Satorra, A. (2010). Testing model nesting and equivalence. *Psychological Methods, 15*(2), 111–123. https://doi.org/10.1037/a0019625

Bergh, D. D., Aguinis, H., Heavey, C., Ketchen, D. J., Boyd, B. K., Su, P., Lau, C. L. L., & Joo, H. (2016). Using meta-analytic structural equation modeling to advance strategic management research: Guidelines and an empirical illustration via the strategic

leadership-performance relationship. *Strategic Management Journal, 37*(3), 477–497. https://doi.org/10.1002/smj.2338

Bernhard, H., Fehr, E., & Fischbacher, U. (2006). Group affiliation and altruistic norm enforcement. *American Economic Review, 96*(2), 217–221. https://doi.org/10.1257/000282806777212594

Blau, P. M. (1964). Justice in social exchange. *Sociological Inquiry, 34*(2), 193–206. https://doi.org/10.1111/j.1475-682X.1964.tb00583.x

Blau, G., & Andersson, L. (2005). Testing a measure of instigated workplace incivility. *Journal of Occupational and Organizational Psychology, 78*(4), 595–614. https://doi.org/10.1348/096317905X26822

Bies, R. J., & Tripp, T. M. (2001). A passion for justice: The rationality and morality of revenge. In R. Cropanzano (Ed.), *Justice in the workplace: From theory to practice* (vol. 2, pp. 197–208). Mahwah, NJ: Lawrence Erlbaum Associates.

Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions*: 349-381. San Francisco, CA, US: Jossey-Bass.

Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors? *The Academy of Management Review*, *24*(1), 82–98. https://doi.org/10.2307/259038

Bolino, M. C., Varela, J. A., Bande, B., & Turnley, W. H. (2006). The impact of impression-management tactics on supervisor ratings of organizational citizenship behavior. *Journal of Organizational Behavior, 27*(3), 281–297. https://doi.org/10.1002/job.379

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*(5), 998–1012. https://doi.org/10.1037/0021-9010.91.5.998

Brown, S. P., Westbrook, R. A., & Challagalla, G. (2005). Good cope, bad cope: Adaptive and maladaptive coping strategies following a critical negative work event. *Journal of Applied Psychology*, *90*(4), 792–798. https://doi.org/10.1037/0021-9010.90.4.792

Carpenter, N. C., Whitman, D. S., & Amrhein, R. (2021). Unit-Level Counterproductive Work Behavior (CWB), A Conceptual Review and Quantitative Summary. *Journal of Management, 47*(6), 1498–1527. https://doi.org/10.1177/0149206320978812

*Chang, K., Kuo, C-C., Quinton, S., Lee, I., Cheng, T-C., & Huang, S-K. (2019). Subordinates' competence: A potential trigger for workplace ostracism. *The International Journal of Human Resources Management, 32*(8), 1801–1827. https://doi.org/10.1080/09585192.2019.1579246

*Chen, J. (2017). *Mindfulness in the workplace* [Doctoral Dissertation, Hong Kong University of Science and Technology]. HKUST Electronic Theses. https://hdl.handle.net/1783.1/89171

*Chen, Y., & Li, S. (2020). Relationship between workplace ostracism and unsafe behaviors: The mediating effect of psychological detachment and emotional exhaustion. *Psychological Reports*, *123*(2), 488–516. https://doi.org/10.1177/0033294118813892

*Chen, Y., & Li, S. (2019). The relationship between workplace ostracism and sleep quality: A mediated moderation model. *Frontiers in Psychology*, *10*, 1–13. https://doi.org/10.3389/fpsyg.2019.00319

*Chen, C. & Tang, N. (2018). Does perceived inclusion matter in the workplace? *Journal of Managerial Psychology, 33*(1), 43–57. https://doi.org/10.1108/JMP-02-2017-0078

Cheung, M. W.-L., & Chan, W. (2005). Meta-analytic structural equation modeling: A two-stage approach. *Psychological Methods, 10*(1), 40–64. https://doi.org/10.1037/1082-989X.10.1.40

*Chenji, K. & Sode, R. (2019). Workplace ostracism and employee creativity: Role of defensive silence and psychological empowerment. *Industrial and Commercial Training, 51*(6), 360–370. https://doi.org/10.1108/ICT-05-2019-0049

*Choi, Y. (2019). The moderating effect of leader member exchange on the relationship between workplace ostracism and psychological distress. *Asia - Pacific Journal of Business Administration, 11*(2), 146–158. https://doi.org/10.1108/APJBA-11-2018-0205

Choi, J. Y., Miao, C., & Oh, I. (2019). Relative importance of major job performance dimensions in determining supervisors' overall job performance ratings. *Canadian Journal of Administrative Sciences, 36*(3), 377–389. https://doi.org/10.1002/cjas.1495

Chiaburu, D. S., Oh, I.-S., Stoverink, A. C., Park, H. (H.), Bradley, C., & Barros-Rivera, B. A. (2022). Happy to help, happy to change? A meta-analysis of major predictors of affiliative and change-oriented organizational citizenship behaviors. *Journal of Vocational Behavior, 132*, 467–484. https://doi.org/10.1016/j.jvb.2021.103664

Chow, R. M., Tiedens, L. Z., & Govan, C. L. (2008). Excluded emotions: The role of anger in antisocial responses to ostracism. *Journal of Experimental Social Psychology, 44*(3), 896–903. https://doi.org/10.1016/j.jesp.2007.09.004

*Chung, Y. W. (2015). The mediating effects of organizational conflict on the relationships between workplace ostracism with in-role behavior and organizational citizenship behavior. *International Journal of Conflict Management*, *26*(4), 366–385. https://doi.org/10.1108/IJCMA-01-2014-0001

*Chung, Y. W. (2017). The role of person-organization fit and perceived organizational support in the relationship between workplace ostracism and behavioral outcomes, *Australian Journal of Management, 42*(2), 328–349. https://doi.org/10.1177/0312896215611190

*Chung, Y. W. (2018). Workplace ostracism and workplace behaviors: A moderated mediation model of perceived stress and psychological empowerment. *Anxiety, Stress & Coping: An International Journal, 31*(3), 304–317. https://doi.org/10.1080/10615806.2018.1424835

Chung Y. W. (2020). The relationship between workplace ostracism, TMX, task interdependence, and task performance: A moderated mediation model. *International Journal of Environmental Research and Public Health, 17*(12), 1–11. https://doi.org/10.3390/ijerph17124432

*Chung, Y. W., & Yang, J. Y. (2017). The mediating effects of organization-based self-esteem for the relationship between workplace ostracism and workplace behaviors. *Baltic Journal of Management, 12*(2), 255–270. https://doi.org/10.1108/BJM-06-2016-0130

Cichocka, A., Marchlewska, M., Golec de Zavala, A., & Olechowski, M. (2016). 'They will not control us': Ingroup positivity and belief in intergroup conspiracies. *British Journal of Psychology, 107*(3), 556–576. https://doi.org/10.1111/bjop.12158

*Cizreliogullari, M. N., Altun, O., & Barut, P. (2019). The effect of emotional exhaustion on workplace ostracism and job insecurity in North Cyprus hotel industry. *Business and Economics Research Journal, 10*(5), 1167–1178. https://doi.org/10.20409/berj.2019.228

*Clark, S. K., Halbesleben, J. R. B., Lester, S. W., & Heintz, R. (2010). Temporary worker alienation and job performance: The impact of rating source. *Journal of Leadership & Organizational Studies, 17*(3), 287–297. https://doi.org/10.1177/1548051810368679

Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson,

M. J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology, 98*(2), 199–236. https://doi.org/10.1037/a0031757

*Crocker, R. M. (2005). *Employee perceptions of managerial civility: Development and validation of a measurement scale* [Doctoral Dissertation, Auburn University]. Auburn University Electronic Theses and Dissertations. http://hdl.handle.net/10415/707

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *The Academy of Management Annals, 11*(1), 479–516. https://doi.org/10.5465/annals.2015.0099

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*(6), 874–900. https://doi.org/10.1177/0149206305279602

*Cullen, K. L., Fan, J., & Liu, C. (2014). Employee popularity mediates the relationship between political skill and workplace interpersonal mistreatment. *Journal of Management, 40*(6), 1760–1778. https://doi.org/10.1177/0149206311435104

Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology, 90*(6), 1241–1255. https://doi.org/10.1037/0021-9010.90.6.1241

De Cremer, D., & Van Knippenberg, D. (2002). How do leaders promote cooperation? The effects of charisma and procedural fairness. *Journal of Applied Psychology, 87*(5), 858–866. https://doi.org/10.1037/0021-9010.87.5.858

de Quervain, D. J., Fischbacher, U., Treyer, V., Schellhammer, M., Schnyder, U., Buck, A., & Fehr, E. (2004). The neural basis of altruistic punishment. *Science, 305*(5688), 1254–1258. https://doi.org/10.1126/science.1100735

Deckop, J. R., Cirka, C. C. & Andersson, L. M. (2003). Doing unto others: The reciprocity of helping behavior in organizations. *Journal of Business Ethics, 47*, 101–113. https://doi.org/10.1023/A:1026060419167

Den Hartog, D. N., De Hoogh, A. H. B., & Keegan, A. E. (2007). The interactive effects of belongingness and charisma on helping and compliance. *Journal of Applied Psychology, 92*(4), 1131–1139. https://doi.org/10.1037/0021-9010.92.4.1131

Deng, H., Coyle-Shapiro, J., & Yang, Q. (2018). Beyond reciprocity: A conservation of resources view on the effects of psychological contract violation on third parties. *Journal of Applied Psychology, 103*(5), 561–577. https://doi.org/10.1037/apl0000272

DeWall, C. N., Deckman, T., Pond, R. S., Jr., & Bonser, I. (2011). Belongingness as a core personality trait: How social exclusion influences social functioning and personality expression. *Journal of Personality*, *79*(6), 979–1012. https://doi.org/10.1111/j.1467-6494.2010.00695.x

Dunlop, P. D., & Lee, K. (2004). Workplace deviance, organizational citizenship behavior, and business unit performance: the bad apples do spoil the whole barrel. *Journal of Organizational Behavior, 25*(1), 67–80. https://doi.org/10.1002/job.243

Edwards, J. R. (2010). Reconsidering theoretical progress in organizational and management research. *Organizational Research Methods*, *13*(4), 615-619. https://doi.org/10.1177/1094428110380468

*Eickholt, M. S., & Goodboy, A. K. (2017). Investment model predictions of workplace ostracism on K–12 teachers' commitment to their schools and the profession of teaching. *Journal of Workplace Behavioral Health, 32*(2), 139–157. https://doi.org/10.1080/15555240.2017.1332483

Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. *Work & Stress, 23,* 24–44. http://dx.doi.org/10.1080/02678370902815673

Einarsen, S. & Mikkelsen, E. G. (2003) Individual effects of exposure to bullying at work. In S. Einarsen, H. Hoel. D. Zapf and C. L. Cooper (eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 127-144). London and New York: Taylor & Francis.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 500–507. https://doi.org/10.1037/0021-9010.71.3.500

Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An FMRI study of social exclusion. *Science, 302*(5643), 290–292. https://doi.org/10.1126/science.1089134

Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology, 2,* 335–362. https://doi.org/10.1146/annurev.so.02.080176.002003

*Erkutlu, H., & Chafra, J. (2016). Value congruence and commitment to change in healthcare organizations. *Journal of Advances in Management Research, 13*(3), pp. 316–333. https://doi.org/10.1108/JAMR-11-2015-0078

Everett, J. A. C., Faber, N. S., & Crockett, M. (2015). Preferences and beliefs in ingroup favoritism. *Frontiers in Behavioral Neuroscience, 9*(15), 1–21. https://doi.org/10.3389/fnbeh.2015.00015

*Fatima, A. (2016). Impact of workplace ostracism on counter productive work behaviors:

Mediating role of job satisfaction. *Abasyn Journal of Social Sciences*, *9*(2), 388–408.

*Fatima, T., Ilyas, M., Rehman, C. A., & Imran, M. K. (2017). Empirical investigation of relationship between workplace ostracism and employee silence: A test of mediating effects of self-esteem and meaningful existence in context of public sector universities in Punjab. *Abasyn Journal of Social Sciences*, *10*(1), 111–128.

*Fay, M. J. (2007). *Informal communication practices between peers in the remote work context* [Doctoral Dissertation, Ohio State University]. OhioLINK Electronic Theses and Dissertations Center. http://rave.ohiolink.edu/etdc/view?acc_num=osu1167786840

*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*(6), 1348–1366. https://doi.org/10.1037/a0012743

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. https://doi.org/10.1146/annurev-orgpsych-032516-113223

*Ferris, D. L., Fatimah, S., Yan, M., Liang, L. H., Lian, H., & Brown, D. J. (2019). Being sensitive to positives has its negatives: An approach/avoidance perspective on reactivity to ostracism. *Organizational Behavior and Human Decision Processes*, *152*, 138–149. https://doi.org/10.1016/j.obhdp.2019.05.001

*Ferris, D. L., Lian, H., Brown, D. J., & 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*(1), 279–297. https://doi.org/10.5465/amj.2011.0347

*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*(5), 1777–

1800. https://doi.org/10.5465/amj.2014.0221

*Fiset, J. (2014.). *The good shepherd: The impact of relational leadership interventionary behaviour on workplace ostracism* [Doctoral Dissertation, Concordia University] Concordia University Spectrum Research Repository. https://spectrum.library.concordia.ca/id/eprint/978304/

*Fiset, J., & Bhave, D. P. (2019). Mind your language: The effects of linguistic ostracism on interpersonal work behaviors. *Journal of Management*, *47*(2), 1–26. https://doi.org/10.1177/0149206319833445

*Fiset, J., Al Hajj, R., & Vongas, J. G. (2017). Workplace ostracism seen through the lens of power. *Frontiers in Psychology*, *8*, 1–19. https://doi.org/10.3389/fpsyg.2017.01528

*Fiset, J., & Boies, K. (2018). Seeing the unseen: Ostracism interventionary behaviour and its impact on employees. *European Journal of Work and Organizational Psychology*, *27*(4), 403–417. https://doi.org/10.1080/1359432X.2018.1462159

*Foster, P.J. (2012). *Leader-member-exchange and the workplace bully* [Doctoral Dissertation, Kansas State University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/leader-member-exchange-workplace-bully/docview/1287168625/se-2

Frijda, N. H. (2007). *The laws of emotion*. Lawrence Erlbaum Associates Publishers.

Gao, S., Low, S. P. & Gong, H. Q. (2022). Effects of activity-based workspaces on employee belongingness. *Facilities, 40* (1/2), 98456117. https://doi.org/10.1108/F-08-2020-0093

*Gebhardt, S. T. (2016). *The moderating effects of harmony enhancement and disintegration avoidance on the relationship between workplace ostracism and outcomes* [Doctoral Dissertation, Hofstra University]. ProQuest Dissertations & Theses Global.

https://www.proquest.com/dissertations-theses/moderating-effects-harmony-enhancement/docview/1870037837/se-2

Geiger, M., Lee, J.-Y., & Geiger, M. K. (2019). The power of negative disposition: An examination of trait and state negative affect with OCBI and OCBO. *Group & Organization Management, 44*(6), 1136-1172. https://doi.org/10.1177/1059601118819893

*Gettinger, S. K. (2008). *Sexual harassment: Implications for counterproductive work behavior* [Doctoral Dissertation, University of Houston]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/sexual-harassment-implications-counterproductive/docview/304602173/se-2

*Gkorezis, P., Panagiotou, M., & Theodorou, M. (2016). Workplace ostracism and employee silence in nursing: The mediating role of organizational identification. *Journal of Advanced Nursing, 72*, 2381–2388. http://dx.doi.org/10.1111/jan.12992

*Goh A. (2007). *An attributional analysis of counterproductive work behavior (CWB) in response to occupational stress* [Doctoral Dissertation, University of South Florida]. USF Tampa Graduate Theses and Dissertations. https://digitalcommons.usf.edu/etd/2535

Golec de Zavala, A., Cichocka, A., & Iskra-Golec, I. (2013). Collective narcissism moderates the effect of in-group image threat on intergroup hostility. *Journal of Personality and Social Psychology, 104*(6), 1019–1039. https://doi.org/10.1037/a0032215

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25*(2), 161–178. https://doi.org/10.2307/2092623

Grant, A. M., & Mayer, D. M. (2009). Good soldiers and good actors: Prosocial and impression management motives as interactive predictors of affiliative citizenship behaviors. *Journal*

of Applied Psychology, 94(4), 900–912. https://doi.org/10.1037/a0013770

*Gray, C. J., Carter, N. T., & Sears, K. L. (2017). The UWBQ-I: An adaption and validation of a measure of instigated incivility. *Journal of Business and Psychology, 32*(1), 21–39. https://doi.org/10.1007/s10869-015-9433-6

Greco, L. M., Porck, J. P., Walter, S. L., Scrimpshire, A. J., & Zabinski, A. M. (2022). A meta-analytic review of identification at work: Relative contribution of team, organizational, and professional identification. *Journal of Applied Psychology, 107*(5), 795–830. https://doi.org/10.1037/apl0000941

*Grosser, T. J., Sterling, C. M., Scott, K. D., & Labianca, G. (Joe). (2010). Social networks, groups, and social exclusion: Combining sociometric and psychometric approaches to understanding social exclusion in organizational settings. In *The "dark" side of management* (pp. 143–191). IAP Information Age Publishing.

Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment, 11*(1), 30–42. https://doi.org/10.1111/1468-2389.00224

Güsewell, A., Gay-Balmaz, S., & Imseng, C. (2022). Musicdrops@work: Impact of shared listening to short live music interventions on sense of belonging and subjective wellbeing at work. *Frontiers in Psychology, 13*, 1–14. https://doi.org/10.3389/fpsyg.2022.865938

*Hächler, P., Pereira, D., & Achim, E. (2017). Recovery experiences during vacation and their association with job stressors and health. *Psychological Writings*, *10*(1), 13–30. https://doi.org/10.5231/psy.writ.2017.1001

Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. (2010). Ego depletion and the strength model of self-control: A meta-analysis. *Psychological bulletin, 136*(4), 495–525.

https://doi.org/10.1037/a0019486

Halbesleben, J. R. B., & Wheeler, A. R. (2015). To invest or not? The role of coworker support and trust in daily reciprocal gain spirals of helping behavior. *Journal of Management, 41*(6), 1628–1650. https://doi.org/10.1177/0149206312455246

Haldorai, K., Kim, W. G., & Li, J. (2022). I'm broken inside but smiling outside: When does workplace ostracism promote pro-social behavior? *International Journal of Hospitality Management, 101*, 1–9. https://doi.org/10.1016/j.ijhm.2021.103088

*Halevy, N., Cohen, T. R., Chou, E. Y., Katz, J. J., & Panter, A. T. (2014). Mental models at work: Cognitive causes and consequences of conflict in organizations. *Personality and Social Psychology Bulletin*, *40*(1), 92–110. https://doi.org/10.1177/0146167213506468

Hall, A. T., Zinko, R., Perryman, A. A., & Ferris, G. R. (2009). Organizational citizenship behavior and reputation: Mediators in the relationships between accountability and job performance and satisfaction. *Journal of Leadership & Organizational Studies, 15*(4), 381–392. https://doi.org/10.1177/1548051809331504

*Haq, I. U. (2014). Workplace ostracism and job outcomes: Moderating effects of psychological capital. *Human Capital without Borders: Knowledge and Learning for Quality of Life*: 1309–1323. http://www.toknowpress.net/ISBN/978-961-6914-09-3/papers/ML14-751.pdf

Hartgerink, C. H. J., van Beest, I., Wicherts, J. M., & Williams, K. D. (2015). The ordinal effects of ostracism: A meta-analysis of 120 cyberball studies. *PloS ONE*, *10*(5), 1–24. https://doi.org/10.1371/journal.pone.0127002

Henderson, A. A., Foster, G. C., Matthews, R. A., & Zickar, M. J. (2020). A psychometric assessment of OCB: Clarifying the distinction between OCB and CWB and developing a

revised OCB measure. *Journal of Business and Psychology*, *35*(6), 697–712. https://doi.org/10.1007/s10869-019-09653-8

Hershcovis, M. S. (2011). "Incivility, social undermining, bullying. . .Oh my!": A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, *32*(3), 499–519. https://doi.org/10.1002/job.689

*Hershcovis, M. S., Ogunfowora, B., Reich, T. C., & Christie, A. M. (2017). Targeted workplace incivility: The roles of belongingness, embarrassment, and power. *Journal of Organizational Behavior, 38*, 1057–1075. https://doi.org/10.1002/job.2183

Hershcovis, M. S., Turner, N., Barling, J., Arnold, K. A., Dupré, K. E., Inness, M., LeBlanc, M. M., & Sivanathan, N. (2007). Predicting workplace aggression: A meta-analysis. *Journal of Applied Psychology, 92*(1), 228–238. https://doi.org/10.1037/0021-9010.92.1.228

*Hitlan, R. T., Cliffton, R. J., & DeSoto, M. C. (2006). Perceived exclusion in the workplace: The moderating effects of gender on work-related attitudes and psychological health. *North American Journal of Psychology, 8*(2), 217–236.

*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*(4), 477–502. https://doi.org/10.1080/13594320903025028

Hockey G. R. (1997). Compensatory control in the regulation of human performance under stress and high workload: A cognitive-energetical framework. *Biological Psychology, 45*(1-3), 73–93. https://doi.org/10.1016/s0301-0511(96)05223-4

Howard, M. C., Cogswell, J. E., & Smith, M. B. (2020). The antecedents and outcomes of workplace ostracism: A meta-analysis. *Journal of Applied Psychology, 105*(6), 577–

596. https://doi.org/10.1037/apl0000453

*Hsieh, H., & Karatepe, O. M. (2019). Outcomes of workplace ostracism among restaurant employees. *Tourism Management Perspectives*, *30,* 129–137. https://doi.org/10.1016/j.tmp.2019.02.015

Hung, T. K., Chi, N. W., & Lu, W. L. (2009). Exploring the relationships between perceived coworker loafing and counterproductive work behaviors: The mediating role of a revenge motive. J*ournal of Business and Psychology*, *24*, 257–270. https://doi.org/10.1007/s10869-009-9104-6

Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd ed.). Thousand Oaks, CA, US: Sage.

*Jahanzeb, S., & Fatima, T. (2018). How workplace ostracism influences interpersonal deviance: The mediating role of defensive silence and emotional exhaustion. *Journal of Business and Psychology*, *33*(6), 779–791. https://doi.org/10.1007/s10869-017-9525-6

*Jahanzeb, S., Fatima, T., Javed, B., & Giles, J. P. (2020). Can mindfulness overcome the effects of workplace ostracism on job performance? *The Journal of Social Psychology, 160*(5), 589–602. https://doi.org/10.1080/00224545.2019.1707465

*Jahanzeb, S., Fatima, T., & Malik, M. A. R. (2018). Supervisor ostracism and defensive silence: A differential needs approach. *European Journal of Work and Organizational Psychology*, *27*(4), 430–440. https://doi.org/10.1080/1359432X.2018.1465411

*Jones, J. R., Wilson, D. C., & Jones, P. (2008). Toward achieving the “beloved community” in the workplace: Lessons for applied business research and practice from the teachings of Martin Luther King Jr. *Business & Society, 47*(4), 457–483. https://doi.org/10.1177/0007650308323475

*Jones, E. E., Wirth, J. H., Ramsey, A. T., & Wynsma, R. L. (2019). Who is less likely to ostracize? Higher trait mindfulness predicts more inclusionary behavior. *Personality and Social Psychology Bulletin*, *45*(1), 105–119. https://doi.org/10.1177/0146167218780698

Johnson, R. E., Lin, S.-H., & Lee, H. W. (2018). Self-control as the fuel for effective self-regulation at work: Antecedents, consequences, and boundary conditions of employee self-control. In A. J. Elliot (Ed.), *Advances in motivation science* (pp. 87–128). Elsevier Academic Press. https://doi.org/10.1016/bs.adms.2018.01.004

*Jung, H. S., & Yoon, H. H. (2019). How does workplace harassment influence the employees' response in a deluxe hotel? *Service Industries Journal*, *39*(11–12), 877–900. https://doi.org/10.1080/02642069.2018.1493103

*Kaya, C., Ataman, G., & Yener Aydin, B. (2017). Workplace ostracism and work engagement: The moderating role of neuroticism. *International Journal of Business and Management, V*(2), 17–28. https://doi.org/10.20472/BM.2017.5.2.002

*Kenneth, T. T. S. (2013). *The consequences of envy and feeling envied* [Doctoral Dissertation, National University of Singapore]. ScholarBank@NUS Repository. https://scholarbank.nus.edu.sg/handle/10635/43405

*Khan, A. T. A. (2017). *Workplace ostracism and counterproductive work behaviors: Examining the mediating role of organizational cynicism and moderating role of neuroticism* [Master's Thesis, Capital University of Science & Technology]. CUST-Thesis Portal.

*Kim, Y., Cohen, T. R., & Panter, A. T., (2015). The reciprocal relationship between counterproductive work behavior and workplace mistreatment: Its temporal dynamics and boundary conditions. *SSRN Electronic Journal.*

http://dx.doi.org/10.2139/ssrn.2638429

Knutson B. (2004). Behavior. Sweet revenge? *Science, 305*(5688), 1246–1247. https://doi.org/10.1126/science.1102822

*Koay, K. Y. (2018). Workplace ostracism and cyberloafing: A moderated–mediation model. *Internet Research*, *28*(4), 1122–1141. https://doi.org/10.1108/IntR-07-2017-0268

*Kottwitz, M. U., Gerhardt, C., Pereira, D., Iseli, L., & Elfering, A. (2018). Teacher's sleep quality: Linked to social job characteristics? *Industrial Health*, *56*(1), 53–61. https://doi.org/10.2486/indhealth.2017-0073

*Kouchaki, M., & Wareham, J. (2015). Excluded and behaving unethically: Social exclusion, physiological responses, and unethical behavior. *Journal of Applied Psychology*, *100*(2), 547–556. https://doi.org/10.1037/a0038034

*Kwan, H. K., Zhang, X., Liu, J., & Lee, C. (2018). Workplace ostracism and employee creativity: An integrative approach incorporating pragmatic and engagement roles. *Journal of Applied Psychology, 103*(12), 1358–1366. https://doi.org/10.1037/apl0000320

Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F. D. (2013). To belong is to matter: Sense of belonging enhances meaning in life. *Personality and Social Psychology Bulletin*, *39*(11), 1418–1427. https://doi.org/10.1177/0146167213499186

*Law, D., Nishioka, M., Beck, J., & Brown, D. (2019). *Development and validation of the receipt of task-related help (ROTH) scale* [Conference presentation]. SIOP annual conference, Washington, DC, United States.

Le, H., Schmidt, F. L., Harter, J. K., & Lauver, K. J. (2010). The problem of empirical redundancy of constructs in organizational research: An empirical investigation.

Organizational Behavior and Human Decision Processes, *112*(2), 112–125. https://doi.org/10.1016/j.obhdp.2010.02.003

Leary, M. R. (2005). Sociometer theory and the pursuit of relational value: Getting to the root of self-esteem. *European Review of Social Psychology*, *16*, 75–111. https://doi.org/10.1080/10463280540000007

Leary, M. R. (2012). Sociometer theory. In Van Lange, P. A. M., Kruglanski, A. W., Higgins, E. T. (Eds.), *Handbook of theories of social psychology* (pp. 141–159). Thousand Oaks, CA: Sage.

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. *Advances in Experimental Social Psychology*, *32*, 1–62. https://doi.org/10.1016/S0065-2601(00)80003-9

Leary, M. R., Haupt, A. L., Strausser, K. S., & Chokel, J. T. (1998). Calibrating the sociometer: The relationship between interpersonal appraisals and the state self-esteem. *Journal of Personality and Social Psychology, 74*(5), 1290–1299. https://doi.org/10.1037/0022-3514.74.5.1290

Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the Need To Belong Scale: Mapping the nomological network. *Journal of Personality Assessment, 95*(6), 610–624. https://doi.org/10.1080/00223891.2013.819511

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*(3), 518–530. https://doi.org/10.1037/0022-3514.68.3.518

Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, *10*(2), 111–132.

https://doi.org/10.1207/s15327957pspr1002_2

Leavitt, K., Mitchell, T. R., & Peterson, J. (2010). Theory pruning: Strategies to reduce our dense theoretical landscape. *Organizational Research Methods*, *13*(4), 644–667. https://doi.org/10.1177/1094428109345156

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology, 87*(1), 131–142. https://doi.org/10.1037/0021-9010.87.1.131

*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*(4), 836–844. https://doi.org/10.1016/j.ijhm.2011.01.004

LePine, J. A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology, 83*(6), 853–868. https://doi.org/10.1037/0021-9010.83.6.853

Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress, 33*(1), 76–103. https://doi.org/10.1080/02678373.2018.1529065

*Li, C.-F., & Tian, Y.-Z. (2016). Influence of workplace ostracism on employee voice behavior. *American Journal of Mathematical and Management Sciences*, *35*(4), 281–296. https://doi.org/10.1080/01966324.2016.1201444

Li, M., Xu, X., & Kwan, H. K. (2021). Consequences of workplace ostracism: A meta-analytic review. *Frontiers in psychology*, *12*, 1–14. https://doi.org/10.3389/fpsyg.2021.641302

Liang, L. H., Coulombe, C., Brown, D. J., Lian, H., Hanig, S., Ferris, D. L., & Keeping, L. M. (2022). Can two wrongs make a right? The buffering effect of retaliation on subordinate well-being following abusive supervision. *Journal of Occupational Health Psychology,*

27(1), 37–52. https://doi.org/10.1037/ocp0000291

Liang, L. H., Nishioka, M., Evans, R., Brown, D. J., Shen, W., & Lian, H. (2022). Unbalanced, unfair, unhappy, or unable? Theoretical integration of multiple processes underlying the leader Mistreatment-employee CWB relationship with meta-analytic methods. *Journal of Leadership & Organizational Studies, 29*(1), 33-72. https://doi.org/10.1177/15480518211066074

Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. Plenum Press.

*Liu, C. (2019). Ostracism, attributions, and their relationships with international students' and employees' outcomes: The moderating effect of perceived harming intent. *Journal of Occupational Health Psychology, 24*(5), 556–571. https://doi.org/10.1037/ocp0000130

Lockwood, P. L., Hamonet, M., Zhang, S. H., Ratnavel, A., Salmony, F. U., Husain, M., & Apps, M. A. J. (2017). Prosocial apathy for helping others when effort is required. *Nature Human Behaviour, 1*(7), 1–10. https://doi.org/10.1038/s41562-017-0131

Lyons, B. J., & Scott, B. A. (2012). Integrating social exchange and affective explanations for the receipt of help and harm: A social network approach. *Organizational Behavior and Human Decision Processes, 117*(1), 66–79. https://doi.org/10.1016/j.obhdp.2011.10.002

*Lyu, Y., & Zhu, H. (2019). The predictive effects of workplace ostracism on employee attitudes: A job embeddedness perspective. *Journal of Business Ethics, 158*(4), 1083–1095. https://doi.org/10.1007/s10551-017-3741-x

Ma, J., Liu, C., Bao, H., & Gu, X. (2022). How to ward off the threat of workplace ostracism? The merit of self-compassion. *Personality and Individual Differences, 187,* 1–11. https://doi.org/10.1016/j.paid.2021.111396

Mahadevan, N., Gregg, A. P., & Sedikides, C. (2019). Is self-regard a sociometer or a

hierometer? Self-esteem tracks status and inclusion, narcissism tracks status. Journal of *Personality and Social Psychology, 116*(3), 444–466. https://doi.org/10.1037/pspp0000189

*Mahfooz, Z., Arshad, A., Nisar, Q. A., Ikram, M., & Azeem, M. (2017). Does workplace incivility and workplace ostracism influence the employees' turnover intentions? Mediating role of burnout and job stress and moderating role of psychological capital. *International Journal of Academic Research in Business and Social Sciences*, *7*(8), 398–413. https://doi.org/10.6007/IJARBSS/v7-i8/3244

*Manata, B. (2012). *Measuring pygmalion and normative expectation messages during workgroup socialization: An empirical study* [Master's Thesis, Michigan State University]. MSU Library Digital Repository. https://doi.org/doi:10.25335/28w1-at84

*Manegold, J. G. (2014). *Negative exchange spirals: A process model of incivility among coworkers* [Doctoral Dissertation, University of Texas]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/negative-exchange-spirals-process-model/docview/1620742703/se-2

Marcus, B., Taylor, O. A., Hastings, S. E., Sturm, A., & Weigelt, O. (2016). The structure of counterproductive work behavior: A review, a structural meta-analysis, and a primary study. *Journal of Management, 42*(1), 203-233. https://doi.org/10.1177/0149206313503019

Martin, R. J., & Hine, D. W. (2005). Development and validation of the uncivil workplace behavior questionnaire. *Journal of occupational health psychology, 10*(4), 477–490. https://doi.org/10.1037/1076-8998.10.4.477

Mathieu, J. E., DeShon, R. P., & Bergh, D. D. (2008). Mediational inferences in organizational

research: Then, now, and beyond. *Organizational Research Methods*, *11*(2), 203–223. https://doi.org/10.1177/1094428107310089

Mathieu, M., Eschleman, K. J., & Cheng, D. (2019). Meta-analytic and multiwave comparison of emotional support and instrumental support in the workplace. *Journal of Occupational Health Psychology*, *24*(3), 387–409. https://doi.org/10.1037/ocp0000135

*Matthews, R. A., & Ritter, K.-J. (2016). A concise, content valid, gender invariant measure of workplace incivility. *Journal of Occupational Health Psychology, 21*(3), 352–365. https://doi.org/10.1037/ocp0000017

*McHugh, J. (2018). *The effects of workplace incivility and job-related social support on organizational commitment of early career registered nurses in acute care hospitals in the U.S.* [Doctoral Dissertation, New York University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/effects-workplace-incivility-job-related-social/docview/2502201289/se-2

*Milam, A. C. (2010). *Racioethnic differences in the experience of workplace incivility* [Doctoral Dissertation, University of Houston]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/racioethnic-differences-experience-workplace/docview/610278127/se-2

*Miner, K. N., January, S. C., Dray, K. K., & Carter-Sowell, A. R. (2019). Is it always this cold? Chilly interpersonal climates as a barrier to the well-being of early-career women faculty in STEM. *Equality, Diversity and Inclusion: An International Journal*, *38*(2), 226–245. https://doi.org/10.1108/EDI-07-2018-0127

*Mitchell, M. S., Vogel, R. M., & Folger, R. (2015). Third parties' reactions to the abusive supervision of coworkers. *Journal of Applied Psychology, 100*(4), 1040–1055.

https://doi.org/10.1037/apl0000002

*Mok, A., & De Cremer, D. (2016). The bonding effect of money in the workplace: Priming money weakens the negative relationship between ostracism and prosocial behaviour. *European Journal of Work and Organizational Psychology*, *25*(2), 272–286. https://doi.org/10.1080/1359432X.2015.1051038

Molet, M., Macquet, B., Lefebvre, O., & Williams, K. D. (2013). A focused attention intervention for coping with ostracism. *Consciousness and Cognition: An International Journal, 22*(4), 1262–1270. https://doi.org/10.1016/j.concog.2013.08.010

*Muhammad, K. I., Iqbal, J., Fatima, T., Syed Muhammad, J. I., Warda, N. J., & Muhammad, S. N. (2022). Why do I contribute to organizational learning when I am ostracized? A moderated mediation analysis. *Journal of Management and Organization, 28*(2), 261–282. https://doi.org/10.1017/jmo.2019.70

Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: does self-control resemble a muscle? *Psychological bulletin, 126*(2), 247–259. https://doi.org/10.1037/0033-2909.126.2.247

*Naz, S., Li, C., Khan, S., & ud din Khan, H. (2017). Comparative analytical study of teachers' personality type (A and B) to study the consequences of ostracism. *International Journal of Scientific in Science, Engineering and Technology*, *3*(5), 488–502.

Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*(2), 85-101. https://doi.org/10.1080/15298860309032

*Nelson, T. (2013). *Leader-member exchange theory: Examining the dynamics and potential contributions of the middle-quality group* [Doctoral Dissertation, The University of Memphis]. The University of Memphis Electronic Theses and Dissertations.

https://digitalcommons.memphis.edu/etd/660

*Nelson, T. (2017). LMX relationships and "social death": A curvilinear effect on ostracism. *Global Journal of Management and Marketing, 1*. 62–80.

*Neves, P., & Cunha, M. P. e. (2018). Exploring a model of workplace ostracism: The value of coworker humor. *International Journal of Stress Management, 25*(4), 330–347. https://doi.org/10.1037/str0000069

*Noel, J. M. (2006). *Workplace exclusion: Examining the interaction between individual and situational factors on work related outcomes* [Doctoral Dissertation, University of Northern Iowa].

*O'Neill, P. B. (2011). *Testing a causal model of job insecurity and job satisfaction: Do dispositions matter?* [Doctoral Dissertation, Curtin University]. Curtin Theses. http://hdl.handle.net/20.500.11937/1443

*O'Reilly, J., & Robinson, S. L. (2009). The negative impact of ostracism on thwarted belongingness and workplace contributions. *Academy of Management Proceedings, 2009*(1), 1–7. https://doi.org/10.5465/AMBPP.2009.44243707

*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*(3), 774–793. https://doi.org/10.1287/orsc.2014.0900

*Oh, K. (2018). *Anger, fear, and emotional comrades against supervisor mistreatment in the workplace* [Doctoral Dissertation, Michigan State University]. MSU Library Digital Repository. https://doi.org/doi:10.25335/yfyc-3n12

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books/D. C. Heath and Com.

Organ, D. W. (1997) Organizational citizenship behavior: It's construct clean-up time, *Human Performance, 10*(2), 85–97. https://doi.org/10.1207/s15327043hup1002_2

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Thousand Oaks, CA: Sage.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology, 48*(4), 775–802. https://doi.org/10.1111/j.1744-6570.1995.tb01781.x

Osgood, J. M., & Muraven, M. (2015). Self-control depletion does not diminish attitudes about being prosocial but does diminish prosocial behaviors. *Basic and Applied Social Psychology, 37*(1), 68–80. https://doi.org/10.1080/01973533.2014.996225

*Peng, A. C., & Zeng, W. (2017). Workplace ostracism and deviant and helping behaviors: The moderating role of 360 degree feedback. *Journal of Organizational Behavior*, *38*(6), 833–855. https://doi.org/10.1002/job.2169

*Penhaligon, N. L., Louis, W. R., & Restubog, S. L. D. (2009). Emotional anguish at work: The mediating role of perceived rejection on workgroup mistreatment and affective outcomes. *Journal of Occupational Health Psychology*, *14*(1), 34–45. https://doi.org/10.1037/a0013288

*Pereira, D., Meier, L. L., & Elfering, A. (2013). Short-term effects of social exclusion at work and worries on sleep. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *29*(3), 240–252. https://doi.org/10.1002/smi.2461

*Petrucci, T. (2013). *The relationship among incivility, tacit knowledge sharing, trust, affective organizational commitment* [Doctoral Dissertation, Regent University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-

theses/relationship-among-incivility-tacit-knowledge/docview/1499833359/se-2

Pfeffer, J. (1993). Barriers to the advance of organizational science: Paradigm development as a dependent variable. *The Academy of Management Review*, *18*(4), 599–620. https://doi.org/10.2307/258592

Plat, J. R. (1964). Strong inference. *Science*, *146*, 347–353. https://doi.org/10.1126/science.146.3642.347

Pletzer, J. L., Bentvelzen, M., Oostrom, J. K., & de Vries, R. E. (2019). A meta-analysis of the relations between personality and workplace deviance: Big five versus HEXACO. *Journal of Vocational Behavior*, *112*, 369–383. https://doi.org/10.1016/j.jvb.2019.04.004

Podsakoff, P. M., MacKenzie, S. B., & Hui, C. (1993). Organizational citizenship behaviors and managerial evaluation of employees' performance: A review and suggestions for future research. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (vol. 11, pp. 1-40). Greenwich, CT: JAI Press.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, *94*(1), 122–141. https://doi.org/10.1037/a0013079

Poon, K., Teng, F., Wong, W., & Chen, Z. (2016). When nature heals: Nature exposure moderates the relationship between ostracism and aggression. *Journal of Environmental Psychology*, *48*, 159–168. https://doi.org/10.1016/j.jenvp.2016.10.002

*Qian, J., Yang, F., Wang, B., Huang, C., & Song, B. (2019). When workplace ostracism leads to burnout: The roles of job self-determination and future time orientation. *The International Journal of Human Resource Management*, *30*(17), 2465–2481.

https://doi.org/10.1080/09585192.2017.1326395

*Quade, M. J. (2013). The goody-good effect: When social comparisons of ethical behavior and performance lead to self-threat versus self-enhancement, social undermining, and ostracism [Master's thesis, The University of Tulsa]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/goody-good-effect-when-social-comparisons-ethical/docview/1548306769/se-2

*Quade, M. J., Greenbaum, R. L., & Mawritz, M. B. (2019). "If only my coworker was more ethical": When ethical and performance comparisons lead to negative emotions, social undermining, and ostracism. *Journal of Business Ethics, 159*(2), 567–586. https://doi.org/10.1007/s10551-018-3841-2

*Quade, M. J., Greenbaum, R. L., & Petrenko, O. V. (2017). "I don't want to be near you, unless…": The interactive effect of unethical behavior and performance onto relationship conflict and workplace ostracism. *Personnel Psychology, 70*(3), 675–709. https://doi.org/10.1111/peps.12164

Quarmley, M., Feldman, J., Grossman, H., Clarkson, T., Moyer, A., & Jarcho, J. M. (2022). Testing effects of social rejection on aggressive and prosocial behavior: A meta-analysis. *Aggressive behavior, 48(*6), 529–545. https://doi.org/10.1002/ab.22026

*Ramsey, A. T. (2012). *Minding the interpersonal gap at work: Role of mindfulness on workplace ostracism in employees* [Doctoral Dissertation, Southern Illinois University]. Carbondale. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/minding-interpersonal-gap-at-work-role/docview/1027764191/se-2

*Ramsey, A. T., & Jones, E. E. (2015). Minding the interpersonal gap: Mindfulness-based

interventions in the prevention of ostracism. *Consciousness and Cognition: An International Journal, 31*, 24–34. https://doi.org/10.1016/j.concog.2014.10.003

*Rasool, S. F., Maqbool, R., Samma, M., Zhao, Y., & Anjum, A. (2019). Positioning depression as a critical factor in creating a toxic workplace environment for diminishing worker productivity. *Sustainability, 11*(9), 1–18. https://doi.org/10.3390/su11092589

Reknes, I., Visockaite, G., Liefooghe, A., Lovakov, A., & Einarsen, S. V. (2019). Locus of control moderates the relationship between exposure to bullying behaviors and psychological strain. *Frontiers in Psychology, 10*, 1–12. https://doi.org/10.3389/fpsyg.2019.01323

Restubog, S. L. D., Scott, K. L., & Zagenczyk, T. J. (2011). When distress hits home: The role of contextual factors and psychological distress in predicting employees' responses to abusive supervision. *Journal of Applied Psychology, 96*(4), 713–729. https://doi.org/10.1037/a0021593

*Riaz, S., Xu, Y., & Hussain, S. (2019). Workplace ostracism and knowledge hiding: The mediating role of job tension. *Sustainability, 11*(20), 1–16. https://doi.org/10.3390/su11205547

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal, 38*(2), 555–572. https://doi.org/10.2307/256693

Robinson, S. L., O'Reilly, J., & Wang, W. (2013). Invisible at Work: An Integrated Model of Workplace Ostracism. *Journal of Management, 39*(1), 203–231. https://doi.org/10.1177/0149206312466141

Robinson, S. L., & Schabram, K. (2017). *Invisible at work: Workplace ostracism as*

aggression. In N. A. Bowling & M. S. Hershcovis (Eds.) *Research and theory on workplace aggression* (pp. 221–244). Cambridge, UK: Cambridge University Press.

Robinson, S. L., Wang, W., & Kiewitz, C. (2014). Coworkers behaving badly: The impact of coworker deviant behavior upon individual employees. *Annual Review of Organizational Psychology and Organizational Behavior, 1*, 123–143. https://doi.org/10.1146/annurev-orgpsych-031413-091225

Rosen, L., Carrier, L. M., Miller, A., Rokkum, J., & Ruiz, A. (2016). Sleeping with technology: cognitive, affective, and technology usage predictors of sleep problems among college students. *Sleep Health, 2*(1), 49–56. https://doi.org/10.1016/j.sleh.2015.11.003

*Sahoo, B. C. (2015). *Moderating role of emotional intelligence and psychological capital towards the relationship between workplace ostracism and work attitudes* [Doctoral Dissertation, Pondicherry University]. Pondicherry University Institutional Repository.

*Sarfraz, M., Qun, W., Sarwar, A., Abdullah, M. I., Imran, M. K., & Shafique, I. (2019). Mitigating effect of perceived organizational support on stress in the presence of workplace ostracism in the Pakistani nursing sector. *Psychology Research and Behavior Management, 12*: 839–849. https://doi.org/10.2147/PRBM.S210794

*Sarwar, Aisha, Khan, M. M., & Mujtaba, B. G. (2017). Despotic leadership, workplace ostracism and knowledge hoarding: A serial mediation model. *SAM Advanced Management Journal, 82*(4), 4–19.

*Sarwar, Ambreen, Abdullah, M. I., Sarfraz, M., & Imran, M. K. (2019). Collaborative effect of workplace ostracism and self-efficacy versus job stress. *Journal of Entrepreneurship Management and Innovation, 15*(4), 107–137. https://doi.org/10.7341/20191544

Schilpzand, P., De Pater, I. E., & Erez, A. (2016). Workplace incivility: A review of the

literature and agenda for future research. *Journal of Organizational Behavior*, *37*(S1), S57–S88. https://doi.org/10.1002/job.1976

*Schilpzand, P., & Huang, L. (2018). When and how experienced incivility dissuades proactive performance: An integration of sociometer and self-identity orientation perspectives. *Journal of Applied Psychology*, *103*(8), 828–841. https://doi.org/10.1037/apl0000303

Schmeichel, B. J., & Baumeister, R. F. (2004). Self-regulatory strength. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 84–98). The Guilford Press.

Schmidt, F. L. (1992). What do data really mean? Research findings, meta-analysis, and cumulative knowledge in psychology. *American Psychologist*, *47*(10), 1173–1181. https://doi.org/10.1037/0003-066X.47.10.1173

*Scott, K. D. (2007). *The development and test of an exchange-based model of interpersonal workplace exclusion* [Doctoral Dissertation, University of Kentucky]. University of Kentucky Doctoral Dissertations. https://uknowledge.uky.edu/gradschool_diss/534

Scott, B. A., & Judge, T. A. (2013). Beauty, personality, and affect as antecedents of counterproductive work behavior receipt. *Human Performance, 26,* 93–113. https://doi.org/10.1080/08959285.2013.765876

*Scott, K. L., Tams, S., Schippers, M. C., & Lee, K. (2015). Opening the black box: Why and when workplace exclusion affects social reconnection behaviour, health, and attitudes. *European Journal of Work and Organizational Psychology*, *24*(2), 239–255. https://doi.org/10.1080/1359432X.2014.894978

*Scott, K. L., Zagenczyk, T. J., Schippers, M., Purvis, R. L., & Cruz, K. S. (2014). Co-worker exclusion and employee outcomes: An investigation of the moderating roles of perceived

organizational and social support. *The Journal of Management Studies*, *51*(8), 1235–1256. https://doi.org/10.1111/joms.12099

Shadish, W. R., & Sweeney, R. B. (1991). Mediators and moderators in meta-analysis: There's a reason we don't let dodo birds tell us which psychotherapies should have prizes. *Journal of Consulting and Clinical Psychology*, *59*(6), 883–893. https://doi.org/10.1037/0022-006X.59.6.883

*Sherwood, J. (2019). *Belongingness, workplace uncivility, and role development in associate degree nursing students* [Doctoral Dissertation, Capella University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/belongingness-workplace-incivility-role/docview/2320966891/se-2

Steele, C., Kidd, D. C., & Castano, E. (2015). On social death: Ostracism and the accessibility of death thoughts. *Death Studies*, *39*, 19–23. https://doi.org/10.1080/07481187.2013.844746

*Stoermer, S., Haslberger, A., Froese, F., & Kraeh, A. (2018). Person-environment fit and expatriate job satisfaction. *Thunderbird International Business Review*, *60*(6), 851–860. https://doi.org/10.1002/tie.21920

*Sulea, C., Filipescu, R., Horga, A., Orţan, C., & Fischmann, G. (2012). Interpersonal mistreatment at work and burnout among teachers. *Cognition, Brain, Behavior: An Interdisciplinary Journal*, *16*(4), 553–570.

Tamplin-Wilson, J., Smith, R., Morgan, J., & Maras, P. (2019). Video games as a recovery intervention for ostracism. *Computers in Human Behavior, 97,* 130–136. https://doi.org/10.1016/j.chb.2019.03.008

Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American, 223*(5), 96–103. http://www.jstor.org/stable/24927662

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37). Monterey, CA: Brooks/Cole.

Tepper, B. J., & Henle, C. A. (2011). A case for recognizing distinctions among constructs that capture interpersonal mistreatment in work organizations. *Journal of Organizational Behavior*, *32*(3), 487–498. https://doi.org/10.1002/job.688

*Thompson, M. J., Carlson, D. S., Kacmar, K. M., & Vogel, R. M. (2019). The cost of being ignored: Emotional exhaustion in the work and family domains. *Journal of Applied Psychology*, *105*(2), 186–195. https://doi.org/10.1037/apl0000433

*Tremblay, M. (2017). Humor in teams: Multilevel relationships between humor climate, inclusion, trust, and citizenship behaviors. *Journal of Business and Psychology*, *32*(4), 363–378. https://doi.org/10.1007/s10869-016-9445-x

Tripp, T. M., Bies, R. J., & Aquino, K. (2002). Poetic justice or petty jealousy? The aesthetics of revenge. *Organizational Behavior and Human Decision Processes, 89*(1), 966–984. https://doi.org/10.1016/S0749-5978(02)00038-9

*Turkoglu, N., & Dalgic, A. (2019). The effect of ruminative thought style and workplace ostracism on turnover intention of hotel employees: The mediating effect of organizational identification. *Tourism & Management Studies*, *15*(3), 17–26. https://doi.org/10.18089/tms.2019.150302

Turner, M. R., & Connelly, S. (2021). Helping in the eyes of the beholder: The impact of OCB type and fluctuation in OCB on coworker perceptions and evaluations of helpful employees. *Journal of Theoretical Social Psychology, 5*(3), 269–282. https://doi.org/10.1002/jts5.92

Twenge, J. M., Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Bartels, J. M. (2007). Social exclusion decreases prosocial behavior. *Journal of Personality and Social Psychology, 92*(1), 56–66. https://doi.org/10.1037/0022-3514.92.1.56

Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology, 81*(6), 1058–1069. https://doi.org/10.1037//0022-3514.81.6.1058

Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of Applied Psychology, 95*(4), 769–780. https://doi.org/10.1037/a0019214

Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management, 42*(5), 1195-1229. https://doi.org/10.1177/0149206316632058

van dem Knesebeck, O., & Siegrist, J. (2003). Reported nonreciprocity of social exchange and depressive symptoms: Extending the model of effort-reward imbalance beyond work. *Journal of Psychosomatic Research, 55*(3), 209–214. https://doi.org/10.1016/S0022-3999(02)00514-7

Viswesvaran, C., & Ones, D. S. (1995). Theory testing: Combining psychometric meta-analysis and structural equations modeling. *Personnel Psychology, 48,* 865–885. https://doi.org/10.1111/j.1744-6570.1995.tb01784.x

Vohs, K. D., Baumeister, R. F., & Ciarocco, N. J. (2005). Self-regulation and self-presentation: Regulatory resource depletion impairs impression management and effortful self-presentation depletes regulatory resources. *Journal of Personality and Social Psychology,*

88(4), 632–657. https://doi.org/10.1037/0022-3514.88.4.632

*Walsh, B. M., Matthews, R. A., Toumbeva, T. H., Kabat-Farr, D., Philbrick Jenna, & Pavisic Ivica. (2019). Failing to be family-supportive: Implications for supervisors. *Journal of Management, 45*(7), 2952–2977. https://doi.org/10.1177/0149206318774621

*Wang, Z., & Li, G. (2018). You don't actually want to get closer to the star: How LMX leads to workplace ostracism. Frontiers of Business Research in China, 12(1), 1–13. https://doi.org/10.1186/s11782-017-0023-5

Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews* (vol. 18, pp. 1–74). Elsevier Science/JAI Press.

Williams, K. D. (1997). Social Ostracism. In R.M. Kowalski (Eds.), *Aversive Interpersonal Behaviors*. The Springer Series in Social/Clinical Psychology. Springer, Boston, MA. https://doi.org/10.1007/978-1-4757-9354-3_7

Williams, K. D. (2007a). Ostracism. *Annual Review of Psychology, 58*: 425–452. https://doi.org/10.1146/annurev.psych.58.110405.085641

Williams, K. D. (2007b). Ostracism: The kiss of social death. *Social and Personality Psychology Compass, 1*(1), 236–247. https://doi.org/10.1111/j.1751-9004.2007.00004.x

Williams, K. D. (2009). *Ostracism: A temporal need-threat model.* In M. P. Zanna (Ed.), *Advances in experimental social psychology. Advances in experimental social psychology* (vol. 41, pp. 275–314). Elsevier Academic Press. https://doi.org/10.1016/S0065-2601(08)00406-1

*Williams, M. S. (2017). *Acculturation and immigrants: The moderating effect of cultural*

identity salience and harmony enhancement and the mediating effect of social support and ostracism on the relationship between acculturation demands and employee outcomes [Doctoral Dissertation, Hofstra University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/acculturation-immigrants-moderating-effect/docview/1967189408/se-2

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*(3), 601–617. https://doi.org/10.1177/014920639101700305

Williams, K. D., Govan, C. L., Croker, V., Tynan, D., Cruickshank, M., & Lam, A. (2002). Investigations into differences between social- and cyberostracism. *Group Dynamics: Theory, Research, and Practice, 6*(1), 65–77. https://doi.org/10.1037/1089-2699.6.1.65

Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling, 15*(1), 23–51. https://doi.org/10.1080/10705510701758166

Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and Coping. *Current Directions in Psychological Science, 20*(2), 71–75. https://doi.org/10.1177/0963721411402480

Williams, S., & Shiaw, W. T. (1999). Mood and organizational citizenship behavior: the effects of positive affect on employee organizational citizenship behavior intentions. *The Journal of Psychology, 133*(6), 656–668. https://doi.org/10.1080/00223989909599771

Wu, C.-H., Kwan, H. K., Liu, J., & Lee, C. (2021). When and how favour rendering ameliorates workplace ostracism over time: Moderating effect of self-monitoring and mediating effect of popularity enhancement. *Journal of Occupational and Organizational*

Psychology, *94*(1), 107–131. https://doi.org/10.1111/joop.12328

*Wu, C.-H., Liu, J., Kwan, H. K., & Lee, C. (2016). Why and when workplace ostracism inhibits organizational citizenship behaviors: An organizational identification perspective. *Journal of Applied Psychology*, *101*(3), 362–378. https://doi.org/10.1037/apl0000063

*Wu, W., Qu, Y., Zhang, Y., Shengyue Hao, Tang, F., Zhao, N., & Si, H. (2019). Needs frustration makes me silent: Workplace ostracism and newcomers' voice behavior. *Journal of Management and Organization*, *25*(5), 635–652. https://doi.org/10.1017/jmo.2017.81

*Wu, W., Wang, H., & Lu, L. (2018). Will my own perception be enough? *Chinese Management Studies*, *12*(1), 202–221. https://doi.org/10.1108/CMS-04-2017-0109

*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*(1), 178–199. https://doi.org/10.1111/j.1467-6486.2011.01017.x

*Xia, A., Wang, B., Song, B., Zhang, W., & Qian, J. (2019). How and when workplace ostracism influences task performance: Through the lens of conservation of resource theory. *Human Resource Management Journal*, *29*(3), 353–370. https://doi.org/10.1111/1748-8583.12226

*Xu, H. (2012). *How am I supposed to live without you: An investigation of antecedents and consequences of workplace ostracism* [Doctoral Dissertation, Hong Kong Polytechnic University]. Polyu Electronic Theses. https://theses.lib.polyu.edu.hk/handle/200/6736

*Xu, E., Huang, X., & Robinson, S. L. (2017). When self-view is at stake: Responses to ostracism through the lens of self-verification theory. *Journal of Management*, *43*(7), 2281–2302. https://doi.org/10.1177/0149206314567779

Xu, A. J., Loi, R., & Lam, L. W. (2015). The bad boss takes it all: How abusive supervision and leader–member exchange interact to influence employee silence. *The Leadership Quarterly, 26*(5), 763–774. https://doi.org/10.1016/j.leaqua.2015.03.002

Yan, Y., Zhou, E., Long, L., Ji. Y. (2014). The influence of workplace ostracism on counterproductive work behavior: The mediating effect of state self-control. *Social Behavior and Personality: An International Journal*, *42*(6), 881–890. https://doi.org/10.2224/sbp.2014.42. 6.881.

*Yang, J. (2012). *Workplace ostracism and performance related outcomes: A process model incorporating social influence and social identity theories* [Doctoral Dissertation, State University of New York]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/workplace-ostracism-performance-related-outcomes/docview/1029863733/se-2

*Yang, J., & Treadway, D. C. (2018). A social influence interpretation of workplace ostracism and counterproductive work behavior. *Journal of Business Ethics*, *148*(4), 879–891. https://doi.org/10.1007/s10551-015-2912-x

*Yang, Q., & Wei, H. (2018). The impact of ethical leadership on organizational citizenship behavior: The moderating role of workplace ostracism. *Leadership & Organization Development Journal, 39*(1), 100–113. https://doi.org/10.1108/LODJ-12-2016-0313

*Yang, L.-Q., Zheng, X., Liu, X., Lu, C.-Q., & Schaubroeck, J. M. (2020). Abusive supervision, thwarted belongingness, and workplace safety: A group engagement perspective. *Journal of Applied Psychology, 105*(3), 230–244. https://doi.org/10.1037/apl0000436

Yu, M., Dai, Y., Xu, M., Wang, G. G., & Wang, L. (2023). The effects of leaders' economic and stakeholder values on subordinates' discretionary behaviors as antecedents of perceived

ethical leadership: a multilevel investigation. *Current Psychology*, 1–15. https://doi.org/10.1007/s12144-023-05293-7

Zadro, L., Williams, K. D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology, 40*(4), 560–567. https://doi.org/10.1016/j.jesp.2003.11.006

*Zhang, X., & Dai, L. (2015). The relationship between neuroticism and experience of workplace ostracism in new employees. *Open Journal of Social Sciences*, *3*(2), 80–87. https://doi.org/10.4236/jss.2015.32011

*Zhang, L., Fan, C., Deng, Y., Lam, C. F., Hu, E., & Wang, L. (2019). Exploring the interpersonal determinants of job embeddedness and voluntary turnover: A conservation of resources perspective. *Human Resource Management Journal*, *29*(3), 413–432. https://doi.org/10.1111/1748-8583.12235

*Zhang, R., Ye, C., & Ferreira-Meyers, K. (2017). Linking workplace ostracism to interpersonal citizenship behavior: A moderated mediation model of work-to-family conflict and rumination. *International Journal of Stress Management, 24*(3), 293–320. https://doi.org/10.1037/str0000056

*Zhao, H., Peng, Z., & Sheard, G. (2013). Workplace ostracism and hospitality employees' counterproductive work behaviors: The joint moderating effects of proactive personality and political skill. *International Journal of Hospitality Management*, *33*, 219–227. https://doi.org/10.1016/j.ijhm.2012.08.006

*Zhao, H., & Xia, Q. (2017). An examination of the curvilinear relationship between workplace ostracism and knowledge hoarding. *Management Decision, 55*(2), 331–346.

https://doi.org/10.1108/MD-08-2016-0607

*Zhao, H., Xia, Q., He, P., Sheard, G., & Wan, P. (2016). Workplace ostracism and knowledge hiding in service organizations. *International Journal of Hospitality Management, 59*, 84–94. https://doi.org/10.1016/j.ijhm.2016.09.009

*Zheng, X., Yang, J., Ngo, H.-Y., Liu, X.-Y., & Jiao, W. (2016). Workplace ostracism and its negative outcomes: Psychological capital as a moderator. *Journal of Personnel Psychology*, *15*(4), 143–151. https://doi.org/10.1027/1866-5888/a000147

*Zhu, H., Lyu, Y., Deng, X., & Ye, Y. (2017). Workplace ostracism and proactive customer service performance: A conservation of resources perspective. *International Journal of Hospitality Management*, *64*, 62–72. https://doi.org/10.1016/j.ijhm.2017.04.004

Appendices

Appendix A: Relative Importance of Mechanisms for Mistreatment Constructs

WO and other forms of mistreatment are classified as negative workplace experiences, which as shown in Figures 3 and 4, seems to have similar processes through which they affect discretionary behaviors. However, scholars have widely discussed their unique properties, arguing that they are somewhat distinct. For the most part, we found their unique paths are significant (exceptions were the indirect effects on CWB via exchange and belongingness), which suggests that the different mistreatment constructs are not redundant. As a further test of their uniqueness, we decided to test the relative importance of each mechanism in explaining the relationships between all of the mistreatment constructs and discretionary workplace behaviors.

Starting with CWB, and with all predictors and outcomes entered in the same model, the relationship between incivility and CWB was mediated by resources (*b* = .06, 95% CI [.05, .08]) but not belongingness (*b* = -.01, 95% CI [-.01, .01]) nor exchange (*b* = -.01, 95% CI [-.02, .01]). For the other mistreatment constructs, we found the relationship between other forms of mistreatment and CWB was mediated by resources (*b* = .03, 95% CI [.01, .04]) but not belongingness (*b* = -.01, 95% CI [-.01, .01]) nor exchange (*b* = -.01, 95% CI [-.01, .01]). These findings are consistent with what we found with WO as the predictor. A test of the relative importance of each perspective was not conducted because only self-regulatory resources explained the relationship between all of the mistreatment constructs and CWB.

Similar to WO, we found the indirect effect of workplace incivility on OCB via belongingness (*b* = -.07, 95% CI [-.09, -.04]), exchange (*b* = -.03, 95% CI [-.05, -.02]), and resources (*b* = -.03, 95% CI [-.04, -.02]) were significant. A test of the difference of these indirect effects found the indirect effect of workplace incivility on OCB via belongingness was

significantly different from the indirect effect via exchange (IE difference = -.03, 95% CI [-.06, -.01]) and resources (IE difference = -.04, 95% CI [-.06, -.01]), while the indirect effect via resources was not significantly different than the indirect effect via exchange (IE difference = -.01, 95% CI [-.02, .02]). These difference tests, along with the magnitude of the indirect effects suggest that belonging provides a stronger explanation of the relationship between workplace incivility and OCB compared to both social exchange and self-regulatory resources, while self-regulatory resources and social exchange may possess similar explanatory power.

In contrast, for other mistreatment constructs, we found the indirect effect of other mistreatment on OCB via belongingness (*b* = -.03, 95% CI [-.05, -.01]) and resources (*b* = -.01, 95% CI [-.02, -.01]) were significant, but via exchange was not (*b* = -.01, 95% CI [-.02, .00]); however, the indirect effect of other mistreatment constructs on OCB via belongingness was not significantly different from the indirect effect via resources (IE difference = -.01, 95% CI [-.04, .01]) and exchange (IE difference = -.02, 95% CI [-.04, .01]), and the indirect effect via resources was not significantly different than the indirect effect via exchange (IE difference = -.01, 95% CI [-.02, .01]). Thus, belongingness and resources likely provided marginally significant explanations of the relationship between other mistreatment constructs and OCB because although they were statistically significant mediators, they were not significantly different from each other and the nonsignificant mediating effect of exchange. Overall, these findings highlight both the similarities and differences between mistreatment constructs.

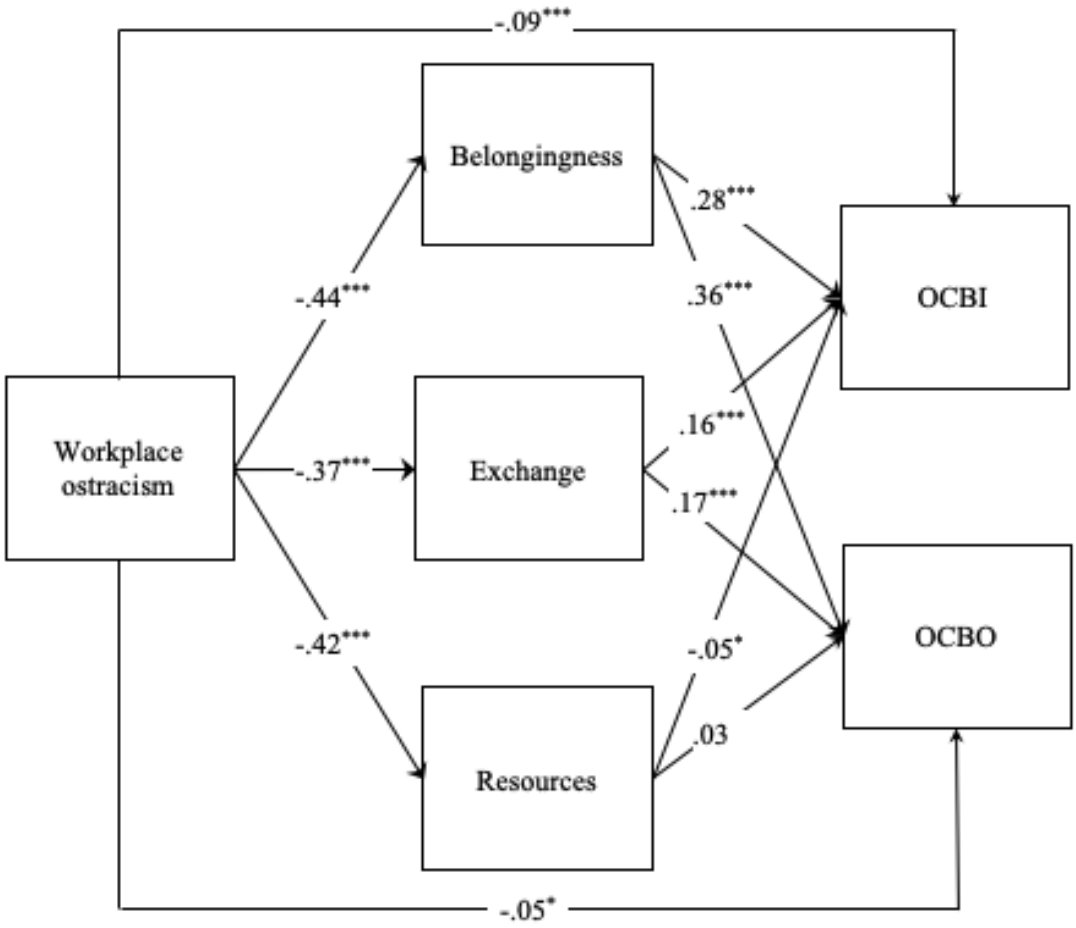
Appendix B: Predicting Individually- and Organizational-Focused Discretionary Behaviors

While scholars have commonly conceptualized OCB and CWB as two broad overall constructs, scholars have also defined OCB and CWB and in terms of their targets, namely, their subdimensions. Both OCB and CWB can be directed towards other employees within the organization or the organization itself, which represents the two subdimensions of these behaviors. Specifically, OCB includes actions that benefit other employees (OCB-I), like helping coworkers with their work, and actions that benefit the broader organization (OCB-O), such as displaying organizational pride (Williams & Anderson, 1991). Similarly, CWB encompasses behaviors that harm other employees (CWB-I), such as bullying coworkers, and actions that harm the broader organization (CWB-O), such as stealing from the organization (Bennett & Robinson, 2000).

Given that discretionary behaviors can be directed towards individuals or towards the broader organization, we explored the idea that the target of the discretionary behavior may moderate the mediating effects. Specifically, the mediating effects might be stronger for discretionary behaviors directed towards individuals compared to discretionary behaviors directed towards the organization. On the basis of social exchange, experiencing WO may afford little opportunities to build quality relationships with other employees. This may lead victims of WO to reciprocate with more negative behaviors towards individuals who mistreat them (CWBI) than towards the organization (CWBO), and they may feel less obligation to perform positive behaviors towards those from whom they receive negative treatment (OCBI) compared to engaging in positive behaviors towards the organization (OCBO). From a self-regulatory resources perspective, it may be especially demanding and painful for victims of WO to resist retaliating against individuals who mistreated them, so they may perform more CWBI relative to

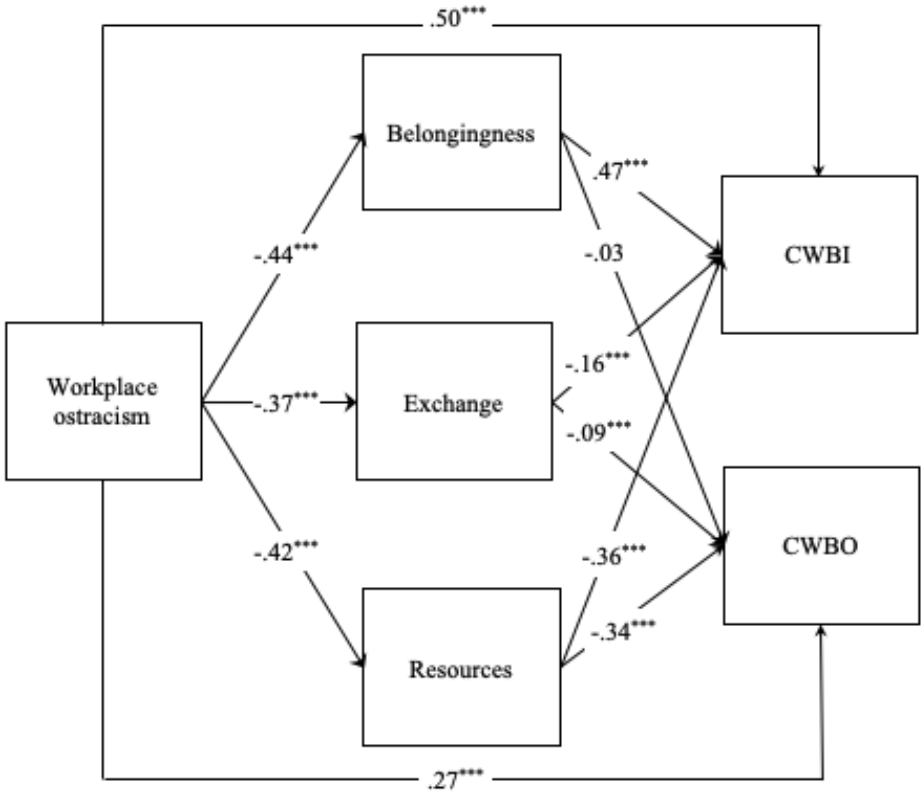
CWBO. Additionally, it may be especially difficult for victims of WO to contribute positively directly towards individuals who ostracized them, thereby doing less OCBI, but it may be somewhat manageable to allocate some resources towards contributing positively to the organization (OCBO). Conversely, based on belongingness theory, victims of WO may be relatively less inclined to make positive contributions that serve the collective interest, such as OCBO, but they may perform relatively more OCBI as an attempt to seek reinclusion. Moreover, victims of WO may be relatively more likely to refrain from CWB towards individuals (CWBI) to enhance their chances of reinclusion in the workgroup, compared to CWBO. The results of our moderator analyses are presented in Figures 5 through 8. We did not run our analyses controlling for incivility or other mistreatment constructs because we did not have enough studies for their intercorrelations to fill a meta-analytic matrix. Thus, we present our findings with only WO entered as the predictor variable. Our results indicate that generally, the three mechanisms provide a better explanation of the relationship between WO and interpersonally-directed compared to the relationship between WO and organizationally-directed discretionary behaviors, although some nuances exist.

Figure 5. Explaining WO on OCBI and OCBO in a Competing Mechanism Model



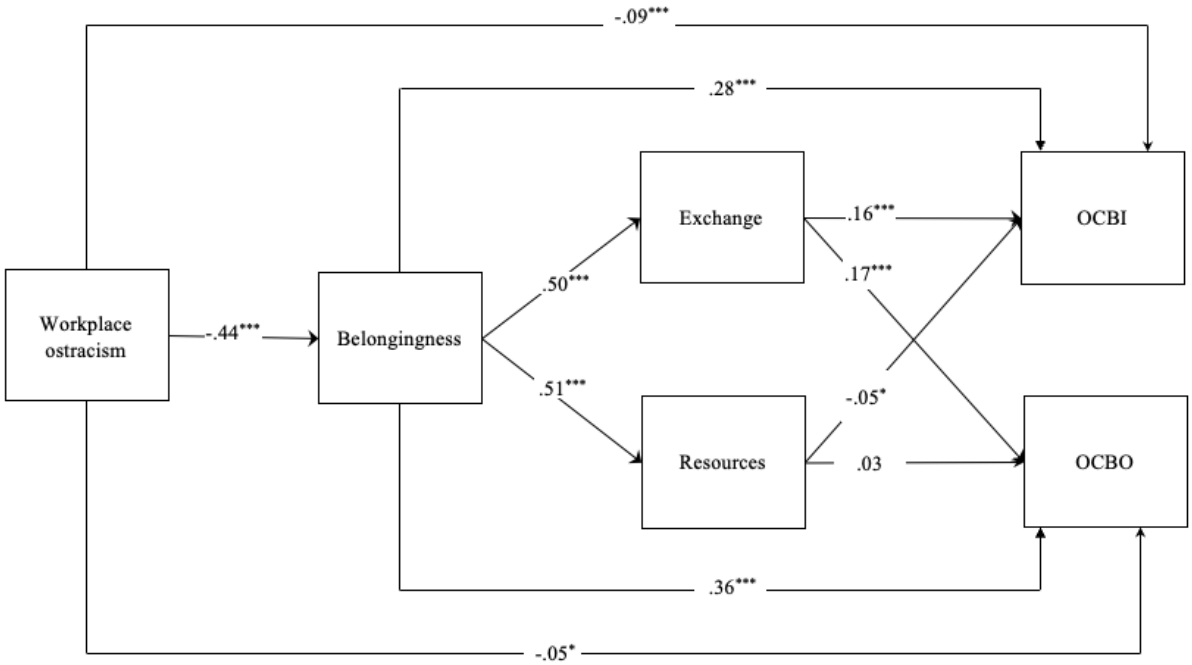
Note. Harmonic N = 2780. Belongingness significantly mediated the effect of WO on OCBI (*b* = -.12, 95% CI [-.14, -.10]) and the effect of WO on OCBO (*b* = -.16, 95% CI [-.18, -.14]). A test of the difference of these indirect effects found that the indirect effect of WO on OCBI via belongingness was significantly different than the indirect effect of WO on OCBO via belongingness (IE difference = .04, 95% CI [.02, .05]); the magnitude of the indirect effects suggest that belongingness provided a better explanation of the relationship between WO and OCBO compared to the relationship between WO and OCBI. Exchange also significantly mediated the effect of WO on OCBI (*b* = -.06, 95% CI [-.08, -.05]) and the effect of WO on OCBO (*b* = -.06, 95% CI [-.08, -.05]). A test of the difference of these indirect effects found that the indirect effect of WO on OCBI via exchange was not significantly different than the indirect effect of WO on OCBO via exchange (IE difference = .01, 95% CI [-.01, .01]). Finally, resources significantly mediated the effect of WO on OCBI (*b* = .02, 95% CI [.01, .04]), but not the effect of WO on OCBO (*b* = -.01, 95% CI [-.03, .01]). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 6. Explaining WO on CWBI and CWBO in a Competing Mechanism Model



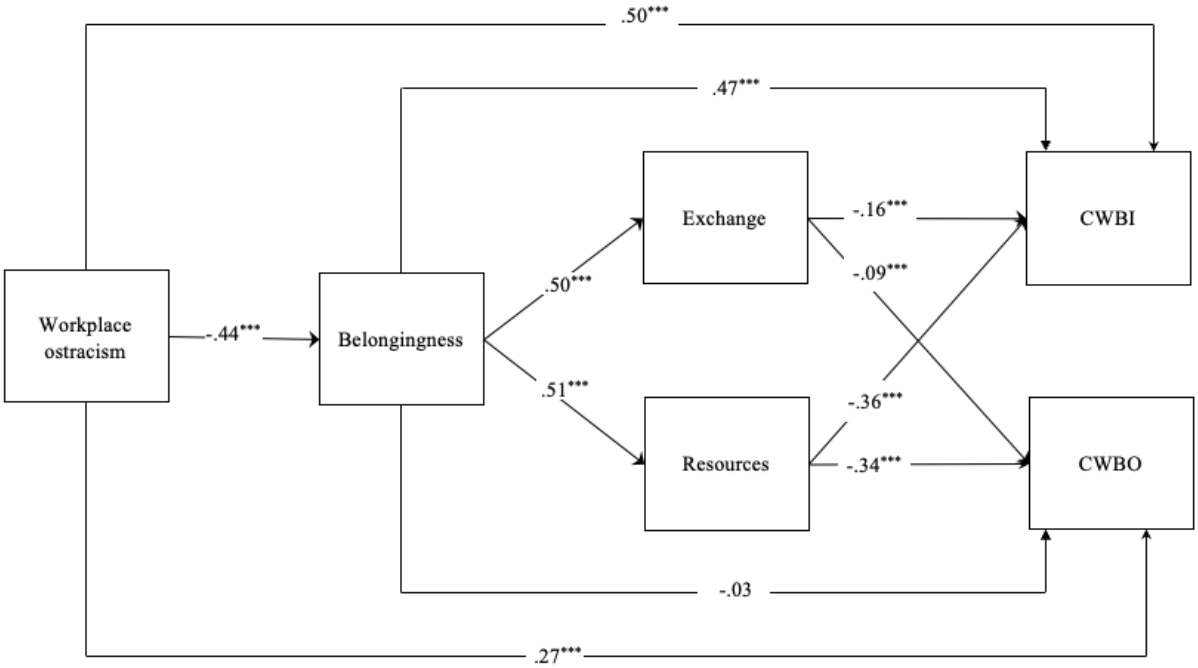
Note. Harmonic N = 2172. Resources significantly mediated the effect of WO on CWBI (*b* = .15, 95% CI [.13, .17]) and the effect of WO on CWBO (*b* = .14, 95% CI [.12, .16]). A test of the difference of these indirect effects found that the indirect effect of WO on CWBI via resources was not significantly different than the indirect effect of WO on CWBO via resources (IE difference = -.01, 95% CI [-.01, .02]). Moreover, belongingness significantly mediated the effect of WO on CWBI (*b* = -.21, 95% CI [-.23, -.18]), but not the relationship between WO and CWBO (*b* = .02, 95% CI [-.01, .03]). Exchange mediated the relationship between WO and CWBI (*b* = .06, 95% CI [.05, .07]) and the relationship between WO and CWBO (*b* = .03, 95% CI [.02, -.05]). Testing the difference of these indirect effects found that the indirect effect of WO on CWBI via exchange was significantly different than the indirect effect of WO on CWBO via exchange (*b* = .03, 95% CI [.02, .03]); the magnitude of the indirect effects suggests that exchange provided a better explanation of the relationship between WO and CWBI compared to the relationship between WO and CWBO. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 7. Explaining Impact of WO on OCBI and OCBO in a Serial Mediation Model



Note. Harmonic N = 2780. Belongingness and resources (*b* = .01, 95% CI [.01, .02]) significantly mediated the indirect effect of WO on OCBI, but not the indirect effect of WO on OCBO (*b* = .00, 95% CI [-.02, .01]). In contrast, belongingness and exchange significantly mediated the indirect effect of WO on OCBI (*b* = -.03, 95% CI [-.05, -.03]) and the indirect effect of WO on OCBO (*b* = -.04, 95% CI [-.05, -.03]); testing the difference of these indirect effects found that the indirect effect of WO on OCBI belongingness and exchange was not significantly different than the indirect effect of WO on OCBO via belongingness and exchange (IE difference = .01, 95% CI [-.01, .01]). Therefore, belongingness and exchange serially mediated the relationship between WO and OCBI and the relationship between WO and OCBO equally well. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 8. Explaining Impact of WO on CWBI and CWBO in a Serial Mediation Model

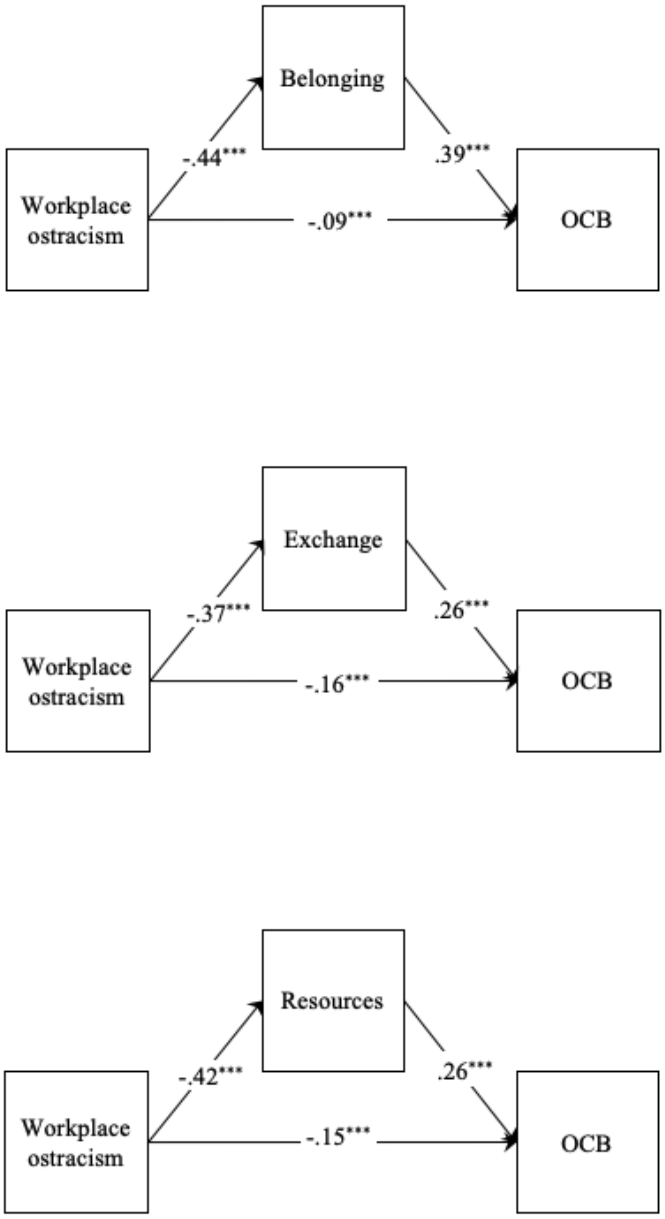


Note. Harmonic N = 2172. Belongingness and resources mediated the indirect effect of WO on CWBI (*b* = .08, 95% CI [.07, .09]) and the indirect effect of WO on CWBO (*b* = .08, 95% CI [.06, .09]). Testing the difference of these indirect effects found that the indirect effect of WO on CWBI via belonging and resources was not significantly different than the indirect effect of WO on CWBO via belonging and resources (IE difference = .01, 95% CI [-.01, .01]). Thus, belongingness and resources serially mediated the relationship between WO and CWBI and the relationship between WO and CWBO equally well. In contrast, belongingness and exchange mediated the indirect effect of WO on CWBI (*b* = .04, 95% CI [.03, .04]) and the indirect effect of WO on CWBO (*b* = .02, 95% CI [.01, .03]). Testing the difference of these indirect effects found that the indirect effect of WO on CWBI via belonging and exchange was significantly different than the indirect effect of WO on CWBO via belonging and exchange (IE difference = -.02, 95% CI [.01, .02]); the magnitude of the indirect effects suggest that belongingness and exchange provided a better explanation of the indirect effect of WO on CWBI compared to the indirect effect of WO on CWBO. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Appendix C: Mediating Effects with one Outcome and Without Mistreatment Controls

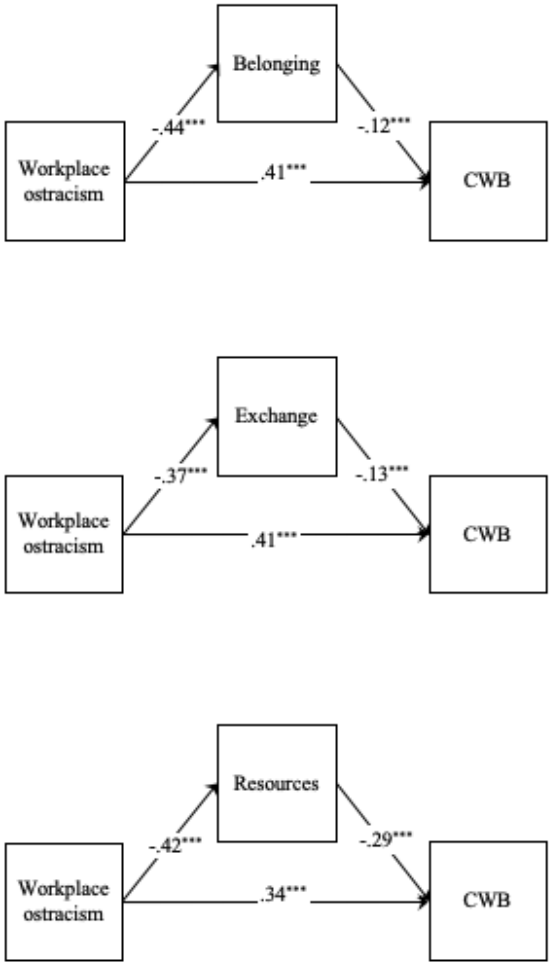
We sought to demonstrate the robustness of our findings by simplifying our models. We tested each mechanism in their own separate models with only one outcome and without mistreatment controls (Figures 9 and 10). All three mechanisms significantly mediated the relationship between WO and OCB, and the relationship between WO and CWB. Then we tested our mediating effects in a competing mechanism model with only one outcome and without mistreatment controls (Figures 11 and 12). All three mechanisms significantly mediated the relationship between WO and OCB, but only self-regulatory resources and social exchange mediated the link between WO and CWB. For the serial mediation models, we tested each serial mediation effect in their own separate models with only one outcome and removed mistreatment controls (Figures 13 and 14). Then we tested the serial mediation effects together in the same model with only one outcome and removed mistreatment controls (Figures 15 and 16). We found the indirect effect of WO on OCB, as well as the indirect effect of WO on CWB were mediated by both belonging and resources, and belonging and exchange. These findings are largely consistent with our previous findings when we controlled for other mistreatment constructs and included both outcomes in the same model, with the exception of the indirect effect of WO on CWB via social exchange, and via belongingness and exchange.

Figure 9. Explaining WO-OCB with each Mediator in Separate Models



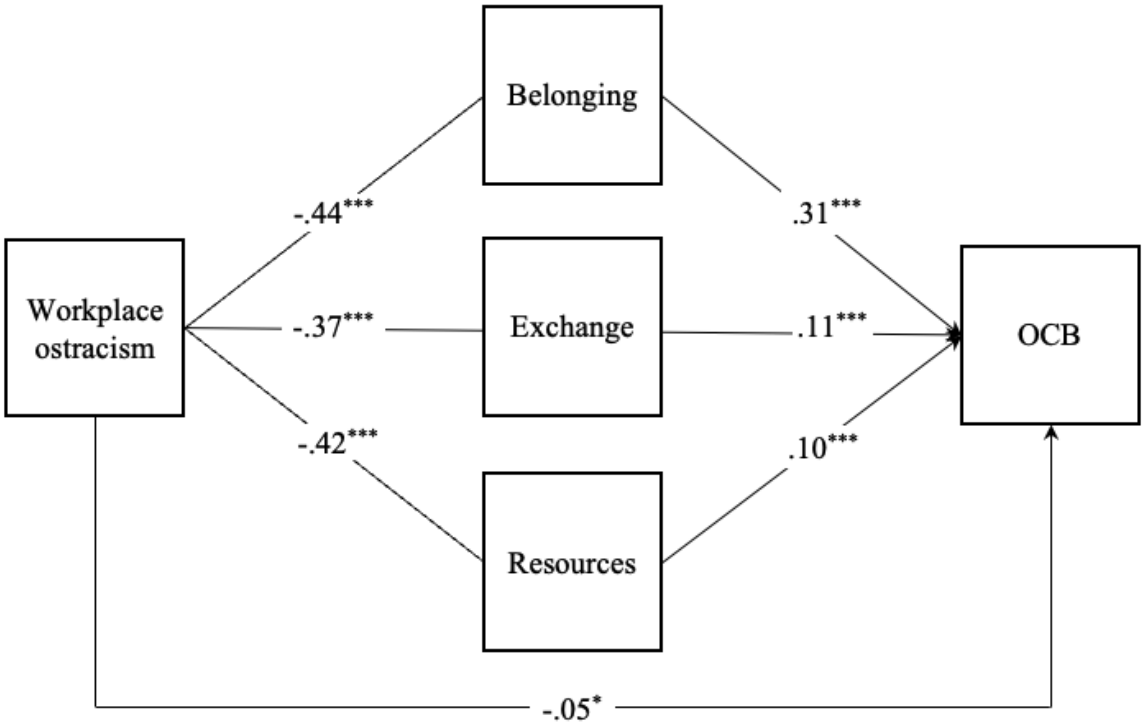
Note. The indirect effect via belongingness was negative and significant (harmonic N = 3623*), b* = -.17, 95% CI (-.19, -.15), the indirect effect via exchange was negative and significant (harmonic N = 7239*), b* = -.10, 95% CI (-.11, -.09), and the indirect effect via resources was negative and significant (harmonic N = 6967), *b* = -.11, 95% CI (-.12, -.10). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 10. Explaining WO-CWB with each Mediator in Separate Models



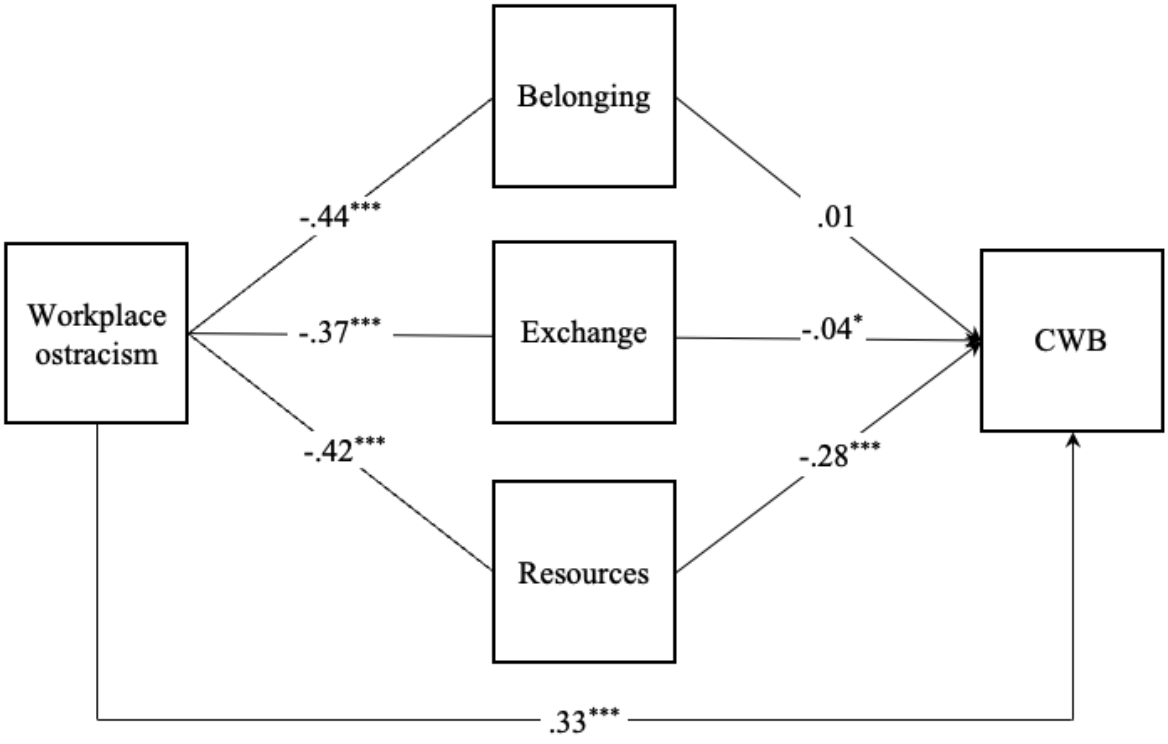
Note. The indirect effect via belongingness was positive and significant (harmonic N = 3200), *b* = .05, 95% CI (.04, .07), the indirect effect via exchange quality was positive and significant (harmonic N = 8403*)*, *b* = .05, 95% CI (.04, .06), and the indirect effect via resources was positive and significant (harmonic N = 8504*)*, *b* = .12, 95% CI (.11, .13). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 11. Explaining the WO-OCB Relationship in a Competing Mechanism Model



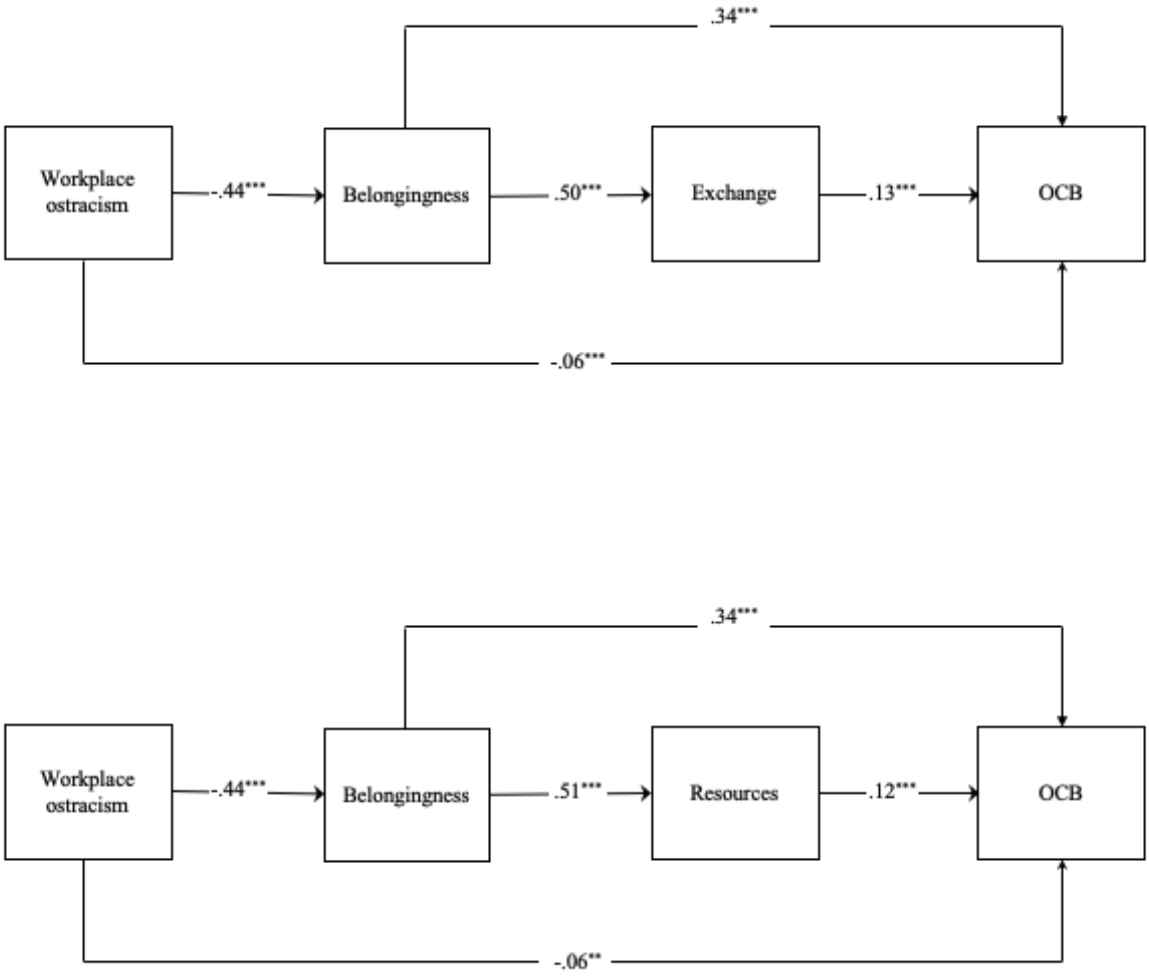
Note. Harmonic N = 4135. The indirect effect via belongingness was negative and significant (*b* = -.14, 95% CI [-.15, -.12]), the indirect effect via exchange was negative and significant (*b* = -.04, 95% CI [-.05, -.03]), and the indirect effect via resources was negative and significant (*b* = -.04, 95% CI [-.05, -.03]). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 12. Explaining the WO-CWB Relationship in a Competing Mechanism Model



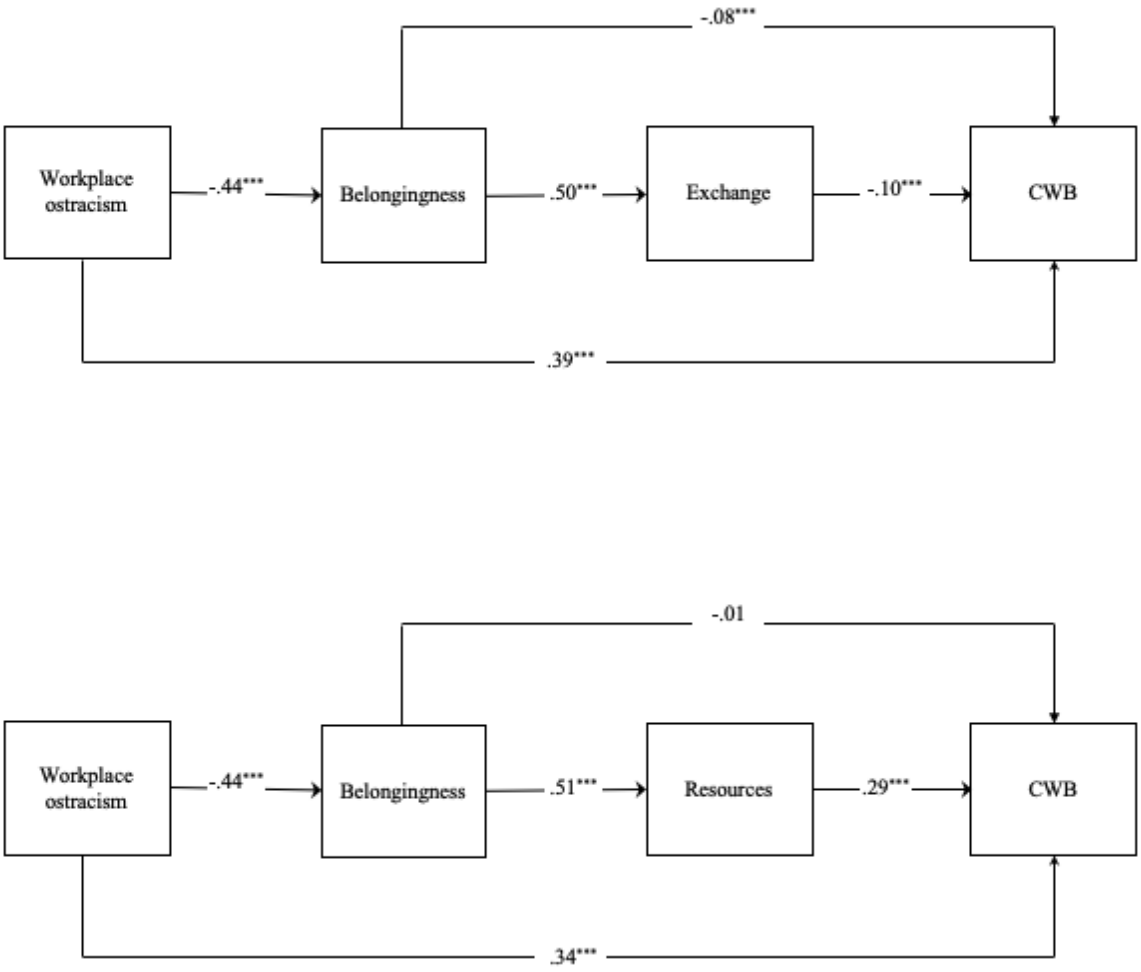
Note. Harmonic N = 4135. The indirect effect via belongingness was not significant (b = -.01, 95% CI [-.02, .01]), while indirect effect via exchange quality (b = .01, 95% CI [.01, .02]) and resources were positive and significant (b = .11, 95% CI [.10, .13]). Results are unstandardized. $^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 13. Explaining WO-OCB Through Serial Mediation in Separate Models



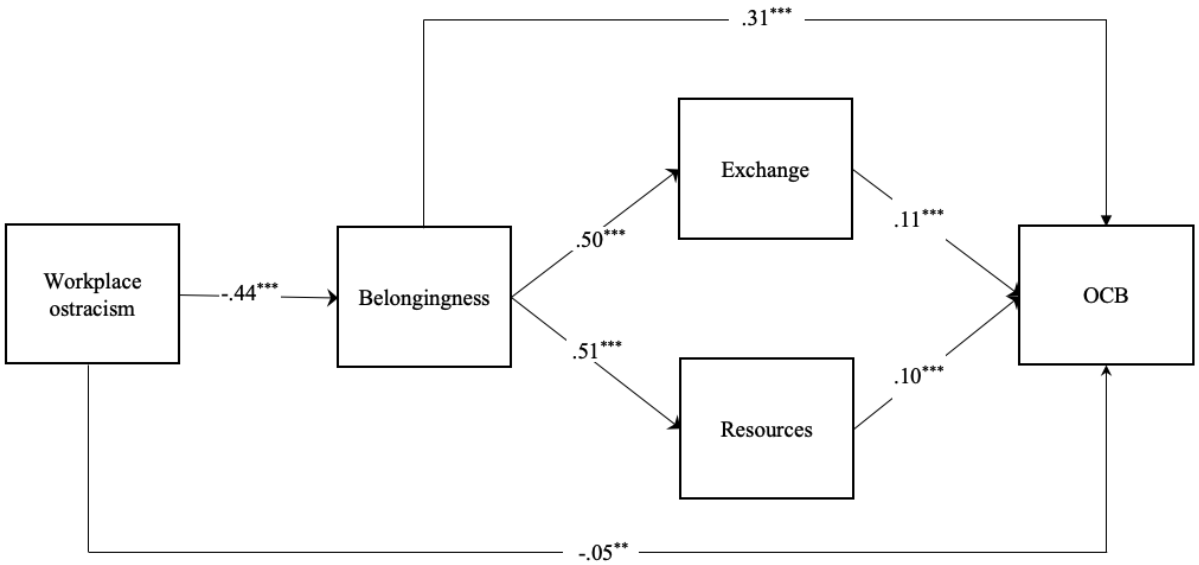
Note. The indirect effect of WO on OCB via belongingness and exchange was significant (harmonic N = 3988), b = -.03, 95% CI (-.04, -.02), via belongingness and resources (harmonic N = 3833), b = -.03, 95% CI (-.04, -.02) were significant. Results are unstandardized. $^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 14. Explaining WO-CWB Through Serial Mediation in Separate Models



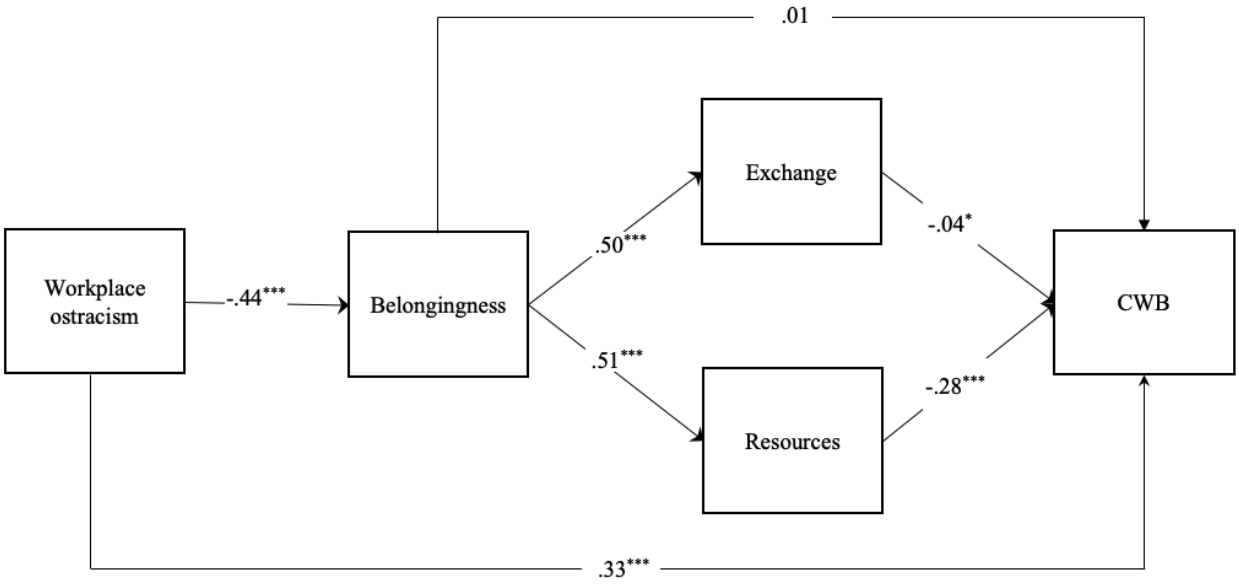
Note. The indirect effect of WO on CWB via belongingness and exchange was significant (harmonic N = 3887), b = .02, 95% CI (.01, .03), via belongingness and resources (harmonic N = 3667), b = .06, 95% CI (.06, .07) were significant. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 15. Indirect Effect of WO on OCB with Serial Mediations in a Single Model



Note. Using a harmonic N of 4135, the indirect effect of WO on OCB was significantly mediated by belongingness and exchange (b = -.02, 95% CI [-.03, -.02]), and belongingness and resources (b = -.02, 95% CI [-.03, -.02]). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 16. Indirect Effect of WO on CWB with Serial Mediations in a Single Model

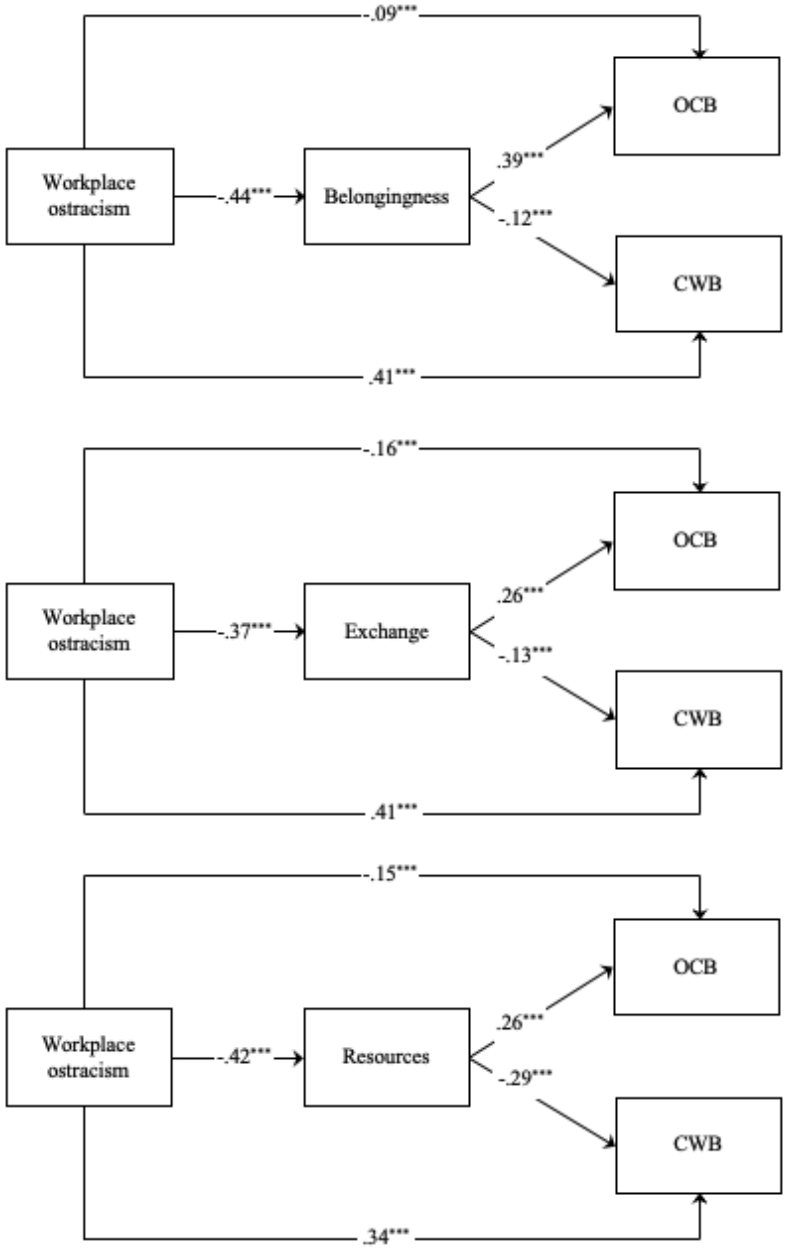


Note. Using a harmonic N of 4135, the indirect effect of WO on CWB was significantly mediated by belongingness and resources (b = .06, 95% CI [.05, .07]), and belongingness and exchange (b = -.01, 95% CI [.01, .01]). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Appendix D: Single, Competing, and Serial Mediation Without Mistreatment Controls

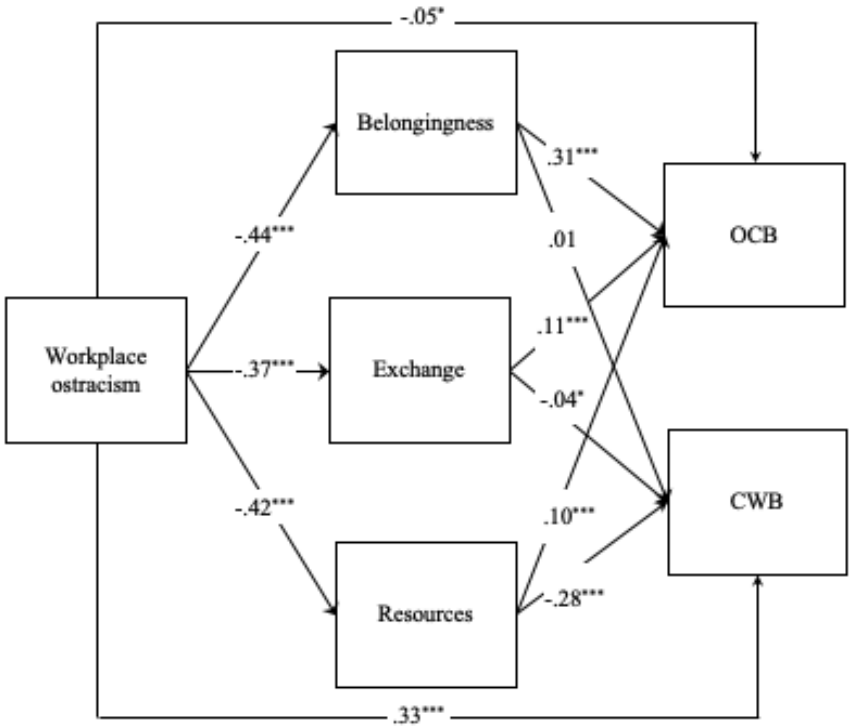
To demonstrate the robustness of our mediating effects explaining the impact of WO on OCB and CWB, we tested each mechanism in their own separate model, the competing mechanism model, and the serial mediation model again, but we removed incivility and other mistreatment constructs as control variables. When testing each mechanism in their own separate models, we found all three mechanisms significantly mediated the relationship between WO and OCB, and the relationship between WO and CWB (Figure 17). In a competing mechanism model (Figure 18), belongingness, exchange, and resources uniquely explained the relationship between WO and OCB, while resources and exchange uniquely explained the relationship between WO and CWB but belongingness did not. In a serial mediation model (Figure 19), belongingness and resources, as well as belongingness and exchange, serially mediated the indirect effect of WO on both OCB and CWB. These results are largely consistent with what we found when we included other mistreatment constructs as control variables, with the exception of social exchange for explaining CWB in both the competing mechanism and serial mediation models. Overall, this shows our findings are largely robust, irrespective of whether we incorporate other mistreatment constructs as control variables or not.

Figure 17. Single Mechanism Models Without Mistreatment Controls



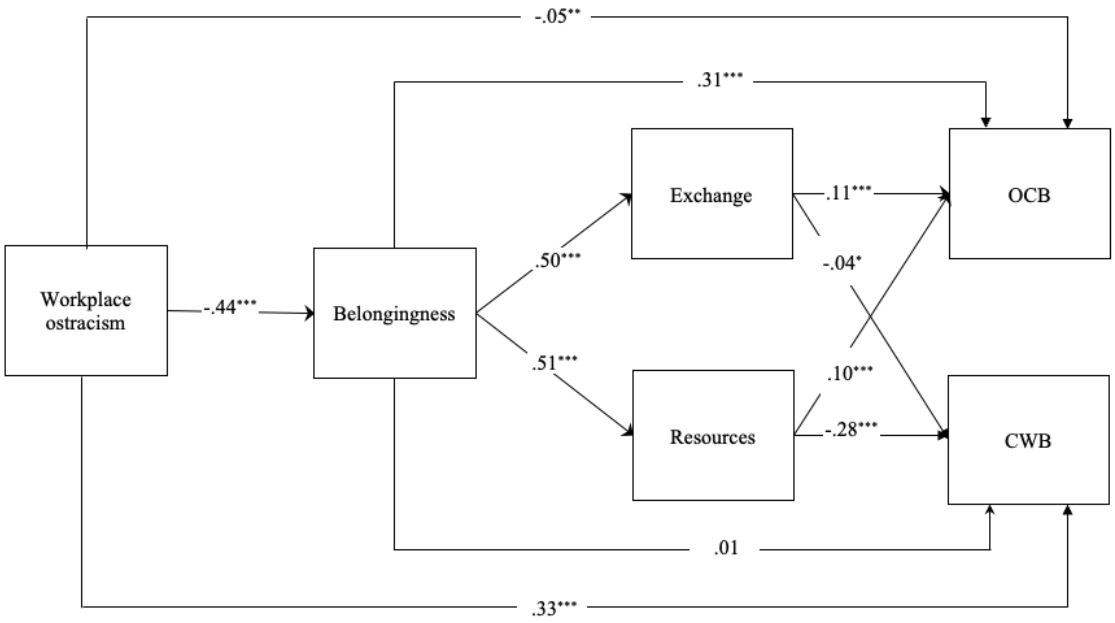
Note. Belonging mediation model harmonic N = 3327; exchange mediation model harmonic N = 6629; and resources mediation model harmonic N = 6165. We found the indirect effects of WO on OCB (*b* = -.17, 95% CI [-.19, -.15]) and CWB (*b* = .05, 95% CI [.04, .07]) via belongingness were significant. Additionally, the indirect effects of WO on OCB (*b* = -.11, 95% CI [-.12, -.10]) and CWB (*b* = .12, 95% CI [.11, .13]) via resources were significant. Finally, the indirect effects of WO on OCB (*b* = -.10, 95% CI [-.11, -.09]) and CWB (*b* = .05, 95% CI [.04, .06]) via exchange were significant. Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 18. Competing Mechanism Model Without Mistreatment Controls



Note. Harmonic N = 3954. The effect of WO on OCB was significantly mediated by belonging (*b* = .14, 95% CI [-.15, -.12]), resources (*b* = -.04, 95% CI [-.05, -.03]), and exchange. (*b* = -.04, 95% CI [-.05, -.03]). In contrast, the effect of WO on CWB was mediated by resources (*b* = .12, 95% CI [.10, .13]) and exchange (*b* = .01, 95% CI [.01, .02]), but not belonging (*b* = -.01, 95% CI [-.01, .01]). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 19. Serial Mediation Model Without Mistreatment Controls

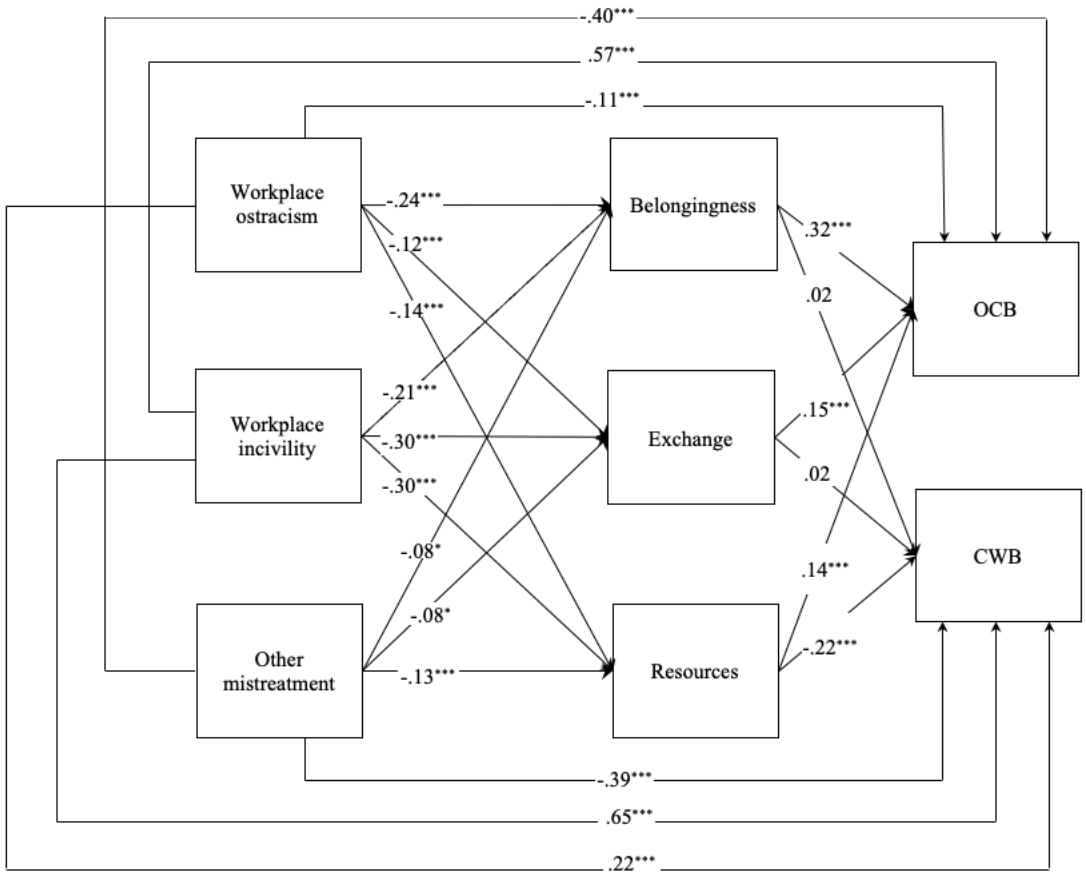


Note. Using a harmonic N of 3954, the indirect effect of WO on OCB was significantly mediated by belongingness and resources (b = -.02, 95% CI [-.03, -.01]), and belongingness and exchange (b = -.02, 95% CI [-.03, -.02]). Moreover, the indirect effect of WO on CWB was significantly mediated by belongingness and resources (b = .06, 95% CI [.05, .07]), and belongingness and exchange (b = .01, 95% CI [.01, .01]). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Appendix E: Addressing Cells with Low k

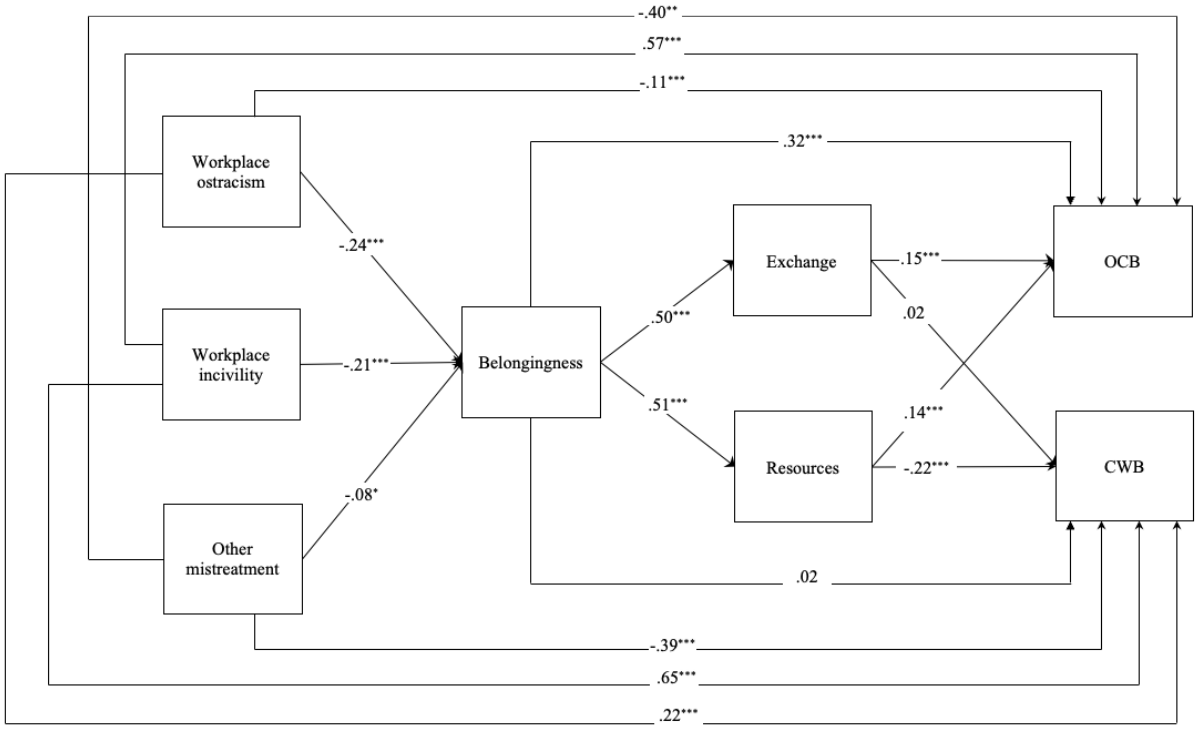
Given that the number of studies used to estimate the relationship between OCB and incivility did not meet the recommended minimum number of studies to estimate rho, we inputted an estimate of rho for that relationship that was found in a published meta-analysis on incivility (Han et al., 2021; $\rho = -.10$, $k = 7$, $N = 1{,}831$). As shown in Figure 20, when we control for other mistreatment constructs, belongingness, social exchange, and self-regulatory resources explained the relationship between WO and OCB, but only self-regulatory resources explained the relationship between WO and CWB in a competing mechanism model. Likewise, as shown in Figure 21–the serial mediation model, when we control for other mistreatment constructs, the indirect effect of WO on OCB is mediated by belongingness and social exchange, and belongingness and self-regulatory resources, while the indirect effect of WO on CWB is mediated by belongingness and resources but not belongingness and exchange. These results are consistent with our previous findings where we controlled for other mistreatment constructs and estimated the rho for the relationship between incivility and OCB using studies that we identified in our literature search (Figures 3 and 4). Thus, inputting an estimate of rho from a published meta-analysis that was based on a larger number of independent samples did not alter our substantive conclusions, highlighting the robustness of our findings.

Figure 20. Inputting ρ for Incivility-OCB in a Competing Mechanism Model



Note. Using a harmonic N of 2655, we found that controlling for incivility and other forms of mistreatment, belongingness significantly mediated the relationship between WO and OCB (*b* = -.08, 95% CI [-.10, -.06]), but not the relationship between WO and CWB (*b* = -.01, 95% CI [-.01, .01]); exchange mediated the relationship between WO and OCB (*b* = -.02, 95% CI [-.03, -.01]), but not the relationship between WO and CWB (*b* = -.01, 95% CI [-.01, .01]); and resources mediated the relationship between WO and OCB (*b* = -.02, 95% CI [-.03, -.01]), and the relationship between WO and CWB (*b* = .03, 95% CI [.02, .04]). Results are unstandardized. $^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.

Figure 21. Inputting ρ for Incivility-OCB in a Serial Mediation Model



Note. Using a harmonic N of 2655, we found that controlling for incivility and other forms of mistreatment, the indirect effect of WO on OCB was significantly mediated by belongingness and exchange (*b* = -.02, 95% CI [-.02, -.01]), and belongingness and resources (*b* = -.02, 95% CI [-.02, -.01]). Also, the indirect effect of WO on CWB was significantly mediated by belongingness and resources (*b* = .03, 95% CI [.02, .03]), but not belongingness and exchange (*b* = -.01, 95% CI [-.01, .01]). Results are unstandardized.
$^{***}p < .001$, $^{**}p < .01$, $^{*}p < .05$.