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SENSITIVITY TO THE ETHICS OF OPERATIONS

A DISSERTATION APPROVED FOR THE

DEPARTMENT OF COMMUNICATION

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Abstract

Ethical wrongdoing in organizations is ubiquitous and costly for organizations, their members, and the people they serve. Despite attempts to address wrongdoing through legal, structural, and social means, much work still needs to be done before scholars can begin to prescribe long-term solutions for these problems. Organizational learning scholarship seeks to identify the antecedents and consequences of rapidly detecting and correcting errors in organizations. Conceptually, errors are similar to the problems generated by ethical wrongdoing. Organizational learning frameworks, when applied to moral errors, may provide insight into the nature and solutions for ethical wrongdoing in organizations. This study utilizes ethically reliable organizing (ERO) theory, a communication ethics theory of organizational moral learning, to hypothesize relationships between an organization's cultural sensitivity to the ethics of its operations, communicative predictors of this sensitivity (e.g., upward ethical dissent and leader listening), and ethics-related organizational outcomes (e.g., moral learning behaviors, ethical safety organizing, incivility, and deviance). After scale development and validation for a measure of sensitivity to the ethics of operations, data were collected from a cross-sectional sample of US-based working adults. Results indicated that prosocial and repetition forms of upward ethical dissent and employee perceptions of leader listening positively predict sensitivity to the ethics of operations, which, in turn, positively predicts moral learning behaviors and ethical safety organizing and negatively predicts incivility. Additional results from path modeling are provided. Implications for ERO theory, organizational dissent, organizational listening, and organizational ethics are discussed. Limitations and future research directions are included.

Keywords: *organizational learning, ethically reliable organizing (ERO) theory, organizational dissent, organizational listening, communication ethics*

Chapter 1

Introduction and Rationale

Organizational wrongdoing—that is, intentional and unintentional actions that violate social standards for appropriate behavior committed by members on behalf of organizations (Palmer, 2013)—is unfortunately all too common. In the corporate context, ethical scandals punctuate every sector and are a perennial feature of business news reports. For example, Enron, a multi-billion-dollar energy and commodities company, engaged in false accounting practices that led to its collapse (Bondarenko, 2024). Volkswagen, an auto manufacturer and retailer, falsified emissions reports for vehicles using deceptive technology, which cost the company billions in recalls and fines (Hotten, 2015). Meta, the social media conglomerate owning Facebook, settled a case involving data breaches and misuse of consumers' data for $725 million (McCallum, 2022). Bausch Health, a pharmaceutical company, paid $45 million in a lawsuit involving misleading investors (Pagliarulo, 2020). Lehman Brothers, an investment bank, went bankrupt with $613 billion in debt due in part to risky mortgage strategy, which is widely considered to be a defining moment initiating the 2008 US recession (Hernandez, 2015). These and other scandals were the result of members of organizations engaged in wrongdoing.

Outside the corporate context, nonprofits and religious organizations do not seem to fare much better regarding wrongdoing. For example, Oxfam, a multinational nonprofit focused on issues related to global poverty, suffered from reports of senior field staff sexually abusing women in the communities they were meant to help (Chapman et al., 2023). Several religious organizations, such as the Southern Baptist Convention (Downen, 2023) and the Catholic Church (Graham, 2023), have also dealt with allegations of sexual abuse and coverups involving church members and children going back decades. Meanwhile, the Red Cross has been accused of

corrupt spending, regarding its allocations of donations for the 2010 earthquake in Haiti (Sullivan & Elliott, 2016). Clearly, organizational wrongdoing is not confined to any one organizational context.

The financial and economic fallout of corporate wrongdoing is staggering: One estimate for cyber-crime alone was estimated to cost around $6 trillion in 2021 (Hou & Wang, 2020), yet the human consequences of organizational and ethical wrongdoing are also catastrophic. Enron's collapse left thousands without jobs to support their livelihoods (Bondarenko, 2024), as did the 2008 US recession following the bankruptcy of Lehman Brothers (Hernandez, 2015). Child victims of sexual abuse have greater rates of sexual disturbance and dysfunction as adults, as well as higher levels of anxiety, fear, and suicidal ideation and self-harm (Beitchman et al., 1992). Organizational wrongdoing and related scandals damage reputations and erode trust among stakeholders and organizations (Chapman et al., 2023). While the human toll of organizational wrongdoing is difficult to quantify fully, it is clearly harmful and damaging to society.

Scholarship has approached organizational and ethical wrongdoing conceptually from multiple angles. On one hand, scholarship has characterized organizational wrongdoing as *abnormal*—that is, rare, aberrant, abhorrent, and due mostly to a small range of flawed organizational structures; on the other hand, scholarship can characterize organizational wrongdoing as *normal*—that is, prevalent, arising from otherwise mundane behaviors, committed by regular individuals, and due to any number of complex organizational structures (Palmer, 2013). Furthermore, unethical behaviors in the workplace may be attributed to *bad apples*—individual members with moral failings that perpetrate the unethical; *bad barrels*—organizational contexts that provide structures enabling unethical actions; or *bad cases*—

particular issues marked by their complexity that do not offer clear guidelines to what may or may not be (un)ethical (Kish-Gephart et al., 2010). While such scholarship has taken strides toward understanding the causes and scope of organizational wrongdoing descriptively, little research has yet been done to prescribe how members of organizations might work systematically toward ensuring or increasing the likelihood that members will act more ethically. In this regard, ethically reliable organizing (ERO) theory is uniquely suited toward furthering this literature. Generally, ERO theory seeks to prescribe communicative methods to develop an organization's capacity to learn from moral and ethical experiences by creating organizational cultures that facilitate rapid detection and correction of ethical mistakes (Bisel, 2018).

The purpose of this study is to advance scholarship in ERO theory by (a) proposing and validating a scale to measure one of its main principles, *sensitivity to the ethics of operations*, and (b) establishing the relationships between this climate marker of ERO culture, its communicative predictors, and organizational outcomes, such as moral learning, incivility, and deviance. An advantage of pursuing this line of study is that it assumes the mechanisms that drive organizational wrongdoing—and thus, the mechanisms to correct wrongdoing—are primarily communicative. Prior research projects into related topics, such as corporate espionage (one form of organizational wrongdoing), have investigated information management and legal solutions with minor but measurable success (Oxnevad, 2019; Willey et al., 2011). Indeed, legal recourse tends to follow major scandals to mandate reparations and to protect against further wrongdoing (Chapmen et al., 2022; Hernandez, 2015). These reactive milestones—while necessary and important—tend to stamp tidy "endings" onto the stories of organizational wrongdoing.

However, organizing does not "end" but rather is a continual process by which members make sense of ongoing circumstances and respond in kind (Weick, 1995). Members accomplish organizing through the exchange of messages in context—or, in other words, through communication. Thus, each act of organizational wrongdoing follows from some (series of) messages that attempt to understand the situation and act in response. Then, is it any surprise that Enron would engage in unethical accounting practices when CEO Jeffrey Skilling was quoted as repeating the mantra, "All that matters is money" (Bisel, 2018, p. 61)? Framing wrongdoing as a consequence of poor sensemaking suggests that intervening in the message-based interpretations by which members decide what to do next may yield better ethical behavior (Mumford et al., 2008). In other words, if wrongdoing happens because individuals make short-sighted and ethically oblivious attributions to understand their environment just enough to choose their next action, a relatively straightforward solution is to implement messages and message techniques that improve individuals' ethical viewpoints of the situation so that they can make better attributions and, consequently, act better. In short, communication plays a pivotal role in organizational and ethical right- and wrongdoing, even if individuals may still make mistakes or choose unethical behaviors despite ethically reliable interpretations.

This study contributes to ERO literature a novel operationalization of one of its five core principles, sensitivity to the ethics of operations, and conducts several steps toward validation of this scale. Additionally, results of this study contribute empirical support that extends ERO theorization about moral mindfulness, the relationship of organizational moral learning to a climate marked by sensitivity to the ethics of operations, and potential boundaries for the influence of this climate on (un)ethical behaviors in organizations. Moreover, this study contributes additional empirical findings using survey design that supplements existing

experimental work in ERO theory (Bisel & Adame, 2019). In addition to these contributions to ERO literature, this study contributes to organizational dissent literature a first successful use of the Upward Ethical Dissent Scale (Mahutga et al., 2024) after its initial scale development. Additionally, results provide further support for the notion that organizational dissent can have ambiguous and contradictory consequences, likely depending on context (Kassing, 2007) and the idea that the communicative competence with which organizational dissent strategies are enacted influences their downstream consequences (Kassing, 2005). This study also contributes (a) to organizational ethics literature the first research design involving conceptualization and operationalization of *both* moral muteness/silence and moral deafness in a single study (Bird, 1996); (b) to the organizational ethics and organizational listening literatures support for the powerful influence of listening on ethical outcomes in the workplace, such as moral learning and incivility; and (c) to the listening ethics literature empirical evidence from a social-scientific perspective supporting notions previously only articulated through rhetorical and critical argumentation (Gehrke, 2009).

Chapter 2

Literature Review

Understanding organizational ethics and the myriad processes that lead to (un)ethical outcomes like those described in the previous chapter requires a deep look into the interpretive forces that make organizations a reality (Morgan, 2006). In an effort to make sense of these interpretive forces, I begin this chapter with fundamental dynamics that affect all organizations—change and error. The following sections offer theories and concepts about how organizations respond to change effectively (i.e., learn) or not, how communication shapes organizations' responses to change, and how ethics intersect with these already complicated interpretive forces. This chapter concludes with an explanation of ethically reliable organizing (ERO) theory (Bisel, 2018), which prescribes ways in which organizations may respond to change with ethical excellence, and poses several hypotheses and a research question in order to advance understanding of core concepts of ERO theory.

Change is always ongoing (Tsoukas & Chia, 2002). The social world moves and evolves constantly. Meanwhile, organizations try to cope with that change by creating dependable repetition and routine; in other words, organization is an attempt to channel the natural flux of the social world toward common purposes (Bencherki et al., 2024; Tsoukas & Chia, 2002). Yet, scholars have noted that because change is the typical condition under which organizations operate, routines and other stable aspects of organizing become outdated quickly and inevitably (Tsoukas & Chia, 2002). Then, from a systems perspective, organizations always exist somewhere between a state of complete order and complete disorder, with change serving as a form of social entropy moving systems toward disorder (Bailey, 1990). Because of entropy in

social systems such as organizations, error is rampant. Error refers to any inability to satisfy the demands of the current situation and environment (Goodman et al., 2011).

The long tradition of organizational sciences demonstrates empirically that faulty and erroneous organizational processes lead to a host of negative outcomes for members, organizations, and society. Negative outcomes include reputational damage (Gatzert, 2015), financial loss (Ramanujam & Goodman, 2011), workplace injuries (Adhikari, 2015), and death (Frese & Keith, 2015), to name a few. As an example, just-in-time manufacturing principles applied without regard for the rarity of certain parts led many auto manufacturers to be unable to produce vehicles beginning in 2021 when difficult-to-produce semiconductor chips became scarce (J.P. Morgan Research, 2023). However, some companies, such as Toyota, understanding the conditions under which just-in-time manufacturing *should not* be applied, stockpiled these rare resources, allowing them to continue operation when other auto manufacturers could not (Shirouzu, 2021). Mindful attention—the noticing of novel differences (Langer, 2014)—creates opportunities to minimize the harms of error related to otherwise typical organizational processes.

Organizational Learning

The opportunities created through mindful organizing are pivotal to organizational learning. Learning refers to the detection and correction of error, preferably while it is still small and resolvable (Argyris & Schon, 1978). Because change is constant and often unpredictable, avoiding error altogether is not feasible. Rather, managing error while it is small and resolvable is a primary concern for organizations seeking to improve operational outcomes and secure their long-term survival (Frese & Keith, 2015). In contrast, large and intractable errors call for various forms of crisis response (Coombs, 1995; Seeger et al., 1998). Argyris (1994) describes two

cycles or loops by which to classify organizational learning. First, in single-loop learning, organizations focus efforts on the immediate error to return to a temporary state of equilibrium with their institutional environment. This learning loop tends to treat errors as aberrant—momentary lapses that can be forgotten when corrected.

In contrast, double-loop learning circles back to identify the conditions under which the error emerged after completing the single loop (Argyris, 1994). In this way, errors are treated as a normal indicator of deeper dysfunctions (Palmer, 2013). Viewing error as normal allows organizations to make long-term adjustments based on relevant information gleaned from ongoing monitoring of the organization's institutional environments and internal operations. For example, Toyota began stockpiling semiconductor chips after the deadly 2011 earthquake and tsunami in Japan, which prompted Toyota not just to address the immediate production concerns this natural disaster caused (single loop) but also to reflect on and bolster points of weakness in their manufacturing process (double loop) that ultimately prepared them for the 2021 semiconductor chip shortage (Shirouzu, 2021). Thus, while both forms of learning may be important, double-loop learning is preferable to single-loop learning because it facilitates greater ability to anticipate and correct potential sources of error rather than merely responding to emergent change.

Elsewhere, organizational learning has been referred to as strategic renewal (Crossan et al., 1999). The strategic renewal metaphor meshes well with double-loop learning, as organizations attempt to redesign and refresh their processes prospectively. Strategic renewal involves a two-fold process of (1) exploring new adaptations to ongoing circumstances and (2) exploiting the effective products of past exploration to improve organizational routines (Crossan et al., 1999). In other words, strategic renewal involves both prospective knowledge-seeking and

retrospective utilization of acquired knowledge. To achieve strategic renewal, individuals within organizations work through four related processes: *intuiting*, to recognize one's natural response to ongoing circumstances; *interpreting*, to derive personal meaning from intuitions both cognitively and socially; *integrating*, to share common meaning among members of a functioning group; and *institutionalizing*, to routinize behaviors across the organization to align common interpretations (Crossan et al., 1999). While exploring tends to work from intuiting to institutionalizing, exploitation works back from institutionalizing to intuiting (Crossan et al., 1999). Stated differently, each process shapes and is shaped by the other processes in a series of feedback and feed-forward loops. When organizations experience change, previously institutionalized routines may prove to be faulty responses, yet new intuitions about mistaken responses and novel experiences provide fertile ground for creating new meaning that renews an organization's routines adaptively.

Unsuccessful organizational learning. Importantly, many organizations do not engage in effective learning processes, and thus, error is often perpetuated in the everyday operations of many workplaces. Sensemaking theory helps explain why organizations often fail to learn. Sensemaking refers to "a sequence in which people concerned with identity in the social context of other actors engage ongoing circumstances from which they extract cues and make plausible sense retrospectively, while enacting more or less order into those ongoing circumstances" (Weick et al., 2005, p. 409). For individuals, sensemaking is about attributing what has happened and, therefore, what to do next (Weick, 2017). However, the attributions individuals make are based on plausibility and not necessarily accuracy (Weick, 1995; Weick et al., 2005). In other words, individuals need only to make an attribution that allows them to continue acting—not one that allows them to respond to ongoing circumstances appropriately and effectively. Thus,

individuals often demonstrate preference for self-enhancing and self-protecting attributions that defer error to external sources (Weick, 1995).

These (potentially) inaccurate attributions challenge learning processes of intuiting and interpreting. Intuition tends to be an effortless, automatic response to stimuli (Levinthal & Rerup, 2006). Over time and repetition, interpretations that defy one's intuition may shape different intuitive responses (Bisel, 2018; Haidt, 2013). Considering that many attributions produced by sensemaking are merely plausible rather than accurate (Weick, 1995), poor interpretations may dull intuitive responses to otherwise ripe opportunities to learn. Individuals do not engage in sensemaking mindfully until some experience of ongoing circumstances violates their intuitive expectations, causing sensemaking to slow down and become laborious and visible (Langer, 2014; Weick et al., 2005). Rather, individuals operate normally in a state of mindlessness, wherein previously institutionalized routines and intuitive reactions guide behavior automatically (Levinthal & Rerup, 2006; Weick et al., 2005). When prior interpretations have dulled intuitions, the threshold to break out of mindless routine may be more difficult to overcome. Over time, dulled intuitions may prevent exploration that should otherwise engage critical self-reflexivity and identity-based dialogue (as opposed to rationalization) that move organizations wisely through processes of integrating and institutionalizing (Brown & Starkey, 2000; Crossan et al., 1999).

At the organizational level, similar sensemaking processes may inhibit learning. The Enact-Select-Retain (ESR) model has been used to demonstrate sensemaking at this level of analysis (Weick et al., 2005). Essentially, the model depicts that organizations facing unexpected environmental change tend to *enact* a variety of spontaneous behaviors (Weick et al., 2005). Some of those spontaneous behaviors satisfy the demands of the situation while others do not,

which organizations learn *selectively* (an analog to biological natural selection) over time (Weick et al., 2005). In other words, those organizations exhibiting behaviors that satisfy the demands of the situation tend to flourish while other organizations struggle. This selection process provides feedback about which behaviors ought to be *retained* by organizations as the preferred modes of operations (Weick et al., 2005). Further institutional mimicry disseminates retained behaviors from organizations to organization within an institutional field (DiMaggio & Powell, 1983). The trouble with this process (regarding learning, at least) is that the logic of selection for sensemaking is guided as much, if not more, by the goal of soothing internal anxieties as by achieving environmental fitness (Weick, 1979; 1995). Thus, institutionalized organizational memory (i.e., that which is retained) in such forms as routines, policies, procedures (Walsh & Ungson, 1991) and paradigmatic narratives of who members are supposed to be (Linde, 2009) become tainted by maladaptive psycho-social coping rather than achieving adaptive fitness, under typical conditions (Weick, 1979). In other words, the same preferences by which poor interpretations may dull our individual intuitions also negatively influence the integration and institutionalization of supposed learning at the organizational level. Thus, organizations engaged in typical sensemaking processes will find it difficult both to explore new knowledge and exploit acquired knowledge in order to achieve strategic renewal.

Successful organizational learning. However, some organizations do overcome the challenge of typical sensemaking in order to learn effectively. High reliability organizations (HROs) are learning organizations that rapidly detect and correct error, at least in part because they are sensitized by the exigency of the extreme negative consequences of mistakes, such as death (Weick & Sutcliffe, 2015). Examples of such organizations include surgical centers, military organizations, and wildland firefighting services. The exigency of death, faced by these

organizations, requires mindfulness—that is, rich awareness of discriminatory details (Langer, 2014)—from members to correct and avoid mistakes that could cost human life and wellbeing. While typical organizations' sensemaking exhibits mindlessness by quickly attributing error to external causes in order to soothe anxiety and bolster view of self, HROs foster mindfulness by building *requisite variety*—that is, meeting the complex demands of the environment with thorough interpretations and equally complex response sets (Weick & Sutcliffe, 2015). These organizations achieve mindfulness through methodical integration of multiple perspectives—their "key information, concerns, and insights about their environments[—]into group decision making and learning processes" (Jahn & Black, 2017, p. 359). Here, the main idea is that there are key differences in learning outcomes between typical organizations and HROs because of their respective patterns of sensemaking.

On one hand, typical organizational sensemaking tends to privilege intuition and interpretation at the individual level. Despite intuition and individual interpretation being primarily cognitive processes, the result of self-bolstering attributions is to ease immediate concerns and return to a sense of mindless autopilot (Levinthal & Rerup, 2006). This progression represents a single loop learning process that fails to define the problem appropriately. That is, rather than focusing on the demands of ongoing circumstances, individuals tend to treat the problem as nothing more than a disruption of their internal cognitive states (e.g., anxiety). Thus, the problem is "solved" (i.e., ignored, missed, dismissed, or deemed forgettable) after the single loop is completed by achieving psycho-social coping. On the other hand, HROs tend to privilege integration at the group level, which is a primarily social and communicative process. The result of building requisite variety via integration processes is mindfulness because group-level understanding defines and treats the problem in terms of the group rather than individual and

therefore enables interpretations that match demands of ongoing *organizational* circumstances while constraining the impulse for individual psycho-social coping.

Rather than being entirely different than typical sensemaking, this HRO progression represents a double loop of what sensemaking is already doing. The first loop inevitably occurs as some environmental change sparks an individual, intuitive response of anxiety—that something has changed and does not conform to what was expected. However, rather than defining the problem in the immediate terms of that intuitive response, the second loop of learning achieved via integration defines the problem in terms of its root causes—namely, the change that sparked error. In this way, the HRO addresses the root cause, which incidentally also corrects for what the individual first experiences in terms of their intuitions. Thus, communication in HROs suspends initial interpretations to challenge easy, but mal-adaptive social cognitions. In so doing, HROs facilitate greater learning by engaging double-loop learning processes.

Moreover, communication in HROs demonstrates the complex relationships between exploration and exploitation to achieve strategic renewal (i.e., organizational learning). While typically presented "in a sequential way, […] there are necessarily many feedback loops among the levels, given the recursive nature of the phenomenon," such that individuals, groups, and organizations do not linearly move from intuiting to interpreting to integrating, and, finally, to institutionalizing while exploring change (or the reverse for exploitation; Crossan et al., 1999, p. 526). In fact, linearity in this process would appear much like a single loop of sensemaking, whereby subsequent processes are subordinated to *one's* initial intuitions. Rather, HROs disrupt this linearity by intentionally looping back during the exploration processes to reconsider and refine emerging interpretations communicatively because the likely outcome of faulty

interpretations (i.e., erroneous—plausible but inaccurate—attributions of the environment) is severe—for example, human casualties as could happen when a nuclear plant does not ask questions that catch small mistakes (Barbour & Gill, 2017) or a US Navy SEAL freezes up after experiencing small setbacks (Fraher et al., 2017). This intentional looping allows *one's* initial intuitions to be held alongside *other's* intuitions in order to co-construct interpretations with greater requisite variety because such integrative interpretations are not as restricted by *one's* bounded rationality and limited perceptions (Simon, 1991). In short, the recursive interplay—not linear progression—between learning processes of intuition, interpretation, and integration facilitated by communication allows organizations to learn and achieve strategic renewal.

Communication practices supporting successful organizational learning. HROs achieve such integrative communication by adhering to five value-laden principles. According to HRO theory, not all communication facilitates learning; *specific* forms of communication that reinforces *specific* principles and values facilitate learning. To be clear, individuals in all organizations including HROs certainly also engage in other types of talk (e.g., small talk) that are mostly irrelevant to organizational learning. The principles that guide learning in HROs may also be transferable to organizations that are not sensitized by the exigency of death should communication patterns mimic that of HROs (Roeder & Bisel, 2024; Scott et al., 2023), at least if the organization still operates under "trying conditions" characterized by complexity, interdependence, and external volatility (Ericksen & Dyer, 2005). Presumably, institutional forces, such as globalization and technological advancement, that impact all modern organizations whether HRO or non-HRO create challenging environments with regard to complexity, interdependence, and volatility.

The first HRO principle is *preoccupation with failure*, which refers to a mindset of preparedness in which members discuss indicators of systemic problems and the types of errors that must not be made (Scott et al., 2023; Weick & Sutcliffe, 2015). Preoccupation with failure is enabled by mindfulness to distinguish small abnormalities, recognition that one's individual knowledge is limited, and sharing information about mistakes to be avoided (Weick & Sutcliffe, 2015). The second HRO principle is *reluctance to simplify*, which refers to delaying conclusions and preserving alternative interpretations of ongoing circumstances so as not to dismiss details as irrelevant (Jahn & Black, 2017; Weick & Sutcliffe, 2015). Reluctance to simplify is enabled by dialogue about ongoing circumstances, questioning and revising tentative assessments, and seeking perspectives that may possess additional details (Weick & Sutcliffe, 2015). Third, *sensitivity to operations* refers to observing work as it is done, rather than assuming it is being done effectively (Weick & Sutcliffe, 2015), which is enabled by orienting to the present moment and "ongoing group interaction about actual operations" including leaders and frontline workers (Weick & Sutcliffe, 2015, p. 91). These three principles enact the HRO value commitment to vigilance (Attansey & Littlefield, 2016; Weick & Sutcliffe, 2015).

Fourth, *commitment to resilience* refers to building capacity to bounce forward from disturbances—to continue acting flexibly during disruption and to learn and recover thereafter (Weick & Sutcliffe, 2015; Roeder & Bisel, 2024; see also Buzzanell, 2010). Commitment to resilience is enabled by wide experience, understanding core structures of emergent circumstances, and creative improvisation (Weick & Sutcliffe, 2015). Fifth, *deference to expertise* refers to a relational dynamic of respectful yielding to those with relatively greater domain-specific knowledge and experience (Weick & Sutcliffe, 2015). Deference to expertise is enabled by personal humility and wisdom, flattened organizational hierarchy, and advice-seeking

across hierarchical boundaries (Weick & Sutcliffe, 2015). These two principles enact the HRO value commitment to humility (Weick & Sutcliffe, 2015).

HROs embed these principles into their everyday talk and ways of communicating. For wildland firefighters, these principles are embedded in borrowing experience during preparation cycles through communication activities, such as after-action reviews, facilitated learning analyses, sand table exercises, and staff rides (Ishak & Williams, 2017). These team training activities identify errors that firefighters cannot make while working through operations with as much detail as possible in training—effectively upholding the first three HRO principles. Similarly, Navy SEALs in training adopt communication slogans that represent HRO principles, such as "Get comfortable being uncomfortable" which relates directly to principles like commitment to resilience (Fraher et al., 2017). In these examples, communication norms related to learning are established in training that prepare teams for reliable performance.

Other organizations establish communication norms during performance that further facilitate reliable operations, such as nuclear power plant inspectors engaging in questioning to interrogate issues, coordinate interaction, and keep track of issues (Barbour & Gill, 2017). Similarly, forecasters at the National Weather Service engage in a communication practice known as "floating" to present tentative decisions for further elaboration and information, enhancing team cognitions and preventing overly simplistic decision making (Roeder et al., 2021). Here, communication practices during operations enable reliability by normalizing the values underlying HRO principles, namely, humility and vigilance.

Summary. Up to this point in this chapter, I described a fundamental dichotomy of organizing—error and learning. Error occurs inevitably because organizations operate in open systems subject to continuous change (Tsoukas & Chia, 2002). Learning processes seek to

identify and correct errors so that organizations may continue operating (Argyris, 1994; Crossan et al., 1999). However, members of organizations tend to engage in sensemaking that delivers maladaptive attributions and interpretations of their ongoing circumstances (Weick, 1995; Weick et al., 2005). Only a select few organizations—HROs—have normalized effective learning processes as part of their typical operations (Weick & Sutcliffe, 2015). These organizations operate with a handful of principled behaviors, including being preoccupied with failure, reluctant to simplify interpretations, sensitive to operations, deferent to expertise, and committed to resilience (Weick & Sutcliffe, 2015). For HROs, the benefit of such principled organizing is, succinctly, avoidance of unnecessary death: nuclear power plants rarely melt down (Barbour & Gill, 2017) and wildland firefighters are remarkably successful and safe despite unpredictable, dangerous situations and lack of adequate resources (Ishak & Williams, 2017; Jahn & Black, 2017). Non-HROs could also benefit from the rapid detection and correction of errors, and thus, the transferability of HRO principles to non-HROs is under debate (Ericksen & Dyer, 2005). Yet, recent work has successfully applied HRO principles to non-HRO organizations, suggesting that principles are transferable: For example, Roeder and Bisel (2024) found that safety climate, a good indicator of institutionalized HRO culture, significantly predicted resilience in a non-HRO sample. Also, Williams et al. (2022) provided a convincing case study of a university acting as an HRO during the COVID-19 pandemic.

Organizational Moral Learning

Rather than advocating for a direct transference of HRO principles to non-HROs that operate under significantly different exigencies (i.e., not necessarily safety), ethically reliable organizing (ERO) theory instead starts with another significant organizational exigency—the committing of moral transgressions—and proposes analogous principles that may lead to rapid

detection and correction of ethical problems (Bisel, 2018). Ethics refer to widely shared standards of right conduct (Bisel & Mahutga, 2024). Whether or not HRO principles apply to non-HROs more broadly, the validity of the analogous theoretical principles of ERO theory with regard to moral and ethical errors is an empirical question to be answered. Toward that end, the following paragraphs describe moral learning and ERO theory in greater detail and propose a limited set of hypotheses related to the validation of one principle of ERO theory.

Moral errors. The sources of moral and ethical errors in organizations have been variously described as bad apples, bad cases, and bad barrels (Kish-Gephart et al., 2010). Here, and colloquially, *bad apples* refer to malevolent actors or characteristics of individuals (e.g., Machiavellianism) that tend to contribute to unethical decision making (Kish-Gephart et al., 2010). *Bad cases* refer to characteristics of ethical circumstances (e.g., probability of harm) that tend to contribute to unethical decision making, and *bad barrels* refer to characteristics of the organization and its environment (e.g., ethical climate) that contribute to unethical decision making (Kish-Gephart et al., 2010). Meta-analytic evidence demonstrates that bad apple/case/barrel characteristics more strongly predict unethical behaviors than intentions for unethical behaviors (Kish-Gephart et al., 2010). In other words, members may not always, or even usually, intend to make moral and ethical errors—not unlike the operational errors that threaten human life in HRO settings. Moral and ethical errors in organizations may occur because previous moral and ethical routines become outdated due to changes in complex moral and ethical circumstances, yet individuals continue to behave "impulsively" (Kish-Gephart et al., 2010) or mindlessly based on the products of outdated sensemaking (Weick et al., 2005).

Scholarship applying moral licensing theory demonstrates some of the complexity regarding intention and ethicality in organizational behavior. Moral licensing theory suggests that

individuals with a history and reputation of morally excellent behavior may be more likely to engage in morally dubious behavior because social approval for their prior behavior bolsters their sense of personal morality—as if prior moral behavior "gives license" to act immorally now in the moral accounting of their actions (Merritt et al., 2010; Miller & Effron, 2010). Moreover, recent studies linked unethical pro-organizational behaviors and prosocial rule breaking to leaders' gratitude expressions, members' psychological entitlement (a variable often used as an empirical substitute for moral licensing), and members' moral self-image (Liu et al., 2019; Liu et al., 2022). In other words, an employee may act immorally to benefit their organization when prior moral behavior has been socially rewarded in ways that bolster their moral view of self. Here, it is difficult to attribute the unethical behavior to a "bad apple," as the intention of the employee is pro-organizational, yet the internal cognitions and perceptions of the employee (e.g., psychological entitlement and moral self-image) clearly contribute to immoral actions. Instead, it might be that when organizational and ethical prerogatives become at odds (i.e., when circumstances become complex), it is the impulsiveness of employees acting too quickly and according to their routinized intuitive cognitions and perceptions (e.g., psychological entitlement and moral self-image) that leads to less-than-desirable moral behavior. A more mindful approach, privileging group-level interpretations that include disagreement, dissent, and deliberation, may help employees and organizations avoid such moral errors.

Moral learning. Moral learning refers to rapid detection and correction of errors involving situations and circumstances related to morality and ethics-related concerns, and organizational moral learning is moral learning in the context of organizations. Organizational moral learning processes are much like other learning processes, involving intuition, interpretation, integration, and institutionalization (Crossan et al., 1999) that may create a single-

loop or double-loop (Argyris, 1994). Two cases may help exemplify these loops and their complexity during organizational moral learning.

First, Enron, a now-defunct energy company, quickly became one of the largest companies in the US after its founding in 1985, often applauded for its innovative work (Treviño & Brown, 2004). During the 1990s, stocks began plummeting, and after its bankruptcy in 2001, Enron's executives (most recognizably Jeffrey Skilling) were accused of accounting fraud—reporting anticipated earnings as actual earnings, for one—and received legal sanctions (Treviño & Brown, 2004). For Enron, a moral error is identified by the transgressive accounting practices, which is eventually met with sanctions from institutional forces (e.g., massive fall in share prices, resulting in bankruptcy following federal legal sanctions) that were meant to restore the institution's image of operating under ethical values of honesty and fairness (Treviño & Brown, 2004). This process is essentially a single-loop learning correction (albeit initiated by institutions rather than the organization). A moral error was identified (e.g., false accounting) and a direct, short-term solution was applied (legal sanctions). However, little reflection (at the time, and perhaps because of the imminent dissolution of the company) happened regarding why the problem arose at all. For instance, the source of the false accounting, on reflection, may be attributed to unethical workplace culture, given leadership statements suggesting that consistent profit-production was the only thing important to the company (Sims & Brinkmann, 2003). In short, Enron did not engage in double-loop learning regarding its moral transgression.

Second, Alexis Reader's Gymnastics, a youth gymnastics training facility, was founded in response to widespread athlete abuse by gymnastics coaches and organizations (Bisel et al., 2017). The gym pioneered new non-abusive coaching strategies that initially violated norms for coaching gymnastics but eventually found success in gymnastics competitions (Bisel et al.,

2017). For Reader's Gymnastics, a moral error is identified by transgressive, non-abusive coaching practices. That is, their violation of existing *abusive* norms created the impression of moral error—a mismatch with the institutional environment that *valued* success at the expense of athletes' well-being. A single-loop correction for this situation would have involved mindlessly accepting the institutional pressure to conform to abusive coaching practices. However, Reader's Gymnastics instead perpetuated non-abusive coaching by sensebreaking and building social and material resources (e.g., success in competition) to support it as a legitimate alternative (Bisel et al., 2017). This accumulation of resources, especially competitive success, suggests the initial morality (i.e., valuing success at the expense of well-being) is faulty—that success and athletes' well-being are both achievable (Bisel et al., 2017).

This latter case demonstrates a double-loop learning process that reflects mindfully on the reason the transgression is viewed as erroneous and seeks to correct the unethical root of the problem in the moral system itself: Alexis Reader led the organization through a mindful double-loop learning process to analyze and attribute the tension of the organization's transgressive behavior to unethical institutions, thus demonstrating the organization's nonnormative behavior was ethical. By focusing attention on the circumstances by which the transgression originated rather than on altering the transgressive behavior (double-loop, not single-loop), Reader's Gymnastics adapted more ethically to uncertainties about how best to coach gymnastics.

Failure to learn morally. Cases of successful moral learning like Alexis Reader's Gymnastics are unfortunately difficult to find (Bisel et al., 2020). A host of factors prevent organizational moral learning, such as socialization that teaches individuals that ethics talk is uncommon in organizations, politeness norms to preserve a positive sense of organizational self, self-serving bias to defer problems to the environment, and employee silence influenced partially

by concerns with organizational powerholders and communication anxiety (Bisel & Adame, 2019; Bisel & Kramer, 2014; Bisel et al., 2011; Greer & Talbert, 2024; Millender et al., 2023; Zanin et al., 2016). As a result of these socializing forces, the moral mum effect—a tendency for organizational members to engage in self-censorship of private ethics-related concerns in workplace interactions (Bisel et al., 2011; Ploeger et al., 2011)—is a problematic norm in many organizations. To the extent that individuals do not voice their private ethical concerns and instead continue acting seemingly in accordance with their organization's unethical norms, their intuitive reactions to the moral mistakes they commit may become dulled, as the unethical slips toward mindless routine and the exploration side of moral learning is suppressed.

Here-and-now ethics talk. If the moral mum effect is a significant cultural failure preventing organizational moral learning, a significant cultural accomplishment leading toward organizational moral learning is the normalization of ethics talk—culturally sanctioned, frank, and candid discussions about ethics (Bisel, 2018). Culture refers to a widely shared set of artifacts, values, and assumptions (Schein, 2010). Artifacts include material and directly observable facets of culture, such as norms (Schein, 2010) and climate (Wallace et al., 1999). Norms refer to expected and accepted behaviors that function as scripts for how to act (Cialdini et al., 1999), while climate refers to shared perceptions about behavioral and attitudinal characteristics of organizations, such as mutual trust, leadership support, or friendliness (Wallace et al., 1999). Norms and climate must be established through repetition (of behaviors and perceptions, respectively) and uptake among a shared group (Bormann et al., 2001; Cialdini et al., 1999). As such, they are not singular actions that happen and then cease to happen. Similarly, learning cannot be reduced to a single instance but rather its process and product must be taken up among members of a shared group of people as the culturally appropriate response to a given

problematic circumstance (i.e., institutionalized; Crossan et al., 1999). In short, organizational moral learning must involve cultural change, often observable in the norms by which organizations routinely address their ongoing circumstances, such as ethics talk.

Not all ethics talk contributes to moral learning. Bisel (2018) defines here-and-now ethics talk in contrast with there-and-then ethics talk. Both involve discourse centered on moral and ethical concerns, but here-and-now suggests that those concerns are the *present* concerns of *the people discussing*, while there-and-then centers the concerns about another group at another time (Bisel, 2018). For example, one may discuss the philandering of a noteworthy celebrity or politician as a condemnation of their moral character, but such there-and-then talk does little to reflect on one's own moral excellence…or moral dubiousness. On the other hand, discussion of one's own marital infidelity in the here-and-now during couples counseling has direct consequences for one's moral reputation and relationship. In short, the here-and-now ethics talk, in forms such as upward ethical dissent to leaders who are willing to listen, provides a platform through which moral talk may lead to ethical improvements.

One of the theoretical consequences of here-and-now ethics talk is the development of a rich and varied repertoire of moral vocabulary that enhances the capacity of individuals to engage in moral learning within their group (Bisel, 2018; Choi, 2015). A nuanced vocabulary creates opportunities for rich distinctions to be drawn out and acted upon appropriately. For instance, imagine the unlikelihood of receiving one's favorite poultry dish at a restaurant if the distinctions between "chicken," "turkey," "duck," "quail," "Cornish hen," "goose," and "pheasant" were collapsed into only the word "bird." Simply saying, "I'll have the bird," will be unlikely to lead to a series of actions that bring the appropriate meal to one's table. The same argument can be made for conversations involving ethical concerns: without plain, rich, and

varied vocabulary to talk about what is ethically desirable, actions are unlikely to be ethically appropriate. The value of a rich and distinctive repertoire mirrors the concept of requisite variety from HRO theory, which refers to the need for complex environments to be met with equally complex action (Jahn & Black, 2017). Essentially, here-and-now ethics talk builds capacity to respond to complicated ethical issues in nuanced and considerate ways.

While here-and-now ethics talk as a concept has not been formalized in scholarly research (yet), parallel concepts may provide some indication of its uses and abuses. For instance, when supervisors begin using explicitly moralized language, moral talk contagion—that is, the diffusion of talk using moral vocabulary through a network—appears to support workers' use of ethical dissent (Zanin et al., 2016). In short, the normalization of ethics talk among supervisors helps prevent the moral mum effect (i.e., suppression and avoidance of expressing private moral concerns) among employees. When situated in the learning framework articulated in this manuscript (see Crossan et al., 1999), this result also suggests that here-and-now ethics talk norms may bolster upward ethical dissent—expressions of disagreement with policy and procedure on moral grounds (Mahutga et al., 2024). At a theoretical level, these relationships suggest that institutionalization of ethics talk may feedback on interpretation and integration processes (e.g., moral talk contagion, ethical dissent) that feed forward on institutionalization processes (e.g., decreasing moral mum effect, creating new ethics talk norms), and so forth (Crossan et al., 1999). This reciprocal relationship also demonstrates the development of organizational moral learning capacity (Bisel, 2018).

On the other hand, concepts such as moral grandstanding suggest that here-and-now ethics talk may not be universally beneficial. Moral grandstanding refers to the use—or rather abuse—of moral talk merely to portray oneself as morally respectable and superior to others

(Tosi & Warmke, 2016). In moral grandstanding, the focus of here-and-now ethics talk is selfhood rather than exploration of and adaptation to one's environment. Colloquially, the underlying motivation of moral grandstanding is navel gazing, or self-promotion, not learning nor systemic improvement. This type of talk mirrors the psychosocial coping of sensemaking, which generally produces ego-bolstering but not adaptive attributions (Weick et al., 2005). Organizations engage in moral grandstanding through public relations actions, such as greenwashing or ethics washing (Voinea & Uszkai, 2020). The effects of moral grandstanding include ideological extremism and affective polarization (i.e., excessive positive view of in-group and negative view of out-groups; Grubbs et al., 2020). These divisions created by moral grandstanding generally lead to more positive perception of status, morality, and interpersonal attraction (Savejnarong et al., 2022) but also increased interpersonal conflict and less proactive health behaviors (Grubbs et al., 2022). These generally negative outcomes suggest that in order for here-and-now ethics talk to be productive, it should not be driven by concerns of self or image but rather by the demands of ongoing circumstances. In fact, image management may be one primary determinant of the moral mum effect that stifles an organizations' capacity for moral learning and promotes moral mindlessness (Bisel et al., 2011; Zanin et al., 2016).

Successful moral learning in organizations. To prevent such moral mindlessness, ERO theory recommends the enactment of five cultural values, analogous to HRO theory (Bisel, 2018). The culmination of these values creates a culture of moral mindfulness that allows for the rapid detection and correction of unwanted moral errors. Much like HRO theory proposes its five principles (discussed previously), ERO theory recommends five principles to build requisite variety in the ways EROs and their members encounter, think about, and respond to issues related to ethics. In other words, ERO theory describes organizations that exhibit ongoing and

consistent moral learning. Part of this accomplishment is due to a transition in the normal way to talk about ethics in such organizations from there-and-then (i.e., as if moral transgressions are something someone else does somewhere else at another time) to here-and-now (i.e., ethics-related work is something *we* are *presently* engaged in doing; Bisel, 2018). Normalization of here-and-now ethics talk allows members to engage with their ongoing ethics-related circumstances reflexively in order to deliberate about and explore new, more ethically excellent ways of organizing.

Communication practices supporting organizational moral learning. The first principle of ERO is *preoccupation with institutionalizing ethical excellence*, which refers to vigilance regarding the application of high ethical standards to work (Bisel, 2018). The goal is not to achieve ethical perfection, which could cause a paralyzing lack of activity when multiple moralities conflict in their ethical dictates, but rather to normalize constant consideration for how members may act better regarding ethics-related issues. In short, preoccupation with institutionalizing ethical excellence is a routine of present-minded attention toward how to act ethically. In the case of Reader Gymnastics (Bisel et al., 2017), preoccupation with institutionalizing ethical excellence was enacted through sensebreaking statements (e.g., "We're not coaching like that," p. 423) that substantiated alternative ethical standards (e.g., "the child's more important," p. 423), allowing new practices of ethical excellence to emerge among coaching staff (e.g., using humor instead of verbal abuse to relieve tension).

Second, *reluctance to simplify ethical applications* refers to preserving the complexity of ethics-related contexts such that when acting into those contexts, members do not take for granted the ethical dimensions of their behaviors (Bisel, 2018). One of the major accomplishments of this principle is to avoid binary thinking that may otherwise consider one's

actions ethical just because they have not been sanctioned as unethical (Bisel, 2018). Typical simplifications of ethical applications may take the form of rationalizations and euphemisms that justify previous actions using only a handful of confirming details and condense the richness of ongoing circumstances into more easily digestible frames, respectively (Ashforth & Anand, 2003; Lucas & Fyke, 2014). Avoiding these simplifications means that EROs tend to discuss with humility the ethical dimensions of what they are actually doing (Bisel, 2018).

The third principle of EROs is *deference to embodied moral knowing*, which refers to honoring intuitive responses and embodied feelings toward ethics-related circumstances because the ethical voices of others are often expressed in such terms (Bisel, 2018). The key accomplishment of this principle is taking seriously members' moral intuitions so that moral transgressions may be considered as potential problems in the organization as a larger system (Bisel, 2018). Without such respect for the multiple ways individuals experience ethics in their work, small errors may go unaddressed until they become intractable problems. Bisel and Adame (2019) found that when leaders express phrases that honor gut-level feelings (e.g., *What does your gut tell you?*), employees are about twice as likely to voice ethical dissent to an unethical business request, which is significant in detecting and correcting moral errors in organizations.

Fourth, *commitment to interpersonal consideration* refers to an ongoing appreciation for how organizational actions affect the connections that individuals (internal and external) have to the organization (Bisel, 2018). The key accomplishment of this principle is expanding thinking about organizational outcomes to include more than just organizational prerogatives like profitability (Bisel, 2018). In so doing, EROs engage in significant boundary spanning that allows organizational needs to be balanced with varying ethical dictates and individual concerns, fostering a beneficial and reciprocal *relationship* between the organization and individuals. For

instance, Mahutga et al. (2024) found low-to-moderate correlations between moral identity variables and communicatively competent forms of upward ethical dissent, suggesting the presence of a relationship between moral identity (outside the organization) and ethical organizational behaviors. This finding supports the notion that organizational outcomes are driven in part by identities that span outside organizational boundaries. Additionally, motivating language theory (Mayfield & Mayfield, 2017; Mayfield et al., 1995; Sullivan, 1988) suggests that emotion-sharing language (e.g., bonding humans together relationally, developing trust) and meaning-making language (e.g., defining roles and their necessary behaviors) are two primary motivators of organizational behavior. In other words, relationships between individuals and between individuals and the organization are central to organizational behavior, including ethics-related organizational behavior.

Finally, ERO theory recommends the practice of *sensitivity to the ethics of operations*, which refers to "being attuned to ethical conduct on the front line, where the real work is accomplished" (Bisel, 2018, p. 203). The major accomplishment of sensitivity to the ethics of operations is encouraging here-and-now ethics talk about workers' private ethics-related concerns so that ethical errors can be detected quickly (Bisel, 2018). An insensitivity to the ethics of operations is the result of the common problems of moral muteness and moral deafness in organizations (Bird, 1996). In turn and reciprocally, this insensitivity becomes ingrained in the mental models workers have for how to perform their duties (Bisel, 2018; Bisel & Arterburn, 2012; Bisel et al., 2011). Ethics-talk is stimulated in situations where employees have high trust-in-supervisor and, paradoxically, low trust-in-supervisor (Zanin et al., 2016). Additionally, workers' private ethical concerns are brought to bear when supervisors use explicitly moralized

language, such as the terms “moral,” “ethical,” or “integrity” (Zanin et al., 2016) or when supervisors defer to workers’ embodied moral knowing (Bisel & Adame, 2019).

Summary. Each of the five ERO principles attempts to prescribe elements of an organizational culture that engages in moral learning, starting with exploration of individuals’ moral intuitions and working through interpretation, integration, and institutionalization of more ethical workplace routines (Bisel, 2018). In presenting *preoccupation with institutionalizing ethical excellence*, *reluctance to simplify ethical applications*, *deference to embodied moral knowing*, *commitment to interpersonal consideration*, and *sensitivity to the ethics of operations*, I describe the importance of each in shifting organizational communication norms toward here-and-now ethics talk that allows for the rapid detection, reflection, and potential correction of moral transgressions. Moreover, I provide examples and evidence to support these principles. However, given that ERO theory is a relatively new theory, many of the ERO principles still lack direct and robust empirical evidence. In order to address this limitation of the current state of ERO theory, the remainder of this literature review focuses on *sensitivity to the ethics of operations* and hypothesizes a cluster of empirical markers that are predictive of this principle and its theoretically likely organizational outcomes.

Sensitivity to the Ethics of Operations

Sensitivity to the ethics of operations means that members of an organization have normalized widespread awareness of and collective reflection upon the ethical dimensions of work procedures and processes (Bisel, 2018). Because sensitivity to the ethics of operations focuses on actual work procedures and processes, frontline workers’ voices are prioritized and moral muteness is avoided (Bird, 1996). Yet, because frontline workers often do not hold positions of power necessary to make changes to procedures and processes (Rahim, 2009), managers and others higher in the organizational hierarchy must also play a role in listening to

workers at the forefront of operations to avoid moral deafness (Bird, 1996). Working together, frontline employees and others higher in the organizational hierarchy develop a culture promoting sensitivity to the ethics of operations, which implies that their interaction creates a *climate* of shared perceptions regarding ethical aspects of work and *norms* for addressing ethical concerns in the here-and-now (Bisel, 2018). This climate of earnest dialogue about here-and-now ethics is predicated on trusting relationships between all parties involved (Edmondson, 1999).

Absence of Moral Muteness: Moral Voice

According to ERO theory, members of ethical organizations must act upon their ethical concerns by communicating in real time about transgressions they perceive (Bisel, 2018). In other words, the enactment of voice is a necessary condition of organizational learning. When workers choose to voice their perspectives, they may target effectual or ineffectual audiences. Generally, upward audiences (e.g., managers) within the organizational hierarchy have greater decision-making authority to improve undesirable conditions than lateral audiences (e.g., coworkers) or displaced audiences (e.g., family members; Kassing, 1997; 1998). Thus, upward (also known as articulated) forms of voice are generally preferable for organizational learning.

Prosocial and repetition upward ethical dissent. When employees encounter discrepant experiences that violate their intuitive expectations—like moral transgressions—their options generally are to dissent actively, to comply, to quit, or to resist passively by neglecting their work (Hirschman, 1970; Gossett & Kilker, 2006). *Dissent* is one form of voice, referring to the expression of contradictory opinions about organizational policies or procedures (Kassing, 2011). *Upward* dissent involves audiences with greater organizational authority than the dissenter. Therefore, upward *ethical* dissent is the expression of ethics-related concerns about organizational policies or procedures to upward audiences (Mahutga et al., 2024).

Upward ethical dissent is a relatively recent construct (Mahutga et al., 2024). As such, scholarship has yet to investigate empirically its direct relationship with organizational learning, including organizational learning about ethics. Experimental findings in communication indicate that upward ethical dissent may be encouraged amongst workers when leaders are known to talk with explicitly moralized vocabularies (Zanin et al., 2016) and when leaders express deference to embodied moral knowing (Bisel & Adame, 2019). Furthermore, survey research revealed that prosocial and repetition strategies of upward ethical dissent are positively correlated with moral identity (Mahutga et al., 2024). These two forms are believed to be more competent forms of dissent than other strategies, such as threatening resignation and circumvention (Kassing & Kava, 2013). More generally, scholarship demonstrated that upward dissent is promoted by a number of factors, including strong organizational assimilation, belief that one's organization is ethical (Croucher et al., 2019), workplace freedom of speech (Croucher et al., 2014; Kassing, 2000a), high quality leader-member relationships (Kassing, 2000b), employment history and job tenure (Kassing, 2006), low threat of retaliation (Kassing, 2008), high argumentativeness and low verbal aggressiveness (Kassing & Avtgis, 1999), internal locus of control orientation (Kassing & Avtgis, 2001); fair and timely supervisor treatment (Kassing & Kava, 2013), perceptions of justice (Kassing & McDowell, 2008), and work engagement (Kassing et al., 2012).

Furthermore, dissent expressions differ based on employment status, with full-time employees preferring more competent forms of upward dissent (i.e., prosocial dissent and repetition rather than circumvention and threatening resignation) than part-time employees (Kassing et al., 2018) and based on imagined interactions with the boss, with competent expressions more likely when employees use imagined interactions to rehearse conversations or

manage relationships with their bosses (Bisel et al., 2024). Dissent expressions also differ based on dissent triggers, with other-focused and functional issues (e.g., roles and decision making) more frequently voiced upwardly than protective issues (e.g., employee harm and ethics; Kassing & Armstrong, 2002). While these findings do not necessarily speak directly to the empirical connection between dissent and organizational learning, the established relationships with adjacent constructs such as justice, fair treatment, and perceived organizational ethicality suggest that upward dissent is linked to the moral aspects of organizing, despite the challenges employees face in voicing ethics-related concerns (Bisel et al., 2011; Kassing & Armstrong, 2002). Theoretically, upward ethical dissent is necessary for members of organizations to begin interpreting and integrating understandings of ethical transgressions in the process of organizational moral learning.

Absence of Moral Deafness: Leader Listening

Upward ethical dissent helps to ensure the avoidance of moral muteness (Bisel et al., 2011), but for social interpretation and integration to happen, organizations must also avoid moral deafness—the degree to which those with the capacity to improve a situation do not hear or do not respond to the moral concerns voiced by others (Bird, 1996). In other words, organizations "can reap the benefits of that input only if it is listened to and acted upon" (Morrison, 2014, p. 191). Thus, leader listening is another important aspect of fostering sensitivity to the ethics of operations. Listening refers to a process involving hearing, giving recognition, attending to others, engaging in interpretation, trying to understand, receiving messages, constructing meaning, considering others, remembering, analyzing, and responding (Flynn et al., 2008; Macnamara, 2015).

Clearly, listening involves a wide range of related processes and behaviors. Research about listening tends to be diverse, divergent, and plagued by methodological challenges. Listening scholarship suffers from an over-reliance on anecdotal evidence, while also lacking a widely used operational definition and a generally accepted measure (at least in organizational settings; Flynn et al., 2008). For instance, individual listening is often conceived of as involving cognitive, behavioral, and affective dimensions (Neill & Bowen, 2021), while organizational listening tends to include culture, policies, systems, technologies, human resources, and articulation through decision-making structures (Macnamara, 2015). Furthermore, listening functions to moderate the relationship between voice opportunity and creative performance, to convey attention, interest, and care (Yang et al., 2021), to bridge relationships and achieve understanding (Rappeport & Wolvin, 2020), to increase aperture (i.e., information volume), discernment (i.e., information value), and doubt (i.e., information accuracy; Lewis, 2020), to achieve organizational prerogatives strategically, and to substantiate ethics (Gehrke, 2009). It is not always clear from the scholarship whether these functions span the entire breadth and depth of listening conceptually or empirically, given differing operationalizations of listening (e.g., as the perception of being listened to versus behaviors associated with being listened to actively). Overall, there is little agreement about what listening is or what it does.

In organizations, listening is frequently purported to be a valuable and desirable skill (Flynn et al., 2008), despite evidence of the speaking-to-listening ratio being decidedly in favor of sending messages rather than listening to others' messages, at least for a sample of communication professionals (Macnamara, 2015; Neill & Bowen, 2021). The value of listening and the proportion of time spent listening increases as an individual moves up the organizational hierarchy (Brownell, 1994; Kotter, 1982). In fact, high supervisory listening seems to be

necessary to capitalize on workers' voice (Kelly et al., 2023), at least for creative performance (Yang et al., 2021). Managerial listening can also promote open dialogue (Rappeport & Wolvin, 2020), trust, employee motivation, productivity, and lower absenteeism (Flynn et al., 2008). Organizational listening is accomplished conventionally through a handful of approaches including skip-level and face-to-face meetings, emails, committees, pulse surveys, and employee resource groups (Neill & Bowen, 2021). These approaches to listening may improve employee identification, involvement, and productivity (Flynn et al., 2008; Qin & Men, 2021). While empirical research linking listening and organizational learning is sparse, Jacobs and Coghlan (2005) conceptualize listening as enabling intersubjective meaning making, which creates a possibility for integration and institutionalization elements of organizational learning (Crossan et al., 1999). In other words, supervisory listening behaviors *and* the widespread perception that management will listen may be necessary to span the boundaries between individuals and groups and between groups and the larger organization in the process of learning.

Listening also appears to play a significant role in ethics. While some theorize that listening and ethics may be consubstantial—each necessary in the production of the other or absent in the absence of the other (Gehrke, 2009)—there is more widespread theoretical agreement that listening is at least necessary for open *dialogue*, which allows for understanding, acceptance, and tolerance, in turn (Rappeport & Wolvin, 2020). This dialogical pathway allows for ethics-based *deliberation* between and among people (Lipari, 2009). In other words, listening provides a fertile environment for ethical development, including in organizations. Operating under these assumptions, Neill and Bowen (2021) suggest that listening may be both ethical and strategic simultaneously. Listening is strategic insofar as it can achieve desired functions (as stated previously), and listening is ethical only insofar as it activates moral sensitivity among

decision-makers (Tompkins, 2009). Moral sensitivity refers to awareness of the consequences of one's decisions on others that provokes sympathy and empathy (Tompkins, 2009). Certainly, decision makers may still overlook ethical considerations in favor of other strategic priorities (Werhane, 1999), suggesting that listening alone is not enough to constitute ethics. However, when listening activates moral sensitivity, decision-makers can make ethical decisions by engaging in ethical, not merely strategic, deliberation (Rest, 1986). In short, listening may support but not replace ethics.

The Present Study

The previous sections provided an overview of the organizational communication, organizational dissent, and listening literatures as they relate to organizational moral learning—a key process and outcome described by ethically reliable organizing (ERO) theory. The present study seeks to begin investigating a key premise of ERO theory: Namely, the notion that *communication behaviors accumulate to shape organizational culture, which influences subsequent organizational behavior* (Bisel, 2018; Fairhurst & Putnam, 2004; Weick et al., 2005; Weick & Sutcliffe, 2015). Recall that ERO theory proposes that sensitivity to the ethics of operations (SEO) is one of five key cultural values of organizations that detect and correct ethical failures. Here, communication behaviors that are hypothesized to predict SEO are competent forms of upward ethical dissent (i.e., prosocial and repetition) and employee perceptions of leader listening, as discussed in the previous section of this manuscript. These communication behaviors are about effectively avoiding the twin problems of moral muteness and moral deafness in organizations (Bird, 1996). Thus, it was hypothesized:

H1: Upward ethical dissent positively predicts sensitivity to the ethics of operations.

H1(a): Prosocial upward ethical dissent positively predicts sensitivity to the ethics of operations.

H1(b): Repetition upward ethical dissent positively predicts sensitivity to the ethics of operations.

H2: Employee perceptions of leader listening positively predict sensitivity to the ethics of operations.

Organizational learning. While Hypotheses 1 through 3 explore whether communication shapes culture, the next hypotheses investigate the influence of organizational culture on members' ethics-related behaviors. A key premise of ERO theory is that enactment of ERO cultural principles ought to improve organizational moral learning (Bisel, 2018). While ERO scholars have yet to investigate this premise directly, analogical reasoning from studies of HROs may indicate how SEO will relate to organizational moral learning. Notably, few studies differentiate HRO into its five principles, partially because Weick and Sutcliffe (2015) explain that these concepts overlap significantly. Thus, analogies must primarily be drawn from indicators of HRO theory as a whole, rather than sensitivity to operations more specifically.

Several qualitative studies demonstrated how HROs learn, often without direct experiences of failure. For instance, in ethnographic work embedded within a cable manufacturer for military submarines, scholars pinpointed that reliability was achieved when risk factors were balanced with worker competence, while operational errors occurred when risk factors outweighed competence (Sullivan, 2014; Sullivan & Beach, 2011). Learning occurred when workers were held accountable for violations in performance expectations. Accountability motivated individuals to remediate incompetence (e.g., by seeking additional training). Furthermore, accountability encouraged the organization to change cultural patterns that were

contributing to declining competence, such as adversarial work culture (e.g., by fostering a no-blame philosophy with messages like “if one of us fails, we all fail;” Sullivan, 2014). Elsewhere, scholarship identified “borrowed learning” among wildland firefighters to improve competence through vigilant preparation activities, such as after-action reviews, sand table exercises, staff rides, case studies, and facilitated learning analyses (Ishak & Williams, 2018). Similar qualitative work has been conducted in HROs, such as nuclear facilities and military branches (e.g., Navy), to show that communication practices help to achieve individual and collective mindfulness in support of operational reliability (Barbour & Gill, 2017; Fraher et al., 2017). This subset of the qualitative work related to HROs supports the notion that organizations are better able to detect and correct errors (i.e., learn) when HRO values are upheld in the cultural norms of organizations.

Quantitative work related to HRO theory also provides support for learning outcomes. Much of this work relies on the Safety Organizing Scale (Vogus & Sutcliffe, 2007), which involves practices indicative of safety culture (a term often used synonymously with high reliability organizing) but does not differentiate these practices between and among the five HRO principles. The original version is intended for use in medical contexts. The Safety Organizing Scale and its modified versions are positively associated with learning communication behaviors (Jahn & Black, 2017), intention to report safety events (Pfeifer, 2022), team learning, safety compliance, and safety participation (Gracia et al., 2020; Renecle et al., 2020) and negatively associated with medication errors and patient falls (Ausserhofer et al., 2013; Vogus & Sutcliffe, 2007). These findings demonstrate direct relationships between climate markers of HRO culture, organizational learning outcomes, and avoidance of contextual errors. Other work supports these relationships indirectly by identifying correlates with organizational errors. For example, safety

organizing is negatively related to emotional exhaustion (Vogus et al., 2014) and individual stress and positively related to individual efficacy (Roeder & Bisel, 2024), factors that may affect likelihood of error and capacity to engage in proactive learning behaviors (Hu & Yeo, 2020). In sum, climate markers of HRO culture tend to relate positively to organizational learning outcomes, and by analogy (in line with ERO theory), I expect the ERO climate marker, sensitivity to the ethics of operations, to relate positively to organizational moral learning outcomes:

H3: Sensitivity to the ethics of operations positively predicts organizational moral learning [as measured by (a) moral learning behaviors and (b) ethical safety organizing].

Incivility. If organizational culture predicts organizational behavior (Fairhurst & Putnam, 2004), the moral culturing of an organization should be associated not only with the enactment of right-doing but also the correction of wrongdoing in the workplace. While many forms of organizational wrongdoing exist, the present study selects only a small subset to begin to address this concern: incivility, interpersonal deviance, and workplace deviance. Incivility refers to "low-intensity deviant behavior with ambiguous intent to harm the target" manifest in violations of norms for respect, such as being rude, discourteous, or lacking regard for others (Andersson & Pearson, 1999, p. 457). In other words, incivility refers to behaviors that are generally small and mindlessly enacted, and thus, incivility may easily become a form of *normal* organizational wrongdoing (Palmer, 2013), especially when a single instance of incivility may go *unnoticed* when moral intuitions are dull. Despite being a small action, the consequences of incivility tend to become quite large. Prior research demonstrates that incivility affects its victims by creating greater job-related stress and lowering job satisfaction, lowering individual creativity, reducing cooperative behaviors, lowering organizational commitment, and increasing turnover (Cortina et

al., 2002; Cortina et al., 2001; Pearson et al., 2000; Pearson et al., 2001; Pearson & Porath, 2004). Incivility also decreases job satisfaction, increases burnout, and leads to turnover in those who see acts of incivility, even if those uncivil behaviors are not directly committed against them (Lim et al., 2008; Miner-Rubino & Cortina, 2004; 2007). Moreover, incivility is affected by social power structures such that historically marginalized groups (e.g., women, people of color) tend to more often be the targets of incivility (Cortina et al., 2011). If, as ERO theory proposes, an organizational culture sensitive to the ethics of operations enables members to notice and address wrongdoing while it is small and resolvable (Bisel, 2018), then incivility behaviors should be suppressed in organizations marked by SEO climate:

H4: Sensitivity to the ethics of operations negatively predicts workplace incivility.

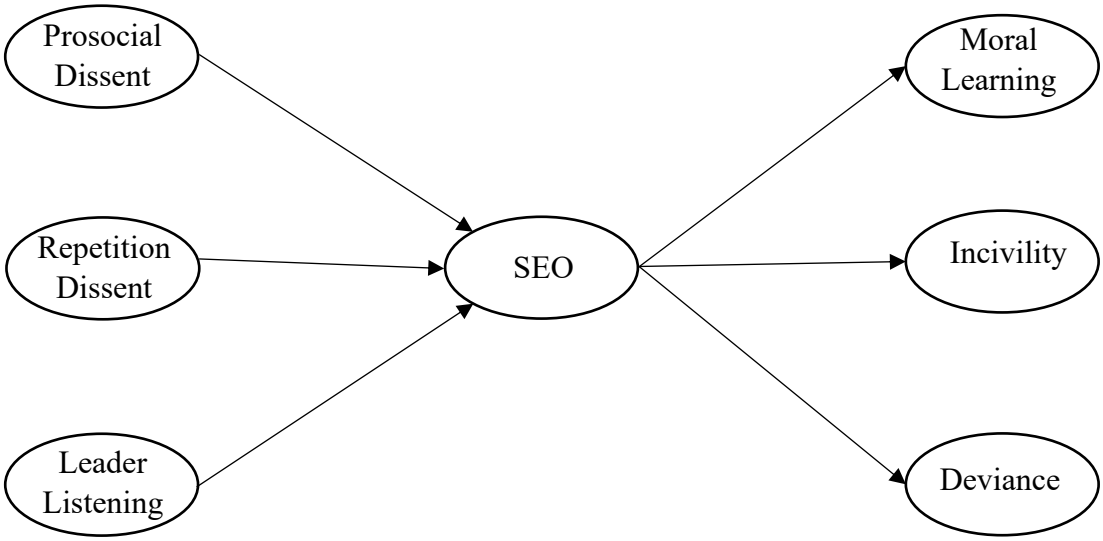
Deviance. Counterproductive workplace behaviors are those which *intend* to have a deleterious effect on an organization and its members (Fox et al., 2001). Deviance refers to any voluntary behavior that breaches organizational norms in major ways that threaten the well-being of an organization or its members (Robinson & Bennett, 1995). Interpersonal and workplace deviance are two forms of deviant counterproductive workplace behaviors. Interpersonal deviance refers to deviant behaviors directed at individuals in an organization, while workplace deviance refers to deviant behaviors directed at the organization itself (Mackey et al., 2021). Deviance differs from incivility in scale and intentionality, with deviance being more transgressive and mindful. According to the latest meta-analysis of deviance (Mackey et al., 2021), both interpersonal and workplace deviance are weakly related to several demographic variables such as age (ρ = -.12 and -.12, respectively) and gender (ρ = -.11 and -.09); more strongly related to personality traits like agreeableness (ρ = -.40 and -.32), conscientiousness (ρ = -.24 and -.41), neuroticism (ρ = .16 and .19), narcissism ((ρ = .17 and .12), and negative

affectivity (ρ = .36 and .41), to name a few; to attitudes and perceptions, such as procedural justice perceptions (ρ = -.18 and -.22), abusive supervision (ρ = .40 and .43), anger (ρ = .31 and .22), anxiety (ρ = .22 and .25), and burnout (ρ = .26 and .35), among others; and to organizational outcomes, such as job satisfaction (ρ = -.20 and -.28), organizational commitment (ρ = -.16 and -.20), turnover intention (ρ = .21 and .29), and task performance (ρ = -.24 and -.40). These meta-analytic results suggest that individual and organizational deviance have negative consequences for members and their workplaces. In contrast, ERO theory proposes that members of ethically reliable organizations build a culture that includes SEO climate in an attempt to direct mindful attention to moral errors committed by organizations and their members (Bisel, 2018). Yet, when wrongdoing is a mindful behavior—as is the case with deviance—it is unclear how influential SEO will be in correcting this type of organizational wrongdoing:

R1: To what extent does sensitivity to the ethics of operations negatively predict deviance [as measured by (a) interpersonal deviance and (b) workplace deviance]?

Figure 1 displays the relationships posed by the hypotheses and research questions.

Figure 1.
Proposed Hypothetical Model.



Chapter 3

Methods

Survey research design and several statistical analysis techniques were utilized in the present study. Well-crafted survey designs can have greater ecological validity compared with other available methods, such as highly controlled experiments (Keyton, 2015). Moreover, surveys are commonly used in research designs intended to study relationships among variables (Frey et al., 2000). Given recent efforts to expand the methodological approaches used to study upward ethical dissent (UED) beyond experimental methods (Mahutga et al., 2024) and the associational nature of this study's hypotheses, a survey research design was appropriate. Data for this study consisted primarily of employees' *perceptions*, which may admittedly differ from other objective measures (e.g., an employee's perception of their leader's listening behavior is unlikely to be identical with the leader's actual listening behavior). The following paragraphs outline the data collection strategies and planned analyses.

Data Collection

Data were collected from US-based working adults, recruited using Prolific™, an online crowdsourcing website. Prolific™ allows researchers to set participant selection criteria, such as demographics and geographic location, in advance of survey distribution. The service distributes the survey to eligible individuals who meet these criteria. Then, eligible participants may choose to participate in the surveys of their interest. Power analysis for structural equation modeling suggests that about 950 participants were necessary to validate the proposed model structure and detect effects (Soper, 2024). Participants were compensated at a rate of at least $12 per hour. Working adults were necessary because their job experiences relate to the organizational contexts in which the theoretical claims of this study operate. By contrast, undergraduate students' responses would be unlikely to be as valid in terms of modeling relationships among variables,

given their limited work experiences. The sample was also composed of US-based employees. Stephen Croucher and his colleagues have made significant efforts in recent years to validate relationships among dissent and associated variables with international samples (Croucher et al., 2014; 2020). However, the performance of instrumentation with international samples has had mixed success. For instance, one commonly used measure of organizational dissent did not maintain reliability and validity for a sample of French employees (Croucher et al., 2020). The present study therefore limited sampling to US-based working adults to avoid problems with instrumentation, as many of the scales included in this study have not yet been tested outside of the US.

Participant characteristics. Of 967 responses (before data cleaning), 785 participants provided demographic information. Participants averaged 15.85 years of work experience (*SD* = 11.55), ranging from one quarter of a year to just over 52 years. The sexual identities of participants included male (*n* = 412, 52.5%), female (*n* = 369, 47%), and other (*n* = 4, .5%). Participants' educational achievements included 218 participants with less than a college degree, 385 with an associate or bachelor's degree, and 182 with a master's, doctorate, or other professional degree. Racial and ethnic identities of participants included Asian/Asian American (*n* = 62, 7.9%), Black/African American (*n* = 181, 23.1%), Latinx/Hispanic (*n* = 43, 5.5%), Middle Eastern (*n* = 3, .4%), Native American (*n* = 8, 1.0%), White/Non-Hispanic (*n* = 456, 58.1%), Biracial/Multi-racial (*n* = 31, 3.9%), and Other (*n* = 1, .1%). The average age of participants was 40.07 years (*SD* = 11.55), ranging from 21 to 77 years of age. The majority of participants were in supervisory roles in their organizations (*n* = 444, 56.6%), while others indicated they held non-supervisory roles (*n* = 341). Participants indicated that they worked in at least 20 different industries with Health and Healthcare Services (*n* = 103), Educational Services

(*n* = 76), Finance (*n* = 67), Retail Trade (*n* = 61), Manufacturing (*n* = 61), and Other (*n* = 139) composing the most frequently listed industries.

Instrumentation

This study used Likert-type scales to capture data about relevant variables. Likert-type scales are able to capture data about individuals' attitudes and perceptions with some degree of nuance: Though often treated as interval data for analytical purposes, Likert scales capture ordinal data generally representing an extent of agreement about a given statement (Singleton & Straits, 2010).

Prosocial and repetition upward ethical dissent. Upward ethical dissent was measured in two communicatively competent forms. *Prosocial* (i.e., involving direct factual appeals and solution presentation) and *repetition* (i.e., involving voicing dissent multiple times) *UED* are measured with two five-item subscales from the UED Scale (Appendix A; Mahutga et al., 2024). Use of the label *prosocial* keeps with the original labeling by Kassing and Kava (2013). To be clear, prosocial dissent refers to polite forms of dissent that includes facework and is not necessarily dissent that benefits society (see Zanin & Bisel, 2023 who make a similar point). Sample items for prosocial UED include "I focus on the facts surrounding the ethical issue," and "I present a well-thought-out solution to the ethics-related problem." Sample items for repetitious UED include "I bring up the ethical concern numerous times," and "I continue to mention my ethics-related concern until it gets addressed." These subscales have performed reliably in a previous study (Mahutga et al., 2024), and they were reliable in this study, too: Prosocial, $\alpha = .90$, $\omega = .90$; Repetition, $\alpha = .96$, $\omega = .96$. Moreover, these subscales previously demonstrated convergent validity with measures of moral identity (Mahutga et al., 2024).

Perceptions of leader listening. *Perceptions of leader listening* are measured with a ten-item *leader listening skills/behaviors* measure (Appendix B) compiled from items from several other listening measures, such as the Active Listening Observation Scale (Fassaert et al., 2007)

and Relationship Inventory (Barrett-Lennard, 2015). The former was designed to assess doctors' listening practices from the perspective of patients (Fassaert et al., 2007), so several items were adapted to fit organization contexts; the latter measure is a much longer assessment of dyadic relationships that includes elements beyond the scope of listening (Barrett-Lennard, 2015). Thus, a shorter other-report version of leaders' listening was derived from these measures to capture employees' beliefs and perceptions about supervisors' listening behavior, skillfulness, and ability to suspend judgment. Sample items include, "My supervisor listens attentively," "My supervisor realizes what I mean even when I have difficulty in saying it," and "I can/could be openly critical or appreciative of my supervisor without making them feel differently about me." This measure performed reliably, $\alpha = .91$, $\omega = .92$.

Sensitivity to the ethics of operations. *Sensitivity to the ethics of operations* was assessed with an original fourteen-item measure created for this study (Appendix C). This scale was subjected to additional validation described in the following chapter. Items are intended to measure employee perceptions of an organizational climate involving normalized, widespread awareness of and reflection upon ethical aspects of work (Bisel, 2018). The final version of the scale performed reliably: $\alpha = 94$, $\omega = .94$.

Moral learning behaviors. *Moral learning* was measured by modifying two established scales. These two scales served as indicators of individual employees' perceptions of their organizations' practices related to ethical updating of policies and practices. First, the seven-item Team Learning Behavior measure (Appendix D) was adapted (a) to include explicitly moral language as the learning referent and (b) to shift the context from team to organization was utilized (Edmondson, 1999). These modifications shift the focus from team learning to organizational moral learning. Mahutga et al. (2024) used a similar strategy to adapt a measure of

upward dissent successfully. Modified items measure employee perceptions of shared behaviors that help organizations adapt their ethics-related work processes to emerging contexts. Sample items include, "We regularly take time to figure out ways to improve the ethics of our organization's work processes," and "This organization frequently seeks new information that leads us to make important ethics-related changes." Previously, the unmodified scale performed reliably, $\alpha = .78$, and demonstrated strong convergent validity with measures of team performance and team efficacy (Edmondson, 1999). The modified scale performed reliably: $\alpha = .91$, $\omega = .91$.

Second, *ethical safety organizing* was measured with a nine-item modified version of the Safety Organizing Scale (Appendix E, Vogus & Sutcliffe, 2007), with items altered to reflect *ethical* reliability by incorporating explicitly moralized language in the items. Modified items measure employee perceptions of ethics-related behaviors in the workplace that seek to detect, correct, and minimize errors. Sample items include, "We spend time identifying ethics-related activities we do not want to go wrong," and "When ethical errors happen, we discuss how we could have prevented them." Modifications are intended to help assess the development of an ethically reliable work climate rather than merely operationally safe climate. This instrument performed reliably: $\alpha = .94$, $\omega = .94$.

Incivility. *Workplace incivility* was measured with the 12-item updated version of the Workplace Incivility Scale (Appendix F; Cortina et al., 2011). These items measure employee perceptions of low-intensity harmful behaviors directed at members of their organization (Andersson & Pearson, 1999). Sample questions include "Were you ever in a situation in which any of your supervisors or co-workers…" (a) "paid little attention to your statements or showed

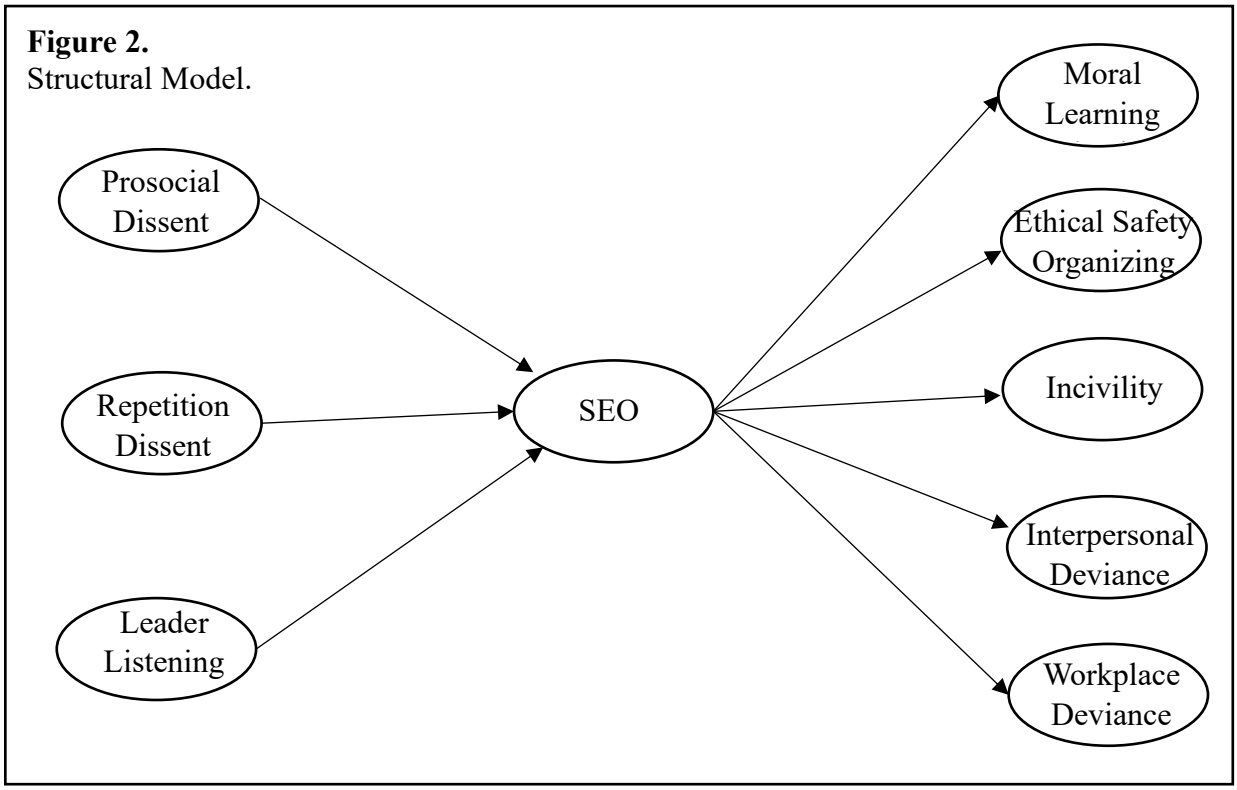
little interest in your opinions," (b) "interrupted or spoke over you,", and (c) "made insulting or disrespectful remarks about you." This scale performed reliably: α = .95, ω = .95.

Deviance. *Interpersonal* and *workplace deviance* were assessed with abbreviated versions of the Interpersonal and Organizational Deviance Scales (Appendix G; Bennett & Robinson, 2000). Interpersonal deviance (i.e., high-intensity behaviors intended to harm individuals within an organization) was assessed with a 6-item instrument, with sample questions including "In the past year, how many times have you…" (a) "made fun of someone at work," (b) "publicly embarrassed someone at work," and (c) "cursed at someone at work." This scale performed reliably: α = 82, ω = .82. Workplace deviance (i.e., high-intensity behaviors intended to harm an organization) was assessed with an 8-item instrument, with sample questions including "In the past year, how many times have you…" (a) "took undeserved breaks to avoid work," (b) "made unauthorized use of organizational property," and (c) "lied about the number of hours you worked." This scale performed reliably: α = 88, ω = .88.

Data Analysis

Data analyses were conducted through several steps. First, data were collected from an initial sample to assess content adequacy of the SEO instrument created for this study, using Q-sort procedures. Second, data were collected from another larger sample, and the data set was cleaned and prepared for analysis. Third, EFA was conducted to assess the viability of combining items designed to measure SEO into a single scale and to explore the dimensionality of the resulting construct. Fourth, CFA was conducted to assess the proposed factor structure for the data set corresponding to Figure 2. Fifth, SEM was utilized to test the proposed structural model in Figure 2.

Figure 2.
Structural Model.



Chapter 4

SEO Scale Development and Q-Sort Procedure

In order to test the hypothesized model, an original measure of sensitivity to the ethics of operations was developed. Recall that SEO refers to normalized widespread awareness of and collective reflection upon the ethical dimensions of work procedures and processes and was first proposed within the ERO theory framework (Bisel, 2018). To develop a measure for this construct, a series of criteria were created that would ensure all items were operationalized in ways that were definitionally faithful to the original concept. Specifically, all items were designed to follow these guidelines:

(a) based in a perception that there exists a cultural *value* or *assumption*

(b) which is *shared/mutual/cooperative*

(c) that the group should be *consistent/routine/persistent/habitual*

(d) about *attending to/focusing on/heedful of/scrutinizing of/reflecting upon*

(e) *ethics/morals/integrity/conscience/right/decency/goodness/principled*

(f) regarding *ongoing work/efforts/energies*

(g) especially at the *frontline/point of contact/boundary/frontier/perimeter/point of delivery.*

Sample items include “We value habitual reflection about the moral implications of ongoing work tasks,” “We do NOT value making a habit of thinking through whether our daily work is ethically ideal, especially at the frontline,” “We assume our everyday work tasks do NOT need to be updated regularly to maintain high ethical standards,” and “We assume our work procedures need to be double checked often in order to ensure they are ethically excellent. The 14 items designed using these procedures were then sent to two professors of communication for expert

review. The professors were familiar with ERO theory but unfamiliar with the goals and details of this project. The expert reviewers cross-checked that every item met each of the above guidelines and suggested minor revisions to phrasing. Suggestions were integrated into the version of items that appear in this manuscript.

Q-Sort for SEO Instrument

In constructing a new measurement instrument in social science, one of the primary concerns is whether that instrument is valid—that is, whether participants' responses to measurement items correspond to real differences in what the scale intends to measure (Boateng et al., 2018; Carpenter, 2018; Devellis & Thorpe, 2021). There are a variety of ways to demonstrate scale validity, such as face validity (i.e., items appear to measure what they purport to measure), criterion validity (i.e., responses to items correspond to some real, external criteria), convergent/discriminant validity (i.e., items correlate or not with other constructs to which they should or should not relate), and content validity (i.e., the range of items capture all theoretical dimensions of the construct; Singleton & Straits, 2010).

Assessing content adequacy, the extent to which the content of a measure covers a representative sample of the theoretical domain one intends to measure (Schriesheim et al., 1993), is one element of validating a new measurement instrument's content validity. A common problem with content adequacy is the modification of scales using data reduction techniques (e.g., factor analysis), which often results in "theoretically distinct constructs being collapsed into more global, multidimensional, and confounded measures" (Schriesheim et al., 1993, p. 389). In order to assess content adequacy and avoid such problems, Hinkin and Tracey's (1999) q-sort procedures, involving ANOVA and Duncan's multiple-range test, were utilized to help

demonstrate the theoretical distinctiveness of items created to measure sensitivity to the ethics of operations.

Procedure. Participants were presented with the 14 items proposed to measure SEO and asked to rate their consistency (1 = "not at all consistent;" 5 = "totally consistent") with three different conceptual definitions. These conceptual definitions are drawn from theoretically close concepts. This study uses definitions for SEO (involving *values* and *assumptions* indicative of ethically sensitive organizational culture), here-and-now ethics talk norms (involving *behaviors* indicative of ethically sensitive organizations), and psychological safety climate (involving climate elements of organizations characterized by perceptions of safety when taking interpersonal risks). Statistically significant differences between ratings for items on these definitions (assessed with ANOVA, using Duncan post-hoc comparisons, as per Hinkin & Tracey, 1999) would indicate that participants understand and treat SEO items as conceptually unique from here-and-now ethics talk norms and psychological safety climate.

Psychological safety is a common variable in the management literature and is an adjacent concept to many ideas in this study, especially regarding organizational learning (Edmondson, 1999). However, as the name implies, psychological safety remains a psychological variable, which has communication outcomes but itself is not a communication variable (Thelen et al., 2022). Nevertheless, because of the similarity of the concept, it represents a good comparison point for evaluating the content adequacy of SEO items. For more information about psychological safety, see Appendix H.

Sample. For their q-sort procedures, Hinkin and Tracey (1999) suggest a sample size of about 30 individuals who are able to comprehend scale items. Their ANOVA procedures are generally functional with small sample sizes, but this may inflate Type II error while reducing

the odds of Type I error (Anderson & Gerbing, 1991; Hinkin & Tracey, 1999). A small sample (N = 12) was recruited from the author's professional network. While this sample is undersized, it was all that was freely available to the researcher during the time frame of data collection. Participants ranged in age from 25 to 60, averaging 36 years of age. Participants were mostly White (n = 9), with a few participants identifying as bi-racial (n = 2) or Hispanic (n = 1). Participants were also highly educated, with half holding Master's degrees (n = 6) and half holding doctoral degrees (n = 6).

Results. Results of ANOVA procedures are displayed in Table 1. No significant differences were found at $p < .05$ between SEO and here-and-now ethics talk. This result indicates that participants do not distinguish between values, assumptions, and behaviors indicative of ethically sensitive organizations, given this set of fourteen empirical indicators. However, except for one item (e.g., We assume our everyday work tasks do NOT need to be updated regularly to maintain high ethical standards), participants treated items as conceptually distinct from psychological safety climate, demonstrated by significant differences on items between SEO and psychological safety definitions.

Table 1.
Content Adequacy Analysis.

	Mean Values for Corresponding Conceptual Definition		
Item	Sensitivity to the Ethics of Operations	Here-and-now Ethics Talk Norms	Psychological Safety Climate
1	**4.08**	**3.92**	2.58
2	**4.08**	3.25	2.58
3	**4.17**	**3.83**	2.75
4	**3.92**	**3.75**	2.50
5	**3.58**	3.83	2.50
6	**3.58**	**3.75**	2.25
7	**4.00**	**3.42**	2.17
8	**3.83**	3.41	2.33
9	**3.92**	**3.58**	2.33
10	3.92	4.33	4.25
11	**4.00**	**4.00**	2.17
12	**3.83**	**3.67**	2.42
13	**4.33**	**3.67**	2.50
14	**3.83**	**3.58**	2.33

Note. Bolded values indicate significant differences from psychological safety climate definition. No items were statistically distinct between the SEO and here-and-now ethics talk norm definitions.

Section discussion. These results provide partial support for the content adequacy of items. While items were not conceptually distinct from their closest conceptual counterpart (i.e., here-and-now ethics talk norms), they were distinct from the other adjacent concept in the nomological network of SEO (i.e., psychological safety). Results further suggest removal of one item from the proposed measure of SEO, as it did not exhibit any well-defined difference between SEO and nearby concepts.

Overall, SEO and here-and-now ethics talk norms may not be observably distinct based on this set of empirical indicators, but this is perhaps unsurprising given the only theoretical distinction between the two sets of indicators is one deals with *behaviors* while the other deals with *values* and *assumptions*. Both sets of indicators deal with the same moral content—expressed in different elements of culture—of ethically sensitive organizations. Significant differences with this very close concept would have provided stronger evidence of the content adequacy of this measure. However, significant differences with psychological safety climate are taken as adequate support to proceed with additional analysis.

Chapter 5

Results of Factor Analysis and Hypothesis Testing

Data Cleaning. Data were cleaned in a series of steps. First, incomplete responses (i.e., those missing more than one entire survey section) were removed from the data set. Of 967 initial responses, 183 were removed. Most of these (n = 153) were participant cases who failed to consent to participate in the study by selecting "No, I do not consent to participate in this research." Additional removed responses included those where the survey was opened without providing information and responses wherein participants completed several sections of the survey before dropping out. The causes of this attrition (up to n = 30) are unknown, but online data collection may be subject to internet connectivity issues and other technical issues, as well as more typical reasons for subject attrition like lack of time or interest. Yet, 30 of 968 responses is not enough to be of great concern.

Second, data were screened for robot/human responses, using a reCAPTCHA© tool built into Qualtrics survey software. Online surveys taken through research pools and recruitment websites, such as MTurk and Prolific, have raised concerns about the authenticity and quality of responses for years (Harris, 2018). Of 784 remaining responses, 16 were removed for failing the reCAPTCHA check. While humans are also capable of failing the reCAPTCHA© checks, the overall number of failed responses (16 of 784) was low enough that the researcher did not perform any additional checks to validate the authenticity of these responses and instead opted to remove them from further analysis.

Third, data were screened for attention. Three attention checks were included throughout the survey, asking participants to select a particular response (e.g., "Please select 'Strongly Agree.'"). Of 768 remaining responses, 13 participants failed at least one attention check. There

are reasons an attention check may be failed other than not paying attention in an online survey (e.g., misclicking, accidentally scrolling to another response), but the overall number of responses failing these checks (13 of 768) was low enough that the researcher opted to remove them from analysis.

Fourth, missing data were assessed. Of 755 remining responses, only 3 were missing data. Of those 3 responses missing data, each were missing data for only a single item on a single survey. Given this extremely low rate of missing data, reasons for missingness (e.g., missing at random, missing systematically, etc.) were not investigated. Instead, mean imputation was performed for the missing items using the average score for that participant on the other items of that scale (paying attention to reverse coded items and adjusting appropriately). This method allowed for these mostly complete responses to be retained for analysis.

Fifth, normality of data were checked. Confirmatory factor analysis and structural equation modeling are generally sensitive to normality of data (Brown, 2015), so each empirical indicator included in the data set should be checked for normality assumptions, and transformations may be considered for non-normal data (Fink, 2009). The researcher looked at histograms, skewness, and kurtosis for each scale item using SPSS Version 28. While many items demonstrated slight skewness and/or kurtosis on visual inspection of histograms, few appeared to deviate egregiously from the normal curve. The most concerning items were self-report items for interpersonal and workplace deviance, which demonstrated floor effects (perhaps due to social desirability bias as items were not flattering for one's professional image). A floor effect is difficult to correct retroactively even with transformations, because much of the (otherwise) natural variability of the phenomenon is reduced into the floor value of the scale, without a clear way to differentiate responses at the floor (Fink, 2009). In hindsight, it would be

helpful to use magnitude scaling when measuring workplace deviance because such scaling helps alleviate the problems of floor and ceiling effects (Fink, 2009). Given these circumstances, no transformations were included in the final data analysis.

Sixth, data were checked for common method bias by conducting Harman's single factor tests. All self-report items were checked using EFA procedures, where greater than 50% of explained variance by a single factor indicates common method bias. A single factor explained only about 29 percent of variance among a set of all self-report items. More stringent single factor tests were run on items measuring perceptions of one's own behaviors (e.g., prosocial and repetitious ethical dissent and workplace deviance), perceptions of behaviors enacted by others in the organization (e.g., leader listening and incivility), and perceptions of shared organizational behaviors and climate (e.g., moral learning behaviors, sensitivity to the ethics of operations, and ethical safety organizing). Single-factor variance explained for each of these more stringent tests were 26 percent, 44 percent, and 49 percent, respectively. While the latter two values approach problematic common method variance, Fuller et al. (2016) performed simulation analysis of common method variance in business research and suggest that "such levels of [common method variance] are not likely to bias relationships sufficiently to alter substantive conclusions" (p. 3196). Even so, the more stringent tests are not typical, and the overall value of 29 percent indicates little concern for common method bias in this data set.

Finally, data were divided into two data sets for subsequent analysis—one for exploratory factor analysis and another for confirmatory factor analysis and structural equation modeling. Data were collected in two intervals: 50 responses were collected to ensure the survey was functioning correctly before the remaining responses were collected. After these initial responses, workplace deviance and incivility items were added to the survey before collecting

the remaining responses. Thus, the initial 50 responses did not contain data for incivility or workplace deviance. In an effort to preserve the full data set and because the EFA did not require data for incivility or workplace deviance (while the CFA/SEM dataset does require those items), the EFA dataset (N = 150) included all initial responses that passed the above screening (n = 47) and an additional randomly selected portion of the remaining collected responses (n = 103). These additional responses were randomly selected using SPSS data filtering functions. The remaining 605 responses formed the CFA/SEM dataset (N = 605).

Exploratory Factor Analysis

Exploratory factor analysis was conducted on the thirteen items (originally 14, reduced to 13 after the Q-sort discussed in the previous chapter) created to measure sensitivity to the ethics of operations for this study with a sample of 150 working adults. The purpose of this analysis was to assess the viability of combining these items into a scale construct to measure the intended concept. The final solution should explain more variance among the items than not—that is, greater than 50 percent of variance (Streiner, 1994), with explained variance closer to 70 percent preferred (Field, 2006).

For the present study, EFA was performed over several steps using Maximum Likelihood estimation and oblique rotation in SPSS Version 28. First, items with communalities (i.e., the ratio of unique variance and shared variance) below .2 should be removed because such items are not well-explained relative to other items in the analysis (Child, 2006). No items demonstrated this low of communality estimate.

Second, the number of factors to extract was considered. Two methods for determining an appropriate number of factors are the Kaiser's criterion (i.e., eigenvalue greater than 1) and visual inspection of scree plots (Field, 2006). Visual inspection determines the number of factors

to extract based on the elbow of the scree plot. Kaiser's criterion frequently over-estimates the number of factors appropriate for a given set of variables (Samuels, 2017). While Kaiser's criterion suggests three factors (Eigenvalues of 8.07, 1.42, and 1.14), the scree plot suggests only one. A three-factor solution explains about 76 percent of variance among items, while a single-factor solution explains about 59 percent of variance. The rotated pattern matrix using Kaiser's criterion shows factors breaking apart based on reverse coding of items. The first factor includes all positively stated items, the second factor includes reverse-coded "value" items, and the third factor includes reverse-coded "assumption" items. Clearly, eigenvalues indicate a methods factor related to question-wording, so some amount of explained variance is attributable to something other than the phenomenon the items intend to measure (i.e., the measurement itself). Thus, a single-factor solution is preferred. Recomputing the test extracting a single factor explains about 58 percent of variance among the items.

After determining the number of factors to extract, items should be iteratively removed if (a) they do not load on any factor greater than .3 (removing the lowest first) or (b) they cross-load greater than 75 percent of their variance (removing the lowest absolute loading first). With a single factor, cross-loading was not possible, and the factor matrix demonstrates that each of the 13 items loads at an estimate greater than .6. MacCallum et al. (1999) also suggests that the communalities should be checked at this point based on sample size, with preference for communalities greater than .6 and an acceptable value greater than .5 for a sample size between 100 and 200. All items possessed communalities of .6 or above at this point in the analysis. No items were removed in this step.

Finally, some last checks of the adequacy of the final solution are performed. KMO measure of sampling adequacy should be greater than .5 (Kaiser, 1974) and Bartlett's test of

sphericity should be significant ($p < .05$). The KMO estimate for the single-factor solution was .92, well above the .5 acceptable threshold, and Bartlett's test of sphericity was significant, $\chi^2(78) = 1912.67$, $p < .001$. These items perform reliability together, $\alpha = .94$, $\omega = .94$. The final EFA solution involves all 13 SEO items extracting on a single factor, explaining about 58 percent of shared variance among those items. This factor is taken to represent respondents' perceptions of their organization's cultural sensitivity to the ethics of operations.

Confirmatory Factor Analysis and Structural Equation Modelling

The next step in analysis is to fit a measurement model for the proposed variables to be included in the structural model. This process involves constraining observed variables (i.e., scale items) to load on a more concise set of latent variables. While CFA and SEM are generally used for causal modelling, these analytic techniques have the advantage of modelling error (i.e., variance not attributable to latent factors), which are not (as easily) represented in alternative path analysis approaches involving inferential statistics (Brown, 2015). Confirmatory factor analysis and structural equation modelling were performed in LISREL Version 12 (with maximum likelihood estimation, metric assumption, and latent factors allowed to correlate) over several steps with the remaining sample of US-based working adults ($N = 605$).

CFA. First, the measurement model is refined. In general, the aim is to achieve an acceptable model fit, using global fit statistics as benchmarks. An acceptable model should demonstrate three types of fit—absolute, degree to which the model reflects actual observations; parsimonious, degree to which model reflects actual observations accounting for simplicity/complexity of the model; and incremental, degree to which model fits data better than alternatives (Brown, 2015; Schumacker & Lomax, 2016). As model complexity increases, benchmarks for global fit statistics become more difficult to achieve (Hu & Benter, 1999). Hu

and Bentler (1999) provide stringent standards, with Standardized Root Mean Square Residual (SRMR) < .08, Root Mean Square Error of Approximation (RMSEA) < .06, and Comparative Fit Index (CFI) > .95, to name a few.

Given the complexity of the proposed model, including 9 latent factors and 75 empirical indicators, less strict global fit standards are adopted for this study. The following are standards used as benchmarks for this study, wherein achieving at least one positive indicator is taken as enough to accept model fit.

Absolute Fit:

- Bentler (1990) suggests the ratio of degrees of freedom to chi-square should be somewhere in the range of 2 to 5 to be acceptable.
- Bentler and Bonett (1980) suggest Goodness-of-Fit Index (GFI) should be greater than .85.
- SRMR lower than .10 indicates acceptable fit with good fit below .08 (Hu & Bentler, 1999).

Parsimonious Fit:

- Browne and Cudeck (1993) suggest RMSEA values less than .08 indicate reasonable fit for complex models.
- For comparing multiple models, lower Akaike Information Criterion (AIC) indicates better fit (Akaike, 1974).

Incremental Fit:

- Comparative Fit Index (CFI) greater than .90 indicates good fit (Bentler, 1990).
- Bentler and Bonett (1980) and Marsh et al (2004) suggest Normed Fit Index (NFI) greater than .90 to indicate good fit.

Several iterations of the proposed model did not achieve successful fit, which is typical of these analytic procedures. This lack of fit happened for a variety of reasons. Local areas of strain, such as individual empirical indicators that do not load well on their respective latent factors, can contribute to poor fit (Brown, 2015). Additionally, extraneous variables, such as measurement artifacts, can inflate error values and worsen global fit of a model (Brown, 2015). To correct these issues, poor indicators—that is, those with standardized lambda coefficients less than .7, corresponding to less than 49 percent of their variance explained by the latent factor—may be considered for removal iteratively (Brown, 2015). Others have suggested standardized lambdas greater than .5 are acceptable (i.e., 25 percent explained variance), with preference for lambdas greater than .7 (Hair et al., 2009). For extraneous variables, if the potential source of inflated error is of theoretical interest, a bi-factor model may be used to model the extraneous variable as another latent variable (Brown, 2015). Otherwise, error estimates attributable to an extraneous variable may be allowed to covary in the model, which makes a similar (though potentially somewhat stronger) correction compared with the bi-factor model without creating another latent factor.

Several empirical indicators did not load well on their respective latent factors and were removed from analysis. The researcher opted to keep indicators with lambda coefficients greater than .5 because removing all items less than .7 would involve a substantial reduction in the dataset that would require re-interpretation of the latent factors. Removed indicators included one item of the moral learning behaviors scale (“This organization tends to handle differences of opinion about ethical issues privately or off-line, rather than addressing them directly as a group.”), two items from the leader listening measure (“My supervisor's attitudes toward things I do or say prevent them from understanding me,” and “Whether the ideas I express are "good" or

"bad" seems to make no difference to my supervisor's feelings toward me.”), and one item from the interpersonal deviance scale (“Gossiped about your supervisor.”). These removals do not substantially change the content of their respective scales, and thus, latent factors are still interpretable as intended.

In addition to removing poor indicators, several error covariances were allowed in the analysis to improve model fit. Error estimates on indicators for sensitivity to the ethics of operations tended to be higher than for other latent factors. Kaiser’s criterion from exploratory factor analysis and modification indices provided by LISREL suggested that a measurement factor related to reverse-coded items may be causing some problems. Because measurement factors were not of theoretical interest to the researcher, error estimates of reverse coded items for sensitivity to the ethics of operations were allowed to covary in analysis (rather than creating a bi-factor model).

After these refinements to the measurement model, an acceptable model solution was reached. Table 2 includes global fit statistics for the measurement model. Table 3 is included as a supplement to demonstrate the standardized lambda loadings of indicators for the SEO scale, given that the scale is new and created for use in this study.

Table 2.

Global Fit Statistics for Measurement Model.

	Initial Measurement Model	Final Measurement Model
Absolute:		
• SRMR	.07	.06
• X^2/df	9056/2664 (3.40)	6210/2357 (2.63)
• GFI	.66	.74
Parsimonious:		
• RMSEA	.06	.05
• AIC	23802	18235
Incremental:		
• CFI	.83	.90
• NFI	.78	.85

Table 3.
Standardized Lambda Coefficients for SEO Indicators in Final Measurement Model.

Indicator	Standardized Lambda (λ)
We do NOT value making a habit of thinking through whether our daily work is ethically ideal, especially at the frontline.	.67
We do NOT value giving our regular attention to whether our ongoing work is done with moral integrity.	.66
We do NOT value reflecting often on whether our ordinary work efforts are living up to ethical excellence.	.68
We do NOT value making a habit of reviewing whether our daily work efforts are done with integrity.	.66
We value habitual reflection about the moral implications of ongoing work tasks.	.81
We value persistent thoughtfulness about the ethical aspects of how we deliver goods or services to stakeholders.	.85
We value maintaining a focus on performing ongoing tasks with moral decency.	.83
We assume our ongoing work does NOT need to be checked for whether it's still ethically ideal.	.50
We assume our routine work at the frontline does NOT need to be scrutinized regularly for its moral integrity.	.52
We assume we do NOT need to give constant attention to the ethical implications of ongoing work practices.	.58
We assume our ongoing work efforts need to be attended to consistently in order to be sensitive to the ethics of operations.	.73
We assume our work routines require constant consideration in order to preserve high standards of good conduct, especially at the frontlines.	.80
We assume our work procedures need to be double checked often in order to ensure they are ethically excellent.	.80

SEM. After a satisfactory CFA solution, analysis progressed to SEM. Model fit always worsens from the measurement model to the structural model (if CFA allows latent variables to covary, at least) because the structural model places more constraints on the data (Schumacker & Lomax, 2016). Ideally, the change in model fit will not be significantly worse for the structural model as compared to the measurement model. While similar global fit benchmarks may be applied to the structural model, additional comparisons should be made using statistics such as a chi-square difference test (for nested models—i.e., those using the same set of empirical indicators) and comparing AIC (Akaike, 1974; Schumacker & Lomax, 2016). Model comparisons (e.g., between full mediation and partial mediation models) may also be helpful for determining the most appropriate model to fit the data set (Schumacker & Lomax, 2016).

A full mediation and partial mediation model are tested. Fit statistics for these models are provided in Table 4. A significant chi-square difference test between the CFA and full mediation models indicates that the full mediation model has significantly worse fit than the measurement model, χ^2-dif(24) = 726, $p < .001$. Similarly, a significant chi-square difference test between the CFA and partial mediation model indicates significantly worse fit than the measurement model, χ^2-dif(9) = 278, $p < .001$. However, a significant chi-square difference test between the full mediation and partial mediation models indicates the partial mediation model has significantly better fit with the data than the full mediation model, χ^2-dif(15) = 468, $p < .001$. Lower AIC values also support that the partial mediation model is an improvement over the full mediation model, despite being a worse fit for the data than the measurement model.

Table 4.

Global Fit Statistics for Structural Models.

	CFA Model	Full Mediation Model	Partial Mediation Model
Absolute:			
• SRMR	.06	.11	.09
• X^2/df	6210/2357 (2.63)	6936/2381 (2.91)	6468/2366 (2.73)
• GFI	.74	.72	.73
Parsimonious:			
• RMSEA	.05	.06	.05
• AIC	18235	18913	18476
Incremental:			
• CFI	.90	.88	.89
• NFI	.85	.83	.84

Worse fit of the structural model than the measurement model is typical of CFA/SEM studies (Schumacker & Lomax, 2016), so this alone is not generally sufficient reason to reject the structural model. Given that global fit statistics are generally within the target benchmarks listed above for the partial mediation model (except for incremental fit—CFI is .01 below the threshold), this is the preferred model for this study.

Table 5 includes a correlation matrix of the variables measure for this study. Figure 3 displays the partial mediation model with only significant paths and squared multiple correlations (represented by R^2) for mediating and outcome variables. Table 6 includes path coefficients (i.e., direct effects) and *p*-values for the partial mediation model. Table 7 includes total and indirect effects of prosocial dissent, repetition dissent, and perceptions of leader listening on outcome variables through sensitivity to the ethics of operations.

Table 5.

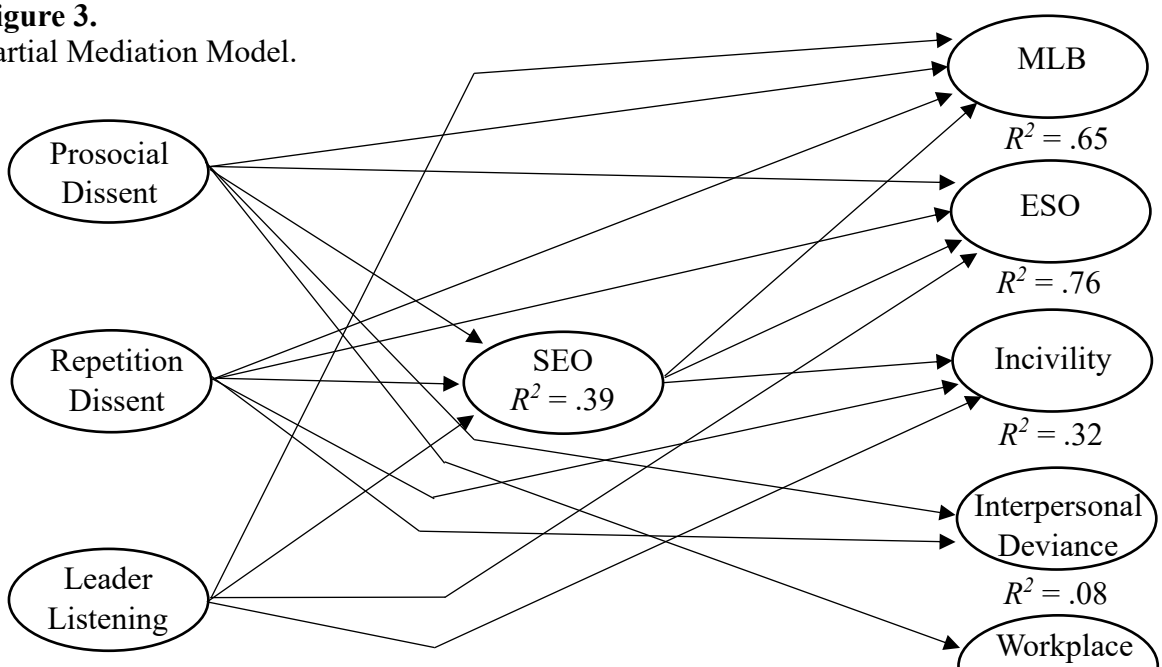
Correlation Matrix.

	PD	RD	LL	SEO	ESO	MLB	Incivility	ID	WD
RD	.46**								
LL	.37**	.18**							
SEO	.37**	.32**	.50**						
ESO	.52**	.46**	.60**	.74**					
MLB	.48**	.50**	.49**	.63**	.72**				
Incivility	-.10*	.15**	-.48**	-.39**	-.26**	-.19**			
ID	-.11*	.11*	-.17**	-.19**	-.09*	-.02	.54**		
WD	-.17**	-.08*	-.16**	-.23**	-.16**	-.11*	.43**	.65**	
Mean	4.64	3.39	4.38	3.48	3.49	3.69	1.59	1.42	1.56
SD	.91	1.32	.96	.96	1.00	1.01	.74	.59	.69

Note: $N = 605$. * is significant at $p < .05$. ** is significant at $p < .001$. PD = prosocial dissent; RD = repetition dissent; LL = leader listening; SEO = Sensitivity to the ethics of operations; ESO = ethical safety organizing; MLB = moral learning behaviors; ID = interpersonal deviance; WD = workplace deviance; SD = standard deviation.

Figure 3.

Partial Mediation Model.



Note: MLB = moral learning behaviors; ESO = ethical safety organizing.

The three communication behaviors predict a moderate amount of the variance in sensitivity to the ethics of operations, R^2 = .39. This finding aligns with conceptualization of organizational culture being shaped in large part by communication behaviors (Fairhurst & Putnam, 2004). Furthermore, those communication behaviors, in tandem with a climate of sensitivity to the ethics of operations, strongly predict an organization's moral learning behaviors, R^2 = .65, and other indicators of moral climate (i.e., ESO), R^2 = .76. To some extent, they are also able to predict immoral behaviors in the workplace, including incivility, R^2 = .32, interpersonal deviance, R^2 = .08, and workplace deviance, R^2 = .05. These results align with the conceptualization that elements of organizational culture, such as a climate of sensitivity to the ethics of operations, influence members of organizations to behave in congruent ways (e.g., a moral climate marked by high sensitivity to ethics of operations ought to engage in moral learning behaviors to a greater extent; Bisel, 2018).

As predicted, it was both members' own ethics-based talk (in this case, in the form of moral dissent) and their perceptions that their supervisors and leaders were listening effectively that made a difference. Prosocial dissent, repetition dissent, and perceptions of leader listening were each significantly and positively related to sensitivity to the ethics of operations, moral learning behaviors, and ethical safety organizing. Hypotheses 1(a), 1(b), and 2 are supported. Moreover, each predictor had a significant and positive direct (see Table 6) and indirect effect via sensitivity to the ethics of operations (see Table 7) on moral learning behaviors and ethical safety organizing. While the direct effect demonstrates the strong influence of communication behaviors on other meaningful organizational behaviors, significant indirect effects further suggest that the positive benefit of such communication is amplified when organizational

members build a climate that supports and is sensitive to similar communication practices. Hypothesis 3 is supported.

Results were not as immediately intuitive for immoral organizational behaviors. As expected, perceptions of leader listening and sensitivity to the ethics of operations negatively predicted incivility, $\gamma = -.29$, $p < .001$, and $\beta = -.22$, $p < .001$, respectively. Hypothesis 4 is supported. Similarly, prosocial dissent negatively predicted interpersonal deviance, $\gamma = -.13$, $p < .001$, and workplace deviance, $\gamma = -.11$, $p < .05$. However, most other direct paths were non-significant (see Table 6). RQ1 suggested a negative relationship between SEO and deviance. No support is found for this type of relationship. Surprisingly, repetition dissent positively predicted incivility, $\gamma = .20$, $p < .001$, and interpersonal deviance, $\gamma = .12$, $p < .001$. In other words, repetition dissent helps build sensitivity to the ethics of operations and contributes to moral learning behaviors, while also contributing to some of the immoral and undesirable organizational behaviors that moral organizational cultures ought (theoretically) to minimize.

Table 6.
Direct Path Coefficients for Partial Mediation Model.

	Sensitivity to the Ethics of Operations	Incivility	Interpersonal Deviance	Workplace Deviance	Moral Learning Behaviors	Ethical Safety Organizing
Prosocial Dissent	**.20 (<.001)**	0 (.99)	**-.13 (<.001)**	**-.11 (.02)**	**.16 (.001)**	**.14 (<.001)**
Repetition Dissent	**.11 (<.001)**	**.20 (<.001)**	**.12 (<.001)**	.03 (.24)	**.23 (<.001)**	**.14 (<.001)**
Leader Listening	**.35 (<.001)**	**-.29 (<.001)**	-.01 (.80)	-.05 (.16)	**.27 (<.001)**	**.24 (<.001)**
Sensitivity to the Ethics of Operations		**-.22 (<.001)**	-.05 (.16)	-.08 (.09)	**.51 (<.001)**	**.66 (<.001)**

Note: Number in parentheses is *p*-value of path estimate. Bolded cells are significant.

Table 7.
Total and Indirect Effects for Partial Mediation Model through Sensitivity to the Ethics of Operations.

	Prosocial Dissent			Repetition Dissent			Leader Listening		
	Total	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect
MLB	**.26***	**.16***	**.10***	**.29***	**.23***	**.06***	**.45***	**.27***	**.18***
ESO	**.27***	**.14***	**.13***	**.21***	**.14***	**.07***	**.46***	**.24***	**.23***
INC	-.04	0.00	**-.04****	**.18***	**.20***	**-.02****	**-.37***	**-.29***	**-.08***
ID	**-.14***	**-.13***	-.01	**.12***	**.12***	-.01	-.03	-.01	-.02
WD	**-.12****	**-.11*****	-.02	.02	.03	-.01	**-.08*****	-.05	-.03

Note: * indicates $p < .001$; ** indicates $p < .01$; *** indicates $p < .05$. Bolded cells are significant. MLB = moral learning behaviors; ESO = ethical safety organizing; INC = incivility; ID = interpersonal deviance; WD = workplace deviance. Indirect effects are mediated by sensitivity to the ethics of operations.

Chapter 6

Discussion

This study tested relationships among communicative predictors, an element of ethical climate (e.g., sensitivity to the ethics of operations—SEO), and behavioral outcomes for organizations. As such, hypotheses sought to test an underlying premise of ethically reliable organizing (ERO) theory that *communication behaviors shape ethical organizational culture, which influences organizational behaviors, including ethical behaviors*. While this premise is derived from ERO theory (Bisel, 2018), which itself is influenced by high reliability organizing (HRO) theory (Weick & Sutcliffe, 2015) within the larger domain of sensemaking (Weick, 1995; Weick et al., 2005), it is notably a simplification. The following paragraphs summarize results, highlight implications for ERO literature and related literature, describe the limitations of this study and its simplified conceptualization, and offer ideas for future research to continue building toward a more robust understanding of EROs and organizational moral learning.

Summary of Results

Hypotheses 1 and 2 stated that the communication behaviors prosocial and repetition upward ethical dissent and perceptions of leader listening should positively predict climates marked by SEO. Results supported Hypotheses 1 and Hypothesis 2. Both competent forms of upward ethical dissent (Mahutga et al., 2024) and employees' perceptions of their leaders' listening were significantly and positively related to SEO. These results support the notion that a climate characterized by SEO may arise in the absence of moral muteness and the absence of moral deafness—when organizations' members talk about moral dimensions of work and decision makers listen actively to such moral talk.

Hypotheses 3 and 4 stated that SEO should positively predict organizational moral learning (measured by both moral learning behaviors and ethical safety organizing) and negatively predict workplace incivility, respectively. Research Question 1 was divided into interpersonal deviance and workplace deviance. Because deviance is conceptualized as intentional behavior (Mackey et al., 2021) and ERO generally deals with mindless causes of unethical behavior in organizations (Bisel, 2018), the relationship between SEO and deviance was posed as a directional research question rather than a hypothesis. SEO was found to be a positive predictor of moral learning behaviors (MLB; Edmondson, 1999) and ethical safety organizing (ESO; Vogus & Sutcliffe, 2007). Both measures captured employees' perceptions of organizational behaviors related theoretically to learning about ethical aspects of work, and thus, strong support is found for the connection between SEO and organizational moral learning.

Similarly, SEO significantly and negatively predicted workplace incivility as hypothesized (Cortina et al., 2011), though the relationship was weaker than with moral learning behaviors. Furthermore, SEO demonstrated no significant relationship with either interpersonal or workplace deviance (Bennett & Robinson, 2000), defying the negative relationship expected in Research Question 1. These results demonstrate some of the complexity of moral behaviors and their organizational deterrents such that minor and unintentional unethical behavior seems much more correctable at the cultural level than major and intentional unethical behavior.

Additional direct and indirect paths were analyzed in order to achieve acceptable fit for the structural model used to test hypotheses for this data set (Brown, 2015). While these paths were not taken into account while forming hypotheses, they provide additional context for understanding the underlying ERO premise that guided this study. Significant indirect paths were detected through SEO connecting all three predictors (prosocial dissent, repetition dissent, and

perceptions of leader listening) to the outcome variables moral learning behaviors, incivility, and ethical safety organizing. These significant indirect paths suggest that the predictors influence outcomes variables by first influencing an organization's SEO. In other words, these paths provide additional support for the premise that communication influences culture (e.g., climate), which influences behavior (Fairhurst & Putnam, 2004; Bisel, 2018).

In addition, significant direct paths were detected between prosocial dissent and interpersonal deviance, workplace deviance, moral learning behaviors, and ethical safety organizing; between repetition dissent and incivility, interpersonal deviance, moral learning behaviors, and ethical safety organizing; and between perceptions of leader listening and incivility, moral learning behaviors, and ethical safety organizing. Unsurprisingly, these direct paths suggest that communication behaviors may influence an organization's (un)ethical outcomes in ways other than through the formation of climate, or at least there is more to an organization's ethics culture than merely SEO climate—perhaps also the other four principles of ERO theory (Bisel, 2018). Future research should investigate other ERO principles alongside SEO to help determine the extent of overlap between ERO principles (Weick & Sutcliffe, 2015).

Notably, the only significant paths to deviance were direct paths from prosocial dissent (negatively) and repetition dissent (positively, only to interpersonal deviance). These results perhaps suggest that an individual's intention to act positively on moral concerns (e.g., prosocial dissent) contradicts intentions to act in morally dubious ways (e.g., deviance). However, one's *intention* may also need to be paired with high communicative competence (or perhaps verbal skillfulness) to avoid the unethical in *practice*, and thus, the less communicatively competent dissent strategy (e.g., repetition dissent) may increase deviance despite the positive intention of dissenting (Kassing & Kava, 2013).

Implications, Contributions, and Future Directions

ERO. The results and procedures of this study carry implications and contributions. Foremost, this study contributes to ERO theory a novel and original measure of one of the theory's five core principles, sensitivity to the ethics of operations (Bisel, 2018). While this measure still requires additional forms of validation, the present study achieved the following steps toward establishing a credible measure for SEO:

1) Rigorous item design followed seven theoretically driven markers of what SEO ought to look like to individuals in organizations (see Chapter 3, instrumentation) to bolster face validity and establish benchmarks for content validity (Singleton & Straits, 2010). Feedback on these items was sought by two professors of communication unassociated with this study but who have studied similar issues, though additional expert review may help further generate and refine items (Devellis & Thorpe, 2021).
2) Content adequacy was established by Q-sort procedures to show that participants understand SEO items as belonging to SEO rather than similar nearby concepts, such as psychological safety (Hinkin & Tracey, 1999). Additional refinement to items may be necessary to help distinguish SEO from more closely related concepts like here-and-now ethics talk norms (i.e., values and assumptions versus behaviors, respectively).
3) Unidimensional factor structure was established during exploratory factor analysis with a sample of working adults (Child, 2006; Field, 2006; MacCallum et al., 1999; Samuels, 2017). This factor structure was additionally supported using confirmatory factor analysis grounded in accepted standards for a variety of fit metrics (Bentler, 1990; Brown, 2015; Hu & Bentler, 1999).

4) Analysis with related concepts established some convergent and discriminant validity, including positive relationships with prosocial dissent, repetition dissent (Mahutga et al., 2024), perceptions of leader listening (Fassaert et al., 2007; Barrett-Lennard, 2015), moral learning behaviors (Edmondson, 1999), and ethical safety organizing (Vogus & Sutcliffe, 2007), and a negative relationship with workplace incivility (Cortina et al., 2011). A non-relationship with deviance may even be another marker of discriminant validity, given the place of mindfulness/mindlessness in these related concepts (Levinthal & Rerup, 2006; Rerup & Levinthal, 2014; Weick & Sutcliffe, 2006). Additional studies are necessary to expand the nomological network of SEO to further establish construct validity (Devellis & Thorpe, 2021). Furthermore, future research should apply the measurement instrument to known (un)ethical organizations to assess criterion validity (Singleton & Straits, 2010).

In addition to this methodological contribution, this study contributes to the ERO literature additional theoretical insight into the types of organizational behavior that ERO cultures are well positioned to influence. Generally, organizational wrongdoing is theorized as unethical behavior originating in individuals, in culture, or in complex situations—bad apples, bad barrels, or bad cases, respectively (Kish-Gephart et al., 2010; Palmer, 2013). As a cultural theory of organizational moral learning, ERO theory is ostensibly most suited to mitigating against bad barrels (Bisel, 2018). However, ERO theory's grounding in sensemaking links SEO at the cultural level to behaviors (and cognitions and perceptions) at the individual level (Weick, 1995; Weick et al., 2005), so ERO culture should also mitigate against bad apples in some ways. This study found that SEO was positively related to behavioral moral learning outcomes, which may, at first glance, support the notion that avoiding a bad barrel helps avoid bad apples (i.e.,

people do morally better things when they are influenced by what they perceive as a moral climate). What if, however, organizational wrongdoing and organizational *right*-doing are two separate and distinct continua? Then, the aforementioned relationship merely reveal that SEO bolsters organizational right-doing rather than mitigating against wrongdoing.

The inconsistencies regarding the relationship between SEO and empirical indicators of organizational wrongdoing may help show the difference between right- and wrongdoing in organizations as it pertains to ERO theory more broadly. This study found that SEO was negatively related to incivility, but that it had no significant relationship with deviance. Incivility is a minor infraction often inflicted mindlessly against a member of one's organization (Cortina et al., 2011), while deviance pertains to major breaches that are often mindfully carried out to harm organizations and their members (Mackey et al., 2021). It may be the mindfulness of such wrongdoing that explains why incivility is related to SEO while deviance is not.

Within ERO theory, moral mindfulness (i.e., present-minded, rich awareness of distinctions regarding moral aspects of one's environment that may or may not conform to prior routines or expectations; Bisel, 2018) is a primary accomplishment, allowing for deliberate moral action to be taken when organizations encounter ethics-related situations (Bisel, 2018). Mindfulness is a concept related to labored attention to detail where understanding is continually updated and refined as new information is sought and accepted from multiple perspectives to enable considered action, while mindlessness involves effortless inattention, relying on past understandings, taking singular perspectives, and routine action (Langer, 1989; Levinthal & Rerup, 2006; Rerup & Levinthal, 2014; Weick & Sutcliffe, 2006). Members of organizations typically operate in a state of mindlessness, unless galvanized by exigencies that require otherwise (Weick & Sutcliffe, 2015). From this state of mindlessness, unconsidered actions could

have any number of moral or immoral effects (who's to say without anyone taking notice?), and incivility represents a range of immoral things that happen when members are inconsiderate (Cortina et al., 2011). If EROs function primarily by making the mindless mindful, then it holds that SEO should be negatively related to workplace incivility, as this study supports. However, if a behavior is already mindful, as is the case with deviance, then EROs cannot achieve their primary function. The "bad apple" may choose to be bad regardless of the barrel it finds itself in. Thus, deviance is unrelated to SEO.

ERO theory is not necessarily about organizational wrongdoing: Rather, ERO theory is about how organizations turn mindlessness (in any of its unconsidered forms) into organizational right-doing, in line with positive communication scholarship (Mirivel & Fuller, 2024). These theoretical conclusions are limited by potential problems with the measurement of deviance and incivility in this study. Notably, there were serious floor effects for deviance. Furthermore, differences in the target of each scale (the deviance scales place the respondent in the role of the wrongdoer, while the incivility scale places the respondent in the role of the victim of wrongdoing) make comparisons difficult. Future research should attempt to explore further the mindfulness/mindlessness dynamic described here by improving instrumentation (e.g., use magnitude scaling for deviance measures; make sure scales put respondents in the same role) and using a variety of other mindful/mindless indicators of organizational right- (e.g., courtesy behaviors, organizational citizenship behaviors) and wrongdoing (e.g., venting, abusive supervision). Additional research should attempt to align with positive communication scholarship by investigating relationships between SEO and other positive communication behaviors (e.g., behaviors from Mirivel's practical model of positive communication; Mirivel & Fuller, 2024) in an attempt to further elaborate notions related to organizational right-doing.

These methodological and theoretical contributions supplement existing empirical work related to ERO theory, including studies that assessed other ERO principles, such as deference to embodied moral knowing (Bisel & Adame, 2019), and concepts, such as moral talk contagion (Zanin et al., 2016), upward ethical dissent (Mahutga et al., 2024), and the moral mum effect (Bisel et al., 2011), among others. While scholarship utilizing ERO theory is recent and forms only a small literature by itself, this new survey instrument creates opportunities for additional experimental and non-experimental research into ERO theory. Additional research should continue to connect SEO to other rich veins of ethics-related organizational scholarship, especially organizational communication work. For instance, longitudinal research could help establish reciprocal relationships among SEO and moral voice behaviors, such as upward ethical dissent and other forms of here-and-now ethics talk, as well as various forms of moral muteness and deafness. Moreover, other organizational climate variables, such as psychological safety (Edmondson, 1999), should be investigated in relation to SEO because results of this study demonstrate that SEO is an imperfect predictor of (un)desirable ethical outcomes. Finally, there is a plethora of organizational variables that this study does not consider, which seem likely to have meaningful relationship with SEO (e.g., job satisfaction, performance, and turnover).

Organizational dissent. In addition to contributions to ERO scholarship, this study contributes to organizational dissent literature. First, this study contributes to the organizational dissent literature the first successful use of the Upward Ethical Dissent Scale (UEDS) outside its foundational study (Mahutga et al., 2024). Results of this study demonstrate additional significant relationships between the two competent forms of upward ethical dissent and SEO, deviance, incivility, and moral learning, which adds to existing knowledge about prosocial and repetition upward ethical dissent relationships with moral identity, acquiescent silence, and moral

idealism (Mahutga et al., 2024). However, this study only employed two subscales from the UEDS; future research could investigate how circumvention and threatening resignation, the other subscales, relate to SEO, incivility, deviance, and moral learning.

Additionally, results from this study provide further support for the notion that organizational dissent can have ambivalent or contradictory consequences. Kassing (2007) found that face-threatening dissent strategies, such as circumvention, did not always create negative outcomes. Rather, outcomes of dissent are grounded in the content and contexts from which they emerge, which influence to a large degree how others respond to the dissent event (Kassing, 2007). Similarly, repetition dissent could be viewed "as an act of conviction or negligence depending on the circumstances in which it transpires" (Kassing, 2009, p. 417). Results of this study, demonstrating positive relationships between repetition upward ethical dissent, incivility, and interpersonal deviance, support the notion that repetition can be viewed as an act of conviction or negligence. Furthermore, the outcomes of repetition dissent are often influenced by the duration of repetition because employees tend to use more competent tactics to repeat their disagreement early and less competent tactics as repetition elongates (Kassing, 2009). The present study does not have a longitudinal design or other method to measure the duration of repetition, so results presented here are under-contextualized. Perhaps repetition dissent could be a symptom of moral deafness in an organization when an employee had originally tried more competent forms and did not find success. Future research should attempt to replicate findings related to repetition upward ethical dissent after controlling for repetition duration and competence of specific dissent tactics.

Finally, this study contributes to the dissent literature additional findings pertaining to the communicative competence of dissent strategies and downstream consequences. Of five different

dissent strategies, “employees perceived solution presentation as the most competent strategy, followed by direct-factual appeal, repetition, circumvention, and threatening resignation” (Kassing, 2005, p. 231). Direct factual appeal and solution presentation are both prosocial forms of dissent (Kassing & Kava, 2013). The magnitudes of total and indirect effects for prosocial and repetition upward ethical dissent in this study may help clarify the usefulness of communication competence for the dissent literature. Compared to prosocial upward ethical dissent, repetition has similar total effects on moral learning behaviors and ethical safety organizing (i.e., repetition is marginally higher for moral learning behaviors, and prosocial is marginally higher for ethical safety organizing). However, prosocial dissent has stronger indirect effects than repetitious dissent (e.g., .10 compared to .06 and .13 compared to .07). This difference suggests that prosocial dissent may be operating in larger part by generating moral climate, while repetition may be more effective at altering behavior without the amplification of moral climate.

From these differences, two implications may be interpreted. First, the communicative competence of dissent may need to be high, or at least consistent, in order to develop SEO climate. Prosocial upward ethical dissent—the more communicatively competent strategy—had a stronger influence on SEO than repetition. Alternatively, it might be variability of communicative competence over the course of multiple dissenting events that leads to a weaker influence on SEO because most markers of culture, including climate, need to be reinforced consistently to become normalized (Bormann et al., 2001; Schein, 2010). The effects of time and the reciprocal influence of SEO on further acts of dissent were beyond the scope of this study, but future research may better characterize what is happening in this data by investigating these topics.

Second, employees working in organizational climates that are not morally excellent (i.e., not sensitive to ethics) may achieve greater success (at least for moral learning objectives) with repetition than with prosocial upward ethical dissent. Persistence in the face of moral deafness may be the only (best) option. Dull moral intuitions may create barriers to learning (e.g., outdated immoral or amoral norms) that are not easily overcome by singular dissent events and instead require an accumulation of social and material resources (Bisel et al., 2017; Crossan et al., 1999). Kassing (2009) draws a similar conclusion that when repetition elongates, it tends to gain momentum and legitimacy. In short, persistence pays off. Future research should conduct longitudinal studies to validate these potential relationships between SEO, communication competence, and upward ethical dissent strategies, especially repetition.

Organizational ethics and wrongdoing. Finally, this study contributes to scholarship within the broader scope of organizational ethics and wrongdoing several applied findings that may help stimulate further study of organizational communication ethics. First, this study brought together concepts related to moral muteness (e.g., upward ethical dissent) and moral deafness (e.g., listening) in a single study. Scholarship since Bird's (1996) *The Muted Conscience* has focused primarily on moral muteness and moral silence (Bisel et al., 2011; Drumwright & Murphy, 2004; Molthan-Hill, 2014), with significantly less attention paid to issues of moral deafness and moral blindness. The present study adds empirical evidence to this literature about the necessity of moral voice to be met with understanding and appropriate responses by leaders of organizations: It is not only the absence of moral muteness but also perceptions of the absence of moral deafness that influence moral learning processes directly and through the formation of moral climate. Future research should integrate Bird's (1996) notions of moral blindness into analyses of moral silence and moral deafness because existing literature

about moral blindness is sparse and often relies on conceptualization from other perspectives, such as Hannah Arendt's formulation of moral blindness (Rendtorff, 2013). This line of research may find it helpful to link *moral blindness* with *dull moral intuitions* from the learning model presented in this study.

Second, this study contributes to the organizational listening and organizational ethics literatures support for the powerful influence of listening on ethics-related outcomes, such as moral climate, incivility, and moral learning. The relationship of each of these outcomes with perceptions of leader listening was stronger than their relationships with either prosocial or repetition dissent, suggesting listening by organizational powerholders is perhaps more important than moral voice (although one without the other is almost certainly ineffectual). Prior organizational listening research has shown that time spent listening is related to position in the organizational hierarchy (Brownell, 1994; Kotter, 1982), and leader listening has some beneficial outcomes such as promoting open dialogue (Rappeport & Wolvin, 2020) and increased trust and motivation (Flynn et al., 2008). Other than these studies, much research about organizational listening tends to overlook empirical proof about its benefits, relying instead on the assumption that listening is desirable (Flynn et al., 2008) and providing evidence about organizational practices that improve listening, such as skip-level meetings, pulse surveys, and employee resource groups (Neill & Bowen, 2021). The present study provides additional empirical support for the benefits of leader listening for organizational outcomes like development of ethically sensitive climate, moral learning, and avoiding incivility.

Moreover, the present study adds much-need empirical evidence to literature connecting ethics and listening. Other than Tompkins (2009), this scholarship has relied almost exclusively on rhetorical and critical argumentation, so this study's social-scientific perspective linking

ethics and listening is a novel contribution. Future research should continue to use social-scientific methods to support existing rhetorical and critical scholarship by investigating ways in which listening to ethical concerns develops and substantiates morality in organizations (Gehrke, 2009), improves interpersonal outcomes, such as understanding, tolerance, and acceptance (Rappeport & Wolvin, 2020), and stimulates ethics-based deliberation (Lipari, 2009). Additionally, expanding from individual-level data to dyadic and group-level data will be a major step forward in this line of research.

Limitations

This study is limited in a variety of ways. First, all data collected for this project were individual-level data, primarily about employee perceptions of the variables used in this study. There is likely a significant difference between one's perceptions of, for instance, preferred dissent strategies and a leader's listening skillfulness and the actual dissent strategies being employed and the actual listening behaviors leaders enact. Furthermore, individual perceptions of climate variables, such as SEO, cannot give a complete picture of the ethics culture of a workplace. Future research should seek to replicate findings of this study with additional objective measurement techniques that span across individual, group, and organizational levels of analysis.

Second, some of the measures employed in this study were problematic. While a good deal of attention was paid to the measurement of sensitivity to the ethics of operations, the SEO measure was not perceptually distinct from behaviors indicative of ethically reliable workplaces, as intended. Additional distinctiveness from concepts such as moral learning may be helpful, especially considering the high correlation SEO demonstrated with these concepts. The q-sort procedure applied to SEO items also employed an undersized sample, which is likely to inflate

Type II error (Hinkin & Tracey, 1999). Further refinements and replication could improve (at least scholarly confidence about) the conceptual distinctiveness of SEO measurement. Additionally, deviance measurement demonstrated floor effects, which compress natural variability in the phenomenon and may create analytical issues. This effect was likely due to demand characteristics and social desirability bias (which were not measured or controlled in this analysis), given that the deviance scale asked participants to self-report their own wrongdoing, which would present a highly unfavorable image of oneself. Magnitude scaling (Fink, 2009) may be a better way to measure this variable in the future to help alleviate issues with floor effects.

Third, this study relies on cross-sectional data. Thus, directionality of relationships from the structural model (see Figure 3) are merely theoretical. Moreover, structural equation modeling is a form of causal modeling (Schumacker & Lomax, 2016), so cross-sectional data is not ideal for this analytic procedure. Rather, cross-sectional data may be more aligned with assumptions of path analysis approaches applying inferential techniques. Future research should investigate causal pathways between upward ethical dissent, leader listening, SEO, moral learning, incivility, and deviance utilizing longitudinal and experimental research designs. As well, future cross-sectional research utilizing the SEO measure created for this study may consider the benefits and drawbacks of utilizing SEM versus inferential statistical approaches to analysis.

Fourth, the sample used for this study may be limited in several ways. First, the sample was recruited with Prolific©, an online data collection tool. While potential issues with authenticity of responses (e.g., robot/ai-generated responses) were mitigated against during collection (e.g., human/robot check using reCAPTCHA©) and analysis (e.g., data cleaning involving attention checks), the pool of respondents was US-based. Prior research has

demonstrated that scales for upward dissent do not translate well outside of US-based samples (Croucher et al., 2020). The developed measure of SEO should not be expected to function appropriately with non-US workers until additional validation studies are conducted with such populations. Additionally, results of this study may not apply to workers outside of the US. Even within the US, a representative sample of US employees was not recruited. Moreover, sensitivity to the ethics of operations is a concept most closely related to frontline workers (Bisel, 2018), while the sample recruited for this study contained mostly employees in supervisory positions. These sample limitations should be kept in mind if attempting to apply results of this study. Future research should attempt to collect (a) representative samples, (b) samples of non-US workers, and (c) samples containing primarily frontline employees, in order to replicate and extend the results of this study.

Finally, several issues were encountered in exploratory and confirmatory factor analysis, which may need to be addressed in future research. First, total variance explained by the SEO scale during EFA was less than the desirable benchmark of 70 percent (Field, 2006). Moreover, two methods for determining dimensionality (e.g., Kaiser's criterion and scree plot analysis) disagreed about the number of factors to extract. While I opted to trust scree plot analysis because Kaiser's criterion often overestimates factors (Samuels, 2017), a methods factor needed to be controlled during CFA to account for the reverse coding of several items in order to achieve acceptable model fit. Additionally, several items from the SEO scale did not load .70 or above (standardized lambda, see Table 3), which is the desired level (Brown, 2015). Taken together, these issues suggest potential underlying problems with the operationalization of SEO. Future research may attempt to replicate findings by modifying the SEO measure to not include reverse-

coded items, which may correct the measurement issues implied in this study (or at least provide clarity about whether the problem runs deeper than reverse-coding).

Conclusion

This study attempted to advance ERO scholarship by creating an original measure of SEO and establishing relationships between SEO, some of its communicative predictors, and a few of its organizational outcomes. Toward these objectives, several steps of scale validation for a measure of SEO were conducted successfully, including item development and refinement, q-sort to check content adequacy, EFA to refine items and assess dimensionality, and CFA to confirm and fit proposed dimensionality to a data set. Additionally, methods were designed and conducted with modest success, involving several hypotheses and a research question. Hypotheses involving positive predictors of SEO, including prosocial upward ethical dissent, repetition upward ethical dissent, and employee perceptions of leader listening were supported. Hypotheses involving direct relationships between SEO and moral learning outcomes—moral learning behaviors and ethical safety organizing—and an inverse relationship between SEO and incivility were also supported. There were no significant results for the research question involving the relationship between SEO and two forms of organizational deviance (e.g., interpersonal deviance and workplace deviance). In short, this study achieved many of its objectives.

In particular, a key premise from ERO theory—that communication behaviors shape organizational culture, which influences members' behaviors—guided the design and implementation of this study successfully. Support for this premise and advancement in ERO theorization about sensitivity to the ethics of operations and conceptualization of moral mindfulness are among the most noteworthy contributions of this study, though empirical results

also extend literature related to organizational dissent, organizational ethics, organizational listening, and listening ethics. Altogether, the results of this study are a small but important milestone in better understanding how organizations and their members may communicate to learn and respond in ethically excellent and effective ways when facing inevitable, challenging changes in their operational and ethical landscapes.

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Appendix A

Upward Ethical Dissent Scale (Mahutga et al., 2024)

Directions: Respond to the following statements by indicating your level of agreement based on your experiences talking to supervisors, managers, and other leaders about ethical concerns in your organization, where 1 = strongly disagree and 5 = strongly agree.

Prosocial

1. I gather evidence to support my ethics-related concern.
2. I focus on the facts surrounding the ethical issue.
3. I present solutions, not just problems, about the ethical issue.
4. I use facts to support my claims about the ethical issue.
5. I present a well-thought-out solution to the ethics-related problem.

Repetition

1. I bring up my ethical concern numerous times.
2. I raise the ethical issue repeatedly.
3. I make several attempts to draw attention to the ethical concern.
4. I continue to mention my ethics-related concern until it gets addressed.
5. I repeat my ethics-related concern as often as possible.

Appendix B

Leader listening behaviors (see Barrett-Lennard, 2015; Fassaert et al., 2007)

Directions: Respond to the following statements by indicating your level of agreement based on your experiences at your current workplace, where 1 = strongly disagree and 5 = strongly agree.

1. My supervisor listens attentively.
2. My supervisor asks follow-up questions.
3. My supervisor expresses understanding nonverbally.
4. My supervisor gives me time and space to present my thoughts.
5. My supervisor wants to understand how I see things.
6. My supervisor realizes what I mean even when I have difficulty in saying it.
7. Whether the ideas I express are "good" or "bad" seems to make no difference to my supervisor's feelings toward me.
8. I can/could be openly critical or appreciative of my supervisor without making them feel differently about me.
9. My supervisor's attitudes toward things I do or say prevent them from understanding me.*
10. When I am hurt or upset, my supervisor can recognize my feelings exactly, without becoming upset themself.

*reverse coded

Appendix C

Sensitivity to the Ethics of Operations

Directions: Respond to the following statements by indicating your level of agreement based on your experiences at your current workplace, where 1 = strongly disagree and 5 = strongly agree.

1. We do NOT value making a habit of thinking through whether our daily work is ethically ideal, especially at the frontline.
2. We do NOT value giving our regular attention to whether our ongoing work is done with moral integrity.
3. We do NOT value reflecting often on whether our ordinary work efforts are living up to ethical excellence.
4. We do NOT value making a habit of reviewing whether our daily work efforts are done with integrity.
5. We value habitual reflection about the moral implications of ongoing work tasks.
6. We value persistent thoughtfulness about the ethical aspects of how we deliver goods or services to stakeholders.
7. We value maintaining a focus on performing ongoing tasks with moral decency.
8. We assume our ongoing work does NOT need to be checked for whether it's still ethically ideal.
9. We assume our routine work at the frontline does NOT need to be scrutinized regularly for its moral integrity.
10. We assume our everyday work tasks do NOT need to be updated regularly to maintain high ethical standards.*
11. We assume we do NOT need to give constant attention to the ethical implications of ongoing work practices.
12. We assume our ongoing work efforts need to be attended to consistently in order to be sensitive to the ethics of operations.
13. We assume our work routines require constant consideration in order to preserve high standards of good conduct, especially at the frontlines.
14. We assume our work procedures need to be double checked often in order to ensure they are ethically excellent.

*Removed from analysis after q-sort

Note: NOT items are reverse-coded

Appendix D

Moral learning behaviors (see Edmondson, 1999)

Directions: Respond to the following statements by indicating your level of agreement based on your experiences at your current workplace, where 1 = strongly disagree and 5 = strongly agree.

1. We regularly take time to figure out ways to improve the ethics of our organization's work processes.
2. This organization tends to handle differences of opinion about ethical issues privately or off-line, rather than addressing them directly as a group.*
3. Members go out and get all the information they possibly can about ethical issues from others—such as customers, or other parts of the organization.
4. This organization frequently seeks new information that leads us to make important ethics-related changes.
5. In this organization, someone always makes sure that we stop to reflect on the ethics of the team's work process.
6. People in this organization often speak up to test assumptions about ethical issues under discussion.
7. We invite people from outside the organization to present information or have discussions about ethics with us.

*reverse coded

Appendix E

Ethical safety organizing (see Vogus & Sutcliffe, 2007)

Directions: The following statements look similar to questions you have answered previously, but please consider each statement below uniquely before selecting your response. Respond to the following statements by indicating your level of agreement based on your experiences at your current workplace, where 1 = strongly disagree and 5 = strongly agree.

1. When giving reports to another employee, we usually discuss what ethical issues to look out for.
2. We spend time identifying ethics-related activities we do not want to go wrong.
3. We discuss ethical alternatives as to how to go about our normal work activities.
4. We have a good understanding of each other's values and morals.
5. We discuss our unique values with each other, so we know and respect differing perspectives and understandings.
6. We talk about ethical mistakes and ways to learn from them.
7. When ethical errors happen, we discuss how we could have prevented them.
8. When attempting to resolve an ethical problem, we take advantage of the unique skills of our coworkers.
9. When an ethics-related crisis occurs, we rapidly pool our collective expertise to attempt to resolve it.

Note: Original Safety Organizing Scale (Vogus & Sutcliffe, 2007) provided for comparison below.

Safety organizing (Vogus & Sutcliffe, 2007)

Directions: Respond to the following statements by indicating your level of agreement based on your experiences at your current workplace, where 1 = strongly disagree and 5 = strongly agree.

1. When giving reports to another employee, we usually discuss what to look out for.
2. We spend time identifying activities we do not want to go wrong.
3. We discuss alternatives as to how to go about our normal work activities.
4. We have a good understanding of each other's talents and skills.
5. We discuss our unique skills with each other, so we know who on the unit has relevant specialized skills and knowledge.
6. We talk about mistakes and ways to learn from them.
7. When errors happen, we discuss how we could have prevented them.
8. When attempting to resolve a problem, we take advantage of the unique skills of our coworkers.
9. When a work-related crisis occurs, we rapidly pool our collective expertise to attempt to resolve it.

Appendix F

Workplace Incivility Scale (Cortina et al., 2011)

Directions: During the past year, were you ever in a situation in which any of your supervisors or co-workers...

Ratings: 1 = never; 2 = Once or twice; 3 = sometimes; 4 = often; 5 = frequently

1. Paid little attention to your statements or showed little interest in your opinions.
2. Doubted your judgment on a matter over which you had responsibility.
3. Gave you hostile looks, stares, or sneers.
4. Addressed you in unprofessional terms, either publicly or privately.
5. Interrupted or "spoke over" you.
6. Rated you lower than you deserved on an evaluation.
7. Yelled, shouted, or swore at you.
8. Made insulting or disrespectful remarks about you.
9. Ignored you or failed to speak to you (e.g., gave you the "silent treatment").
10. Accused you of incompetence.
11. Targeted you with anger outbursts or "temper tantrums."
12. Made jokes at your expense.

Appendix G

Interpersonal and Organizational Deviance Scales (Bennett & Robinson, 2000)

Directions: The following questions regard poor workplace behaviors. Your honesty is appreciated, and your responses will NOT be linked to your name or shared with your employer as part of this research. In the past year, how many times have you...

Ratings: 1 = never; 2 = one to three times; 3 = four to ten times; 4 = 11 to 20 times; 5 = more than 20 times

Interpersonal Deviance

1. Made an ethnic, racial, or religious slur against a co-worker.
2. Swore at a co-worker.
3. Refused to talk to a co-worker.
4. Gossiped about your supervisor.
5. Made an obscene comment or gesture at a co-worker.
6. Teased a co-worker in front of other employees.

Workplace Deviance

7. Intentionally arrived late for work.
8. Called in sick when you were not really ill.
9. Took undeserved breaks to avoid work.
10. Made unauthorized use of organizational property.
11. Left work early without permission.
12. Lied about the number of hours you worked.
13. Worked on a personal matter on the job instead of working for your employer.
14. Purposely ignored your supervisor's instructions.

Appendix H

Psychological Safety

A climate in which members engage authentically with one another is likely to possess safety. Psychological safety refers to a widespread perception among team members that interpersonal risks may be taken safely and without the fear of retribution (Edmondson, 1999). Interpersonal risks include the communication of messages that differ in some way from what would be expected of in-group members, such as offering dissenting opinions to prevailing group processes or procedures. Interpersonal risks tend to involve a threat to one's own face or belongingness to the group overall. Several factors enable psychological safety in organizations, including proactive personality traits, emotional stability, openness to experience, personal learning orientation, positive leader-member relationships (Frazier et al., 2017), peer support, leader support, organizational support, relational familiarity, equal status/flatter organizational hierarchy, and inclusive leader behaviors (O'Donovan & McAuliffe, 2020).

Psychological safety has been shown to predict better team performance when mediated by team learning behaviors (Edmondson, 1999); Likewise, psychological safety limits the dysfunction of employee silence, the conscious withholding of work-related information from those who could act on it (Morrison, 2011; Sherf et al., 2021). Psychological safety is more strongly associated with employee silence than voice (Sherf et al., 2021) and more strongly associated with prohibitive voice (i.e., to prevent negative outcomes) than promotive voice (i.e., to seek change in organizational procedures or processes; Chamberlin et al., 2017). In other words, psychological safety enables discussion about a potential organizational failure, such as a fault detected in a purchasing order, but other influences may be necessary for correcting the procedures that may lead to failures, such as the process by which current inventory is communicated to a purchasing manager. These findings tend to paint a picture of psychological safety as an important part of detecting but not actively correcting errors in organizations insofar as psychological safety discourages silence and focuses candid discussion on the mistakes and errors that individuals hope to prevent. Notably, psychological safety is also associated positively with a host of other desirable organizational outcomes such as citizenship behaviors, commitment, creativity, information sharing, satisfaction, task performance, and work engagement (Frazier et al., 2017).

Regarding ethical issues in the workplace, psychological safety has been shown to mediate the relationship between ethical leadership and ethics-related voice behaviors among a sample of teachers (Sagnak, 2017), and to partially mediate the relationship between authentic leadership and internal whistleblowing (Liu et al., 2015). Additionally, the stronger relationship with prohibitive voice than promotive voice (Chamberlin et al., 2017) suggests that psychological safety is better suited for enabling feedback about potential ethical transgressions than for building actively toward more ethically excellent routines. Overall, these findings suggest that psychological safety may be an important milestone toward organizational learning by enabling the communication behaviors (e.g., internal whistleblowing, forms of voice/avoidance of silence) that allow members to collaboratively address ethics-related issues—moving personal intuitions about moral transgressions in the workplace up toward social interpretation and integration processes. However, independent of other factors, psychological safety alone is unlikely to create the widespread cultural practices indicative of an ERO or of sensitivity to the ethics of operations.