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COMMUNICATION CONFIDENCE IN CONFRONTING UNETHICAL BEHAVIOR: SCALE DEVELOPMENT AND VALIDATION

A DISSERTATION APPROVED FOR THE
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BY THE COMMITTEE CONSISTING OF

Dr. Ryan S. Bisel, Chair

Dr. Michael W. Kramer

Dr. Sun Kyong Lee

Dr. Justin Reedy

Dr. Mark Bolino

Abstract

This study describes a new construct, self-perceived communication confidence in confronting unethical behavior (SPC@CUB) as well as develops and validates an original 25-item instrument to measure this construct. This study contributes to the extant literature on communication competence, communication apprehension, organizational ethics, and organizational moral learning, and has implications for the growing literature on bystander intervention training. This investigation followed scholarly recommendations on scale development, which included a pilot study, expert review, exploratory factor analysis, and an assessment of convergent, divergent, and predictive validity with multiple, established measures. It was hypothesized that the SPC@CUB measure would include three facets: apprehension, competence, and voice efficacy. Additionally, it was hypothesized that the SPC@CUB measure would converge with four validated measures: (a) organizational commitment, (b) self-efficacy, (c) communication competence, and (d) experience managing personnel. Additionally, it was hypothesized that the SPC@CUB measure would diverge from three validated measures: (a) personal report of communication apprehension, (b) directness (avoidance-approach), and (c) verbal aggressiveness. Lastly, it was hypothesized that the SPC@CUB measure would predict two variables: (a) group ethical voice and (b) psychological safety.

A pilot sample of full-time working adults ($N = 109$) participated in the initial survey design instrument, which included 22 items designed to measure communication competence and communication apprehension in confronting minor unethical behavior. As expected, results of the factor analysis indicated the measure was comprised of two factors: communication apprehension and communication competence, with strong reliability ($\alpha = .95$).

Based on feedback from the pilot study, expert review, and additional literature review, a full-study version of the measure was modified to include a total of 59 items reflecting the constructs of communication apprehension, communication competence, and voice efficacy. In the full study, a sample of full-time working adults ($N = 600$) was collected. Results of a maximum likelihood analysis revealed a two-factor model related to communication competence and voice efficacy. The final SPC@CUB measure was constituted by 25 items and two subscales (i.e., $SPC@CUB_{competence}$ and $SPC@CUB_{fruitful)}$. As hypothesized, one or more of the SPC@CUB measures converged with organizational commitment, self-efficacy, communication competence, and experience managing personnel; the new measure demonstrated discriminant validity with communication apprehension, unwillingness to communicate, verbal aggressiveness and predicted group ethical voice and psychological safety.

This study contributes to organizational communication research in several ways: First, this study contributes further evidence to the communication competence literature that speech context is influential in determining one's self-perceived communication competence. Second, this study contributes to the organizational moral learning literature the idea that practicing difficult discussions involving ethical confrontation may result in greater organizational moral learning capacity by bolstering self-perceived communication competence in confronting unethical behavior. Third, these results contribute to the bystander intervention literature the implication that $SPC@CUB_{competence}$ may need to be trained in tandem with bystander intervention training to maximize the training strategy's effectiveness. Fourth, these findings contribute to the organizational communication literature the idea that the SPC@CUB constructs have important implications for creating and sustaining ethically excellent organizational culture. Lastly, this investigation contributes to the communication competence and communication

anxiety literature based on the idea that communication competence may ameliorate the anxiety-producing event of confronting a co-worker about his or her unethical behavior. This study concludes with future directions for research, practical implications, and limitations.
Keywords: communication confidence, communication apprehension, communication competence, self-efficacy, voice behavior, group ethical voice, organizational ethics, organizational culture, organizational moral learning, bystander intervention training, psychological safety.

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Chapter 1: Introduction

The reality of organizational life is that here-and-now ethical talk creates discomfort that most employees prefer to avoid (Bisel, 2018). However, overt talk about ethics is essential to detecting and correcting ethical lapses while they remain small and resolvable and before they become normalized within an organization's culture (Bisel, 2018). Ethical breaches in organizations can be major (e.g., embezzlement of large sums of money or property, pervasive sexual or racial harassment) or minor (e.g., lying on a timesheet, taking credit for another's work, or crossing professional boundaries). Minor infractions, however, should not be confused for *insignificant* infractions. While some bad behavior may seem inconsequential, research demonstrates that even seemingly small ethical lapses or wrongdoing can have a cumulative influence on members' decision-making as well as organizational culture and reputation (McLain & Keenan, 1999; Sims, 1992; Weick & Sutcliffe, 2007). Furthermore, minor lapses can also lead to incrementalism, rationalizations, and self-deception, which pave the way for corrupt organizations (Anand, Ashforth, & Joshi, 2004; Ashforth & Anand, 2003).

Even small lapses in ethical judgment may have lasting effects if not detected and corrected. Employees and customers alike can suffer, which can result in significant harm to individuals as well as organizations' reputations (Reuber & Fischer, 2010). For example, media reports recently brought to light a former Uber employee's allegation of widespread sexual harassment within the ridesharing company (Shen, 2017). This bad behavior, combined with other questionable corporate practices, when exposed, led to reputational and financial harm to the organization. Coupled with reports of sexual harassment and assault of Uber customers, this revelation resulted in the ousting of the CEO, loss of some of its customer base, and a dramatic diminishment of corporate valuation (Shen, 2017). Uber was also accused of silencing customers

who claimed they were sexually assaulted by drivers (Levin, 2018). Research in organizational communication ethics suggests that Uber's cultural and reputational woes likely developed incrementally, and were the product of systemic moral failings and missed opportunities for organizational learning (Bisel, 2018).

Individuals within organizations learn behavioral expectations from one another through communication (Keyton, 2011). Unethical conduct shapes culture and behavior, often leading to employees' desensitization to unethical activity and acceptance of bad behavior as an organizational norm (Treviño & Victor, 1992). Furthermore, silence in the face of unethical behavior, especially by management, can be perceived by employees as implicit endorsement of the bad behavior, reinforcing the act as reflective of desired organizational culture (Bisel, 2018; Schein, 1985; Sims & Brinkman, 2003). Organizational decision-makers should be held responsible for communicating and enforcing ethically-excellent conduct as an organizational value.

One possible means of bolstering ethical excellence in organizations is to avoid a simplistic perspective that invests management alone with the responsibility of addressing ethical lapses (Singh & Twalo, 2015). That simplistic perspective assumes that (a) management is always ethical and does not require subordinates and co-workers to use their ethical judgment, and (b) management always has the best view from which to assess and address ethical troubles. Neither assumption is realistic. In contrast, bystander intervention training, which is becoming widespread in organizations, takes these points seriously and attempts to share responsibility of addressing and reporting unethical behavior throughout the hierarchy (Schulte, 2018). Bystander intervention training is justified by the observation that a peer who "stands up" for a co-worker is more likely to end the offensive behavior than if he or she merely "stands by" (Brody, 2019).

Yet, metaphorically "standing up" often requires literally *speaking up* in the here-and-now within the context of a difficult ethics-based conversation. To date, few have grappled with the communication barriers that are inherent in a bystander intervention training perspective. This study is the first of its kind to develop and validate a measure that will allow future researchers to explore organizational members' willingness and ability to confront others' unethical behavior—a measure that can potentially be used in tandem with bystander training to assess trainees' self-perceived ability to confront others about unethical behavior. This responsibility includes equipping employees with the tools necessary to recognize and articulate ethical concerns and intervene communicatively when necessary. Immediate confrontation of ethical lapses is a benefit to both individuals and organizations. Additionally, confronting ethical lapses are important to minimizing damage and cultural reproduction while ethical troubles remain small and resolvable and before patterns become intractable (Bisel & Adame, 2019; Lucas & Fyke, 2014; Tang, Chen, & Sutarso, 2008).

While management plays an essential role in communicating an organization's overarching values, peer-to-peer communication also plays a significant role in the everyday development of organizational norms (Kramer, 2010). Unquestionably, organizational leadership and management have an influential role in creating and maintaining ethical workplace cultures. Yet, importantly, co-workers are *more* likely than managers to be aware of peer misconduct because they often have more opportunity to observe bad behavior (Treviño & Victor, 1992). Managers rely on employees to report unethical behavior, but should also encourage employees to resolve minor issues directly at the peer level (Treviño & Victor, 1992). For example, domestic violence and sexual assault prevention researchers encourage bystander intervention training as a way to prevent workplace intimate partner violence and workplace bullying by

training employees to recognize and take actions at signs of abuse (Lassiter, Bostain, & Lentz, 2018).

Although not without social risks, confronting ethical lapses directly and informally with a peer creates an additional avenue for meaningful ethical conversations, creating cultures in which responsibility for ethical conduct is seen as a shared value and responsibility throughout all levels of the hierarchy. For example, the Nuremberg defense of "*I was only following orders!*" during the Nazi war crimes trials should sensitize us to the importance of encouraging responsibility-sharing across the organization and that management cannot be assumed to be ethical (Arendt & Kroh, 1964; Kaptein, 2011). An employee who provides a co-worker with corrective moral feedback and the opportunity to explain his or her behavior opens the door to a deeper moral dialogue, thereby communicating that ethics is an organizational value worth discussing.

Rationale

Organizational decision-makers have a responsibility to the organization and its stakeholders to create and maintain an ethically excellent culture. While much of the research in organizational ethics examines silence in the face of unethical behavior at a collective, cultural level (Brown, Treviño, & Harrison, 2005; Kaptein, 2011; Tang, Chen, & Sutarso, 2008), this study extends that body of research to investigate the relevance of individualized communication factors, specifically, communication apprehension (CA), communication competence (CC), and voice efficacy. This study also extends previous organizational communication ethics research by including a keen focus on direct, lateral (i.e., peer-to-peer) communication about ethical concerns, as opposed to examining upward reporting in isolation (e.g., Bisel & Adame, 2019; Bisel, Messersmith, & Kelley, 2012; Randall & Gibson, 1991; Treviño & Victor, 1992; Zanin,

Bisel, & Adame, 2016). Extending existing research to include these individualized communication variables offers supplementary explanations for organizational silence, and positions future research to explore applied solutions regarding how to break barriers to the initiation of authentic moral dialogue among organizational members (Jovanovic & Wood, 2006). One such solution is to develop an instrument to assess perceived individual barriers, such as CA and CC, that may deter employees from engaging one another with discussions regarding ethical concerns. This measure will be an important step towards identifying individuals who perceive themselves as being capable of confronting others' unethical behavior and creating interventions (e.g., training) to bolster those self-perceptions.

Communication is the site and substance of culture, and *organizational* communication is the site and substance of *organizational* culture. Over time and space, individuals learn from one another about normative behavioral expectations through both verbal and nonverbal communication (Keyton, 2011; Kramer, 2010). While management expresses behavioral expectations formally through policies, core values, and vision statements (Schein, 1995), organizational scholarship has demonstrated consistently that organizations' cultures are reproduced by the informal network of talk, interaction, and example-setting (Dougherty & Smythe, 2004; Keyton, 2011). For example, according to moral licensing theory, observations of peer behavior permit employees to "license" (i.e., excuse and justify) such behavior, enabling employees to carry out negative activities without reputational harm (Klotz & Bolino, 2013). In the context of organizational ethics, the "ethical culture of an organization is one component of the organizational context and can be defined as those elements of the perceived organizational context that impede unethical behavior and promote ethical behavior" (Kaptein, 2011, p. 516). This coupling is important to consider when striving to create an ethically excellent culture. In

order to thrive, the organization needs more than just the absence of *wrongdoing*; it also needs the encouragement of *right-doing* (Bisel, 2018).

One example of *right-doing* has been researched in the form of bystander intervention. Bystander intervention refers to the extent to which observers of a person in need choose to intervene and what circumstances influence that decision (Latané & Nida, 1981). Although early bystander intervention research addressed interventions in situations where individuals were clearly in need of assistance (e.g., medical emergencies, Morgan, 1978), contemporary researchers have applied this concept to the workplace. For example, in 2005, Bowes-Sperry and O'Leary-Kelly (2005) built a framework for examining the (in)actions of observers in ethically problematic workplace situations such as sexual harassment. Various elements of the Bowes-Sperry and O'Leary-Kelly (2005) framework draw similarities to communication research into why individuals do or do not report unethical behavior in the workplace. For example, Ryan and Wessell (2012) used bystander intervention to investigate and explain employee involvement when observing discrimination based on sexual orientation. They found that "observer perceptions about the magnitude of consequences" influenced one's decision to intervene in the face of harassment of a co-worker (Ryan & Wessell, 2012, p. 504). Additionally, Ghumman, Ryan, and Park (2016) examined bystander intervention in the context of religious harassment in the workplace. They found that several factors, including relationship to the target and harasser, pro-social orientation, and costs of (in)action influenced employees' decisions to intervene. While the Bowes-Sperry and O'Leary-Kelley (2005) model examined the individual decision-making process, the construct investigated in this study brings a much-needed communication perspective to the analysis of why some people act and others do not. Likewise, bystander intervention *training* serves as a possible intervention when inaction has become the norm within

the organization (Brody, 2019). Understanding *why* individuals do not intervene communicatively when they observe unethical behavior and *how* organizations can intervene to support employees in addressing unethical concerns creates a springboard for action to building a morally-excellent organizational culture.

Although the constructs investigated in this study capture individual attributes, organizational culture is important to understanding the implications of these constructs in context. To date, excellent measures exist for measuring ethical organizational culture. For example, Kaptein (2011) used the Corporate Ethics Virtue Model (CEV Model) to examine the relationships between the seven cultural dimensions of the CEV Model and employee responses to wrongdoing. The seven dimensions are: (a) clarity, (b) congruency of local and senior management, (c) feasibility, (d) supportability, (e) transparency, (f) discussability, and (g) sanctionability. The study demonstrated that clarity (where ethical expectations are comprehensive and unambiguous), supportability (the extent to which employees feel supported in conforming to normative expectations), discussability (where employees have the opportunity to raise and discuss ethical concerns), and sanctionability (the perception that wrongdoers will be punished for unethical conduct) were relevant in encouraging positive responses to unethical behavior (Kaptein, 2011). Additionally, Glaser, Zamanous, and Hacker (1987) developed the Organizational Culture Survey (OCS), which measures an organization's culture related to factors, such as teamwork, trust, fairness, character, and conflict resolution. Research involving the OCS demonstrated weak-to-strong reliability (Cronbach's alpha = .63 to .91). However, scholars recommend the OCS be used in conjunction with other methodologies in evaluating culture due to the abstract nature of the concept (Rubin, Palmgreen, & Sypher, 2008).

Additionally, the measure investigated in this study examines *individual* ethical perception, distinguishing it from existing measures that examine *collective* culture.

The culture of an organization creates the context for workplace action. While these extant measures are oriented to understanding systemic patterns in organizations, they fail to measure individual communication differences that could explain the role played by micro-interactions in the detection and correction of ethical lapses. The following pages explain the development and validation of a new measure, which was adapted from existing and validated communication measures (i.e., communication apprehension and communication competence). The following section begins with a brief literature review of organizational culture, communication apprehension, communication competence, and organizational ethics. Next, it reports the results of a pilot study, which measured CA and CC in confronting unethical workplace behavior. Then, it explains the results of a full study, which developed and validated an original measure titled, "Self-Perceived Communication Confidence in Confronting Unethical Behavior" (SPC@CUB).

Chapter 2: Literature Review

Communication Apprehension

Communication apprehension refers to the "unwillingness of an individual to engage in communication as a source of oral or written messages or as a receiver of intended oral communication" (Pate & Merker, 1978, p. 108). Prior research examined the CA construct in a variety of contexts, including its influence in the organizational context (Pate & Merker, 1978). There is a more specialized body of research explaining individuals' unwillingness to engage in communication specifically about ethical issues (e.g., Greenberger, Micelo, & Cohen, 1987; Milliken, Morrison, & Hewlin, 2003; Zanin, Bisel, & Adame, 2016). However, little research exists regarding CA in the context of organizational ethics, specifically the apprehension that might drive organizational silence in the face of communicating about unethical behavior. This section describes the extant CA research, describes the relationship between CA and ethics talk, and explains a survey tool to measure CA in confronting ethical infractions.

Historical development of communication apprehension research. Historically, CA was examined in the context of stage fright and public speaking as a means of understanding and remediating the debilitating fear and social anxiety experienced by some public speakers (Clevenger, 1955; Gilkinson, 1942). Since those earliest days, researchers have recognized that communication apprehension can be experienced in a variety of contexts beyond the one-to-many public speech setting. For example, CA research has investigated contexts such as technology usage during the employee socialization process (Flanagin & Waldeck, 2004), managerial CA (Smith, Nelson, & Smeltzer, 1994), and physician-patient communication (Perrault & Silk, 2015).

Aside from the effects of apprehension on one's tendency to engage with certain communication contexts, research shows that CA can also damage an individual's public image and reputation in the eyes of others. Pate and Merker (1978) examined CA in the context of organizational communication, including the effects of apprehension on social relationships. Individuals who are high in CA tend to be perceived to be "less competent, less extroverted, and less task attractive by those who worked with them, including even other high apprehensives" (Pate & Merker, 1978, p. 108-109). As discussed further in subsequent sections, this dynamic undoubtedly influences interactions among employees, particularly when those interactions are emotionally and socially charged confrontations.

Subsequently, researchers expanded this body of research to include CA prompted by other anxiety-producing events. For example, in the academic context, McCroskey and Anderson (1976) found that high apprehensives hold a negative attitude toward educational systems that mandate active student participations (e.g., group discussions). These negative attitudes are then reflected in teacher evaluations of students (McCroskey & Daly, 1976). Additionally, while there is no known correlation between CA and intelligence, research demonstrated consistently a correlation between apprehension and both grade point average and standardized test scores (McCroskey, 1978; McCroskey & Anderson, 1976). Importantly, these negative consequences of CA carry over to the workplace context.

From the earliest years of CA research, investigations explored the dynamic within the organizational context; CA has been shown to influence job placement and interview performance. For example, Daly and McCroskey (1975) found that high apprehensives tend to avoid job roles or industries they perceive as too communication heavy. Additionally, individuals with high CA tend to be evaluated negatively during job interviews (Pate & Merker, 1978). CA

also influences supervisor-subordinate relationships. For example, Bartoo and Sias (2004) examined the influence of CA on employee information experiences. Their research found that CA of the supervisor was negatively correlated to the amount and variety of information that was shared with the subordinate (Bartoo & Sias, 2004). Imagine if a supervisor is highly apprehensive about communicating with subordinates regarding desired behavioral expectations and organizational culture. The subordinates will be ill-equipped to adapt to the norms and behaviors desired by the organization, potentially leading to poor role performance and other unintended outcomes and conflicts.

In this vein, Russ (2013) studied the relationship between supervisory communication apprehension and Theory X/Theory Y orientations. Theory X managers prefer a "top down" approach and perceive subordinates to have negative attitudes about work and be unmotivated. Theory Y managers prefer a more collaborative working environment and perceive employees to be motivated and have a desire to build positive working relationships (McGregor, 1960). In his study, Russ surveyed 281 managers employed by a variety of organizations using Sager's (2008) Theory X and Theory Y inventory and McCroskey's (1977) Personal Report of Communication Apprehension (PRCA) to measure trait-like and context-specific CA in managers (Russ, 2013). In examining the correlations between CA and participating managers' Theory X and Theory Y assumptions, he determined that supervisors high in CA tend to approach managing through a Theory X lens (i.e., preferring a "top down" management approach) while supervisors low in CA tend to approach managing through a Theory Y lens (i.e., preferring a more collaborative working environment). In other words, it appears that holding Theory X assumptions about human behavior has consequences for managers' anxieties associated with communicating with employees and vice versa. Although not directly examined in this research study, continuing the

investigation into the influence of CA on management communication styles could yield additional important insights into organizational culture and ethics.

Additional research demonstrated a relationship between CA and job attitudes and behaviors, indicating the importance of CA for resolving other organizationally relevant variables (Pate & Merker, 1978). Perceptions of apprehension are "capable of influencing the individual's personal life and ability to conduct satisfactory and compelling relationships within organizational settings. To the extent that relationships between communication apprehension and job attitudes and behaviors . . . can be verified, the functioning of the entire organization is impaired" (Pate & Merker, 1978, p. 111-112). This research highlights the need to address CA in contexts where such apprehension may impede the desired functioning of an organization.

The encouraging news is that CA is not a static, immutable personality trait. While initial research examined the construct as a relatively enduring personality trait (McCroskey, 1977, 1978), subsequent scholars suggest that CA exists as a more fluid construct that fluctuates based on context. For example, McCroskey and Beatty (1984) measured 120 participants' CA in four different settings: public speaking, meeting, group, and dyadic interaction. Their results indicate that state anxiety responses correlated differently to CA scores depending on the context of focus. This finding indicates the importance of considering the anxiety experienced in actual communication situations when measuring CA (McCroskey & Beatty, 1984).

Traditional approaches exist to remediating CA, such as prescribing participation in public speaking courses (Pate & Merker, 1978), visualization, which teaches individuals to focus on positive thinking and ignore negative thinking (Ayres, 1998), and systematic desensitization, in which an individual is exposed to small quantities of the anxiety-producing communication consistently over time (McCroskey, 1997). Targeted interventions can help lessen apprehension

and ameliorate its effects. For example, conversational skills treatment programs (Glaser, Biglan & Dow, 1983) and teaching relaxation as self-management (Deffenbacher & Payne, 1977) can help individuals high in CA to make themselves more comfortable and effective in various social situations (Glaser, Biglan, & Dow, 1983). However, Opt and Loffredo (2000) cautioned organizational leaders to manage expectations when it comes to overcoming CA in employees. They conclude managers need to develop an understanding and tolerance for communication differences among different personality types (e.g., introverts and extroverts) that may influence communication proclivities. There may be no one-size-fits-all approach, but there is work that can be done. The development of a measure that captures CA associated with confronting unethical workplace behaviors would supply a much-needed empirical tool for investigating organizational interventions or organizational development programs that can help employees be more forthcoming with explicitly ethics-related conversation.

Communication apprehension and organizational ethics. CA may exacerbate the anxiety of engaging in a discussion about ethics, particularly in the face of ethical wrongdoing. As discussed previously, employees' perceptions of rightness and wrongness within the organization is influenced by the organizational culture, including the alignment of formal rules and informal behavioral norms (Keyton, 2011). Employees use these explicit and implicit rules to guide their own behaviors and make judgments about others (Cialdini, 2012). Unfortunately, when employees feel compelled to speak out against ethical transgressions, they do so at their own social and occupational risk. For example, Bisel and Arterburn (2012) found that individuals do not engage in upward dissent out of fear of retaliation, construing management or others in the hierarchical chain as ultimately responsible, predicting supervisor deafness and

inopportune timing (see also Kassing, 2011). These reasons for silence represent chilling effects that further amplify existing communication apprehension in this context.

Additionally, power relationships influence the likelihood that someone will confront or report unethical behavior and *how* someone communicates their disapproval of the transgressor's actions (Valde & Henningsen, 2011). The *hierarchical mum effect* (Bisel, Kelley, Ploeger & Messersmith, 2011; Ploeger, Kelley, & Bisel, 2011) proposes that linguistic directness in confronting unethical behavior is influenced by one's power position within the chain of command. Furthermore, Bisel, Kelley, Ploeger, and Messersmith (2011) examined the negative influence of the *moral mum effect*, which posits that employees tend to avoid using explicitly moralized language, which can undermine organizational learning about ethical issues. For example, even when an individual privately perceived a business request from a co-worker or supervisor to be unethical, he or she will tend to use policy or operational justifications – as opposed to voicing explicitly moralized justifications – to deny the unethical request (Bisel, et al., 2011; Bisel & Kramer, 2014; Sonenshein, 2006).

Both the outright avoidance of ethical discussions and the tendency of individuals to avoid speaking in direct, unequivocal moral terms about ethical issues hinders decision-makers from learning about the issue and creates a missed opportunity for organizational members to discuss ethics and update work practices accordingly (Bisel & Adame, 2019). Even when individuals speak up about private moral concerns, often such dissent is displaced outside the organization, providing little opportunity for organizational moral learning (Kassing & Armstrong, 2002). Organizational moral learning, defined as the "adaptation of work according to members' communication about their moral intuiting" (p. 175) is not characterized solely by the absence or reduction of wrongdoing, but by an organization's endeavoring toward a morally

excellent culture (Bisel, 2018). This crucial social cognition process requires authentic moral dialogue among organizational members about the organization's values as they relate in the here-and-now (Bisel, 2018; Jovanovic & Wood, 2006).

Additionally, Pate and Merker (1978) posit that "organizations probably suffer from a more subtle loss in the form of an opportunity cost" from the effects of CA (p. 116). For example, imagine an employee who does not understand a task assignment. An employee high in CA may avoid seeking advice or assistance in understanding the assignment, while an employee low in CA would seek out such assistance eagerly. In this scenario, the high CA employee may make unnecessary mistakes or delays, while the low CA would receive the necessary information to accomplish the task. While this notion was in reference to employee productivity, an important implication is that communication apprehension prevents open dialogue about issues that shape organizational culture. As described above, discussions about ethical issues in the workplace and attempts to resolve small ethical conflicts before they become detrimental to organizational functioning are critical to organizational learning about ethical concerns and sustaining highly-ethical organizational cultures.

Measuring communication apprehension. With regard to measuring CA, Scott, McCroskey, and Sheahan (1978) provided a brief history and overview of the PRCA measure. The PRCA originally included 50 items. Thirty items were drawn from existing scales measuring verbal reticence and unwillingness to communicate. Twenty additional items were developed specifically to capture communication apprehension in organizational contexts (e.g., talking to subordinates or supervisors, conducting interviews, representing the organization, and answering questions at meetings). Estimated reliability of the complete 50-item scale was .95 and estimated reliability on the 20-item organization-specific scale was .91, indicating sufficient reliability for

the 20-item scale alone (Scott, McCroskey, & Sheahan, 1978; *see* Appendix A). Scott et al. (1978) also note several correlations between CA and organizationally relevant outcomes. For example, respondents with high CA had lower desire and expectations for career advancement, were more likely to occupy organizational roles with low communication demands, and have less organizational tenure than respondents who were not generally anxious about communicating.

McCroskey (1982) redesigned the 20-question measure to include 24 items, known as the PRCA-24, in four distinct communication contexts: (a) public speaking, (b) small group speaking, (c) speaking in meetings and (d) speaking in dyads. Later, McCroskey, Beatty, Kearney, and Plax (1985) revisited the measure to assess the content validity across communication contexts, recognizing the original four contexts measured by the PRCA-24 are not exhaustive of the speaking situations encountered by communicators. For example, CA could come into play through "superior-subordinate communication, situations involving intercultural encounters, situations involving interviews, and situations involving assertiveness, just to name a few" (McCroskey, et al., 1985, p. 167; *see* Appendix B).

Levine and McCroskey (1990) reexamined the PRCA-24 against rival measures to ensure construct distinctiveness of the measure. Although the unidimensional PRCA-24 model has demonstrable reliability and construct validity, the authors tested three other models: Guttman simplex, linear unidimensional, and a second-order factor model. In comparison to alternative measures, the PRCA-24 indicated highest reliability of this model (alpha = .97). Additionally, based on the results indicating potential for error, the authors recommend reducing the 24-item measure to 20 items, removing items 1 ("I dislike participating in group discussions"), 10 ("I am afraid to express myself at meetings"), 17 ("While conversing with a new acquaintance, a I feel very relaxed"), and 24 ("While giving a speech, I get so nervous I forget facts I really know").

The development of the PRCA-24 demonstrates the importance of context in measuring CA. One important context occurs when employees are faced with unethical behavior of co-workers. CA influences an employee's willingness to confront such behavior. However, willingness is not the only communication dynamic of interest in this speech situation. Self-perceived ability and skillfulness is also an important consideration.

Communication Competence

Communication competence (CC) refers to "the knowledge of appropriate communication patterns in a given situation and the ability to use that knowledge" to achieve task goals effectively in a given context (Cooley & Roach, 1984, p. 25; Spitzberg & Cupach, 1984; Jablin & Sias, 2001). Prior research examined the CC construct in a variety of contexts, including its influence in organizational (Berman & Hellweg, 1989; Clegg, Hardy, & Nord, 1996). However, little research exists regarding CC in the context of organizational ethics. This section describes the extant CC research, the relationship between CC and ethics talk, and the current tools to measure CC.

Historical development of communication competence research. Theoretical formulations of CC developed from three main schools of thought: (a) the self-presentation approach (Goffman, 1959), (b) the human relations approach (Argyris, 1962), and (c) the social skill approach (Argyle, 1969). The self-presentation approach conceptualizes the competent communicator as one who pays special attention to the quality of interpersonal interactions and is skillful at helping others save face in the event of a social misstep (Goffman, 1959). The human relations approach posits that CC includes the ability to identify and achieve objectives, the ability to collaborate with others and the ability to adapt one's behavior to a given context (Argyris, 1962). Lastly, the social skill approach describes CC as a set of deliberate, coordinated

actions in relation to a situation, and which constantly recognizes and adapts to sensory inputs (Argyle, 1969). In other words, the self-presentation approach focuses most intensively on preserving relationships and reputation, the human relations approach focuses most intensively on achieving one's objective, and the social skills approach emphasizes action and adaptability.

Later, communication scholars synthesized these views to define CC as "the ability of an interactant to choose among available communicative behaviors in order that he may successfully accomplish his own interpersonal goals during an encounter while maintaining the face and line of his fellow interactants within the constraints of the situation" (Wiemann, 1977, p. 198). In other words, a communicatively competent person can adapt his or her communication approach both to accomplish the purpose of the communication and to maintain interpersonal relationships. Wiemann and Backlund (1980) reevaluated the definition of CC, comparing "communication competence" to "social literacy" (p. 185). They describe the challenge in presenting a clear definition of CC, as previous research of CC draws from two perspectives: cognitive and behavioral.

The cognitive perspective examines CC from a nonbehavioral lens, stating that competence theories are not concerned with events and social processes, but rather with "how information about the world is presented in a person's mind which makes it possible for him to perform the way he does or the way he could perform under a variety of circumstances" (Pylshyn, 1973, p. 548). Researchers employing a cognitive perspective lens focus on the creation of a mental framework for future action (i.e., potential capability), as opposed to examining the outcomes of certain behaviors in context (Wiemann & Backlund, 1980). On the other hand, the behavioral perspective ties competence to its more commonly understood usage: effectiveness of communication in social contexts (Wiemann & Backlund, 1980). The behavioral

approach states that behavior is built on knowledge and extends this approach to how that knowledge manifests in the context of social interactions. In short, the behavioral perspective encapsulates skill and performance in one's communication. Both perspectives bring value to understanding how people could or should behave (cognitive) and appreciating the contextual reality of unfolding conversational turns (behavioral; Weimann & Backland, 1980).

Some contemporary communication research examined CC in the organizational setting. For example, communication research has shown that a supervisor's CC can influence subordinates' levels of organizational identification (Meyers & Kassing, 1998), job satisfaction, motivation and organizational commitment (Mikkelson, York, & Arritola, 2015), and communication satisfaction (Madlock, 2008). Other research indicated an association between CC and career success (Spitzberg & Cupach, 1989). Thus, CC appears to be important to the establishment and maintenance of social connectedness between organizations, management, and members.

Similar to the PRCA-24, previous research also examined CC as both a state and trait. Cupach and Spitzberg (1983) conducted an experiment to measure state and trait CC as predictors of certain outcome variables (e.g., social self-esteem, communicative adaptability, rating of other-competence, and rating of other-anxiety). The authors first administered a survey to participants to measure dispositional (trait) CC. At a later time, the authors administered a second instrument to the same participants to measure CC in the situational context of group problem solving. Their results indicated that situational measures of competence were better predictors of outcome variables when compared to dispositional measures (Cupach & Spitzberg, 1983). Perotti and DeWine (1987) later confirmed this proposition through their finding that CC measures should emphasize contextual situatedness over global trait. For example, imagine a

person who is a highly effective leader in a Fortune 500 company. This person is experienced in her trade and is highly effective in motivating employees and communicating information throughout the organization. Now imagine this person at the doctor's office, receiving the news of a cancer diagnosis. This leader is no doubt a highly competent communicator in the workplace. However, the anxiety of receiving devastating health news, coupled with a lack of knowledge about how to talk about the underlying issue, would likely have a negative effect on her competence in communicating with her doctor.

Early CC research tended to focus on an individual's ability to successfully navigate a communication situation with another, with an emphasis on adaptability and maintaining the relationship. More contemporary scholars have highlighted the importance of context in influencing CC. Therefore, the development of a measure that captures CC associated with confronting unethical workplace behaviors would supply a much-needed empirical tool for investigating organizational interventions or programs that can be used to help employees be prepared to engage in explicitly ethics-related conversations.

Communication competence and organizational ethics. As more organizations move toward a purpose-driven – as compared to profit-driven – culture, leaders are increasingly recognizing the benefits of addressing corporate social responsibility, "rightness," and ethical concerns (O'Conner, Parcha, & Tulibaski, 2017; Bulgarella, 2018). CC draws from normative expectations as to the appropriateness of behavior in the social context (Weimann, 1977; Weimann & Backlund, 1980) and is highly situationally determined (Perotti & DeWine, 1987). Cognitive and behavioral aspects of communication are developed by observing the behavior of others, and organizational actors are responsible for creating a strong culture that communicates its social norms (i.e., a range of acceptable and unacceptable behavior; Kish-Gephart, Harrison,

& Treviño, 2010). An individual's perception that he or she has the tools necessary to confront unethical behavior in the workplace is likely influenced by previous experiences within the organization. This presumption therefore highlights the need to encourage the appropriate confronting of unethical behavior in the workplace as a means to set a (communication) example and influence culture.

However, confronting unethical behavior directly can be a complex exercise in relational management. One major reported barrier to confronting ethical behavior is the concern of damaging relationships and creating threats to face (Morrison, Milliken, & Hewlin, 2003). However, there is optimism that CC can mitigate the anxiety-producing effects of confronting unethical behavior. For example, Arroyo and Harwood (2010) found that CC mediates the link between shyness and relational quality, such that a shy person's difficulty in maintaining quality personal relationships is partly influenced by self- and other-perceived CC. In other words, a person who is a highly competent communicator provides certain relational rewards, such as social support, which contribute positively to perceptions of relationship quality. CC has also been linked with reporting mistakes within organizations. For example, McKinley and Perino (2013) found that CC was a significant predictor of job satisfaction, which indirectly correlated with increased error reporting. McKinley and Perino's (2013) findings indicate that an individual's perceived confidence in his or her ability to communicate concerns effectively may motivate that person to speak up when situations do not seem right. Therefore, a tool that measures CC in addressing ethical quandaries effectively would provide useful information for management to address communication training and development needs within the organization.

Measuring communication competence. Weimann (1977) proposed an instrument to measure CC, which he defined as an ability "to choose among available communicative

behaviors" to accomplish one's "interpersonal goals during an encounter while maintaining the face and line [of] fellow interactants within the constraints of the situation" (p. 198). Wiemann (1977) initially designed a 57-item scale to measure five facets of interpersonal communication competence: (a) general competence; (b) empathy; (c) affiliation/support; (d) behavioral flexibility; and (e) social relaxation. Factor analysis of these items resulted in a 36-item model with two dimensions: general competence and social relaxation (*see* Appendix C).

Although Wiemann's CC scale demonstrated internal reliability ($\alpha = .96$) as well as construct validity (McLaughlin & Cody, 1982), some scholars have criticized the measure. For example, Perotti and Dewine (1987) examined Wiemann's (1977) scale against Cegala's (1981) 18-item interaction involvement scale and Cupach and Spitzberg's (1981) 24-item model of relational competence. Perotti and DeWine (1987) concluded that the communication context matters significantly in determining the reliability and validity of a CC scale. For example, the qualities that may make an effective communicator in an organizational setting may not be similarly effective in a family setting. Different contexts call for different abilities to navigate various types of talk successfully. Therefore, this study seeks to fill a need to measure such contexts and abilities.

Communication Confidence in Confronting Unethical Behavior

Given that confronting others' unethical behavior is an anxiety-producing and technically-difficult social interaction to navigate, it seems likely that both CA and CC are relevant communication dynamics implicated by the conversational situation. The significant communication stress such a speech situation places on the speaker may explain why unethical behaviors often go unconfronted and unreported, and therefore become normalized within the organizational culture.

Therefore, the current study combines and reimagines the constructs of CA and CC into one scale: Self-Perceived Communication Confidence in Confronting Unethical Behavior (SPC@CUB). Here, and within the context of the new measure, communication confidence is defined as the self-perceived absence of anxiety and self-perceived skillfulness associated with confronting a target about a target's unethical behavior in a workplace setting. Additionally, this speech situation is likely to demand self-efficacy and activate speech anxiety in terms of communication skillfulness (i.e., balancing task effectiveness and relational appropriateness). Based on the research into CA and CC, both constructs appear essential in determining whether a speaker will confront the unethical behavior of a work peer, and do so successfully. Therefore, it was hypothesized that SPC@CUB will have two dimensions that reflect the respective facets of CA and CC. Importantly, voice efficacy was also added as a potential dimension in SPC@CUB after the pilot study and based on expert review (described below).

Convergent, Discriminant and Predictive Validity

In order to assess content validity of a new measure, scholars recommend assessing the degree to which the proposed instrument correlates with other established instruments designed to assess similar constructs (convergent validity), the degree to which they do not correlate with dissimilar constructs (discriminant validity), and the degree to which the proposed instrument relates to other relevant variables (predictive validity) (Hinkin, 1998). First, it was hypothesized that the construct of communication confidence in confronting unethical behavior is expected to be positively correlated with these variables: (a) organizational commitment, (b) self-efficacy, (c) self-perceived CC, (d) experience managing personnel, and (e) experience with unethical behavior in the workplace. Second, it was hypothesized that the construct of communication confidence in confronting unethical behavior is negatively associated with dissimilar measures,

such as: (a) CA, (b) verbal aggressiveness, and (c) unwillingness to communicate (approach-avoidance). This section describes the extant literature related to each of these constructs.

Convergent Validity

Organizational commitment. First, SPC@CUB is likely related to the construct of organizational commitment (affective). Often explained through a social exchange framework (Organ, 1976), affective organizational commitment refers to one's emotional attachment to the organization (Meyer & Allen, 1990). Employees with strong affective organizational commitment tend to believe their personal values match those of the organization (Sinclair, Tucker, Cullen, & Wright, 2005) and are more likely to remain at the organization and work proactively toward successful outcomes for the organization (Meyer, Paunonen, Gallatly, Goffin, & Jackson, 1989). Organizational commitment leads to several positive organizational outcomes, including positively influencing job performance (Greguras & Diefendorff, 2009), decreasing turnover intent (Vandenberghe & Bentein, 2009), as well as extra-role behaviors designed to benefit the organization, such as organizational citizenship behaviors (Feather & Rauter, 2004). Whistleblowers and boatrockers often cite loyalty (a form of commitment) to their organization as a key motivator for speaking up with their moral concerns to authorities external and internal to the organization (Near & Miceli, 1995). This hypothesis assumes, however, that organizational leaders aspire to an ethical organizational culture and have communicated that desire (Treviño & Victor, 1992). Thus, it was hypothesized:

Hypothesis 1a (H1a): SPC@CUB is positively associated with organizational commitment (affective).

Self-efficacy. Second, SPC@CUB is likely related to the construct of self-efficacy. Self-efficacy refers to a person's belief that he or she can successfully perform the actions needed to

complete a specified task (Bandura, 1986). Previous research demonstrated that self-efficacy correlates with proactive organizational behaviors, including taking charge (Morrison & Phelps, 1999), improved communication skills in the public speaking context (Tucker & McCarthy, 2001), and improved communication skills within the physician-patient relationship (Ammentorp. Sabroe, Kofoed, & Mainz, 2007). Morrison and Phelps (1999) posit that those with greater self-efficacy will perceive a path to success through their behavior and be more likely to attempt behavior that comes with social risks. Similar to SPC@CUB, self-efficacy demonstrates perceived ability to complete a task effectively. However, the measures are not merely identical. The focal speech situation of the SPC@CUB measure provides a context that may increase anxiety, thereby reducing one's confidence despite his or her perceived ability. Therefore, the following hypothesis was proposed:

Hypothesis 1b (H1b): SPC@CUB is positively associated with self-efficacy.

Communication competence. Third, SPC@CUB is likely related to the construct of CC. As described above, CC refers to the knowledge and ability of an individual to engage in appropriate communication patterns in a given context (Spitzberg & Cupach, 1984). Because CC provides a foundational basis for the development of the SPC@CUB construct, the following hypothesis was proposed:

Hypothesis 1c (H1c): SPC@CUB is positively associated with CC.

Experience in managing personnel. Fourth, SPC@CUB is likely related to an individual's experience in managing personnel. High levels of communication competence and low levels of communication apprehension are a desired trait of supervisors, as these behaviors contribute to positive organizational outcomes such as job satisfaction (Madlock, 2008; Pate & Merker, 1978). Furthermore, low apprehensives are more likely to perform well in job interviews

because they demonstrate their ability as a competent communicator, thereby providing greater opportunity for advancement to a supervisory role where communication skills are necessary for success (Pate & Merker, 1978) Additionally, with organizations increasingly emphasizing supervisor-subordinate feedback as a mechanism for motivating performance improvement (Illies, & Judge, 2005), serving in a managerial position presumably provides greater opportunity for participants to practice confronting others' unethical behavior. This skill development over time could increase an individual's CC and reduce CA during a confrontation regarding another's unethical behavior, creating greater confidence in confronting unethical behavior. Therefore, the following hypothesis was proposed:

Hypothesis 1d (H1d): SPC@CUB is positively associated with experience in managing personnel.

Discriminant Validity

Communication apprehension. First, SPC@CUB is likely related to, yet distinct from, the construct of CA. As described above, CA refers to the reticence or unwillingness of an individual to engage in certain communications (Pate & Merker, 1978). CA provides a foundational basis for the development of the SPC@CUB construct in that high apprehensives will likely feel *less* confident in their communication. However, the speech situation of confronting a co-worker's unethical behavior provides a contextual contingency that may heighten apprehension. Furthermore, the SPC@CUB construct measures one's perceived ability to confront unethical behavior effectively in the workplace in addition to perceived apprehension. Therefore, the following hypothesis was proposed:

Hypothesis 2a (H2a): SPC@CUB is negatively associated with CA.

Communication style (verbal aggressiveness). Second, SPC@CUB is likely related to, yet distinct from, verbal aggressiveness. The communication style of verbal aggressiveness refers to a personality trait that inclines an individual to attack other people, as opposed to (or in addition to) addressing a specific topic (Infante & Wigley, 1986). Such ad hominem verbal attacks may result in negative organizational outcomes, such as detrimental organizational disagreements (e.g., arguments between co-workers resulting in damage to trust and overall organizational culture, Kassing & Avtgis), frequent conflict (Nicotera & Mahon, 2012), impaired organizational assimilation (Sollitto and Canmar, 2015), and employee incivility toward customers (Walker, van Jaarsveld, & Skarlicki, 2017). Furthermore, some communication scholars have identified verbal aggressiveness specifically as a *non-competent* form of communication (Sollitto & Canmar, 2015). In other words, individuals who are verbally aggressive in their communication tend not to accomplish the communicative goal they set out to achieve. Because the construct of communication confidence identifies the need for the ability to engage in difficult conversations, it follows that verbal aggressiveness would not support a constructive conversation about sensitive or uncomfortable topics. Therefore, the following hypothesis was proposed:

Hypothesis 2b (H2b): SPC@CUB is negatively associated with the communication style of verbal aggressiveness.

Unwillingness to communicate (approach-avoidance). Third, SPC@CUB is likely related to, yet distinct from, an unwillingness to communicate. Unwillingness to communicate refers to the "chronic tendency to avoid and/or devalue oral communication" (Burgoon, 1976, p. 60). Unwillingness to communicate comprises two dimensions: (a) approach-avoidance, which refers to "the degree to which individuals feel anxiety and fears about interpersonal encounters,"

and (b) reward, which refers to the degree to which an individual perceives that their personal interactions are worthwhile (Burgoon & Hale, 1983b, p. 240). The avoidance-approach dimension shares similar attributes to CA, in that individuals who score high on these measures tend to perceive interpersonal encounters as anxiety-producing events that influence their communication effectiveness. However, the construct is distinct from SPC@CUB in that SPC@CUB considers the speech situation rather than global traits. In other words, a person could be low in unwillingness to communicate (i.e., there is an absence of fear about communicating) and still low in SPC@CUB because of the difficulties of the speech situation (i.e., the anxiety is likely exacerbated when confronting unethical behavior; Treviño & Victor, 1992) Therefore, the following hypothesis was proposed:

Hypothesis 2c (H2c): SPC@CUB is negatively associated with unwillingness to communicate (approach-avoidance).

Predictive Validity

Group Ethical Voice. SPC@CUB may predict group ethical voice. Drawing on social cognitive theory (Bandura, 1986) and social learning theory (Bandura, 1977), group ethical voice is defined as a "form of group expression that challenges, and seeks to change, the current behaviors, procedures, and policies that are not normatively appropriate." (Huang & Paterson, 2017, p. 1158). In organizational contexts, employees tend to view the social appropriateness of their behavior primarily through interactions with organizational leaders and co-workers (Burris, Detert, & Chiaburu, 2008; Treviño & Victor, 1991). Communication about ethics in the organizational setting influences whether groups develop a shared belief about the social acceptability of speaking up about ethical issues (Huang & Paterson, 2017). High levels of SPC@CUB indicate a willingness and ability to speak up about ethical issues in the workplace.

It follows, then, that individuals high in SPC@CUB would raise their voice when confronted with unethical behavior in the workplace, thereby normalizing such behavior and encouraging a shared belief about the value of ethical dialogue. Therefore, the following hypothesis was proposed:

Hypothesis 3a (H3a): SPC@CUB predicts group ethical voice, such that the stronger one's SPC@CUB, the stronger the group ethical voice.

Psychological Safety. SPC@CUB may predict perceptions of psychological safety in organizations. Psychological safety is conceptualized as the "share belief about the consequences of interpersonal risk-taking." (Edmondson, 1999, p. 375). Previous research demonstrated that a major barrier to "speaking up" in organizations is the perception that there will be social or professional consequences to such communication (Treviño & Victor, 1992). High levels of SPC@CUB indicate an employee's belief that his or her voice will make a difference and potentially change problematic behavior (Parker, 1998), thereby changing the collective ethical culture of the organization. SPC@CUB One's confidence, in confronting another about his or her unethical behavior may indicate Therefore, the following hypothesis was proposed:

Hypothesis 3b (H3b): SPCA@SUB predicts perceptions of psychological safety, such that the stronger one's SPC@CUB, the stronger the perception of his or her psychological safety.

Chapter 3: Methods

Scale development requires multiple steps to ensure internal reliability, content validity, and construct validity (Hinkin, 1998; Carpenter, 2018). For example, Carpenter (2018) recommends ten steps in scale development and reporting: (1) researching the intended meaning and breadth of the theoretical concept; (2) determine sampling procedure; (3) examine data quality; (4) verify factorability of the data; (5) conduct Common Factor Analysis; (6) select factor extraction method (e.g., Principal Factors Analysis or Maximum Likelihood); (7) determine the number of factors; (8) rotate factors; (9) evaluate items based on a priori criteria (e.g., theoretical convergence, parsimony, and inter-item correlations); and (10) present results. Additionally, Hinkin (1998) recommends techniques for assessing the convergent and discriminant validity of a newly created measure to investigate construct validity. Therefore, the following section is organized according to Carpenter (2018) and Hinkin's (1998) criteria for developing and validating the SPC@CUB measure.

Step 1: Research the intended meaning and breadth of the theoretical concept.

Review literature regarding construct. Theory and research should have the greatest influence in informing the structure and meaning of a proposed construct (Chaffee, 1991). As recommended by Carpenter (2018), an extensive literature review was conducted to develop appropriate conceptual labels and items. This review included an evaluation of theoretical research into organizational ethics, culture, CA and CA, as well as a review of the methodologies used to measure these concepts. From this research, a conceptual definition was created, potential dimensions were identified, and items were originated. Although the conceptual definition changed based on the results of this study, at this point in the development process SPC@CUB is defined as the self-perceived absence of anxiety and self-perceived skillfulness

associated with confronting a target about a target's unethical behavior in a workplace setting. Using this conceptual definition, 22 initial survey items were developed, which were later expanded into a final list of 59 items (see Appendix D for the initial list of 22 items and Appendix E for the final list of 59 items). The following paragraphs explain the development process that unfolded in two main stages: an initial pilot study and proof of concept, followed by an expansion of items and a full study.

Qualitative research to generate and validate dimensions and items. Carpenter (2018) provides several strategies for accomplishing Step 1 with rigor. These strategies were accomplished via those recommended methods, including obtaining feedback from small groups of individuals with characteristics similar to the targeted respondents (e.g., work history, experience with unethical issues in the workplace) regarding appropriate conceptual labels, conceptual definitions, as well as to identify ambiguous, confusing, difficult, skipped, or missing questions (see a description of items below and Appendix D). Therefore, seven working adults with experience in management and supervisory roles were recruited to review generated survey items and provide feedback regarding conceptual labels and proposed items. Carpenter (2018) recommends that qualitative feedback be solicited from samples as small as five individuals, depending on the needs of the study. Responses from the seven working adults were generally positive and supportive of the conceptual design and items. Specific feedback included suggestions about wording for several questions, which were incorporated as well as comments regarding the overall design of the survey tool. For example, one respondent commented that he liked how the questions varied from positive to negative in order to prompt respondents to think carefully about their responses.

Pilot study. Also relevant to Step 1, Carpenter (2018) recommends conducting a pilot test of survey items in field conditions in order to collect quantitative data to identify skipped questions and how the data will load around each factor. In order to conduct an exploratory factor analysis, Carpenter (2018) recommends the sample size should range from 50-100 participants. Therefore, for a pilot study, 100 working adults in the United States were recruited through Amazon Mechanical Turk. Amazon Mechanical Turk is an acceptable means of sampling participants, as research has shown that this source represents a participant pool that is as diverse as traditional methods, especially as compared with those that sample college students (Burhrmester, Kwang, & Gosling, 2011). An initial exploration of the multidimensional structure of CA and CC was conducted via online survey.

The pilot study scale was developed by adapting prior research on CA (Levine & McCroskey, 1990; Scott, McCroskey, & Sheahan, 1978) and CC (Wiemann, 1977). That adaptation involved beginning with validated items that measure CA and CC, and then adding to those items language that relates specifically to ethical confrontation in the workplace. Examples of questions included, "I have no fear of speaking up in conversations about ethical issues within my organization," and "Ordinarily, I am very calm and relaxed in conversations about ethical issues in the workplace" (*see* Appendix D). Lastly, participants answered questions regarding demographic information, including sex, race, ethnicity, age, organizational tenure and job function, including whether the participant holds a supervisory role and how long the participant has held such role.

Participants and procedures. The sample for the pilot study consisted of 109 working adults. Participants consisted primarily of males (61.4%) and predominately reported a white (70.3%) race and ethnic identity. All participants reported having at least 1 year of working

experience (range = 1 – 36). A small monetary amount was awarded for participation. Participants completed an online questionnaire where they were asked to respond to the initial 22-items that were measured on a 7-point Likert-type scale (1 = *strongly agree* to 7 = *strongly disagree*). Items were designed to measure CA and CC in confronting minor unethical behavior. As explained below, an initial items list was eventually expanded to 59 items for a full study per Carpenter's (2018) recommendation that new measures should have approximately 60 items in order to ensure correct solutions and classification of items. The original 22 items served as an initial "proof of concept" and evolved upon further analysis and expert feedback.

Initial pilot study results. Carpenter (2018) recommends using common factor analysis (i.e., maximum likelihood) rather than principal components analysis on the collected data to examine common, unique, and error variances among the variables in order to develop the most parsimonious model and determine internal consistency reliabilities using Cronbach's α. Common factor analysis results tend to be more generalizable, particularly when data is normally distributed (Haig, 2005; Nunnally & Bernstein, 1994).

A maximum likelihood analysis was conducted on the initial 22 Communication Apprehension and Communication Competence in Confronting Minor Unethical Behavior (CAC@CMUB) measures (N = 109) in order to extract the minimum number of components that account for the maximum amount of variance. Items 2, 4, 5, and 8 were reverse coded because affirmative responses to these questions indicated low CA (e.g., "In general, I am comfortable when I have to discuss an ethical issue in the workplace, regardless of the severity of the issue," see Appendix D). The correlation matrix indicated satisfactory correlations among items (i.e., most items were correlated greater than |.30|). Factorability of these items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy [MSA] = .921, and Barlett's Test of

Sphericity, χ^2 [*df* = 190] = 1617.68). Additionally, all univariate MSA values were strong (all items were .877 or higher). Two items had low communalities ("If I saw an unethical action by a co-worker, I would feel comfortable confronting that person only if I knew that person well," (.268) and "I am capable of being polite while confronting a co-worker who acted unethically" (.366)). Therefore, those variables were removed and the analysis was recomputed.

A maximum likelihood analysis was recomputed on the now 20 Communication Apprehension and Communication Competence in Confronting Minor Unethical Behavior (CAC@CMUB) measure (*N* = 109) in order to extract the minimum number of components that account for the maximum amount of variance. The correlation matrix indicated satisfactory correlations among items (i.e., most items were correlated greater than |.30|). Factorability of these items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) = .919, and Barlett's Test of Sphericity, χ^2 [*df* = 153] = 1528.33). Additionally, all univariate MSA values were strong (all items were .872 or higher). Communalities were adequate (.437 - .799). Therefore, no more items were removed at this point.

Next, a scree plot was performed to determine the number of components to extract. Carpenter (2018) does not recommend eigenvalues greater than one for the development of measurement models. As anticipated, the scree plot indicated a two-component model. According to the promax pattern matrix, two items cross-loaded ["Ordinarily, I am very calm and relaxed in conversations about ethical issues in the workplace" (-.416 for Component 1 and .379 for Component 2) and "I have no fear of speaking up in conversations about ethical issues within my organization (-.051 for Component 1, .581 for Component 2)]. Therefore, these items were also deleted and the analysis was recomputed.

The maximum likelihood analysis was recomputed on the now 18 CAC@CMUB measure (N = 105). Similar to the initial factor analysis, correlations between items were satisfactory (most items > .30) and factorability of the items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) = .922, and Barlett's Test of Sphericity, χ^2 [df = 120] = 1317.26). Additionally, all univariate MSA values were good (all items were .866 or higher). Communalities were adequate (.412 - .789). Next, a scree plot was performed to determine the number of components to extract. Again, and as anticipated, the scree plot indicated a two-component model. According to the promax pattern matrix, no items cross-loaded. At this point, Cronbach's alpha indicated strong reliability (α = .95). The pilot data suggested that a two-factor model may be feasible, but further reading of best practices in scale development indicated that many more items may be needed. Furthermore, as recommended by Carpenter (2018), subject matter experts were consulted and their insights were integrated into the scale development, which helped improve construct validity of the proposed measure (see below).

Expert feedback and the addition of voice-efficacy items. Within Step 1, Carpenter (2018) also recommended obtaining expert feedback regarding item quality and overarching construct, which should include individuals with expertise in methodology and relevant subject matter regarding feedback on item quality (DeVillis, 2012). Therefore, open-ended feedback was solicited from three subject matter experts in business, management, communication and ethics, as well as methodologists familiar with social and behavioral research and measure design. These experts serve as full professors at research-intensive universities and have an extensive publishing history including peer-reviewed journal articles, textbooks, and conference papers regarding the topics relevant to this study. Key feedback from subject matter experts included comments regarding a potential lack of consistency between descriptions of behavior (e.g.,

"immoral" versus "unethical"), as well as determining whether the severity of unethical behavior should be minor, major, or unspecified. Furthermore, the concept of "unethical behavior" was added to the instructions so that the survey could be modified to eliminate that wording from each and every question. Additionally, one subject matter expert suggested a reexamination of the use of questions that describe actual behavior as opposed to questions that describe hypothetical behavior. Because the communication confidence instrument is intended to measure one's confidence about confronting unethical behavior in the workplace "in the moment," questions designed to measure hypothetical behavior, as opposed to actual experience, likely capture this construct more appropriately.

Furthermore, on the advice of the experts, several questions were developed from the voice efficacy literature to reflect the construct of "futility" and added to the instrument. Voice efficacy refers to an "individual's belief in his or her capacity to speak up" (Jian, Gao, & Yang, 2018, p. 33). Here, "futility" is a shorthand for the observation that individuals tend to refrain from speaking up when they perceive that their voice will not or cannot result in meaningful changes. Drawing from social cognitive theory (Bandura, 1986), voice efficacy in the organizational context draws on the normative expectation of organizational members regarding what is ethical or unethical, as well as the appropriateness of speaking up (Huang & Paterson, 2017). Voice efficacy has been shown to influence individuals' assessment of their personal control over a situation and is an important motivator to speak up in anxiety-producing situations (Kish-Gephhart, Detert, Treviño, & Edmondson, 2009; Morrison, 2014). Moreover, the voice efficacy literature also provides a theoretical foundation for the constructs of ethical leadership and group ethical voice (Huang & Paterson, 2017). Thus, additional items were added that were

intended to capture participants' perceptions that their voice would be or could be "fruitful" in creating meaningful changes (i.e., the positively-framed counterpart of "futility").

In the end, the survey items were modified extensively to address these concerns. At the conclusion of this process, the survey consisted of 59 items (see Appendix E). Additionally, the extensive revision included a modification of the measure's main title. The measure title now emphasizes confidence, defined as the self-perceived willingness and ability to address unethical behavior via communication with coworkers. Therefore, this measure was titled, "Self-Perceived Communication Confidence in Confronting Unethical Behavior" (SPC@CUB).

Full Study. The following section explains the methodology used to factor analyze and validate the SPC@CUB). Based on the feedback obtained in Step 1, the constructs were combined into one 59-item scale which asked about ethical infractions regardless of severity, and measured convergent and divergent validity with scales of similar content. The concept of "unethical behavior" is subjective based on a participants' characteristics or experiences (Cullen, Victor, & Bronson, 1993). Therefore, unethical behaviors were broadly defined and participants were instructed to keep these behaviors in mind when answering questions related to the participant's confidence in confronting others' unethical behavior in the workplace. This method was intended to help participants think more broadly about ethical lapses and how they would communicate when faced with unethical behavior. Respondents also answered several questions regarding work history and demographics. IRB approval was obtained and data collection was accomplished under IRB oversight.

Carpenter (2018) notes that for communication studies, a scholar should write 60 items to ultimately result in a 20-item scale. Thus, an original 59-item scale was developed to capture participants' self-perceived communication confidence (SPC@CUB) in confronting unethical

behavior. Participants were requested to respond to the 59-item SPC@CUB pilot scale using a 7-point Likert-type scale (1 = *strongly disagree* to 7 = s*trongly agree*). Sample items included "I find it easy to confront others if I see them act unethically" and "I know how to have an effective conversation to confront a co-worker who acted unethically" (*see* Appendix E). Scale reliability for this study was computed with Cronbach's alpha.

Step 2: Determine Sampling Procedure

Factor analysis requires a large sample size in order to ensure generalizability and more stable scales (Tabachnick & Fidell, 2007), as well as increasing the likelihood of attaining statistical significance (Hinkin, 1998). Carpenter (2018) recommends using between a 5:1 and 20:1 participants-to-items ratio, although she notes that there is no clear consensus among scholars. For example, a large proportion (42.8%) of published scale development studies relied on a sample size ranging from 100-200 people, although many studies with smaller sample sizes (e.g., less than 100 participants) have been published (e.g., Conway & Huffcutt, 2003). Therefore, for the full study, a 10:1 participants-to-items ratio was used to determine sample size, and a sample of 600 (600 participants:59 items) working adults in the United States were recruited through Amazon's Mechanical Turk crowdsourcing service. Participants were a diverse sample of United States residents, working adults from varying organizations, professions, and personal demographics. To be eligible to participate, individuals had to be at least 21 years of age, currently working full-time in the United States (in a position in addition to working for Amazon's Mechanical Turk), and possess at least one year of work experience. Eligible participants were paid $1.00 to complete the survey.

Steps 3 – 10: Statistical Analyses

To complete the remaining steps identified by Carpenter (2018), a common factor analysis was conducted using SPSS software to evaluate the sources of common variance. As recommended by Carpenter (2018), the maximum likelihood factor extraction method was used to determine factor loading and number of items per factor. The maximum likelihood factor extraction method maximizes the correlations between factors and variables, as well as maximizing the probability that the observed correlation matrix is representative of the sample population (Tabachnick & Fidell, 2007). Cases missing more than 50% of the data were removed. Factors were determined by analyzing correlations (at or above .30) and communalities of items (at or above .5), as well as factorability of items using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity. Items with double loading with a difference of less than .1 were removed from further consideration. Next, a scree-plot was performed to determine the number of components to extract visually, and a parallel analysis was conducted to confirm the number of components. A promax pattern matrix rotation was used to more clearly identify the scale's dimensions (Carpenter, 2018).

After conducting the exploratory factor analysis, scholars recommend assessing convergent, discriminant and predictive validity in the scale development process in order to further confirm construct validity of the measure (e.g., Hinkin, 1998). Therefore, existing scales should be put forth that, theoretically, converge or diverge with the proposed scale, as well as two predictive, dependent variables. The outcome of this assessment provides further confirmation of the construct validity of the proposed measure (Hinkin, 1998).

Convergent, Discriminant and Predictive Validity

Convergent validity assesses the extent to which the new scale correlates with other tools designed to measure similar constructs, while discriminant validity assesses the extent to which

the scale does not correlate with dissimilar constructs (Hinkin, 1998). Predictive validity measures the extent to which a scale is able to predict future behavior (Fowler, 1995). As outlined in the previous section, the SPC@CUB construct is hypothesized to converge with four established measures: (a) organizational commitment, (b) self-efficacy, (c) self-perceived CC, and (d) experience managing personnel; diverge with three established measures: (a) self-perceived CA, (b) unwillingness to communicate, and (c) verbal aggressiveness, and predict two variables: (a) group ethical voice and (b) psychological safety. Both dimensions, "fruitful" and "communication competence," were measured with each of these constructs.

Convergent variables. Four scales were used to determine convergent validity: organizational commitment, self-efficacy, self-perceived CC, and experience managing personnel.

Organization commitment (affective). An eight-item organizational commitment (affective) scale (Allen & Meyer, 1990) was used to measure the extent to which a participant is emotionally attached to his or her organization. Items were measured on a 7-point Likert-type scale (1 = *strongly disagree, 7 = strongly agree*). Sample items included "I am very happy being a member of this organization" and "This organization has a great deal of personal meaning for me" (*see* Appendix F). Previous research supports the validity of the organizational commitment scale. For example, Meyer, Paunonen, Gellatly, Goffin, and Jackson (1989) found a direct positive correlation between organizational commitment and performance. Scale reliability for this study was acceptable, Cronbach's alpha = .80. Previous internal consistency of this measure is strong (α = .87; Allen & Meyer, 1990).

Self-efficacy. The eight-item self-efficacy scale (Chen, Gully, & Eden, 2001) was used to measure an individual's self-perceived capabilities to produce certain outcomes. Items were

measured on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items included "When facing difficult tasks, I am certain that I will accomplish them" and "In general, I think that I can obtain outcomes that are important to me" (see Appendix G). To validate this scale, Chen, Gully and Eden (2001) analyzed the responses from graduate student assessments of scale items as either "general self efficacy" or "self-esteem." Results indicated that the eight-item scale is more consistent with the general self-efficacy construct than with the self-esteem construct. Additionally, general self-efficacy was shown to moderate the relationship between previous performance and subsequent exam performance (Chen, Gully, & Eden, 2001). Scale reliability for this study was strong, Cronbach's alpha = .94. Previous internal consistency of this measure is strong (α = .85; Chen, Gully, & Eden, 2001).

Self-perceived communication competence. The 36-item CC scale (Wiemann, 1977) was used to measure an individual's self-perceived competence in communicating with others in the workplace. Items were measured on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items included "I can deal with others effectively" and "I am an effective conversationalist" (see Appendix C). Research has demonstrated evidence of scale validity. For example, Query, Parry, and Flint (1992) found that individuals high in CC had more social supports and satisfaction with those supports than individuals with low CC. Scale reliability for this study was strong, Cronbach's alpha = .95. Previous internal consistency of this measure is strong (α = .96; Wiemann, 1977).

Experience managing personnel. An original six-item scale for this study was developed to measure one's experience in managing personnel. Items are measured on a 5-point Likert-type scale (1 = *never*, 5 = *always*). Sample items included "I have addressed concerns with an employee directly" and "I have provided coaching to employees regarding appropriate

workplace behavior" (*See* Appendix H). Presumably, experience managing personnel provide greater opportunity for participants to practice confronting others' unethical behavior, which, in turn, could bolster confidence and reduce apprehension about these communication situations. Scale reliability for this study was strong, Cronbach's alpha = .92.

Discriminant variables. Three scales were used to determine discriminant validity: PRCA, unwillingness to communicate, and verbal aggressiveness.

Personal report of communication apprehension. The six-item communication apprehension (dyadic) scale (McCroskey & Beatty, 1984) was used to measure an individual's self-perceived apprehension with communicating in the workplace. Items were measured on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items included "Ordinarily, I am very tense and nervous in conversations" and "I'm afraid to speak up in conversations" (*see* Appendix J). Multiple studies have demonstrated construct and criterion-related validity. For example, McCroskey, et al. (1985) found that the PRCA correlated negatively with assertiveness, and Booth-Butterfield (1988) found that high apprehensives reported greater anxiety and lower recall in certain social interactions. Scale reliability for this study was acceptable, Cronbach's alpha = .82. Previous internal consistency of this measure is strong (α = .90; McCroskey & Beatty, 1984).

Unwillingness to communicate. The 10-item unwillingness to communicate (approach-avoidance) scale (Burgoon, 1976) was used to measure an individual's willingness and comfort in communicating with others. Items were measured on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items included "I find it easy to make conversation with strangers" and "I feel nervous when I have to speak to others" (*see* Appendix K). Previous research demonstrates evidence of scale validity. For example, Burgoon (1977) found that an

individual's unwillingness-to-communicate significantly predicts total participation, information giving and information seeking. Additionally, Daly (1978) found that unwillingness to communication (approach-avoidance) positively correlates with CA, verbal reticence and sociability. Scale reliability for this study was acceptable, Cronbach's alpha = .87. Previous internal consistency of this measure is good (α = .86; Burgoon, 1976).

Verbal aggressiveness. The 20-item verbal aggressiveness scale (Infante & Wigley, 1986) was used to measure a participant's communication style when trying to influence other persons. Items were measured on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items included "When I am not able to refute others' positions, I try to make them feel defensive in order to weaken their positions" and "When I dislike individuals greatly, I try not to show it in what I say or how I say it" (*see* Appendix L). Multiple studies have confirmed the validity of the verbal aggressiveness scale. For example, Infante and Gordon (1985) found that verbal aggressiveness was negatively related to subordinates' satisfaction with their supervisor. Scale reliability for this study was strong, Cronbach's alpha = .90. Previous internal consistency of this measure is good (α = .81; Infante & Wigley, 1986).

Predictive variables. Two scales were used as dependent variables to measure the predictive validity of the SPC@CUB: Group ethical voice and psychological safety.

Group ethical voice. The six-item voice behavior scale developed by Van Dyne and LePine (1998) was used to measure group ethical voice. Items were measured on a 7-point Likert-type scale (1= *strongly disagree*, 7 = *strongly agree*). Sample items included "This group develops and makes recommendations concerning ethical issues that affect their work" and "This group communicates its opinions about ethical issues to others even if its opinion is different and others disagree with it" (see Appendix M). Multiple studies have confirmed the validity of the

group ethical voice scale. For example, Huang and Paterson (2017) found that group ethical voice positively influences group ethical performance. Scale reliability for this study was strong, Cronbach's alpha = .92. Previous internal consistency of this measure is strong (α = .93; Huang & Paterson, 2017).

Psychological safety. The seven-item psychological safety scale developed by Edmondson (1999) was used to measure psychological safety. Items were measured on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Sample items included "Members of this organization are able to bring up problems and tough issues" and "It is safe to take a risk in this organization" (see Appendix N). Multiple studies have confirmed the validity of the psychological safety scale. For example, Ashauer and Macan (2013) found that psychological safety predicted team learning behavior. Scale reliability for this study was adequate, Cronbach's alpha = .75. Previous internal consistency of this measure is adequate (α = .70; Carmeli & Gittell, 2009).

Chapter 4: Results

Participants and Procedures

The sample for the study consisted of 600 working adults. A majority of participants were male (61%) and predominately reported a white (56.9%) race and ethnic identity. All participants reported having at least 1 year of working experience (range = 1–50), and a majority of participants (69%) reported having at least 1 year of supervisory experience (range = 0–35). A small monetary amount was awarded for participation. Participants completed an online questionnaire where they were asked to respond to the initial 59-items that were measured on a 7-point Likert-type scale (1 = *strongly agree* to 7 = *strongly disagree*). Items were designed to measure participants' communication confidence in confronting unethical behavior in the workplace.

Data Analysis

Missing data, outliers and normality. The data were first analyzed to determine if the missing data were systematically or randomly missing from the variables. An analysis indicated that any missing or undesirable variables (e.g., age indicated < 18; missed attention checks) were missing cases at random (MCAR) and were therefore deleted listwise. In total, 59 cases were deleted. Next, the data were examined for univariate and multivariate outliers. For this analysis, the sample for cases and z-scores that exceeded three standard deviations plus or minus the mean on all variables were examined. Several outliers were identified for multiple variables, including SPC@CUB (n = 1), organizational commitment (n = 3), self-efficacy (n = 11), communication competence (n = 6), aggressiveness (n = 2), and group ethical voice (n = 8). Lastly, Mahalanobis D^2 was used to examine the data for multivariate outliers. Generally, a case is considered a multivariate outlier only if the probability associated with its D^2 is less than 1.001. Mahalonobis

D^2 indicated no cases of outliers. A case-by-case review revealed no systemic pattern and thus, as recommended by Hair, Anderson, Tatham, and Black (1995), these outliers were retained because there lacked demonstrable proof that they were *not* representative of any observation in the population.

Next, the data were assessed for normality. Factor analysis requires variables be normally distributed (Tabachnick & Fidell, 2007). For large sample sizes, scholars recommend determining normality by assessing skewness and kurtosis for each variable (e.g., Tabachnick & Fidell, 2007). To determine whether skewness and kurtosis values significantly deviated from normal distribution, each skewness and kurtosis was divided by its own standard errors. A visual examination of the data, as well as the standard error calculation, indicated CA and psychological safety were significantly positively skewed, while SPC@CUB, organizational commitment, self-efficacy, CC, unwillingness to communicate, verbal aggressiveness, and group ethical voice were significantly negatively skewed. Verbal aggressiveness and psychological safety had a significant negative kurtosis, while the remaining variables had a significant positive kurtosis. Logarithmic, square root, inverse, and "transformed" transformation were computed on the variables; a comparison revealed that only the "transformed" transformation significantly improved the normality of the following variables: organizational commitment (see Table 1), self-efficacy (see Table 2), CC (see Table 3), and group ethical voice (see Table 4). All other transformations did not improve normality of the data distribution. Therefore, for the post-factor analysis correlation and regression analyses, the transformed variable for organizational commitment, self-efficacy, communication competence, and group ethical voice was used, but the original data distribution for the remaining variables was retained. In total, although no outliers were removed, 38 cases that did not meet the minimum requirements for participation

(e.g., minimum age requirements, missed attention checks) were deleted, leaving 562 cases remaining for analysis.

Common factor analysis. Per Carpenter's (2018) recommendation, a common factor analysis (i.e., maximum likelihood) was computed on the collected data to examine common, unique, and error variances among the variables in order to develop the most parsimonious model and determine internal consistency reliabilities using Cronbach's α. Thus, a maximum likelihood analysis was conducted on the initial 59 Self-Perceived Communication Confidence in Confronting Unethical Behavior (SPC@CUB) measure ($N = 527$) in order to extract the minimum number of components that account for the maximum amount of variance. The correlation matrix indicated satisfactory correlations among items (i.e., most items were correlated greater than |.50|). Factorability of these items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy [MSA] = .974, and Barlett's Test of Sphericity, $\chi^2[df = 1653] = 29{,}543$; $p < .001$). Additionally, all univariate MSA values were strong (all items were .908 or higher). Three items had low communalities ("I would feel very calm in that discussion" (.395), "I know that speaking up to a co-worker who has behaved unethically will not make a difference in their future behavior" (.339), and "I would be able to articulate my thoughts easily to a co-worker about their bad behavior." (.473)). Therefore, those items were removed and the analysis was recomputed.

A maximum likelihood analysis was recomputed on the now 56 SPC@CUB measure ($N = 513$) in order to extract the minimum number of components that account for the maximum amount of variance. The correlation matrix indicated satisfactory correlations among items (i.e., most items were correlated greater than |.50|). Factorability of these items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy [MSA] = .974, and Barlett's Test of Sphericity, χ^2

[*df* = 1485] = 28,676; $p < .001$). Additionally, all univariate MSA values were strong (all items were .904 or higher). Communalities were adequate (.544 - .831). Therefore, no more items were removed at this point.

Next, a scree plot was examined to determine the number of components to extract. The scree plot indicated a six-component model. An analysis of the Promax pattern matrix was conducted. Double-loadings of less than .1 difference between factors and factors below |.5| were removed from further consideration. According to the Promax pattern matrix, thirteen items cross-loaded (e.g., "I would feel nervous in that conversation" (.496 for Component 2 and .676 for Component 3) and "I would be concerned about backlash if I confronted a co-worker about their unethical behavior" (.548 for Component 2, .575 for Component 6)). Therefore, these items were also deleted and the analysis was recomputed.

The maximum likelihood analysis was recomputed on the now 37 SPC@CUB measure (N = 527). Similar to the initial factor analyses, correlations between items were satisfactory (most items > .50) and factorability of the items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) = .971, and Barlett's Test of Sphericity, χ^2 [*df* = 666] = 18,772; $p <$ .001). Additionally, all univariate MSA values were good (all items were .893 or higher). Communalities were adequate (.463 - .80).

Next, a scree plot was performed to determine the number of components to extract. At this point, the scree plot indicated a three-component model. According to the Promax pattern matrix, two items cross-loaded ("I feel a sense of duty to speak up" (.579 for Component 1 and .383 for Component 3) and "It is my moral obligation to speak up" (.508 for Component 1 and .449 for Component 3). These items were removed and the analysis was recomputed.

The maximum likelihood analysis was recomputed on the now 35 SPC@CUB measure (N = 527). Similar to the initial factor analyses, correlations between items were satisfactory (most items > .50) and factorability of the items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) = .972, and Barlett's Test of Sphericity, χ^2 [df = 595] = 17,954; p < .001). Additionally, all univariate MSA values were good (all items were .893 or higher). Communalities were adequate (.503 – 794).

Next, a scree plot was performed to determine the number of components to extract. As with the previous analysis, the scree plot indicated a three-component model. According to the Promax pattern matrix, ten items cross-loaded (e.g., "I would not be good at talking to a co-worker if they behaved in an ethically problematic way" (.449 for Component 1 and .570 for Component 2) and "I am not confident in my ability to make change within my organization as it relates to the ethical culture (.525 for Component 1 and .585 for Component 2)). These items were removed and the analysis was rerun.

The maximum likelihood analysis was recomputed on the now 25 Self-Perceived SPC@CUB measure (N = 527). Similar to the initial factor analyses, correlations between items were satisfactory (most items > .50) and factorability of the items was strong (Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) = .973, and Barlett's Test of Sphericity, χ^2 [df = 300] = 13,795; p < .001). Additionally, all univariate MSA values were good (all items were .708 or higher; see Appendix O).

Next, a scree plot was examined to determine the number of components to extract. At this point, the scree plot indicated a two-component model. The remaining items reflected the constructs communication competence and perceptions that confrontation would matter within the organization's culture. The first component, labeled *competence*, loaded 22 items. The

second component, labeled *fruitful*, loaded three items (see Table 5). Based on a review of factors, the common shared variance of the variable SPC@CUB accounts for 70.1% of the variance. Cronbach's alpha for the SPC@CUB scale indicated strong reliability ($\alpha = .97$). Cronbach's alpha was strong for both factors, communication competence ($\alpha = .98$) and fruitful ($\alpha = .90$)

Convergent Validity Results

In addition to refining the factor structure of the SPC@CUB instrument, a related goal of the study was to establish convergent validity of the SPC@CUB instrument. The association of SPC@CUB with four variables was examined via Person correlation coefficients with: (a) organizational commitment, (b) self-efficacy, (c) CC, and (d) experience managing personnel. It was hypothesized that each scale would be positively correlated with the SPC@CUB scale. All convergent validity hypotheses were supported (see Table 6).

Organizational commitment. Hypothesis 1(a) predicted that SPC@CUB would converge significantly with organizational commitment. Analysis of the data indicated a moderate, positive association between the communication competence factor and organizational commitment, $r(559) = .40$, $p < .01$, and with the fruitful factor, $r(599) = .57$, $p < .01$. Therefore, Hypothesis 1(a) was supported. This finding indicates that individuals high in organizational commitment may correlate to increased levels of communication competence in confronting unethical behavior. This finding is consistent with the literature on the benefits of organizational commitment (i.e., organizational commitment refers to one's attachment to the organization; therefore, it may be more likely that a person high in organizational commitment would speak up to protect the culture of the organization).

Self efficacy. Hypothesis 1(b) predicted that SPC@CUB would converge significantly with self-efficacy. Analysis of the data indicated a moderate, positive association between the communication competence factor and self-efficacy, $r(559) = .49$, $p < .01$. Additionally, the fruitful factor indicated a weak positive correlation with self-efficacy, $r(599) = .13$, $p = .01$. Therefore, Hypothesis 1(b) was supported. This finding also is aligned with the literature on self-efficacy. Communication competence refers to one's ability to know what to say and how to say it in a given context to accomplish a goal. Self-efficacy and communication competence align in being goal-oriented. Similarly, a perception that voice will or can be fruitful in creating meaningful changes indicates one's belief that the taking certain communicative action matters.

Communication competence. Hypothesis 1(c) predicted that SPC@CUB would converge significantly with CC. Analysis of the data indicates a positive association between the communication competence factor and CC, $r(559) = .54$, $p < .01$, and a small, negative association with the fruitful factor, $r(599) = -.10$, $p < .05$. Therefore, Hypothesis 1(c) was partially supported. These findings indicate the need for an ethics-specific communication competence scale. Although the communication competence scale had significant correlation with communication competence factor, there was not complete alignment, indicating the importance of the context of an ethical quandary in measuring communication competence.

Experience managing personnel. Hypothesis 1(d) predicted that SPC@CUB would converge significantly with an individual's experience managing personnel. Analysis of the data indicated a moderate, positive association between the communication competence factor and experience managing personnel, $r(559) = .37$, $p < .01$, and a small negative association with the fruitful factor, $r(599) = -.09$, $p < .01$. Therefore, Hypothesis 1(d) was partially supported. This finding indicates that one's experience in managing personnel provides them with greater

confidence in confronting unethical behavior, presumably due to increased opportunities to have tough conversations and serving in positions of authority where social risks may be reduced. In other words, "practice makes perfect." Conversely, the weak and negative association between experience managing personnel and the perception that voice will be fruitful may suggest a minor amount of learned cynicism on the part of experienced personnel managers regarding whether employees' behaviors can or will change.

Discriminant Validity Results

In addition to refining the factor structure of the SPC@CUB instrument, a related goal of the study was to establish discriminant validity of the SPC@CUB scale. Correlational analyses for SPC@CUB were conducted via Person correlation coefficients with three variables: (a) CA, (b) verbal aggressiveness, (c) unwillingness to communicate (avoidance/approach). It was hypothesized that each scale would diverge from the SPC@CUB scale. All but one discriminant validity hypotheses were supported (see Table 6).

Communication apprehension. Hypothesis 2(a) predicted that SPC@CUB would diverge significantly from CA. Analysis of the data indicated a negative association between communication competence factor and CA, $r(559) = -.52$, $p < .001$, and a strong negative association with the fruitful factor, $r(559) = -.64$, $p < .01$. Therefore, Hypothesis 2(a) was supported. These findings indicate that one's communication competence in confronting unethical behavior is not correlated with one's level of CA. Therefore, although there are practical implications of investing in communication competence, organizations should take additional steps to create an organizational culture that alleviates employee apprehension. It is unsurprising that the fruitful factor diverged with communication apprehension, as apprehension

highlight an individual's feeling of fear or hopelessness in taking action, while perceptions of voice fruitfulness imply a belief that action can or will result in meaningful changes.

Verbal aggressiveness. Hypothesis 2(b) predicted that SPC@CUB would diverge significantly from verbal aggressiveness. Analysis of the data indicated a slight, negative association between the communication competence factor and verbal aggressiveness, $r(559) = -.06$ $p < .01$, and a negative association with the voice fruitfulness factor, $r(559) = -.58$, $p < .01$. Therefore, Hypothesis 2(b) was supported. This finding is interesting for several reasons that warrant further research. On one hand, it makes sense to see a negative correlation between communication competence and verbal aggressiveness. After all, communication competence indicates an ability to communicate effectively in a given situation, while verbal aggressiveness indicates a lack of finesse. On the other hand, one might expect that a person high in verbal aggressiveness would be a strong, straightforward communicator in the context of confronting unethical behavior.

Unwillingness to communicate (avoidance/approach). Hypothesis 2(c) predicted that SPC@CUB would diverge significantly from unwillingness to communicate (avoidance/approach). Contrary to the hypothesis, analysis of the data indicated a moderate, *positive* association between the communication competence factor and unwillingness to communicate, $r(559) = .51$, $p < .01$, and a strong, negative association with the voice fruitfulness factor, $r(559) = -.67$, $p < .01$. Therefore, Hypothesis 2(a) was partially supported. Although the communication apprehension dimension was not part of the final SPC@CUB measure, this finding may support the significance of CA in confronting unethical behavior. In other words, even when an individual is a highly competent communicator, there are still reasons influencing

their decision to speak up. Future research should explore the relationship between unwillingness to communicate with communication apprehension and SPC@CUB.

Predictive Validity Results

In addition to refining the factor structure of the SPC@CUB instrument, a related goal of the study was to establish predictive validity of the SPC@CUB scale. A bivariate regression analysis was conducted with SPC@CUB factors (communication competence and fruitful) as the independent variables with two variables: (a) group ethical voice and (b) psychological safety. It was hypothesized that each scale would be significantly predicted by the SPC@CUB scale. The regression analysis revealed that SPC@CUB moderately predicts group ethical voice and psychological safety with moderate strength.

Group ethical voice. Hypothesis 3(a) posited that SPC@CUB would be a significant positive predictor of group ethical voice. The results of a bivariate regression analysis were significant for the communication competence factor, $F(1,560) = 213.00$, $p < .001$, adjusted $R^2 = .27$. Individuals reported the communication competence factor ($\beta = .41$, $t = 14.6$, $df = 561$, $p < .001$) is positively predictive of individuals' reported group ethical voice. When controlled for race, there was a small, significant difference in the predictive value of the communication competence factor for whites as compared to non-whites (R^2 change = .01; $p < .01$). However, there was no significant difference in the predictive value of the communication competence factor when controlling for sex.

The results of the regression analysis for the voice fruitfulness factor indicated no significant prediction of individuals' reported group ethical voice, $F(1,560) = 251.00$, $p > .05$, adjusted $R^2 = .00$. Individuals reported the fruitful factor is not significantly predictive of individuals' group ethical voice ($\beta = .-.020$, $t = 20.98$, $df = 605$, $p < .001$. There was no

significant difference in the predictive value of the fruitful factor when controlled for sex. However, when controlled for race, white respondents indicate a significant difference in the predictive value of the fruitful factor as compared to nonwhite participants (R^2 change = .31; $p <$ .00. Therefore, Hypothesis 3(a) was partially supported (see Table 7).

Psychological safety. Hypothesis 3(b) posited that SPC@CUB would be a significant positive predictor of psychological safety. The results of a bivariate regression analysis were significant for the communication competence factor, $F(1,560) = 39.1$, $p < .001$, adjusted $R^2 =$ .18). Individuals reported SPC@CUB ($\beta = .26$, $t = 8.35$, $df = 561$, $p < .001$) was slightly positively predictive of reported psychological safety. When controlled for sex, there was no significant difference in the predictive value of the communication competence factor. However, when controlled for race, white respondents indicate a significant difference in the predictive value of the communication competence factor as compared to nonwhites (R^2 change = .11, $p <$ .00).

The results of a bivariate regression analysis were significant for the voice fruitfulness factor, $F(1,560) = 177.37$, $p < .001$, adjusted $R^2 = .23$). Individuals reported the fruitful factor (β = .48, $t = 8.35$, $df = 605$, $p < .001$) was slightly positively predictive of reported psychological safety. Individuals reported the fruitful factor is not significantly predictive of individuals' group ethical voice (β = .-.020, $t = 20.98$, $df = 559$, $p < .001$. When controlled for sex, there was no significant difference in the predictive value of the fruitful factor (R^2 change = 005; $p > .05$). When controlled for race, white respondents indicate a small, significant difference in the predictive value of the fruitful factor (R^2 change = .05, $p <$ .00). Therefore, Hypothesis 3(b) was partially supported (see Table 8).

Chapter 5: Discussion

Theoretical Contributions and Directions for Future Research

The primary goals of this study were to create two original measures of Self-Perceived Confidence in Confronting Unethical Behavior ($SPC@CUB_{competence}$ and $SPC@CUB_{fruitful}$) and determine the instruments' convergent, discriminant, and predictive validity. Overall, the study met these goals by establishing the instruments' dimensions via exploratory factor analysis and assessing convergent, discriminant and predictive validity with other previously validated and conceptually relevant measures. Factor analytic procedures produced a simplified two-factor measure of 25 items after an iterative process of examination and removal of weak items. A communication apprehension dimension was not supported by the EFA with the large sample of working adults. However, an alternative secondary dimension of voice fruitfulness was supported, which reflects questions derived from the voice-efficacy literature.

This section describes the study's findings, contributions to extant literature, implications, and proposes direction for future research as follows: (a) $SPC@CUB_{competence}$ provides further evidence that speech context is influential in determining one's self-perceived CC; (b) practicing difficult discussions involving ethical confrontation may result in greater organizational moral learning capacity; (c) $SPC@CUB_{competence}$ and $SPC@CUB_{fruitful}$ may support bystander intervention approaches by offering the idea that training employees how to intervene when a co-worker engages in unethical behavior will increase the likelihood of speaking up in the face of unethical behavior; (d) $SPC@CUB_{competence}$ and $SPC@CUB_{fruitful}$ has important implications for creating and sustaining ethically excellent organizational culture; (e) perceptions of voice-fruitfulness influences self-perceived confidence at confronting unethical behaviors,; and (f) $SPC@CUB_{competence}$ reinforces the idea that CC will ameliorate the anxiety-

producing event of confronting a co-worker about his or her unethical behavior. Lastly, practical implications and limitations of the study are discussed.

First, these results contribute to the CC literature by providing further evidence of the importance of speech context in influencing one's perceived CC (Cupach & Spitzberg, 1983). Modern communication research supports the notion that individual CC is largely influenced by contextual situatedness, as opposed to being merely trait based (Cupach & Spitzberg, 1983; Perotti & DeWine, 1987). Literature on CC suggests that skillful communication requires sensitivity to normative expectation so that appropriate behavior can be performed within the confines of a given social context (Weimann, 1977; Weimann & Backlund, 1980). CC is distinguishable from behavior or performance, and "requires not only the ability to perform adequately certain communication behaviors, it also requires an understanding of those behaviors and the cognitive ability to make choices among behaviors" (McCroskey, 1984, p. 264; Jablin & Sias, 2001). Therefore, a CC perspective suggests that organizational members are responsible for communicating within the boundaries of professional and organizational social norms in performing communication skillfully (i.e., a range of acceptable and unacceptable behavior; Kish-Gephart, Harrison, & Treviño, 2010). Equipping organizational members with communicative tools to confront unethical behavior successfully would benefit the overall organizational culture. These findings demonstrated that @SPC@CUB$_{competence}$ somewhat converges with, yet remains sufficiently distinct from, the standard self-perceived CC measure (see H1c result). Therefore, this finding supports the notion that a specific scale that measures CC specific to the context of confronting unethical behavior in the workplace is warranted over and above the standard measure. Further research is needed to validate and refine the SPC@CUB$_{competence}$ scale in various organizational contexts.

Second, these results contribute to emerging literature on organizational moral learning the idea that practice having difficult discussions will enhance self-perceived communication confidence in confronting unethical behavior. Organizational learning refers to the manner by which organizations detect and correct errors and adjust subsequent actions accordingly to adapt to the situation at hand (Argyris & Schön, 1978; Bisel, 2018). Organizational *moral* learning refers to the "adaption of work according to members' communication about their moral intuiting" (Bisel, 2018, p. 175), which requires *capacity* or *readiness* to engage in conversations about ethics (Bisel, 2018). Additionally, prior research demonstrated organizational learning is largely dependent on organizational communication and the shared meaning that develops from such communication (Bisel, 2018; King, 2003; Simon, 1991). This study found that organizational members who have experience in managing personnel tend to report greater confidence in confronting unethical behavior. In other words, confidence benefits from practice.

As individuals practice confronting others' unethical behavior, they tend to grow in their self-confidence in having such conversations. By implication, organizational members' greater confidence should enhance their organization's moral learning capacity in that its social system is better primed to have difficult conversations in the future and therefore more ready to correct ethical lapses more rapidly. These data suggest that organizational members who regularly engage in conversations about ethics demonstrate an increased capacity to engage in such conversations because they feel better equipped with what to say and how to say it. By implication, therefore, this capacity readies an organization to adapt when faced with an organizational moral learning event (Bisel, 2018). While this study measured the relationship between more general experience managing personnel (e.g., coaching and confronting) with communication confidence in confronting unethical behavior, future research should examine

whether experience confronting specifically unethical behavior in the workplace correlates with increased confidence and subsequent follow-through in confronting unethical behavior.

Third, these results contribute to the bystander intervention literature the idea that training employees how to intervene when a co-worker engages in unethical behavior may increase the likelihood of engaging in that desired communication. Bystander training has an unsubstantiated assumption that bystanders perceive themselves to be capable in communicating confrontationally. Nevertheless, prior research has shown evidence that incorporating early intervention strategies into employee training and development program could help improve internal safety in the context of bullying and intimate partner violence (Lassiter, Bostain, & Lentz, 2018; see also Moynihan, Banyard, Cares, Potter, Williams, & Stapleton, 2014; Potter, Moynihan, Stapleton, & Banyard, 2009). Other research into bystander intervention training demonstrated positive correlations between bystander intervention training and employee affective well-being and job commitment (Kim, Gevers, Rispens, & Demerouti, 2017). Moreover, similar to the literature on competence, bystander intervention literature tells us that one's perceived ability to speak up may be increased through certain interventions (e.g., training; Lassiter et al., 2018). These results indicate that many bystander training recipients will likely lack much needed confidence in knowing how and what to say to address observed unethical behavior in the workplace. Bystander intervention trainings may benefit from incorporating the SPC@CUB$_{competence}$ measure to gauge the effectiveness of the training. Future research should incorporate pre- and post-test designs to measure the efficacy of coupling bystander intervention trainings with SPC@CUB interventions simultaneously. Moreover, future research should examine the effectiveness of such intervention programs on influencing future employee behavior in the context of confronting unethical behavior.

Fourth, these results contribute to the organizational culture literature, by implication, the idea that organizational members' self-perceived communication confidence may be important for creating and sustaining an ethically excellent organizational culture. Organizational communication scholarship demonstrated consistently that organizations' cultures are reproduced by the informal network of talk, interaction, and example-setting that aggregate across time (Dougherty & Smythe, 2004; Keyton, 2011). A failure to speak up in the face of unethical behavior normalizes such behavior, even potentially sending the message that unethical behavior is deemed to be an acceptable action within the organization (Kish-Gephart, Harrison, & Treviño, 2010). Future research should examine whether the SPC@CUB constructs influence the actual behavior of speaking up in the face of unethical behavior. In other words, do individuals who report high levels of $SPC@CUB_{competence}$ and $SPC@CUB_{fruitful}$ engage in such confrontations when they arise? While one of the strengths of this study is that it captured a wide range of participant demographics (e.g., age, years of work experience, industries), one limitation is that this method failed to capture a shared cultural influence that may be evident by conducting research in specific organizations. Given these limitations, future research should examine the SPC@CUB constructs in terms of its association with an organizational culture measure. In other words, does the organizational culture reflect the levels of $SPC@CUB_{competence}$ and $SPC@CUB_{fruitful}$ of its employees? Additionally, future research should also explore the communication confidence construct in the context of supervisor-subordinate relationships. For example, does a supervisor's reported levels of $SPC@CUB_{competence}$ and $SPC@CUB_{fruitful}$ correlate with the reported level of his or her subordinates or teams? Results of such studies would enhance the organizational culture and ethics literatures by demonstrating the extent to

which the SPC@CUB constructs influence action in context, resulting in cultural improvements to ethically excellent behavior.

Fifth, these results contribute to the voice efficacy literature the idea that one's perception of voice futility in regard to confronting another's unethical behavior influences one's overall confidence in confronting that behavior. Voice efficacy refers to "an individual's belief in his or her capacity to speak up" (Jiang, Gao, & Yang, 2018, p. 33). Employees with higher voice efficacy likely view themselves to be in control of the situation, as opposed to those with low voice-efficacy (Kish-Gephhart et al., 2009). Additionally, voice efficacy plays a key role in assisting employees in overcoming anxiety related to certain speech situations (Jiang et al., 2018; Morrison, 2014). This study found that when individuals perceive their confrontation could be capable of affecting change, they had greater self-perceived communication confidence in speaking up. However, the "fruitful" factor (i.e., the positively framed counterpart of voice futility) was a small contributor to the overall communication confidence as compared to the competence factor. Therefore, future research should examine the extent to which organizational culture influences an employee's communication confidence. In other words, it may be hypothesized that while culture will not necessarily influence competence, culture likely influences one's perception that his or her voice has the potential to make a difference, therefore increasing collective *confidence*. This vein of research may be used to further validate the SPC@CUB scale by determining the strength and necessity of the "fruitful" factor (i.e., perceptions of whether voice will be "fruitful") in understanding communication confidence in confronting unethical behaviors.

Sixth, these results contribute to the ethics literature the idea that communication confidence in confronting unethical behavior provides an alternative explanation for why people

refrain from such confrontations. Previous ethics research highlighted that confronting unethical behavior directly can be a complex exercise in relational management, including navigating the concern of damaging relationships and creating threats to public image (Morrison, Milliken, & Hewlin, 2003). Interestingly, the items derived from the CA literature did not load well on the overall SPC@CUB instrument. A post hoc investigation revealed that scores on apprehension items tended to be above the scale midpoint, and somewhat high (*Mean* = 4.79, *Median* = 4.96, and *Mode* = 4.96), indicating most participants "somewhat agree" with items such as "I would feel nervous in that conversation" and "I would be afraid to speak up in that communication situation." A comparison of those indicators of central tendency to the central tendency of the final $SPC@CUB_{competence}$ scale items (*Mean* = 3.97, *Median* = 3.78, and *Mode* = 3.33) suggests working-adult participants' scores were more evenly and moderately distributed on the competence factor than the apprehension-based items. Results of the EFA revealed that apprehension items did not contribute to the overall measure of communication confidence indicating that anxiety at the thought of confronting unethical behavior was a consistent challenge for working-adult participants. In other words, even if one reports high confidence in confronting unethical behavior, that person will still likely experience a significant amount of anxiety in that communication situation.

This study demonstrated that levels of CA were relatively high in the context of confronting unethical behavior in organizations. Yet, findings indicated that CA does not load as consistently with other items as those designed to capture competence and efficacy in confronting unethical behavior. While there is some research indicating CC can ameliorate the anxiety-producing effects of confronting unethical behavior (Arroyo & Harwood, 2010), future research should examine CA in the communication situation of confronting unethical behavior,

as well as investigate the potential interaction effects of communication apprehension and SPC@CUB$_{competence}$ as well as SPC@CUB$_{fruitful}$ with individual follow-through of confronting unethical behavior in context. Furthermore, it may be advisable for leaders to dedicate organizational resources to teaching employees *what* to say and *how* to say it. Future research should use experimental techniques to measure the effect of organizational interventions (e.g., trainings, coaching) on CC and subsequent correlations with CA, and speaking up in the here-and-now about private ethical concerns.

Limitations and Practical Implications

Limitations. Taken together, the two dimensions measured by the SPC@CUB instrument represent an empirically-derived conceptualization of communication confidence in confronting unethical behavior in organizations. The SPC@CUB instruments provide a survey tool for organizations to measure employees' confidence in confronting unethical behavior in organizations. The SPC@CUB instruments' potential utility should be interpreted within the limitations of the study. The study conclusions must be considered in light of the limitations associated with a cross-sectional study conducted with an online sample of participants that did not share a single organizational culture. While this method is sufficient in developing an initial measure, as it captures a wide variety of age, sex, work experience, and industry, future studies are needed to confirm the instrument's validity in context. Additionally, the measure has not yet been subjected to a confirmatory factor analysis, as recommended by organizational researchers and methodologists (e.g., Hinkin, 1995).

Practical implications. Consistent with the literature on CC, an individual's perceived confidence in his or her ability to communicate concerns effectively may motivate that person to speak up when situations do not seem right (McKinley & Perino, 2013). Therefore, the

SPC@CUB instruments may serve as a useful tool for organizations to identify highly confident communicators and measure baseline confidence of employees in confronting ethically problematic behavior. Identifying communicators with strong SPC@CUB$_{competence}$ and SPC@CUB$_{fruitful}$ could be a way for organizations to determine whether ethics confronters are evenly and appropriately distributed throughout the organization. Also, this measure may provide organizations with the empirical data necessary to develop training programs for employees and supervisors in order to cultivate the communication skills needed to confront unethical behavior. Furthermore, individuals who are identified as highly confident communicators may be selected to provide leadership or mentorship as it relates to the organization's ethics program. Consistent with the literature on bystander intervention training, incorporating early intervention strategies into employee training and development programs could help improve employees' self-perceived communication confidence in confronting bad behavior when they see it. Assuming confidence translates into action, management should implement employee trainings or education geared toward equipping employees with the communicative tools to engage in uncomfortable conversations.

Conclusion

Here-and-now ethical talk matters to an organization's moral wellbeing. The barriers that exist to address unethical infractions are engrained as a normal part of organizational life. However, these barriers are not insurmountable. By addressing minor unethical infractions before they become major organizational routines, employees can play a significant role in constructing and sustaining an ethically-excellent organizational culture. As such, it is important to understand the cultural contexts and individual barriers that influence the occurrence of morally authentic dialogue. This research explored several of those variables: communication

apprehension, communication competence, and voice efficacy in the context of confronting unethical behavior. By understanding these variables and recognizing the potential for intervention, organizational leaders can better recognize the needs of the organizational members and intervene to improve communication confidence to the ethical betterment of organizational life.

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Appendix A

Personal Report of Communication Apprehension (Scott, McCroskey, & Sheahan, 1978*)*

Instructions: These questions are designed to help gain a better understanding of your communication apprehension in the workplace. Please indicate how strongly you agree or disagree with the following items:

1. People can usually count on me to keep a conversation going. [R]
2. Conversing with people who hold positions of authority is something I really enjoy. [R]
3. I feel self-conscious when I am called upon to answer a question or give an opinion.
4. I am basically an outgoing person. [R]
5. When I have to represent my organization to another group I feel very tense and nervous.
6. I am afraid to express myself in a group.
7. When I'm with other people, I often have difficulty thinking of the right things to say.
8. I enjoy fielding questions at a meeting. [R]
9. I'm afraid to speak up in conversations.
10. I look forward to an opportunity to speak in public. [R]
11. In most situations, I generally know what to say to people. [R]
12. I enjoy talking to my subordinates. [R]
13. I talk less because I'm shy.
14. I am fearful and tense all the while I am speaking before a group of people.
15. Talking to my supervisor makes me nervous.
16. I like to get involved in group discussions. [R]
17. Conversing with people who hold positions of authority causes me to be fearful and tense.
18. I enjoy representing my organization to other groups. [R]

19. I look forward to interviewing people applying for a job as my subordinate. [R]

20. I consider myself to be the silent type.

Appendix B

Personal Report of Communication Apprehension (PRCA-24; McCroskey, 1982)

Instructions: These questions are designed to help gain a better understanding of your communication apprehension in the workplace. Please indicate how strongly you agree or disagree with the following items:

1. I dislike participating in group discussions.
2. Generally, I am comfortable while participating in a group discussion. [R]
3. I am tense and nervous while participating in group discussions.
4. I like to get involved in group discussions. [R]
5. Engaging in a group discussion with new people makes me tense and nervous.
6. I am calm and relaxed while participating in group discussions. [R]
7. Generally, I am nervous when I have to participate in a meeting.
8. Usually I am calm and relaxed while participating in meetings. [R]
9. I am very calm and relaxed when I am called upon to express an opinion at meetings. [R]
10. I am afraid to express myself at meetings.
11. Communicating at meetings usually makes me uncomfortable.
12. I am very relaxed when answering questions at meetings. [R]
13. While participating in a conversation with a new acquaintance, I feel very nervous.
14. I have no fear of speaking up in conversations. [R]
15. Ordinarily I am very tense and nervous in conversations.
16. Ordinarily I am very calm and relaxed in conversations. [R]
17. While conversing with a new acquaintance, I feel very relaxed [R]
18. I'm afraid to speak up in conversations.
19. I have no fear of giving a speech. [R]

20. Certain parts of my body feel very tense and rigid while giving a speech.

21. I feel relaxed while giving a speech. [R]

22. My thoughts become confused and jumbled when I am giving a speech.

23. I face the prospect of giving a speech with confidence. [R]

24. While giving a speech I get so nervous, I forget facts I really know.

Scale: 1 – *strongly disagree;* 7 = *strongly agree*

Appendix C

Communication Competence (Wiemann, 1977)

Instructions: These questions are designed to help gain a better understanding of your communication competence in the workplace. Please indicate how strongly you agree or disagree with the following items.

1. I find it easy to get along with others.
2. I can adapt to changing situations.
3. I treat people as individuals.
4. I interrupt people too much. [R]
5. I am rewarding to talk to.
6. I can deal effectively with others.
7. I am a good listener.
8. My personal relations are cold and distant. [R]
9. I am easy to talk to.
10. I won't argue with someone just to prove I am right.
11. My conversational behavior is not "smooth." [R]
12. I ignore other people's feelings. [R]
13. I generally know how others feel.
14. I let other people know I understand them.
15. I understand other people.
16. I am relaxed and comfortable when speaking.
17. I listen to what people say to me.
18. I like to be close and personal with people.
19. I generally know what type of behavior is appropriate in any given situation.

20. I usually do not make unusual demands on my friends.

21. I am an effective conversationalist.

22. I am supportive of others.

23. I do not mind meeting strangers.

24. I can easily put myself in another person's shoes.

25. I pay attention to the conversation.

26. I am generally relaxed with conversing with a new acquaintance.

27. I am interested in what others have to say.

28. I don't follow the conversation very well. [R]

29. I enjoy social gatherings where I can meet new people.

30. I am a likeable person.

31. I am flexible.

32. I am not afraid to speak with people in authority.

33. People can come to me with their problems.

34. I generally say the right thing at the right time.

35. I like to use my voice and body expressively.

36. I am sensitive to others' needs of the moment.

Scale: 1 – *strongly disagree;* 7 = *strongly agree*

Appendix D

Communication Competence and Communication Apprehension (CCA@CUB) in Confronting Minor Unethical Behavior (22-Item Pilot Study Version)

Instructions: These questions are designed to help gain a better understanding of employee apprehension and employee competence in confronting minor ethical infractions in the workplace. Please indicate how strongly you agree or disagree with the following items:

1. Generally, I am nervous when I have to discuss an ethical issue in the workplace, regardless of the severity of the issue. [R]
2. In general, I am comfortable when I have to discuss an ethical issue in the workplace, regardless of the severity of the issue.
3. Communicating at meetings about ethical issues within my organization usually makes me uncomfortable. [R]
4. I have no fear of speaking up in conversations about ethical issues within my organization.
5. Ordinarily, I am very calm and relaxed in conversations about ethical issues in the workplace.
6. I am afraid to speak up in conversations about ethical issues even when those issues are small. [R]
7. If I saw wrongdoing by a co-worker, I would be afraid to confront them directly. [R]
8. If I saw a co-worker do something unethical, I would feel comfortable confronting that person about their actions, regardless of how well I know that person.
9. If I saw an unethical action by a co-worker, I would feel comfortable confronting that person about their behavior only if I knew that person well.
10. If I saw my co-worker do something unethical, I would feel nervous and tense about addressing the issue with that person. [R]

11. If I saw someone in the organization act immorally, I would rather someone else talk to that person about it. [R]
12. I find it easy to confront others if I see them act unethically.
13. I know how to have an effective conversation to confront a co-worker who behaved immorally.
14. I know how to have an appropriate conversation to confront a co-worker who acted unethically.
15. I am confident I can get my point across when confronting a co-worker about their unethical actions.
16. I am skillful in expressing my ideas clearly when confronting a co-worker who acted unethically.
17. I am capable of being polite while confronting a co-worker who acted unethically.
18. I am confident in my ability to confront a co-worker about their unethical behavior.
19. I know I have the communication skills to confront a co-worker who has behaved immorally.
20. I am capable of balancing the need to get my point across with the need to be friendly while confronting unethical behavior.
21. I am skillful in navigating a difficult conversation with a co-worker about their unethical actions.
22. I am confident I will saw the right thing at the right time when confronting a co-worker who acted unethically.

Scale: 1 = *strongly disagree;* 7 = *strongly agree*

Appendix E

Self-Perceived Communication Confidence in Confronting Unethical Behavior (SPC@CUB) (59-Item Full Study)

Instructions: Indicate how much you agree with the following statements about confronting a co-worker about their unethical behavior at work. As you answer, please indicate your level of agreement within the SPECIFIC CONTEXT of confronting a co-worker about their UNETHICAL behavior in the workplace.

1. I would feel nervous in that conversation [R]
2. I would feel comfortable having that conversation.
3. I would be very calm during that discussion.
4. I would be afraid to speak up in that communication situation [R]
5. If I saw wrongdoing by a co-worker, I would be afraid to confront them directly. [R]
6. If I saw someone in the organization act unethically, I would rather someone else talk to that person about it. [R]
7. I would freeze up if I had to talk to a co-worker about their ethically problematic behavior. [R]
8. I would find it easy to confront a co-worker if I saw them act unethically.
9. I would know how to have an effective conversation to confront a co-worker who behaved unethically.
10. I would know how to have an appropriate conversation to confront a co-worker who acted unethically.
11. If I confronted a co-worker who behaved unethically, I would be skillful in expressing my thoughts.
12. I know I have the communication skills to confront a co-worker who behaved badly.

13. I would be skillful in navigating a difficult conversation with a co-worker about their wrongdoing.
14. I am confident I would say the right thing at the right time when confronting a co-worker who acted unethically.
15. I would be skillful at handling conversations about others' unethical behavior in the workplace.
16. People would look to me to confront others about their unethical behavior because I know what to say.
17. I would not be good at talking to a co-worker if they behaved in an ethically problematic way. [R]
18. My stomach feels queasy at the thought of confronting a co-worker about their unethical behavior. [R]
19. If I saw a co-worker make a decision that goes against the organization's ethical principles, I would feel confident in talking to that person about it.
20. I would fumble over my words if I had to discuss a co-worker's unethical behavior with them. [R]
21. I would not have a problem talking to co-workers about their bad behavior.
22. I would worry about my reputation if I were to confront a co-worker about their unethical behavior. [R]
23. If I were to confront a co-worker about their unethical behavior, I would worry about damaging that relationship. [R]
24. If I were to confront a co-worker about their unethical behavior, I would be concerned about social fallout. [R]

25. I would be concerned about backlash if I confronted a co-worker about their unethical behavior. [R]
26. I feel comfortable confronting a co-worker about their unethical behavior, regardless of that person's role within the organization.
27. I worry people would think I'm a "good two-shoes" if I confronted a co-worker about their unethical behavior. [R]
28. I am comfortable with the thought of confronting a co-worker about their unethical behavior.
29. I would know how to have a conversation with someone who has made an unethical choice.
30. I would be able to find the right words to communicate with someone about why their behavior is unethical.
31. I would do a good job communicating why someone's behavior is wrong, while still maintaining a friendly relationship.
32. I would be able to confront a co-worker about their unethical behavior without that person feeling "attacked."
33. I would be able to articulate my thoughts easily to a co-worker about their bad behavior.
34. I would be prepared to be a leader by calling out others when they act in ways that go against the organization's ethical code.
35. I do not feel that I would be skilled enough to have a conversation with a co-worker about their unethical behavior. [R]
36. I know I would be able to find the words to describe to a co-worker why their behavior was ethically problematic.

37. My co-workers see me as a leader in maintaining the organization's ethical culture.
38. I feel a sense of duty to speak up when I see someone acting unethically.
39. I feel motivated to say something when I see someone behaving badly in the workplace.
40. It is my moral obligation to speak up when someone behaves unethically in the workplace.
41. I know I have the right training to effectively confront a co-worker who has behaved unethically.
42. I am capable of effectively speaking up when I see a co-worker act unethically.
43. I am capable of effectively navigating a conversation with a co-worker about their unethical behavior.
44. I am confident my voice makes a difference in the ethical culture of my organization.
45. I know that peers and managers listen when I speak about ethical issues in the workplace.
46. I know that confronting a co-worker about their unethical behavior will make a difference in their future choices.
47. I am confident that voicing my concerns to a co-worker who has acted unethically will change their behavior for the better.
48. I am capable of effectively confronting a co-worker who has acted unethically.
49. I know that speaking up to a co-worker who has behaved unethically will not make a difference in their future behavior. [R]
50. I am not capable of effectively confronting a co-worker about their unethical behavior. [R]
51. There is no point in confronting a co-worker about their unethical behavior because nothing will change. [R]

52. It would be a waste of my time to speak up to a co-worker who has acted unethically. [R]
53. I am confident that speaking up will change my organization's ethical culture for the better.
54. I am capable of effectively getting my point across to a co-worker who behaves badly.
55. I am capable of effectively addressing unethical behavior in the workplace.
56. I am not confident in my ability to make change within my organization as it relates to the ethical culture. [R]
57. I am not capable of effectively persuading a co-worker that their behavior is unethical. [R]
58. I am confident I have the skills to convince a co-worker that they acted unethically.
59. Management would back me up if there were social backlash after confronting a co-worker about their bad behavior.
60. It would be futile to spend the energy confronting a co-worker about their unethical behavior. [R]

Scale: 1 – *strongly disagree;* 7 = *strongly agree*

Appendix F

Organizational Commitment (*affective*) (Meyer & Allen, 1990)

Instructions: The following questions are intended to measure an employee's commitment to his or her organization. Please indicate how strongly you agree or disagree for each question.

1. I am very happy being a member of this organization.
2. I enjoy discussing about my organization with people outside it.
3. I really feel as if this organization's problems are my own.
4. I think that I could easily become as attached to another organization as I am to this one. [R]
5. I do not feel like "part of the family" at my organization. [R]
6. I do not feel "emotionally attached" to this organization. [R]
7. This organization has a great deal of personal meaning for me.
8. I do not feel a "strong" sense of belonging to my organization. [R]

Scale: 1 – *strongly disagree;* 7 = *strongly agree*

Appendix G

Self-Efficacy (Chen, Gully, & Eden, 2001)

Instructions: These questions are designed to provide a better understanding of your capabilities to produce certain outcomes. Please indicate how strongly you agree or disagree with the following items.

1. I will be able to achieve most of the goals that I have set for myself.
2. When facing difficult tasks, I am certain that I will accomplish them.
3. In general, I think that I can obtain outcomes that are important to me.
4. I believe I can succeed at most any endeavor to which I set my mind.
5. I will be able to successfully overcome many challenges.
6. I am confident that I can perform effectively on many different tasks.
7. Compared to other people, I can do most tasks very well.
8. Even when things are tough, I can perform quite well.

Scale: 1 – *strongly disagree;* 7 = *strongly agree*

Appendix H

Experience Managing Personnel (original)

Instructions: Please indicate how often you have experienced the following situations with employees or personnel in your workplace.

1. I have addressed concerns with an employee directly.
2. I have engaged in official conversations to correct an employees' behavior.
3. I have provided guidance or coaching to employees regarding appropriate workplace behavior.
4. I have provided formalized feedback to other employees.
5. I have needed to document plans to improve employees' behavior.
6. I have engaged in conversations with an employee to correct his or her performance.

Scale: 1 = *never*; 5 = *always*

Appendix I

Experience with Unethical Behavior in the Workplace (original)

Instructions: Thinking about your work experience, how often have you:

1. Observed co-workers acting unethically.
2. Heard about co-workers acting unethically.
3. Confronted a co-worker who acted unethically.
4. Observed leaders acting unethically.
5. Heard about leaders acting unethically.
6. Confronted a leader who acted unethically.

Scale: 1 = *never*; 5 = *always*

Appendix J

Communication Apprehension (Dyadic) (McCroskey & Beatty, 1984)

Instructions: These questions are designed to help gain a better understanding concerning your feelings about communicating with other people. Please indicate how strongly you agree or disagree with the following items.

1. I'm afraid to speak up in conversations.
2. While participating in a conversation with a new acquaintance, I feel very nervous.
3. I have no fear of speaking up in conversations. [R]
4. Ordinarily, I am very tense and nervous in conversations.
5. Ordinarily, I am very calm and relaxed in conversations. [R]
6. While conversing with a new acquaintance, I feel very relaxed. [R]

Scale: 1 = *strongly disagree;* 7 = *strongly agree*

Appendix K

Unwillingness to Communicate (Burgoon, 1974)

Instructions: These questions are designed to provide a better understanding of the willingness with which you communicate. Please indicate how strongly you agree or disagree with the following items.

1. I am afraid to speak up in conversations. [R]
2. I talk less because I'm shy. [R]
3. I like to get involved in group discussions.
4. I talk a lot because I am not shy.
5. I have no fears about expressing myself in a group.
6. I avoid group discussions. [R]
7. I am afraid to express myself in a group. [R]
8. During a conversation, I prefer to talk rather than listen.
9. I find it easy to make conversation with strangers.
10. I feel nervous when I have to speak to others. [R]

Scale: 1 = *strongly disagree;* 7 = *strongly agree*

Appendix L

Verbal Aggressiveness (Infante & Wigley, 1986)

Instructions: These questions are concerned with how we try to get people to comply with our wishes. Please indicate how often each statement is true for you personally when you try to influence other people.

1. I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas. [R]
2. When individuals are very stubborn, I use insults to soften the stubbornness.
3. I try very hard to avoid having other people feel bad about themselves when I try to influence them. [R]
4. When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable.
5. When others do things I regard as stupid, I try to be extremely gentle with them. [R]
6. If individuals I am trying to influence really deserve it, I will attack their character.
7. When people behave in ways that are in poor taste, I insult them in order to shock them into proper behavior.
8. I try to make people feel good about themselves even when their ideas are stupid. [R]
9. When people simply will not budge on a matter of importance, I lose my temper and say rather strong things to them.
10. When people criticize my shortcomings, I take it in good humor and do not try to get back at them. [R]
11. When individuals insult me, I get a lot of pleasure out of telling them off.
12. When I dislike individuals greatly, I try not to show it in what I say or how I say it. [R]

13. I like poking fun at people who do things which are very stupid in order to stimulate their intelligence.
14. When I attack persons' ideas, I try not to damage their self-concepts. [R]
15. When I try to influence people, I make a great effort not to offend them. [R]
16. When people do things which are mean or cruel, I attack their character in order to help correct their behavior. [R]
17. I refuse to participate in arguments when they involve personal attacks. [R]
18. When nothing seems to work in trying to influence others, I yell and scream in order to get some movement from others.
19. When I am not able to refute others' positions, I try to make them feel defensiveness in order to weaken their positions.
20. When an argument shifts to personal attacks, I try very hard to change the subject. [R]

Scale: 1 = *strongly disagree;* 7 = *strongly agree*

Appendix M

Verbal Aggressiveness (Van Dyne & LePine, 1998)

Instructions: Thinking about the co-workers with whom you interact most frequently (your "group"), please answer the following questions to better understand the ethical climate of your workplace.

1. This group develops and makes recommendations concerning ethical issues that affect their work.

2. This group speaks up and encourages other units in the organization to get involved in issues that affect the business ethics of the work environment.

3. This group communicates its opinions about ethical issues to others even if its opinion is different and other disagree with it.

4. This group keeps well informed about ethical issues that affect the quality of work life.

5. This group speaks up with ideas for initiatives of changes in procedures to improve ethics in the organization.

Scale: 1 = *strongly agree;* 7 = *strongly disagree*

Appendix N

Psychological Safety (Edmondson, 1999)

Instructions: Please answer the following questions in order to better understand the perceived psychological safety within your organization.

1. If you make a mistake in this organization, it is often held against you.
2. Members of this organization are able to bring up problems and tough issues.
3. People in this organization sometimes reject others for being different.
4. It is safe to take a risk in this organization.
5. It is difficult to ask other members of this organization for help.
6. No one in this organization would deliberately act in a way that undermines my efforts.
7. Working with members of this organization, my unique skills and talents are values and utilized.

Scale: 1 = *strongly agree;* 7 = *strongly disagree*

Appendix O

Self-Perceived Communication Confidence in Confronting Unethical Behavior (original)

Instructions: These questions are designed to help gain a better understanding of employee confidence in confronting others' unethical behavior in the workplace. Indicate how much you agree with the following statements about **confronting a co-worker about their unethical behavior at work.**

SPC@CUB$_{competence}$

Perceptions of Communication Competence (i.e., "Competence")

1. I would know how to have an effective conversation to confront a co-worker who behaved unethically.

2. I would know how to have an appropriate conversation to confront a co-worker who acted unethically.

3. If I confronted a co-worker who behaved unethically, I would be skillful in expressing my thoughts.

4. I know I have the communication skills to confront a co-worker who behaved badly.

5. I would be skillful in navigating a difficult conversation with a co-worker about their wrongdoing.

6. I would be skillful at handling conversations about others' unethical behavior in the workplace.

7. People would look to me to confront others about their unethical behavior because I know what to say.

8. I would know how to have a conversation with someone who has made an unethical choice.

9. I would be able to find the right words to communicate with someone about why their behavior is unethical.

10. I would do a good job communicating why someone's behavior is wrong, while still maintaining a friendly relationship.

11. I would be able to confront a co-worker about their unethical behavior without that person feeling "attacked."

12. I would be able to articulate my thoughts easily to a co-worker about their unethical behavior.

13. I would be prepared to be a leader by calling out others when they act in ways that go against the organization's ethical code.

14. I know I would be able to find the words to describe to a co-worker why their behavior was ethically problematic.

15. I know I have the right training to effectively confront a co-worker who has behaved unethically.

16. I am capable of effectively speaking up when I see a co-worker act unethically.

17. I am capable of effectively navigating a conversation with a co-worker about their unethical behavior.

18. I am capable of effectively confronting a co-worker who has acted unethically.

19. I am confident my voice makes a difference in the ethical culture of my organization.

20. I am capable of effectively getting my point across to a co-worker who behaves badly.

21. I am capable of effectively addressing unethical behavior in the workplace.

22. I am confident I have the skills to convince a co-worker that they acted unethically.

SPC@CUB$_{\text{fruitful}}$

Perceptions of Voice Fruitfulness (i.e., "Fruitful")

23. It would be a waste of my time to speak up to a co-worker who as acted unethically. [R]

24. There is no point in confronting a co-worker about their unethical behavior because nothing will change. [R]

25. It would be futile to spend the energy confronting a co-worker about their unethical behavior. [R]

Scale: 1 = *strongly agree;* 7 = *strongly disagree*

Table 1

Table 1: Organizational Commitment Normality

Statistics					
	Competence	Log_ Competence	SQRT_ Competence	Inverse_ Competence	Transform_ Competence
N	562	562	562	562	562
Mean	4.86	.67	2.19	.22	.01
Median	4.88	.69	2.20	.21	-.03
Mode	4.25	.63	2.06	.20	-.57
Skewness	-.51	-1.6	-1	4.1	.03
Std. Error of Skewness	.10	.10	1.61	.10	.10
Kurtosis	.26	4.65	.21	29	-.10
Std. Error of Kurtosis	.21	.21	1	.21	.21
Minimum	1	.00	2.65	.14	-2.91
Maximum	7	.85		1	2.79

Table 2

Table 2: Self-Efficacy Normality

Statistics					
	Competence	Log_ Competence	SQRT_ Competence	Inverse_ Competence	Transform_ Competence
N	562	562	562	562	562
Mean	5.63	.74	2.36	.18	-.01
Median	5.89	.77	2.42	.17	.04
Mode	6	.78	2.45	.17	.33
Skewness	-1.17	-2.52	-1.7	6.58	-.13
Std. Error of Skewness	.10	.10	.10	.10	.10
Kurtosis	2.09	11	4.7	73.86	-.39
Std. Error of Kurtosis	.21	.21	.21	.21	.21
Minimum	1	.00	1	.14	-2.91
Maximum	7	.85	2.65	1	1.7

Table 3

Table 3: Communication Competence Normality

Statistics					
	Competence	Log_ Competence	SQRT_ Competence	Inverse_ Competence	Transform_ Competence
N	562	562	562	562	561
Mean	5.35	.72	2.31	.19	-.00
Median	5.44	.74	2.33	.18	.02
Mode	5.5	.74	2.35	.18	.11
Skewness	-.83	-1.76	-1.24	3.3	-.00
Std. Error of Skewness	.10	.10	.10	.10	.10
Kurtosis	1.54	5.71	3.1	18.42	-.15
Std. Error of Kurtosis	.21	.21	.206	.206	.21
Minimum	1.83	.26	1.35	.14	-2.91
Maximum	7.0	.84	2.64	.55	2.69

Table 4

Table 4: Group Ethical Voice Normality

Statistics					
	Group Ethical Voice	Log_ Group Ethical Voice	SQRT_ Group Ethical Voice	Inverse_ Group Ethical Voice	Transform_ Group Ethical Voice
N	562	562	562	562	562
Mean	4.89	.67	2.19	.23	.001
Median	5.0	.70	2.24	.20	-.038
Mode	5.0	.70	2.24	.20	-.04
Skewness	-.787	-2.1	-1.33	4.28	-.03
Std. Error of Skewness	.103	.10	.10	.10	.10
Kurtosis	.561	5.71	2.22	22.76	-.31
Std. Error of Kurtosis	.206	.206	.206	.21	.21
Minimum	1.0	.00	1.0	.14	-2.41
Maximum	7.0	.85	2.65	1.0	2.06

Table 5

Table 5: SPC@CUB Factor Score Matrix

	Factor 1	Factor 2
I would know how to have an effective conversation to confront a co-worker who behaved unethically.	.834	-.022
I would know how to have an appropriate conversation to confront a co-worker who acted unethically.	.793	.003
If I confronted a co-worker who behaved unethically, I would be skillful in expressing my thoughts.	.818	-.045
I know I have the communication skills to confront a co-worker who behaved badly.	.831	-.013
I would be skillful in navigating a difficult conversation with a co-worker about their wrongdoing.	.818	-.035
I would be skillful at handling conversations about others' unethical behavior in the workplace.	.860	-.040
People would look to me to confront others about their unethical behavior because I know what to say.	.768	-.161
I would know how to have a conversation with someone who has made an unethical choice.	.866	.003
I would be able to find the right words to communicate with someone about why their behavior is unethical.	.895	-.020
I would do a good job communicating why someone's behavior is wrong, while still maintaining a friendly relationship.	.850	-.041
I would be able to confront a co-worker about their unethical behavior without that person feeling "attacked."	.785	-.014
I would be able to articulate my thoughts easily to a co-worker about their unethical behavior.	.858	-.101
I would be prepared to be a leader by calling out others when they act in ways that go against the organization's ethical code.	.838	-.045
I know I would be able to find the words to describe to a co-worker why their behavior was ethically problematic.	.886	.041
I know I have the right training to effectively confront a co-worker who has behaved unethically.	.821	-.044
I am capable of effectively speaking up when I see a co-worker act unethically.	.863	.065
I am capable of effectively navigating a conversation with a co-worker about their unethical behavior.	.846	.054
I am capable of effectively confronting a co-worker who has acted unethically.	.699	.109
I am confident my voice makes a difference in the ethical culture of my organization.	.842	.075
I am capable of effectively getting my point across to a co-worker who behaves badly.	.830	.064
I am capable of effectively addressing unethical behavior in the workplace.	.777	-.006
I am confident I have the skills to convince a co-worker that they acted unethically.	.871	9.25
It would be a waste of my time to speak up to a co-worker who has acted unethically	.013	.925
There is no point in confronting a co-worker about their unethical behavior because nothing will change.	.019	.904
It would be futile to spend the energy confronting a co-worker about their unethical behavior.	-.071	.740

Extraction Method: Maximum Likelihood
Rotation Method: Promax with Kaiser Normalization. [a]

Table 6

Table 6: Convergent and Discriminant Validity Correlations

Variable	1	2	3	4	5	6	7	8	9	10
1. SPC@CUB$_{overall}$	--									
2. SPC@CUB$_{competence}$	--	--								
3. SPC@CUB$_{fruitfulness}$	--	--	--							
4. Organizational Commitment	.45**	.40**	.57**	--						
5. Self Efficacy	.51**	.49**	.13**	.52**	--					
6. Communication Competence	.59**	.54**	-.10*	.54**	.69**	--				
7. Experience Managing Personnel	.37**	.37**	-.09**	.23**	.18**	.18**	--			
8. Communication Apprehension	-.58**	-.52**	-.64**	-.39**	-.44**	-.61**	-.26**	--		
9. Willingness to Communicate	.55**	.51**	-.67**	.42**	.41**	.62**	.30**	-.82**	--	
10. Aggressiveness	-.15**	-.06**	-.58**	-.26**	-.38**	-.51**	.12**	.28**	.22**	--

* $p < .05$, ** $p < .01$

Table 7

Regression Results for SPC@CUB$_{competence}$ Predicting Group Ethical Voice, Controlling for Gender Variables (N = 561)

	Model 1			Model 2		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Group Ethical Voice	.56	.034	.55	.56	.04	.55
F		260.4			130.6***	
R^2		.30			.30***	
ΔR^2		-			.001***	

Note. ***p < .001.
Model 1: N = 561, R^2 = .301 $F(1, 560)$ = 260.4
Model 2: N = 561, R^2 = .30, $F(1, 560)$ = 130.6, p < .001.

Table 8

Regression Results for SPC@CUB$_{fruitfulness}$ Predicting Group Ethical Voice, Controlling for Race Variables (N = 561)

	Model 1			Model 2		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Group Ethical Voice	.56	.034	.55	.54	.04	.54
F		260.4			135.3***	
R^2		.30			.31***	
ΔR^2		-			.008***	

Note. ***p < .001.

Model 1: $N = 561$, $R^2 = .301$ $F(1, 560) = 260.4$
Model 2: $N = 561$, $R^2 = .31$, $F(1, 560) = 135.3$, $p < .001$.

Table 9

Regression Results for SPC@$CUB_{competence}$ Predicting Psychological Safety, Controlling for Gender Variables ($N = 561$)

	Model 1			Model 2		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Psychological Safety	.25	.02	.48	.25	.02	.47
F		177.4			91.3***	
R^2		.23			..23***	
ΔR^2		-			.005***	

Note. ***$p < .001$.
Model 1: $N = 561$, $R^2 = .23$ $F(1, 560) = 177.4$
Model 2: $N = 561$, $R^2 = .31$, $F(1, 560) = 91.3$, $p < .001$.

Table 10

Regression Results for SPC@$CUB_{futility}$ Predicting Psychological Safety, Controlling for Race Variables ($N = 561$)

	Model 1			Model 2		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Psychological Safety	.25	.02	.48	.21	.02	.39
F		177.4			116.2***	
R^2		.23			.28***	
ΔR^2		-			.05***	

Note. ***$p < .001$.

Model 1: $N = 561$, $R^2 = .23$ $F(1, 560) = 177.4$
Model 2: $N = 561$, $R^2 = .31$, $F(1, 560) = 116.2$, $p < .001$.