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It is entitled: Civility, Job Satisfaction, and Intentions to Quit

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Civility, Job Satisfaction, and Intentions to Quit

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Abstract

Civility is an important research topic in today’s work environment, especially given concerns about retaining employees in the increasingly mobile labor market (Pearson & Porath, 2005). Although much of the research on civil work behaviors focuses on the negative impact of incivility, ongoing research at the Veterans Administration (VA) utilizes a strengths-based approach that identifies ways to increase civility rather than to decrease incivility (Osatuke, Moore, Ward, Dyrenforth, & Belton, 2009). VA’s civility research had found that workplace civility predicts organizational performance (Moore, Osatuke, & Howe, 2008), and that it exerts a positive influence on patient satisfaction (Osatuke et al., 2009) and employee job satisfaction (Moore, et al. 2008). While job satisfaction is important to consider, previous research suggests that employee intention to quit is the best leading indicator of actual employee turnover (Griffeth, Hom, & Gaertner, 2000), an important cost-related outcome for organizations.

The current study examined the relationship between civility, job satisfaction, and intentions to quit using longitudinal techniques which accounted for the contextual effects of workgroups nested within facilities. All previous multi-level or contextual conceptualizations of incivility have involved cross-sectional data. The only study to examine civility, job satisfaction, and turnover intentions longitudinally was Moore et al. (2008), and those authors did not use intention to quit in their analysis, nor did they adjust their models for the multilevel nature of the data. Our approach also extended current research methodologically through consideration of the nested structure of the data and accounting for dependencies which could have led to misleadingly small standard error estimates and biased decision making regarding the significance of path coefficients.
The study used archival de-identified data from 160 Veterans Health Administration (VHA) facilities (N ≈ 85,000 employees, and 5,883 workgroups per year) from 2009-2011. The data had workgroup and facility identifiers, permitting the contextual analyses.

The primary aim of the study was to determine the causal impact of civility on job satisfaction and intentions to quit. Given the nested structure of the data, I was also interested in using contextual modeling techniques to account for the clustering of workgroups within facilities.

The modeling process resulted in two panel models, one cross-lagged and the other a non-recursive simultaneous influence model where at Times 2 and 3 there were reciprocal effects present. The purpose of the cross-lagged models was to examine the influence of the three variables on one another over a one year lag, whereas the simultaneous influence model was meant to test the possibility that reciprocal contemporary influences coupled with stability paths between the same measures from time $i$ to time $i + 1$ could account for the observed covariance structure. Findings suggested that within a given year, civility and job satisfaction may be more likely to influence each other equally; but from one year to the next, civility is a stronger driver of job satisfaction than vice versa. With respect to intentions to quit, both models supported the notion that civility is a stronger driver of intentions to quit than the converse.
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Chapter 1

Introduction

Civility is an important research topic in today’s fast-paced and results-driven workplace. In this context, organizations often struggle to balance concern for customers and profits with the need to ensure respectful treatment of employees, which helps to build loyalty to the firm and improve retention in an increasingly mobile labor market (Pearson & Porath, 2005). Civility is defined as courteous and considerate workplace behaviors within the workgroup, such as coworkers’ personal interest and respect toward each other, cooperation or teamwork, fair resolution of conflicts, and valuing diversity (Osatuke, Moore, Ward, Dyrenforth, & Belton, 2009).

Unfortunately, civility is frequently considered to be unimportant, and in some organizations incivility is so prevalent that the general sentiment seems to be that there simply is no time for employees to worry about how they are treating one another (Cortina, Magley, Williams, & Langhout, 2001; Pearson & Porath, 2005). For example, Pearson and Porath (2009) state that as a rule of thumb, about 50% of the workers they survey in their research mention that “they have no time to be nice at work” (p. 45). Due to the prevalence of incivility in modern workplaces, and the need for understanding and remedying it, the literature has grown immensely since Andersson and Pearson (1999) wrote their seminal paper on the topic. However, the majority of this research focuses exclusively on incivility rather than civility, although there have been some exceptions (e.g., Osatuke et al., 2009; Leiter, Laschinger, Day, & Oore, 2011). While studies of incivility have helped to illuminate a growing problem in today’s workplaces, they seem somewhat less useful for designing interventions to improve the situation. Rather than dwelling on bad behavior in today’s workplaces, civility research utilizes a positive,
strengths-based approach and aims to understand the type of behaviors that firms should be incenting employees to engage in more frequently. This philosophy has clear roots in positive psychology (Seligman & Csikszentmihalyi, 2000) and positive organizational behavior (Luthans, 2002), and has much to offer the extant literature on incivility.

In addition to the relative shortage of research on civility (rather than incivility), at least two other aspects of the extant literature on this topic have not been studied in great detail. First, the majority of incivility research focuses on individuals rather than on workgroups or organizations, yet given the interpersonal nature of civility one should expect workgroups and organizations to exert a potent influence on the norms that govern employees’ behaviors (Lim, Cortina, & Magley, 2008; Osatuke et al., 2009; Griffin, 2010). Second, the majority of the literature has utilized cross-sectional designs, which make it difficult to draw conclusions regarding the causal direction of relationships between (in)civility and other constructs (e.g., job satisfaction, intentions to quit) or organizational outcomes (e.g., turnover and other job-related withdrawal behaviors such as sick leave usage).

Given these limitations in the extant literature, it is the aim of the present research to add to the current body of knowledge by using a contextual longitudinal approach to study the impact of civility on two key organizational outcomes, job satisfaction and intentions to quit. This study will analyze workgroup-level data and use longitudinal contextual modeling techniques to account for the influence of workgroups being nested within Veterans Health Administration facilities. In order to provide sufficient context for the proposed research, the findings from deficiency-based approaches focusing on incivility that characterize much of the literature will be discussed in detail here. However, I contrast these findings with the strengths-based approach
focused on civility that is emphasized by the Veterans Health Administration National Center for Organization Development (VHA NCOD).

Sources and facilitators of workplace incivility

In their seminal work, Andersson and Pearson (1999) listed a variety of possible explanations for the apparent increase in incivil behavior in today’s workplace, but they focused on the notion that “business has started to reflect the informality of society at large…[resulting in]…fewer obvious cues as to what constitutes ‘proper’ business behavior” (p. 453). Technology such as email and web-based chat has also made it easier to miss contextual and social cues, because cyber media allow relatively “little opportunity for…immediate clarification and feedback” (Lim & Teo, 2009, p. 424).

In service-oriented organizations, there is greater potential for incivility to come from outside the organization as well, in the form of rude/incivil customers (Sliter, Sliter, & Jex, 2011), and patients in healthcare settings (Hutton & Gates, 2008). Therefore, some researchers have chosen to focus on multiple sources of incivility, including from customers. For example, Sliter et al. (2011) showed that the interaction of incivility experienced from customers and from coworkers compounded to have a greater negative impact on the targeted employees than either of the sources alone (see also Sliter, Jex, Wolford, & McInnerney, 2010).

The difficulty in defining exactly what an incivil behavior is may also play a role in enabling incivility in the workplace. One commonly cited definition is that incivil behavior refers to “low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (Andersson & Pearson, 1999, 457). From this definition, one can see that unlike workplace aggression (Barling, Dupré, & Kelloway, 2009) and other more visible and overt forms of abuse (e.g., bullying; Rayner, & Hoel, 1998), incivility tends to
be much more subtle. This may facilitate perceptions that incivil acts are relatively innocuous and unworthy of a busy supervisor or manager’s time, particularly if a supervisor or manager fails to recognize any immediate threats to workplace functioning.

Similarly, Cortina (2008) has suggested that the ability to attribute incivil acts to a variety of factors such as instigator “ignorance, oversight, or personality” (p. 56) creates additional challenges for targets who want their complaints to be taken seriously. In more extreme cases, these types of attributions may even be used by instigators as excuses for sexism and racism—a phenomenon Cortina refers to as selective incivility.

Definitional issues aside, the situation for targets of incivil behaviors is sometimes made worse because the instigators of these behaviors are the supervisors and managers (Pearson & Porath, 2009). Supervisors are able to behave poorly due to the power differential that exists between them and their subordinates. This situation is particularly undesirable because the target’s lack of power is likely to decrease his or her willingness to take appropriate action. Furthermore, the likelihood of appraising the incivil behavior as less controllable and more threatening is increased, which increases stress for targets (Cortina & Magley, 2009).

A final challenge that facilitates incivility within organizations is that the employees themselves may sometimes regard incivil behavior as unworthy of their supervisor’s attention. Cortina and Magley (2009) found that only one to six percent of employees responded to incivility by discussing it with superiors, and that “incivility must be appraised as fairly aversive and continue for some time—perhaps even escalate to bullying—before employees report it to management” (p. 285). These authors cautioned that their results might also indicate unwillingness to complain about the behavior of a more powerful instigator. If they are correct, their notion regarding powerful instigators corresponds well with earlier work from authors such
as Katz and Kahn (1978) who suggested that “subordinates protect their own positions by screening facts to accord with the emotional biases of the chief” (p. 512).

Given that employees may not report the behavior until it becomes more severe, some might question why organizations should be worried about low levels of incivility at all. One reason is that what begins as a small violation of workplace norms can escalate over time, creating an “incivility spiral” which may lead to more intense forms of deviant behavior and aggression (Andersson & Pearson, 1999). A spiral is especially likely if action is taken by the target to punish the instigator for his or her incivil behavior. When incivility becomes a contest of wills, no one wins (Pearson & Porath, 2009).

Even when the outcome does not escalate to bullying (intent to harm becomes unambiguous), aggression or workplace violence, a growing body of research suggests that when incivil behavior is allowed to persist, organizations and employees pay serious costs that are difficult to ignore. Pearson and Porath (2009) suggested that addressing the issue in terms of costs might in fact be the only way to ensure that incivil behavior is taken seriously; they remark that: “…it’s beyond the scope of business to teach moral values…[but]…there is always the appeal to self-interest. To the extent that workers…learn that there are costs for bad behavior…they’ll be more inclined to mend their ways” (p. 47).

**Individual level costs of incivility**

At the level of the individual, incivility harms both instigators and targets. For targets, dealing with workplace incivility is stressful, reduces job satisfaction, decreases performance, and generally increases intentions to quit (see Estes & Wang, 2008 for review). Cortina and Magley (2009) studied targets of incivil behaviors, and then conducted a cluster analysis to identify various types of coping styles. They found evidence of several distinct coping styles.
(e.g., support seekers, detachers and minimizers, conflict avoiders), but more importantly they noted that regardless of coping style, the incivil behavior had a negative impact on employee well-being.

Similarly, Lim, Cortina, and Magley (2008) used a structural equation modeling framework and found that for both men and women targets, incivil work experiences were directly related to poorer mental health. Furthermore, the results of Lim et al. suggested that mental health mediated the relationship between incivil work experiences and poorer physical health. While the relatively low intensity of incivility may seem like an unlikely culprit of serious health issues, similar previous research has indicated that “daily hassles are more predictive of negative health outcomes, job performance, and absenteeism than less frequent but more serious life stressors” (Ivancevich, 1986, as cited by Sliter et al., 2010, p. 469). In addition to the potential health problems, targets may also have to cope with damaged relationships with co-workers and it seems likely that spillover effects could harm relationships outside of work as well.

For instigators, there are also costs to be paid. Even when a power differential exists between the instigator and the target(s) that prevents prompt direct remedial action, targets may find discrete ways to sabotage or get back at the instigator. In their research, Pearson and Porath (2009) have frequently observed that eventually “offenders lose support from their employees, customers, and shareholders…their reputations may be dashed, they may lose their jobs, and they might even be sued” (Pearson & Porath, 2009, p. 110). In sum, organizations need to recognize that the consequences of incivility at the individual level may be very serious.
Organizational Costs of Incivility

While the costs of incivility to individuals are noteworthy, the phenomenon may still be perceived as “between the employees” and unworthy of upper management or the organization’s resources. As a result, creating a business case for dealing with incivility requires a monetization approach to demonstrate what the impact can be on the organization’s bottom line. Pearson and Porath (2009) pioneered an approach to incivility monetization, which focuses on identifying expected rates of incivility and then accounting for estimated reductions in productivity due to: time spent worrying, intentional reductions in effort and time spent at work, and replacement costs for employees who decide to leave the organization.

In their calculations, Pearson and Porath also attempted to account for costs associated with the witnesses of the incivile behavior as well as the targets. They argue that this consideration is necessary because research in the laboratory and the field has shown that the costly behaviors typically associated with targets of incivility are also likely to be observed for those who simply witness it (Porath & Pearson, 2010). For example, in a laboratory study, Porath and Pearson (2010) observed that “those who witnessed incivility performed 20% worse on...word puzzles and produced nearly 30% fewer ideas in [a] brainstorming task...” (p. 66). The authors also witnessed a sharp decline in helping behaviors for those participants who had witnessed incivility, which is consistent with evidence from their field research suggesting that targets and observers of incivility often reduce their discretionary efforts, including organizational citizenship behaviors (Pearson, Andersson, & Porath, 2000, p. 130).

In sum, the ways in which incivility costs organizations are numerous but include reduced productivity, increased absenteeism, and employee turnover. Using their monetization method for a large health care organization with an annual gross income of approximately one
billion dollars, Pearson and Porath (2009) estimated the cost of incivility at $71 million annually. Importantly, their estimate does not account for costs associated with damage to the reputation of the organization which could be grave. In today’s competitive marketplace, organizations seeking to attract the best employees and satisfy their customers cannot ignore incivility (Estes & Wang, 2008).

*Civility and the Veterans Health Administration*

As noted earlier, extant research primarily focuses on the negative impact of incivility. However, ongoing research at the VHA NCOD utilizes a strengths-based approach which identifies ways to increase civility rather than to decrease incivility (Osatuke, Moore, Ward, Dyrenforth, & Belton, 2009). Support for this approach is grounded in positive psychology (e.g., Seligman & Csikszentmihalyi, 2000) and it has also been advocated by researchers in organizational behavior as a means to “make the lives of [employees] more productive and fulfilling” (Luthans, 2002, p. 696). In addition to the fact that focusing on building something positive is likely to produce better outcomes than dwelling on something negative (Cooperrider & Srivastva, 1987); civility may not simply be the opposite of incivility.

Conceptually, there are likely to be important distinctions between behaving without regard for norms of respect (incivility), behaving with indifference, and behaving respectfully and with consideration for others (civil behavior). For example, a manager who consistently uses a condescending tone in emails to subordinates could choose to stop using the tone in response to employee complaints, but this does not necessarily imply that the manager becomes courteous and considerate, which are hallmarks of civil behavior (Osatuke et al., 2009). There is also some empirical support for the notion that civility and incivility are not simply opposites; for instance,
scales that purport to measure the two constructs are only moderately correlated, ranging from .32 to .49 (Leiter, Laschinger, Day, & Oore, 2011).

In terms of its history within VA, civility became a key area of interest after a series of consulting studies (Kowalski, Harmon, York, & Kowalski, 2003; Yorks, Neuman, Kowalski, & Kowalski, 2007) revealed that a large percentage of employees had voluntarily quit due to “lack of respect and fairness” in the workplace (Osatuke et al., 2009, p. 386). VA considers civility as encompassing courteous and considerate workplace behaviors. It is measured by coworkers’ personal interest and respect toward each other, coworkers’ cooperation or teamwork, fair resolution of conflicts, and valuing of differences among individuals by coworkers and supervisors (Osatuke et al., 2009).

In recent years, VA’s civility research on its healthcare workforce, as well as research within Nova Scotia and Ontario, Canada healthcare systems, has found that workplace civility is a key predictor of organizational performance (Osatuke & Dyrenforth, 2006; Mohr, et al. 2007; Moore, Osatuke, & Howe, 2008; Laschinger, Leiter, Day, & Gilin, 2009; Leiter, Laschinger, Day, & Oore, 2011). More specifically, civility appears to exert a positive influence on patient satisfaction (Osatuke et al., 2009), employee job satisfaction (Moore, et al. 2008), and a variety of other organizational outcomes such as decreased sick leave usage and reduced Equal Employment Opportunity complaint activity (Osatuke & Dyrenforth, 2006; Yorks et al., 2007).

**Turnover, Job Satisfaction, and Intentions to Quit**

This review has discussed a variety of individual and organizational implications related to civility in the workplace. Among these outcomes, one of the most important in today’s knowledge-driven and service-oriented organizations is employee turnover. In particular, Hausknecht, Trevor, and Howard (2009) cite research suggesting that turnover causes
operational disruptions (Watrous, Huffman, & Pritchard, 2006), depletes mission-critical firm-specific knowledge (Batt, 2002), and forces those who remain to effectively train and socialize newcomers while maintaining a consistent level of service quality (Shaw, Gupta, & Delery, 2005). In addition to these employee-centric issues, Hausknecht et al. (2009) also demonstrated with a sample of hospitality employees that unit-level turnover was negatively related to customers’ service quality perceptions. Furthermore, the cost of a good employee leaving has been estimated to range from 93%-200% of the leaver’s salary due to separation, recruiting, and new employee training expenditures (Cascio & Boudreau, 2008).

Given the importance of turnover to customer outcomes and its cost to organizations, many studies have been conducted to determine its leading indicators (Griffeth, Hom, & Gaertner, 2000). Some have suggested that employee perceptions of a civil work environment might serve as such an indicator (e.g., Pearson & Porath, 2005; Lim, Cortina, & Magley, 2008), since employee’s experiences of incivility have been shown to be related to decreased performance, increased time spent worrying, decreased job satisfaction, and eventual departure from the organization (Pearson & Porath, 2010). Further, given the importance of interpersonal relationships in the workplace to both job satisfaction and intent to stay with the firm (Maertz & Griffeth, 2004) it seems likely that job satisfaction could mediate the relationship between civility and employee turnover.

Job satisfaction is one of the most studied constructs in the history of applied psychology, and it has been referred to by some as the most focal employee attitude from the perspective of research and practice (Saari & Judge, 2004). One reason for its popularity is that job satisfaction has been shown to be related to both job performance and reduced intentions to quit. For example, in a meta-analysis of 312 correlations with a combined N of 54,471, Judge, Thoresen,
Bono, and Patton (2001) found that the mean correlation between job satisfaction and job performance was .30; while it was shown in another study and a meta-analysis that positive changes in job satisfaction predicted reductions in turnover intentions (Chen, Ployhart, Thomas, Anderson, & Bliese, 2011; Hom, Caranikas-Walker, Prussia, & Griffeth, 1992). However, as a predictor of actual employee turnover, the turnover intentions construct has been shown to generally outperform other predictors, including job satisfaction. In their meta-analysis, Griffeth, Hom, and Gaertner (2000) found that the correlation between intentions to quit and actual turnover was .38, while the correlation between job satisfaction and actual turnover was -.19.

Despite the extensive research linking job satisfaction and intentions to quit to actual turnover, some have suggested this work has underestimated the importance of interpersonal antecedents to turnover such as coworker and leader relationships (Maertz & Griffeth, 2004; Pearson & Porath, 2005). In particular, Maertz and Griffeth (2004) note a powerful aspect of motivation to stay with an organization which they call constituent forces. They state that “Motivation to remain or quit depends on the employee’s attachment to coworkers or groups within the organization” (p. 669). As VA defines it, high levels of civility within a workgroup (e.g., coworkers’ personal interest and respect toward each other, teamwork, valuing of differences) seem likely to have a strong impact on constituent forces which would improve satisfaction and reduce intentions to quit.

*Multi-level and systems approaches to understanding civility’s impact*

Whether the focus is incivility or civility, research suggests that incivil behavior in the workplace has a variety of negative effects on both employees’ satisfaction and intentions to quit, as well as on the organization through increased employee turnover and other related problems. With a few exceptions (e.g., Lim, Cortina, & Magley, 2008; Griffin, 2010), extant
research has explored civility and incivility from the perspective of individuals, and examined the effects that individuals, independent of their work groups or organizational context, might have on organizational functioning. Yet Osatuke et al. (2009) noted that it is critical to consider that “(in)civility may be thought of as an interactive process occurring within a situational context (whether a workgroup or entire organization) rather than single static events between separate individuals” (p. 386).

The notion of interdependence and the need to examine social phenomena from a systems perspective is obviously not a new idea; over 30 years ago, Katz and Kahn (1978) cautioned that researchers should avoid the urge to “attribute causes to personal agencies” (p. 507). Katz and Kahn referred to this type of error as a form of non-dialectical thinking which emphasizes unidirectional cause and effect relationships as opposed to viewing causation “as an aspect of a mutually interacting field of forces” (p. 508). Therefore, to understand a construct like civility, which by definition is concerned with interpersonal connections, one must consider that individuals are nested within workgroups, which in turn are nested within organizations. This nested structure is likely to have a profound influence on the way individuals perceive civility, as well as the extent to which civility is related to other variables of interest such as job satisfaction and intentions to quit.

Despite the fact that theory and methods for multilevel and contextual research have existed for some time now, organizational research in general has been relatively slow to utilize these ideas. For example, Kozlowski and Klein (2000) lamented that “The organization may be an integrated system, but organizational science is not” (p. 3). In the case of civility research, the relative shortage of multilevel and contextual research is particularly surprising because nearly all of the research has involved individuals within groups, within organizations, and multilevel
theory and techniques are ideally suited for exploring this kind of nested structure (Kashy & Kenny, 2000).

One of the first studies to explore incivility at the workgroup level was performed by Lim, Cortina, and Magley (2008). These authors observed that for a sample of 26 workgroups ($N = 271$ employees), workgroup level perceptions of incivility predicted unique variance in job satisfaction even after individual level perceptions of incivility were accounted for. Also, at the workgroup level, Lim et al. found that job satisfaction mediated the relationship between incivility and intentions to quit. Additional support for aggregating civility to the level of the workgroup was provided by Moore, Howe, Langmeyer, and Peteet (2009). These authors found that workgroup level civility consistently predicted changes in the proportion of highly satisfied employees within the workgroup in a three-year longitudinal study with a much larger sample of Veterans Hospital Administration employees (4,766 workgroups and $N = 207,615$ employees).

More recently, other researchers have begun to explore the possibility that incivility or related constructs (e.g., interpersonal deviance) at the level of the organization might predict unique variance and provide a measure of environmental conditions within organizations (e.g., Reio & Ghosh, 2009; Griffin, 2010; Arthur, 2011). For example, Griffin (2010) examined the potential for organization level incivility, the “incivility environment” (p. 320), to affect the relationship between individual-level incivility and intentions to quit.

In Griffin’s (2010) study of 35,000 employees from several different types of organizations (e.g., customer service, engineering, marketing), she found that the incivility environment (measured as the aggregate of individual incivility) moderated the relationship between individuals’ reports of experienced incivility and individuals’ intentions to quit. When incivility environment is strong, the relationship between individual incivility and turnover
intentions is weaker; and when environment is weak, the relationship is stronger. To explain this finding, Griffin invokes the concepts of interactional justice and equity (similar to Griffeth & Gaertner, 2001) and suggests that employees who experience incivility in civil environments are more likely to feel unfairly singled-out, and are therefore more likely to quit compared to employees who experience incivility in incivil environments.

In sum, the multilevel studies of civility and incivility reviewed here suggest that these constructs may be meaningfully aggregated to create measures of climate at the workgroup and even the organization levels. These aggregated climate measures of civility and incivility are related to other key organizational constructs such as job satisfaction and intentions to quit. Similarly, both job satisfaction and intentions to quit have also been studied in aggregated form, with results generally supporting these constructs as valid measures when considered at the business unit or organization level (Ostroff, 1992; Harter, Schmidt, & Hayes, 2002). These findings are important because they allow researchers to understand how constructs are related to outcomes across levels of the organization.

Ostroff (1993) cautioned that a potential for fallacy exists if “…correlations at a more macro level are used to make inferences about individuals or vice versa” (p. 570). Ostroff (1993) discusses two possibilities for the relationships between variables and their aggregates. First, it is possible that the individual level and aggregate represent essentially the same construct or process, which is called homology. The second possibility is that the aggregated variable is reflective of additional constructs or processes that were not captured at the individual level. For example, when Lim et al. (2008) found that workgroup level incivility predicted additional variance in the incivility-job satisfaction relationship above and beyond individual level incivility, this finding suggested that the shared perceptions of incivility might influence
individuals’ attitudes beyond what would be expected from observing only their individual perceptions. Therefore, while there are potential benefits to aggregation of organizational constructs, it is important to exercise caution and not to assume that the constructs operate the same way regardless of the level of aggregation (Ostroff, 1993).

The proposed study

The current study will examine the relationship between civility, job satisfaction, and intention to quit at the workgroup level using longitudinal contextual modeling techniques. I expect that civility will be positively related to job satisfaction and negatively related to intentions to quit. With the exception of the two studies by Moore and colleagues (Moore et al., 2008; Moore et al., 2009), previous multi-level or contextual conceptualizations of incivility have involved cross-sectional data (e.g., Lim et al., 2008; Griffin, 2010). While instructive, these studies do not allow conclusions to be made about the direction or stability of the relationship between civility and intention to quit. The only study to examine civility, job satisfaction, and turnover intentions longitudinally was Moore et al. (2008), and those authors did not conduct analyses that accounted for the nesting of workgroups within facilities.

This will be the first study to use longitudinal contextual modeling techniques to examine the relationship between civility and intentions to quit with job satisfaction as a mediator. Our approach extends current research methodologically and theoretically. In terms of methodology, our consideration of the nested structure of the data will account for dependencies which others have largely ignored that could lead to misleadingly small standard error estimates, and increased Type I errors due to biased decision making regarding the significance of path coefficients (Raudenbush & Bryk, 2002; Carle, 2009).
The emphasis on civility rather than incivility here is also worth underscoring, given that the majority of the extant literature has focused on measuring employees’ perceptions of their coworkers’ undesirable behaviors. As I noted earlier, a measure of civility rather than incivility is particularly desirable because focusing on building something positive is likely to produce better outcomes than dwelling on something negative (Luthans, 2002; Cooperrider & Srivastva, 1987). In today’s economy, to obtain sustained organizational commitment to creating a civil workplace it is necessary to demonstrate longitudinal evidence of the relationship between civility and indicators that finance-oriented individuals consider to be important (Pearson & Porath, 2009). It has been demonstrated elsewhere that human resources outcomes influence business outcomes, and not the other way around (Koys, 2001); but this study seeks to explicitly link changes in employees’ perceptions of civility to changes in a leading indicator of a costly problem for organizations, voluntary turnover (Cascio & Boudreau, 2008).

Chapter 2
Method

Participants and Procedures

The study used use archival de-identified survey data from 160 Veterans Health Administration (VHA) facilities from 2009-2011. The data were collected by The Veterans Health Administration National Center for Organization Development (VHA NCOD) as a part of an annual confidential census survey of employees’ job satisfaction, intentions to quit, perceptions of civility, and other relevant constructs such as organizational culture called the All Employee Survey (AES). The average response rate for the AES from 2009-2011 was 69.3%.

To facilitate data comparisons across years, employees are asked to provide a workgroup identifier and a facility identifier when they complete the AES. Workgroups either consist of groups of individuals who report to the same supervisor, or individuals who work together on a
regular basis. Facilities are the physical locations where employees work (e.g., Cincinnati VA Medical Center). It was not possible to perform the longitudinal analysis at the individual level because individuals were not uniquely identified.

Due to the longitudinal nature of this study and the SEM methodology used, only workgroups with no missing data during the 2009-2011 time period were selected from the original samples (2009 $N = 164,306$, $N_{wg} = 10,973$; 2010 $N = 185,879$, $N_{wg} = 11,437$; 2011 $N = 180,749$; $N_{wg} = 11,869$). To avoid including workgroups of atypical size, an additional constraint was that the matched workgroups should include those with greater than four and less than 40 employees (Moore et al., 2009). From the original samples, 5,883 matched workgroups with the appropriate range of employees (i.e., 4 - 40) were identified resulting in the following $N$’s: 2009 = 87,721; 2010 = 94,925; 2011 = 91,331. In sum, the matching and workgroup size restrictions amounted to an average decrease in sample size of 52% (average $\Delta N = 85,652$ employees and 5,543 workgroups per year). The primary arguments against the use of listwise deletion are that power is lost, and that the remaining sample is unrepresentative (Graham, 2009). However, given the size of the original samples, the loss of power is not a consideration. Furthermore, the demographic variables as well as the sample means, standard deviations, and correlations among variables were similar for workgroups that met the selection criteria and those that did not (Appendices A and B) suggesting that the individuals and workgroups in the final sample did not differ systematically from the omitted portion of the original sample. Finally, I chose not to impute the missing data values because occasionally, through reorganization or other means, workgroups are combined and given a new ID or perhaps eliminated altogether. Therefore, if I had imputed missing values, I would have risked creating data points for workgroups that literally no longer existed.
The individuals who belonged to the workgroups included in the final sample represented a diverse sample in terms of age, tenure, and supervisory status. In terms of age, on average 77% of the sample were 30-59 years of age, 7% were less than 30 years, and 11% were 60 years or greater (on average, about 5% of individuals did not report their age). These individuals also represented six different levels of supervisory statuses within VHA, and on average 91% were from the lower three levels (i.e., no supervisory status, team leaders, and first line supervisors), while just over 5% were from the upper three levels (i.e., managers, executives, and senior executives; on average about 4% of individuals did not report supervisory status). With respect to tenure, on average 23% had less than two years, 35% had 2-10 years, and 45% had greater than 10 years. Note that these percentages may not always sum to 100% because they are averaged across the three years and there were some small changes in demographics from year to year.

*Survey Measures*

Civility is an aggregate score of eight items measuring workgroup civility perceptions (Table 1), which respondents rate from (1) *strongly disagree* to (5) *strongly agree*. Moore et al. (2009) found evidence of structural validity for this measure by conducting confirmatory factor analyses, and established that the unidimensional structure and path coefficients of the civility construct remained invariant over a three-year period. Given the evidence for civility as a unidimensional construct, I chose to use average civility scores in the modeling process rather than utilizing the measurement model for civility developed by Moore et al.
Table 1

*Civility Index Items from the VA All-Employee Survey*

1. People treat each other with respect in my work group.
2. A spirit of cooperation and teamwork exists in my work group.
3. Disputes or conflicts are resolved fairly in my work group.
4. The people I work with take a personal interest in me.
5. The people I work with can be relied on when I need help.
6. This organization does not tolerate discrimination.
7. Differences among individuals are respected and valued in my work group.
8. Managers work well with employees of different backgrounds in my work group.

Scored: 1: *strongly disagree* to 5: *strongly agree*

To measure satisfaction, VHA uses 11 facet satisfaction items (satisfaction with type of work, amount of work, pay, coworkers, supervision, senior management, promotion opportunities, working conditions, perceived customer satisfaction, praise, and quality of work provided) and a single-item measure of overall satisfaction (*Compared to what you think it should be, what is your current overall level of satisfaction with your job?*). The single item satisfaction measure was correlated > .80 with the sum of the facet items in each year of data and therefore I used only the single item overall satisfaction measure in all subsequent analyses. The overall satisfaction item was scored from (1) *not at all satisfied* to (5) *very satisfied*. Intentions to quit is also a single-item measure (*If I were able, I would leave my current job because I am dissatisfied*.), scored from (1) *strongly disagree* to (5) *strongly agree*.

*Analysis*

*Aggregation tests.* Following the approach of Moore et al. (2009), intraclass correlation coefficients—ICC(1) and ICC(2)—were calculated to determine the appropriateness of aggregating civility, job satisfaction, and intentions to quit to the workgroup level. Since I was also interested in the clustering of workgroups within facilities, I calculated ICCs using the workgroup level data as well. These values were calculated for each of the three variables using
the equations (Equations 1 and 2) provided by Bliese (2000) using a random effects ANOVA model with the score on the variable (e.g., civility) as the dependent variable, and workgroup ID (or facility) as the independent variable.

\[
\frac{MS_{\text{between}} - MS_{\text{within}}}{MS_{\text{between}} + (k - 1)(MS_{\text{within}})} \quad (1)
\]

\[
\frac{MS_{\text{between}} - MS_{\text{within}}}{MS_{\text{between}}} \quad (2)
\]

According to Bliese (2000, p. 354), Equation 1 is generally interpreted as the “proportion of the total variance that can be explained by group membership,” and Equation 2 “provides an estimate of the reliability of the group means.” Bliese suggests that when ICC(1) values are greater than zero, “group membership affects or is related to lower-level observations” (p. 358).

For ICC(2), Klein et al. (2000) suggest that “values equal to or above .70 are acceptable … between .50 and .70 are marginal, and values lower than .50 are poor” (p. 518). Due to unequal workgroup (and facility) sizes in the sample, I used the harmonic mean of workgroup size (or harmonic mean of workgroups per facility) for each year as the value of \(k\) in the calculation of ICC(1) values (harmonic mean workgroup size = 11.10, 12.20, and 11.65 for 2009, 2010, and 2011, respectively; and harmonic mean of number of workgroups per facility each year = 10.58). This calculation conformed to the method used by the SAS/STAT® 9.2 GLM procedure, which uses harmonic means to obtain estimates for mean square between and mean square within (SAS 9.2 User’s Guide, 2012).

Workgroup level analyses. To examine the relationships between civility, job satisfaction, and intentions to quit, and to explore the causal direction of these relationships, I analyzed three panel models. The first two models were cross-lagged panel models, one which included lagged
effects of variables from Time 1 to Time 3, and another without the Time 1 to Time 3 effects present. The third model was a non-recursive simultaneous influence model, where at Time 2 and Time 3 there are reciprocal effects present. The purpose of the cross-lagged models (Figures 1 and 2) was to examine the influence of the three variables on one another over a one year lag, whereas the simultaneous influence model (Figure 3) was meant to explore the possibility that reciprocal contemporary influences coupled with stability paths between the same measures from time $i$ to time $i + 1$ were more important than the influence of previous years (similar to the approach taken by Moore et al., 2009). I ran each of these models using civility, job satisfaction, and intentions to quit aggregated to the workgroup level. Support for this methodology comes from a variety of studies that have shown the importance of exploring organizational phenomena at the appropriate level of analysis (e.g., Ostroff, 1992; Koys, 2001; Harter, Schmidt, & Hayes, 2002; Hausknecht, Trevor, & Howard, 2009). Further, the aggregation of responses for the single item measures of job satisfaction and intentions to quit is likely to increase their reliability (Bliese, 2000). Figures 1, 2, and 3 show the final models that were analyzed. It is also important to note here that each of the three models accounted for the clustering of workgroups within facilities. This was a significant consideration because failure to account for the nested structure of the data could have resulted in misleadingly small standard errors and overestimation of observed path coefficients (Raudenbush & Bryk, 2002).
Figure 1. Proposed cross-lagged panel model with all possible Time 1 to Time 3 paths.

Figure 2. Proposed cross-lagged panel model with only Time 1 to Time 3 stability paths.
Chapter 3

Results

Descriptive statistics and intercorrelations

Descriptive statistics and intraclass correlations for civility, job satisfaction, and intentions to quit are displayed in Table 2. The means for civility, job satisfaction, and intentions to quit remain relatively stable across years and levels of analysis, and the standard deviations decrease as the variables are aggregated to higher levels of analysis. Similar to the means and standard deviations, the correlations between civility, job satisfaction, and intentions to quit remained relatively stable from year to year as well as across levels of analysis (Table 3). The stability in the correlations between these variables across levels of analysis suggests that aggregation bias is not a concern (Freedman, 1999; Bliese, 2000). Additionally, each of the correlations was in the expected direction, civility was positively correlated with job satisfaction.
and negatively correlated with intentions to quit, and job satisfaction was negatively correlated with intentions to quit (all $p < .01$).

**Intraclass correlations and aggregation**

To further demonstrate that each of the three variables could be appropriately aggregated to the workgroup and facility levels, I calculated ICC(1) to determine the amount of variability due to group membership (i.e., workgroup or facility membership) within each level. I also calculated ICC(2) to estimate the reliability of the group means for workgroup and facility level aggregation of each variable.

**Civility.** The ICC(1) values calculated using the individual level civility measure indicated that 18-24% of the variance in scores could be explained by workgroup membership. At the workgroup level, ICC(1) values for civility indicated that 12-14% of the variance in scores could be explained by facility membership.
## Table 2

*Descriptive Statistics and Intraclass Correlation Coefficients (ICC) Across Years and Levels of Analysis for Key Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>2009</th>
<th></th>
<th></th>
<th></th>
<th>2010</th>
<th></th>
<th></th>
<th></th>
<th>2011</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Individual Level</td>
<td></td>
<td>Workgroup Level</td>
<td></td>
<td>Facility Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>ICC(1)</td>
<td>ICC(2)</td>
<td>Mean</td>
<td>SD</td>
<td>ICC(1)</td>
<td>ICC(2)</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Civility (Ci)</td>
<td></td>
<td>85,549</td>
<td>3.74</td>
<td>0.96</td>
<td>.19</td>
<td>.74</td>
<td>3.76</td>
<td>0.48</td>
<td>.12</td>
<td>.61</td>
<td>3.81</td>
<td>0.21</td>
</tr>
<tr>
<td>Job satisfaction (JS)</td>
<td></td>
<td>87,207</td>
<td>3.90</td>
<td>1.08</td>
<td>.11</td>
<td>.60</td>
<td>3.90</td>
<td>0.46</td>
<td>.13</td>
<td>.63</td>
<td>3.91</td>
<td>0.17</td>
</tr>
<tr>
<td>Intentions to Quit (ItQ)</td>
<td>85,486</td>
<td>2.43</td>
<td>1.29</td>
<td>.09</td>
<td>.54</td>
<td>2.42</td>
<td>0.53</td>
<td>.11</td>
<td>.58</td>
<td>2.40</td>
<td>0.19</td>
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</tr>
<tr>
<td>Civility (Ci)</td>
<td></td>
<td>93,883</td>
<td>3.70</td>
<td>0.98</td>
<td>.18</td>
<td>.74</td>
<td>3.71</td>
<td>0.48</td>
<td>.14</td>
<td>.65</td>
<td>3.77</td>
<td>0.2</td>
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<tr>
<td>Job satisfaction (JS)</td>
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<td>94,339</td>
<td>3.83</td>
<td>1.12</td>
<td>.21</td>
<td>.77</td>
<td>3.83</td>
<td>0.48</td>
<td>.15</td>
<td>.67</td>
<td>3.85</td>
<td>0.16</td>
</tr>
<tr>
<td>Intentions to Quit (ItQ)</td>
<td>92,499</td>
<td>2.50</td>
<td>1.31</td>
<td>.14</td>
<td>.68</td>
<td>2.50</td>
<td>0.53</td>
<td>.11</td>
<td>.58</td>
<td>2.48</td>
<td>0.18</td>
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</tr>
<tr>
<td>Civility (Ci)</td>
<td></td>
<td>90,350</td>
<td>3.71</td>
<td>0.98</td>
<td>.24</td>
<td>.80</td>
<td>3.71</td>
<td>0.48</td>
<td>.14</td>
<td>.65</td>
<td>3.75</td>
<td>0.21</td>
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<tr>
<td>Job satisfaction (JS)</td>
<td></td>
<td>90,786</td>
<td>3.82</td>
<td>1.12</td>
<td>.11</td>
<td>.62</td>
<td>3.82</td>
<td>0.47</td>
<td>.13</td>
<td>.64</td>
<td>3.81</td>
<td>0.19</td>
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<tr>
<td>Intentions to Quit (ItQ)</td>
<td>89,173</td>
<td>2.54</td>
<td>1.32</td>
<td>.09</td>
<td>.55</td>
<td>2.55</td>
<td>0.53</td>
<td>.10</td>
<td>.56</td>
<td>2.55</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Overall individual level Ns were 2009 = 87,721; 2010 = 94,925; 2011 = 91,331. Workgroup level N = 5,883. Facility level N = 160. Intraclass correlation coefficients were calculated using the individual level data and the workgroup level data to determine the proportion of variance attributable to group membership (i.e., ICC-1 for within workgroup or facility), and to determine the reliability of group-level means (ICC-2).
Table 3

*Correlations Across Years and Levels of Analysis for Key Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Individual Level</th>
<th>Workgroup Level</th>
<th>Facility Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ci</td>
<td>JS</td>
<td>ItQ</td>
</tr>
<tr>
<td><strong>2009</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civility (Ci)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction (JS)</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intentions to Quit (ItQ)</td>
<td>-.49</td>
<td>-.58</td>
<td></td>
</tr>
<tr>
<td><strong>2010</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civility (Ci)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Job satisfaction (JS)</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intentions to Quit (ItQ)</td>
<td>-.49</td>
<td>-.60</td>
<td></td>
</tr>
<tr>
<td><strong>2011</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civility (Ci)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction (JS)</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intentions to Quit (ItQ)</td>
<td>-.49</td>
<td>-.61</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Overall individual level *Ns* were 2009 = 87,721; 2010 = 94,925; 2011 = 91,331. Workgroup level *N* = 5,883. Facility level *N* = 160. All correlations were significant (*p* < .01).
The ICC(2) values for civility at both the individual and workgroup level were either above or near the acceptable level (.70) suggested by Klein et al. (2000), suggesting reliability of the aggregated scores.

**Satisfaction.** The ICC(1) values calculated using individual level job satisfaction indicated that 11-21% of the variance in scores could be explained by workgroup membership. At the workgroup level, ICC(1) values for job satisfaction indicated that 13-15% of the variance in scores could be explained by facility membership. The ICC(2) values for job satisfaction at the individual and workgroup levels approached the .70 level, indicating tolerable reliability of the aggregated scores.

**Intentions to Quit.** The ICC(1) values calculated using individual level intentions to quit indicated that 9-14% of the variance in scores could be explained by workgroup membership. At the workgroup level, ICC(1) values indicated that 10-11% of the variance in scores could be explained by facility membership. The ICC(2) values for intentions to quit at the individual and workgroup levels ranged from .54 to .68, indicating tolerable reliability of the aggregated scores (Klein et al., 2000).

Given the modest values attained for the intraclass correlation coefficients of job satisfaction and intentions to quit (ICC-2 was generally below the .70 cutoff suggested by Klein et al., 2000), I created two additional dependent variables: the proportion of individuals within the workgroup who chose somewhat satisfied or very satisfied, and the proportion of individuals within the workgroup who agreed or strongly agreed with the intentions to quit item. Compared to the mean-based job satisfaction and intentions to quit variables, the proportion-based variables performed more poorly on diagnostics related to model assumptions such as normality. For example, the histograms of the proportion-based variables were more skewed, and the normal
probability plots also supported this observation. Additionally, scatterplots of the bivariate relationships between each of the three variables suggested that the mean-based variables were more densely distributed in a linear pattern than the proportion-based variables. As a result of these observations, all modeling utilized the mean-based job satisfaction and intentions to quit variables.

*Longitudinal contextual models using path analysis*

To examine the directionality of the civility-job satisfaction-intentions to quit relationships, three models were developed. Two models were cross-lagged panel designs (Figures 4 and 5), whereas the third model (Figure 6) allowed for simultaneous influence within each year of data. The purpose of the cross-lagged models was to examine the influence of the three variables on one another over a one year lag, whereas the simultaneous influence model was meant to explore the possibility that reciprocal contemporary influences coupled with stability paths between the same measures from time $i$ to time $i + 1$ were more important than the influence of previous years (similar to the approach taken by Moore et al., 2009). Each of the cross-lagged models proposed that the residual error variances would be correlated at Time 2 and Time 3 in order to account for the absence of the contemporary influence paths present in the simultaneous influence model.

The first cross-lagged panel model included all possible paths and correlations from and between the Time 1 and Time 3 variables. The result was a model that fit the data perfectly (model $\chi^2 = 0.00, df = 0$). Aside from the stability paths, none of the standardized Time 1 to Time 3 paths was greater than an absolute value of .06, so I chose to drop all but the Time 1 to Time 3 stability paths from the model to create a more parsimonious cross-lagged panel model which would not include several non-statistically significant path coefficients.
Figure 4. Cross-lagged panel model with all possible Time 1 to Time 3 paths (standardized coefficients are shown), $\chi^2 = 0.00$, $df = 0$. For clarity, paths not shown on the diagram were: Civility 2009 to Job Satisfaction 2011 (.04), Civility 2009 to Intentions to Quit 2011 (-.06), Job Satisfaction 2009 to Civility 2011 (-.04), Job Satisfaction 2009 to Intentions to Quit 2011 (.02), Intentions to Quit 2009 to Civility 2011 (.00), and Intentions to Quit 2009 to Job Satisfaction 2011 (.01). The model accounted for the following variances Civility 2010 = .40, Civility 2011 = .43, Satisfaction 2010 = .27, Satisfaction 2011 = .27, Intentions to Quit 2010 = .27, and Intentions to Quit 2011 = .26. Letters indicate groups of paths that were constrained to be equal in the modeling process (e.g., all paths from civility to job satisfaction and job satisfaction to civility are marked with a superscript ‘A’).
Figure 5. Cross-lagged panel model with Time 1 to Time 3 stability paths (standardized coefficients are shown), $\chi^2 = 14.35, df = 6$. The model accounted for the following variances: Civility 2010 = .40, Civility 2011 = .43, Satisfaction 2010 = .27, Satisfaction 2011 = .27, Intentions to Quit 2010 = .27, and Intentions to Quit 2011 = .26. Letters indicate groups of paths that were constrained to be equal in the modeling process (e.g., all paths from civility to job satisfaction and job satisfaction to civility are marked with a superscript ‘A’).

Figure 6. Simultaneous influence model with Time 1 to Time 3 stability paths (standardized coefficients are shown), $\chi^2 = 574.42, df = 12$. The model accounted for the following variances: Civility 2010 = .61, Civility 2011 = .63, Satisfaction 2010 = .61, Satisfaction 2011 = .61, Intentions to Quit 2010 = .60, and Intentions to Quit 2011 = .60. Letters indicate groups of paths that were constrained to be equal in the modeling process (e.g., all paths from civility to job satisfaction and job satisfaction to civility are marked with a superscript ‘A’).
Although it was dropped from the model in this step due to its small magnitude, the coefficient for the path from Time 1 civility to Time 3 intentions to quit was statistically significant (.06, \( p < .01 \)). This finding suggested that job satisfaction does not fully mediate the relationship between civility and intentions to quit. Although six paths were dropped from the model, the chi-square tests and other fit indices did not change much given the increase in parsimony (\( \chi^2_{\text{difference}} = 14.35, df_{\text{difference}} = 6, p < .05; \text{RMSEA} = .02 \)). It is important to note here that all chi-square difference scores were calculated using the Satorra-Bentler scaled chi-square difference test to account for the fact that the model used maximum likelihood estimation with robust standard errors (Muthén & Muthén, 2012).

The directional paths in the cross-lagged panel model with the Time 1 to Time 3 stability coefficients appeared to suggest that civility at time \( i \) had a greater influence on job satisfaction and intentions to quit at time \( i + 1 \) than job satisfaction or intentions to quit at time \( i \) had on civility at time \( i + 1 \). To examine directionality in this model, the pairs of cross-lagged paths were systematically constrained to be equal to observe the effects on model fit indices. The other fit indices for the cross-lagged panel model with Time 1 to Time 3 stability paths showed little change as various paths were constrained to equality (Appendix C). However, each of the chi-square difference tests suggested that fit significantly decreased (\( \alpha = .05 \)) as each pair of freely estimated parameters was constrained to equality (Kline, 2005). A model with all pairs of paths constrained was compared to the unconstrained model with Time 1 to Time 3 stability paths (model \( \chi^2 = 153.26, df = 15, p < .01; \chi^2_{\text{difference}} = 138.42, df_{\text{difference}} = 9, p < .01 \)). In sum, constraining the various directional paths to be equal resulted in chi-square difference statistics which suggested that the unconstrained model (Figure 5) fit the data better than any of the models where a subset of paths was constrained. This final cross-lagged model has stronger path
coefficients from civility to job satisfaction and intentions to quit than vice versa; which supports the notion that civility is a leading indicator of both variables.

The simultaneous influence model did not fit the data as well as the cross-lagged panel model with Time 1 to Time 3 stability coefficients (AIC_{CLMODEL} = 38,587.08 < AIC_{SIMODEL} = 39,315.48). Despite the decrease in fit, the path coefficients were generally larger for the simultaneous influence model, as were the $R^2$ values for the endogenous variables (Figure 6). Similar to the cross-lagged panel model, the path coefficients suggested that civility had a stronger influence on intentions to quit than the converse, but in this case the influence is contemporary rather than predictive. The model also provided additional support for the notion that the relationship between civility and intentions to quit is not fully mediated by job satisfaction, due to statistically significant path coefficients from civility to intentions to quit. In spite of these similarities, the directionality of the relationship between civility and job satisfaction was more a case of roughly equal and reciprocal influence whereas in the simultaneous influence model it was clearly the case that civility predicted satisfaction better than the reverse.

A three step procedure similar to the one used for the cross-lagged panel model was used for examining directionality in the simultaneous influence model. Similar to the cross-lagged panel model, the other fit indices showed little change as the paths were constrained to equality (Appendix C). However, unlike the cross-lagged panel model, constraining the two pairs of paths between civility and job satisfaction (at Time 2 and at Time 3) to equality did not result in significantly poorer model fit compared to the unconstrained model ($\chi^2_{\text{difference}} = 5.71, df = 3, p > .10$). This finding supported the notion of a reciprocal relationship between civility and job satisfaction within a given year. Since this result conflicted with Moore et al. (2009) who found
that the paths from job satisfaction to civility were non-significant and dropped those paths from their model, I also tested a model with only civility and job satisfaction to determine the impact of the additional variable (intentions to quit). When the model is run with only civility and job satisfaction using my data, the result is a model with stronger paths from civility to job satisfaction than vice versa, and when those paths are constrained to be equal, the Satorra-Bentler adjusted chi-square difference statistic suggests a significant decrement in model fit ($\chi^2_{\text{difference}} = 178.34$, $df_{\text{difference}} = 3$, $p < .01$).

The next largest decrease in fit for my simultaneous influence model was due to constraining the paths between job satisfaction and intentions to quit to equality ($\chi^2_{\text{difference}} = 11.14$, $df = 3$, $p < .05$), which suggested that these paths are significantly different, and that job satisfaction is a stronger driver of intentions to quit than vice versa. Finally, the largest decrease in model fit was due to constraining the paths between civility and intentions to quit to equality ($\chi^2_{\text{difference}} = 32.02$, $p < .01$). This significant decrease in model fit suggested that the paths from civility to intentions to quit are significantly different, and that civility is a stronger driver of intentions to quit than vice versa.

In sum, the directionality results for the civility—job satisfaction relationship from the simultaneous influence model are somewhat contrary to the results observed in the cross-lagged panel model. Whereas in the cross-lagged model the paths appeared to indicate a stronger influence of civility on job satisfaction than the converse; in the simultaneous influence model, the paths were essentially of the same magnitude. Together these findings seem to suggest that within a given year, civility and job satisfaction may be more likely to influence each other equally; but from one year to the next, civility is a stronger driver of job satisfaction than vice versa.
The directionality results for the relationship between civility and intentions to quit were more consistent across the two models. The simultaneous influence model provided support for the notion that civility within a given year influences intentions to quit more strongly than intentions to quit influence civility. Likewise, the cross-lagged panel model suggested that civility in the current year was a driver of decreased intentions to quit in the following year, while intentions to quit in the current year exerted a more subtle impact on civility in the following year.

Chapter 4
Discussion

It was the primary aim of this study to add to the current body of research on (in)civility by using a longitudinal contextual modeling approach to determine the impact of civility on two key organizational outcomes: job satisfaction and intentions to quit. My findings suggest that within a given year, civility and job satisfaction display reciprocal causation but that from one year to the next, civility appears to be a stronger driver of job satisfaction than vice versa. With respect to intentions to quit, the modeling results suggested that civility is a stronger driver of intentions to quit than vice versa; both within a given year and from one year to the next.

A secondary aim of the study was to account for the clustering of workgroups within facilities when examining the relationships between civility, job satisfaction, and intentions to quit. Theoretically, I expected that workgroups within facilities would be more similar to each other than to workgroups from other facilities. Intraclass correlation coefficients (ICC-1) suggested that modest but not insignificant proportions of the variance in civility, job satisfaction, and intentions to quit could be attributed to facility membership. Accounting for this
non-independence helped to ensure that my confidence in the path coefficients I observed was not inflated due to biased standard errors (Raudenbush & Bryk, 2002; Carle, 2009).

**Theoretical and Practical Implications**

There are several theoretical and practical implications for this study. First, the results of this study demonstrate the importance of testing for bidirectional relationships between (in)civility and other organizational constructs of interest over time. For example, my finding that within a given year, civility and job satisfaction seem to influence each other to approximately equal extents suggests that previous cross-sectional work which ignored the bidirectional paths (e.g., Lim, Cortina, & Magley, 2008) may have overlooked the possibility that dissatisfaction and intentions to quit to influence concurrent levels of civility. That being said, from one year to the next, the path coefficients from job satisfaction or intentions to quit to civility are generally smaller than those in the opposite direction. Thus civility is a leading indicator of job satisfaction and intentions to quit; but it appears that concurrent levels of satisfaction and civility reciprocally influence one another.

Practically, these findings suggest that it is important to consider methods for improving workgroup civility (e.g., VHA NCOD’s Civility, Respect, and Engagement, in the Workforce program); but it is also necessary to address situations where employees are dissatisfied or intend to quit for other reasons. Dissatisfied individuals and those who intend to quit may perceive that they have little to gain from behaving respectfully toward others and are therefore likely to play a role in encouraging an atmosphere of incivility.

A final point to note with respect to the bi-directionality of the observed relationships, particularly the relationships between civility and job satisfaction in the simultaneous influence model is that they do not agree with the previous study by Moore et al. (2009). Rather than
finding evidence for equal paths between civility and job satisfaction, Moore et al. found that the paths from job satisfaction to civility were non-significant and dropped them from their model. The presence of intentions to quit as a predictor of both civility and job satisfaction seems to have affected the magnitude of the path coefficients observed in this study compared to those observed by Moore et al. When the model is run with only civility and job satisfaction, the results indicate stronger paths from civility to job satisfaction than vice versa, and when those paths are constrained to be equal, the result is a significant decrement in model fit. There is the possibility that the models presented in this study are misspecified, but there is no temporal or other logical reason why intentions to quit cannot be dynamically entangled with satisfaction and civility.

Second, the stability of the intercorrelations at each level of aggregation and the ICC(1) evidence for the need to consider facility level clustering of workgroups supports the sentiments from several authors that (in)civility research needs to explore interpersonal and organizational influences on employees’ attitudes and behaviors (Lim & Cortina, 2008; Osatuke et al., 2009). Addressing the clustering statistically not only helps to build models that more accurately capture the interactive nature of the civility construct (Osatuke et al., 2009), it also ensures that researchers do not overvalue the ability of civility to influence organizational outcomes in their data analyses by adjusting standard error estimates and ensuring less biased decision making regarding the significance level of path coefficients. In practice, knowing that the facility and workgroup cultures can influence the behaviors and attitudes of workgroups and individuals is useful because it encourages systems thinking rather than attributing causes solely to individuals (Katz & Kahn, 1978). Without support for a systems approach, it might seem appropriate to deal with incivility problems by simply taking action to change the behaviors of the perpetrators (or
to terminating their employment). However, such an approach would fail to address the contextual factors (e.g., culture) that allowed the behavior to persist in the first place.

Third, this study examined civility’s influence on job satisfaction and intentions to quit, and not the influence of incivility. As noted in the introduction, studies of incivility have done much to illuminate a growing problem in today’s workplaces, and in particular the writings of authors such as Pearson and Porath (2009) have made a strong case for taking action given the costs associated with allowing incivility to flourish. However in practice, knowing that there is a problem does not necessarily signal to the organization’s decision makers what behaviors need to be encouraged. I argue that this is one of the primary reasons to study civility, rather than incivility. While the two constructs are undoubtedly related to some degree, when civility (as measured by VHA NCOD) is low in an organization, decision makers are presented with data that focuses on the positive behaviors (e.g., cooperation, conflict resolution, co-worker support, and diversity acceptance) that need to be encouraged rather than a list of the bad behaviors that need to be eliminated. This philosophy has clear roots in positive psychology (Seligman & Csikszentmihalyi, 2000) and positive organizational behavior (Luthans, 2002), two fields of study that have found that a positive focus tends to help energize and motivate people to take action (Cooperrider, Whitney, Stavros, & Fry, 2008).

Study Limitations

A few limitations to this study will be noted here. First, there are other possible causes of civility, job satisfaction, and intentions to quit that are unaccounted for in the models I developed. One especially important influence on employee’s ratings of civility, job satisfaction, and intentions to quit is incivility from VHA customers and patients. Several authors have shown
the important role that customers and patients can play in determining the level of civility in a workplace (Hutton & Gates, 2008; Sliter et al., 2011). Another important limitation to note is that the reliability of civility, job satisfaction, and intentions to quit was less than desirable given the assumption of path analysis that exogenous variables are measured without error (Klein, 2005). The unreliability in these variables and in the endogenous variables would likely attenuate the magnitude of the path coefficients observed in my models.

A final limitation to note is that the data from each of the workgroups that was analyzed in this study did not necessarily consist of the same individuals from year to year. Employee turnover and new hires likely changed the composition of workgroups in subtle ways from year to year, and there is no good way to account for this because the individual level data are de-identified. However, previous research involving groups has shown that the norms which govern the behavioral patterns of groups can be extremely persistent even when the group no longer contains any of its original members (Jacobs and Campbell, 1961, as cited by Crano & Brewer, 2002). Given this phenomenon, it seems likely that despite some attrition and new employees being added, workgroups should tend to have relatively stable characteristics from year to year.

Future Directions

This study analyzed data from workgroups that had between four and forty members. Although this procedure was used to conform with recommendations from Moore et al. (2009) regarding the use of “typical” rather than atypical workgroups; given the shared nature of the civility construct and the fact that job satisfaction and intentions to quit were aggregated to form workgroup climate measures, it seems possible that the strength of the relationships between these variables might differ as a function of group size.
Another possibility for future research would be to go beyond the employee survey results, and attempt to make direct linkages to other organizational variables, particularly those with high costs attached to them. For example, given that VHA NCOD’s civility construct includes a diversity acceptance facet; it seems likely that civility could potentially be a leading indicator of Equal Employment Opportunity (EEO) complaint activity. Similarly, given that incivility is expected to produce disengagement and withdrawal from the workplace (Pearson & Porath, 2009), I would expect that longitudinal civility data at the workgroup or perhaps even facility level could be linked using SEM methods to increased use of sick leave time, and actual workgroup or facility level turnover. If these analyses were successful, it would provide a true business case argument for the importance of civility as a leading indicator of costly organizational outcomes.
References


Arthur, J. B. (2011). Do HR system characteristics affect the frequency of interpersonal deviance in organizations? The role of team autonomy and internal labor market practices. *Industrial Relations, 50*(1), 30-56.


## APPENDIX A

Demographics Were Similar for Individuals in Workgroups That Met Selection Criteria and Those in Workgroups That Did Not

<table>
<thead>
<tr>
<th>Age</th>
<th>Selected</th>
<th>Omitted</th>
<th>Original Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing</td>
<td>4.5%</td>
<td>3.7%</td>
<td>4.1%</td>
</tr>
<tr>
<td>&lt; 20 years</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>20 - 29 years</td>
<td>6.7%</td>
<td>7.2%</td>
<td>7.0%</td>
</tr>
<tr>
<td>30 - 39 years</td>
<td>16.6%</td>
<td>16.9%</td>
<td>16.8%</td>
</tr>
<tr>
<td>40 - 49 years</td>
<td>26.3%</td>
<td>26.6%</td>
<td>26.4%</td>
</tr>
<tr>
<td>50-59 years</td>
<td>34.2%</td>
<td>33.6%</td>
<td>33.9%</td>
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<tr>
<td>60 or older</td>
<td>11.5%</td>
<td>11.6%</td>
<td>11.6%</td>
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### Tenure

<table>
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<td>Missing</td>
<td>3.9%</td>
<td>3.3%</td>
<td>3.6%</td>
</tr>
<tr>
<td>&lt; 6 months</td>
<td>3.8%</td>
<td>4.5%</td>
<td>4.1%</td>
</tr>
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<td>6 months - 1 year</td>
<td>6.5%</td>
<td>7.1%</td>
<td>6.8%</td>
</tr>
<tr>
<td>1 - 2 years</td>
<td>12.8%</td>
<td>13.6%</td>
<td>13.2%</td>
</tr>
<tr>
<td>2 - 5 years</td>
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<td>18.2%</td>
<td>18.1%</td>
</tr>
<tr>
<td>5 - 10 years</td>
<td>16.8%</td>
<td>16.6%</td>
<td>16.7%</td>
</tr>
<tr>
<td>10 - 15 years</td>
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<td>13.2%</td>
<td>13.1%</td>
</tr>
<tr>
<td>15 - 20 years</td>
<td>12.5%</td>
<td>12.0%</td>
<td>12.3%</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>19.1%</td>
<td>17.5%</td>
<td>18.3%</td>
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### Supervisory Level

<table>
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<th>Original Sample</th>
</tr>
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<td>3.0%</td>
<td>3.2%</td>
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<tr>
<td>None</td>
<td>67.6%</td>
<td>68.6%</td>
<td>68.1%</td>
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<tr>
<td>Team Leader</td>
<td>17.2%</td>
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<td>16.7%</td>
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<tr>
<td>First Line</td>
<td>6.5%</td>
<td>6.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Manager</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Executive</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.6%</td>
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<tr>
<td>Senior Executive</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

*Note:* The tenure averages are based on 2010 - 2011 data only because the 2009 AES did not have the same measurement scale for tenure. Data are averages and may not sum to 100%.
## APPENDIX B

**Comparison of Means, Standard Deviations, and Correlations for Workgroups Meeting Selection Criteria and Omitted Workgroups**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Ci</th>
<th>JS</th>
<th>ItQ</th>
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<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Ci</td>
<td>JS</td>
<td>ItQ</td>
</tr>
<tr>
<td></td>
<td>Selected</td>
<td>Omitted</td>
<td>Selected</td>
<td>Omitted</td>
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<tr>
<td><strong>2009</strong></td>
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<tr>
<td>Civility (Ci)</td>
<td>3.76</td>
<td>3.74</td>
<td>0.48</td>
<td>0.50</td>
<td>.69</td>
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<td>Job satisfaction (JS)</td>
<td>3.90</td>
<td>3.88</td>
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<td>0.49</td>
<td>.69</td>
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<tr>
<td>Intentions to Quit (ItQ)</td>
<td>2.42</td>
<td>2.48</td>
<td>0.53</td>
<td>0.56</td>
<td>-.64</td>
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<tr>
<td><strong>2010</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Civility (Ci)</td>
<td>3.71</td>
<td>3.73</td>
<td>0.48</td>
<td>0.51</td>
<td>.71</td>
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<tr>
<td>Job satisfaction (JS)</td>
<td>3.83</td>
<td>3.83</td>
<td>0.48</td>
<td>0.49</td>
<td>.68</td>
</tr>
<tr>
<td>Intentions to Quit (ItQ)</td>
<td>2.50</td>
<td>2.54</td>
<td>0.53</td>
<td>0.58</td>
<td>-.61</td>
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<tr>
<td><strong>2011</strong></td>
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<tr>
<td>Civility (Ci)</td>
<td>3.71</td>
<td>3.74</td>
<td>0.48</td>
<td>0.50</td>
<td>.68</td>
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<tr>
<td>Job satisfaction (JS)</td>
<td>3.82</td>
<td>3.82</td>
<td>0.47</td>
<td>0.49</td>
<td>.69</td>
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<tr>
<td>Intentions to Quit (ItQ)</td>
<td>2.55</td>
<td>2.56</td>
<td>0.53</td>
<td>0.57</td>
<td>-.63</td>
</tr>
</tbody>
</table>

*Note.* Above diagonal correlations are for the selected workgroups, below diagonal correlations are for the omitted workgroups that did not have a record for each year but did have between 4 and 40 members.
**APPENDIX C**

*Fit Indices for Simultaneous Influence (SI) and Cross-Lagged Panel (CL) with Various Paths Constrained to be Equal*

<table>
<thead>
<tr>
<th></th>
<th>model $\chi^2$</th>
<th>model df</th>
<th>$p$</th>
<th>$\chi^2$ difference</th>
<th>df difference</th>
<th>$p$</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civility—Satisfaction Paths Constrained</td>
<td>574.42</td>
<td>12</td>
<td>&lt;.01</td>
<td>574.42</td>
<td>12</td>
<td>&lt;.01</td>
<td>.09</td>
<td>.97</td>
<td>.93</td>
<td>.06</td>
<td>39315.48</td>
</tr>
<tr>
<td>Satisfaction—Intentions to Quit Paths Constrained</td>
<td>604.55</td>
<td>15</td>
<td>&lt;.01</td>
<td>604.55</td>
<td>15</td>
<td>&lt;.01</td>
<td>.08</td>
<td>.97</td>
<td>.94</td>
<td>.06</td>
<td>39315.60</td>
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<tr>
<td>Civility—Intentions to Quit Paths Constrained</td>
<td>581.97</td>
<td>15</td>
<td>&lt;.01</td>
<td>581.97</td>
<td>15</td>
<td>&lt;.01</td>
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<tr>
<td><strong>CL Model All Time 1 to Time 3 Paths</strong></td>
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<td>0</td>
<td></td>
<td>.00</td>
<td>0</td>
<td></td>
<td>.00</td>
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<td>1.00</td>
<td>.00</td>
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<tr>
<td>CL Model Stability Time 1 to Time 3 Paths</td>
<td>14.35</td>
<td>6</td>
<td>&lt;.05</td>
<td>14.35</td>
<td>6</td>
<td>&lt;.05</td>
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<td>1.00</td>
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<td>.01</td>
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<td>Civility—Satisfaction Paths Constrained</td>
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<td>9</td>
<td>&lt;.01</td>
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<td>.03</td>
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<tr>
<td>Satisfaction—Intentions to Quit Paths Constrained</td>
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<td>9</td>
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<td>9</td>
<td>&lt;.01</td>
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<td>.01</td>
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<td>Civility—Intentions to Quit Paths Constrained</td>
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<td>9</td>
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<td>.03</td>
<td>1.00</td>
<td>.99</td>
<td>.02</td>
<td>38627.30</td>
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</table>

*Note.* Chi-square difference statistics calculated using the Satorra-Bentler scaled chi-square difference test to account for the fact that the model used maximum likelihood estimation with robust standard errors.