# Looking down from above: Measuring downward maintenance communication and exploring Theory X/Y assumptions as determinants of its expression

## Kevin L. Sager*

*University of Alaska Fairbanks, U.S.A.*

ABSTRACT

The present study examined the degree to which superiors' downward maintenance communication could be predicted from their Theory X/Y assumptions. In the first phase of the study, a self-report measure of downward maintenance communication was developed. Principal components analysis yielded three categories of maintenance communication: Downward Confirmation, Downward Conflict Avoidance, and Downward Civility. Regression analysis was performed in phase two. As hypothesized, Theory X orientation was a significant negative predictor of Downward Confirmation, and Theory Y orientation was a significant positive predictor of both Downward Confirmation and Downward Civility.
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## Mirar desde arriba: medición de la comunicación descendente de mantenimiento y exploración de los supuestos de la teoría X/Y como determinantes de su expresión

RESUMEN

Este estudio analizó el grado en el que puede predecirse por parte de los superiores la comunicación descendente de mantenimiento a partir de los supuestos de la teoría X/Y. En la primera fase del estudio se desarrollo una medida de autoinforme de la comunicación descendente de mantenimiento. El análisis de componentes principales dio como resultado tres categorías de comunicación de mantenimiento: confirmación descendente, evitación del conflicto descendente y urbanidad descendente. En una segunda fase se realizó un análisis de regresión. Tal y como se había planteado en la hipótesis, la orientación hacia la teoría X fue un predictor negativo significativo de la confirmación descendente y la orientación hacia la teoría Y fue un predictor positivo significativo tanto de la confirmación como de la urbanidad descendentes.
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The types of communication exhibited by superiors towards their subordinates can have profound implications. For example, Wu and Hu (2009) discovered a positive association between abusive supervision and subordinate emotional exhaustion. In contrast, maintenance communication between superiors and subordinates functions "to preserve an acceptable and lasting relational state" (Waldron, 1991, p. 28).

Although numerous studies have examined subordinates' *upward* (i.e., from subordinate to superior) maintenance communication (e.g., Waldron, 1991), only one study has examined superiors' *downward* (i.e., from superior to subordinate) maintenance communication (i.e., Lee & Jablin, 1995). Additionally, an extensive literature search revealed that no studies to date have examined possible links between superiors' cognition and their downward maintenance communication.

The growing realization that superior message selection is linked to subordinate well-being, along with the paucity of research on downward maintenance communication, provide the dual exigencies for studying the cognitive determinants of superiors' use of such communication. In this essay, I propose and test a model in which Theory X/Y assumptions function as cognitive antecedents of downward maintenance communication.

The present study was conducted in two phases. The first phase was devoted to developing a self-report measure of downward maintenance communication and the second phase was devoted to testing the model. I report each phase in a separate section of this essay.

To provide a conceptual framework for phase one, I first describe Kaplan's (1975/76) notion of relational maintenance, and then present Kaplan's (1979) two fundamental types. I then move to the study of maintenance communication in the workplace. In particular, I review studies that investigated determinants of subordinates' use of upward maintenance tactics (e.g., Lee, 1998a). Following the review, I present the results of a principal components analysis that

*Correspondence concerning this article should be addressed to Kevin L. Sager, Department of Communication. University of Alaska Fairbanks. Fairbanks, AK 99775. E-mail: ksager2@alaska.edu

I conducted to identify various categories of downward maintenance communication.

I begin my report on phase two by describing McGregor's (1960) Theory X/Y assumptions and reviewing studies that have linked Theory X/Y assumptions to communication (e.g., Neuliep, 1987). Next, I draw on relational schemata theory (Baldwin, 1992) to explain why a superior's Theory X/Y assumptions could influence his or her downward communication. I then advance a set of hypotheses and utilize regression analysis to test the set. After presenting the results, I discuss the theoretical and practical implications of the findings. Let us begin by looking at Kaplan's (1975/76) notion of relational maintenance and the various functions that it serves.

## Phase One: Instrument Development

### Relational Maintenance

Kaplan (1975/76) pointed out that "Relationships … are subject to wear-and-tear, friction, and strain, and can be counted on to run down or fall apart altogether, unless they receive regular attention" (106). He conceptualized *maintenance* as "the *manner* in which a relationship is handled" (p. 107). Kaplan claimed that maintenance serves three functions: (a) to express feelings, especially negative pent-up feelings; (b) "to *understand* what happens between" the parties, especially during periods of relational turbulence; and (c) to "*preserve a certain order* in the relationship" (p. 107). According to Kaplan, these maintenance functions can be performed in two very different ways.

**A fundamental dichotomy in relational maintenance**. Kaplan's (1975/76) two approaches to maintenance differ depending on "whether the parties to a relationship broach the subject of their relationship with each other" (p.108). The first approach is known as "*maintenance-by-suppression*" (p. 108), because "Any direct discussion of their mutual feelings, their views of the relationship, or their efforts to carry on in orderly fashion is, in effect, suppressed" (p. 108). The second approach is called "*maintenance-by-expression*" (p. 108). Here, "the parties to a relationship verbalize their feelings, their observations about the relationship, and the regulation of the interaction between them" (p. 108).

Although Kaplan (1978) suggested that asymmetrical reliance on expressive maintenance in the workplace is extremely rare, he did find one organization that required its members to use maintenance by expression – "The Farm" (p. 378). According to Kaplan, The Farm was a religious commune led by Stephen Gaskin. Kaplan uncovered three functions of expressive maintenance at The Farm: (a) *integration* (promoting relational harmony), (b) *regulation* (promoting normative behavior), and (c) *education* (promoting collective values). After researching expressive maintenance in the field, Kaplan (1979) examined the relative efficacy of expressive and suppressive maintenance in the laboratory.

In an experiment that required group members to complete three successive tasks, Kaplan (1979) compared groups that used expressive maintenance to those that used suppressive maintenance. As predicted, he found that the groups in the expressive maintenance condition reported higher overall levels of interpersonal satisfaction and "emotional drain" (p. 54) than the groups in the suppressive maintenance condition. Unexpectedly, however, he discovered that the groups that used expressive maintenance did not exhibit better task performance than the groups that used suppressive.

**Categories of upward maintenance communication**. Moving beyond Kaplan's fundamental dichotomy, researchers set out to identify the range of upward maintenance tactics that exist. In an initial study of this sort, Waldron (1991) defined maintenance communication as "messages and behaviors used to preserve an acceptable and lasting relational state" (p. 289) and identified four categories of upward maintenance tactics: (a) *personal* (e.g., exhibiting a friendly demeanor), (b) *contractual* (e.g., adhering to organizational rules), (c) *regulative* (e.g., omitting information indicative of poor performance), and (d) *direct* (e.g., confronting the supervisor about perceived unjust treatment). In a subsequent study, Tepper (1995) added a fifth category called "extracontractual" (p. 1197), which he defined as "efforts to *exceed* supervisory and organizational expectations" (p. 1197).

At about the same time as Tepper's study, Lee and Jablin (1995) broadened the focus of previous studies on maintenance communication by considering the communicative strategies that subordinates and superiors use to maintain their relationships. In particular, Lee and Jablin set out to identify situations in which subordinates and superiors believed it was necessary to display maintenance behaviors as well as the types of maintenance behaviors that they displayed in those situations.

Lee and Jablin (1995) identified three "strategic maintenance situations" (p. 224): (a) *escalating* (undesirable movement towards increased superior-subordinate closeness), (b) *deteriorating* (undesirable movement towards decreased superior-subordinate closeness), and (c) *routine* (no change in superior-subordinate closeness, but the interactant still seeks to reinforce the existing level of closeness). In the *routine* strategic maintenance situation, Lee and Jablin found that the maintenance behaviors that subordinates and superiors reported using most often were "avoidance," "supportiveness," "positive regard," "restrained expression," and "small talk" (p. 237).

**Determinants of upward maintenance communication**. Accompanying the expansion in the number of upward maintenance tactics identified was an effort to identify determinants of their use. For ease of review, I have grouped various determinants of subordinate upward maintenance communication into three categories: (a) subordinate self-efficacy, (b) superior-subordinate relationship quality, and (c) organizational cohesion. In addition, because Waldron's (1991) categories of upward maintenance communication are not broken down by situation, Waldron's findings are integrated below with Lee and Jablin's findings for the routine strategic maintenance situation.

***Subordinate self-efficacy***. Bandura (1994) defined self-efficacy "as people's beliefs about their capabilities to produce designated levels of performance …" (p. 71). Sources of self-efficacy may include mastery experiences (Bandura, 1994) and positional power (Stolte, 1983). Subordinate self-efficacy appears to be positively associated with subordinate display of personal and direct upward maintenance communication. For example, Lee (1998a) found that subordinates who perceived themselves to be effective at upward maintenance communication reported using more supportiveness, positive regard, and small talk, but less avoidance than subordinates who perceived themselves to be ineffective. Additionally, Waldron and Hunt (1992) found that subordinate position power (i.e., the power to supervise) was a positive predictor of subordinate use of direct tactics.

***Superior-subordinate relationship quality***. Another area of study is the effects of superior-subordinate relationship quality on subordinate use of upward maintenance communication. Research in this area suggests that superior-subordinate relationship quality is positively related to subordinate use of personal, contractual, and direct tactics, but negatively related to use of regulative and avoidance tactics (Lee & Jablin, 1995; Tepper, 1995; Waldron, 1991; Waldron & Hunt, 1992).

***Organizational cohesion***. A third area of inquiry concerns the broader social context in which the superior-subordinate relationship is embedded. Organizational cohesion appears to be negatively associated with subordinate use of avoidance tactics and positively associated with use of personal tactics. For example, Lee (1998b) found that subordinates in cooperative groups reported using avoidance less frequently, but supportiveness, positive regard, and small talk more frequently than subordinates in uncooperative groups. Similarly, Lee

found that when in-group relationships existed between subordinates' superiors and the superiors' superiors, the subordinates reported using avoidance less often, but supportiveness, positive regard, and small talk more often than when out-group relationships existed.

**Identifying general categories of downward maintenance communication**. In the present study, *downward maintenance communication* is defined as messages exhibited by a superior towards his or her subordinate in an effort to sustain a desired level of closeness and relational valence. In contrast to Waldron (1991) and Tepper (1995), who identified general categories of upward maintenance communication (e.g., personal, extracontractual), Lee and Jablin's (1995) taxonomy includes a number of highly specific maintenance behaviors (e.g., "restrained expression," "indirect conversational refocus," "procrastination," "self-promotion" [pp. 235-237]). Consistent with Waldron's (1991) and Tepper's (1995) approach, I sought to identify general categories of downward maintenance communication that presumably subsume the range of more specific downward maintenance behaviors. Consequently, Waldron's measure of *upward* maintenance communication (Waldron, 1991; Waldron, Hunt, & Dsilva, 1993) was adapted for use herein as a measure of *downward* maintenance communication.

## Method

### Participants

The participants were 250 superiors (supervisors or managers) who worked for organizations in the Northwestern or Midwestern United States. They held positions in sales or higher education, were predominantly female (155 females, 83 males, and 12 unreported), and ranged in age from 20 to 72 ($M$ = 48.35, $SD$ = 10.54). The participants described themselves as White, non-Hispanic/Caucasian (89.60%), African-American (0.80%), Alaska Native (0.40%), American Indian (.80%), Asian (0.40%), Hispanic (4.00%), Pacific Islander (0.80%), Multiracial (1.20%), and Other (2.00%).

### Procedures

Potential participants were employed as supervisors or managers. They received mass e-mail messages announcing the opportunity to complete an online survey, the eligibility requirements (i.e., age 18 or older and employed as a supervisor or manager), and the opportunity to enter a random drawing for a gift certificate. The mass e-mail messages included a link to the survey website, which contained an online consent form and the survey items.

### Measures

**Downward maintenance communication.** Waldron's (1991) 29-item survey measures four categories of upward maintenance communication (i.e., personal, direct, regulative, and contractual). In support of the reliability of the instrument, Waldron et al. (1993) found acceptable levels of internal consistency for the four subscales: personal (alpha = .79), direct (alpha = .75), regulative (alpha = .62), and contractual (alpha = .70).

The following examples illustrate how I converted the original 29 upward maintenance items to downward maintenance items. The original item "Avoid direct criticism of him/her" (Waldron, 1991, p. 298) was converted to "I avoid directly criticizing individual employees." Similarly, the original item "Treat him/her like a friend" (Waldron, 1991, p. 298) was converted to "I treat individual employees like friends."

The instructions for completing the downward maintenance communication items stated that the items "describe behaviors that you, as a manager or supervisor, might exhibit towards individual employees in order to maintain your one-to-one relationships with individual employees." Participants indicated their extent of agreement with each item by selecting a number along a 7-point, Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*).

## Results

Initial analysis of the data revealed that the Kaiser-Meyer-Olkin measure of sampling adequacy was .72, and that Bartlett's Test of Sphericity was significant, $p$ < .001. These findings suggested that the correlation matrix was factorable (Field, 2005). Principal components analysis with Varimax rotation was then performed on the 29 items.

Analysis of the scree plot suggested that there were four components. Two alternative solutions were then explored, one with four components retained and the other with three retained. The first three components in both rotated solutions were very similar. However, in the four-component solution, the particular set of survey items that comprised the fourth component had an unacceptably low Cronbach's alpha value of .53, and the underlying meaning of this fourth component seemed extremely difficult to interpret. Consequently, I chose to retain three components in accordance with Kachigan's (1991) criterion of comprehensibility. All three components had acceptable Cronbach's alpha values (i.e., .74, .71, and .71), and all were readily interpretable. A total of 32.06% of the variance was explained by the three components. The items comprising each component are shown in Table 1.

### Component Interpretation

I named the three components Downward Confirmation, Downward Conflict Avoidance, and Downward Civility. Each component (or category) of downward maintenance communication shares conceptual overlap with a more broadly-defined communication phenomenon. Let us now examine how communication scholars have defined each communication phenomenon, as well as look at the more narrowly-defined meaning of each corresponding component.

**Confirmation**. Cissna and Sieburg (1981) conceived of *confirmation* as messages capable of reinforcing a receiver's sense of existence, sense of relatedness to others, or sense that his or her thoughts and feelings are valid. Closely related to these three functions, Cissna and Sieburg (1981) grouped confirming messages into three sets: recognition, acknowledgment, and endorsement.

Confirming messages classified as *recognition* reinforce the receiver's sense of existence as a distinct individual (Cissna & Sieburg, 1981). A variety of communicative behaviors may be considered forms of recognition: "looking at the other, making frequent eye contact, touching, speaking directly to the other person, and allowing the other the opportunity to respond" (p. 269). Confirmation in the form of *acknowledgment* reinforces the receiver's sense of relatedness to others (Cissna & Sieburg, 1981), that is, "it acknowledges a relationship of affiliation with the other" (p. 259). Acknowledgment can be accomplished by engaging in a meaningful dialogue with a receiver, providing thoughtful, "relevant and direct response[s] to his or her communication" (p. 269-270). And confirming messages in the *endorsement* set reinforce the receiver's sense that his or her thoughts and feelings are real and valid (Cissna & Sieburg, 1981). Consistent with this objective, critiquing or evaluating the receiver's experience should be avoided (Cissna & Sieburg, 1981).

***Downward confirmation.*** The Downward Confirmation component consists of items 1-8 (Cronbach's alpha = .74). Initiating interaction with employees, engaging in conversations with them, and adhering to *their* work-related rules characterize the first component. These three sub-themes closely resemble Cissna and Sieburg's (1981) three categories of confirming messages (i.e., recognition, acknowledgment, and endorsement).

**Table 1**
Component Loadings for Varimax Orthogonal Three-Component Solution for Downward Maintenance Communication Items

| | Component Loading | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| 1. I share jokes or amusing stories with individual employees. | .64 | .11 | .13 |
| 2. I talk with individual employees about past work experiences we have shared. | .62 | .03 | .29 |
| 3. I frequently offer my opinions to individual employees. | .55 | -.09 | -.12 |
| 4. I talk with individual employees frequently even when I have nothing important to discuss. | .53 | .10 | .10 |
| 5. I treat individual employees like friends. | .50 | .41 | .07 |
| 6. I am sure to follow the work-related rules individual employees have established. | .50 | -.02 | -.09 |
| 7. I make a point to interact with individual employees at social gatherings. | .49 | .12 | .35 |
| 8. I ask individual employees about their personal lives. | .45 | .01 | .15 |
| 9. I confront individual employees who treat me unjustly. | .42 | -.33 | .02 |
| 10. I give individual employees some of the credit when I do a good job at work. | .40 | .11 | .25 |
| 11. I make sure to tell individual employees when I am unhappy about something at work. | .39 | -.16 | -.32 |
| 12. I tell individual employees how I expect to be treated at work. | .39 | -.17 | -.17 |
| 13. I ask individual employees for help even when I don't really need any help. | .37 | .32 | -.24 |
| 14. I discuss any problems in my relationships with individual employees with the individual employees themselves. | .26 | -.06 | .06 |
| 15. I avoid conflicts with individual employees. | -.13 | .72 | .15 |
| 16. I avoid delivering bad news to individual employees. | -.07 | .65 | -.06 |
| 17. I avoid directly criticizing individual employees. | -.15 | .63 | .22 |
| 18. I ignore the comments of individual employees which might change our relationships for the worse. | .07 | .58 | -.05 |
| 19. I make sure individual employees are in a good mood before I discuss important work-related matters with them individually. | .22 | .54 | -.06 |
| 20. I sometimes stretch the truth during conversations with individual employees in order to avoid problems with them. | .11 | .47 | -.41 |
| 21. I am certain to follow the work-related suggestions of individual employees. | .33 | .36 | .13 |
| 22. I talk only superficially with individual employees. | -.26 | .33 | -.25 |
| 23. I share my frustrations with other managers or supervisors rather than with individual employees. | -.01 | .06 | .05 |
| 24. I remain polite towards individual employees. | .05 | .07 | .73 |
| 25. I respond with a positive attitude when individual employees ask me to do something. | .20 | .01 | .69 |
| 26. I compliment individual employees. | .31 | -.05 | .57 |
| 27. I follow organizational rules as closely as possible to avoid problems with individual employees. | -.01 | -.04 | .42 |
| 28. I make sure to tell individual employees when I have done a good job at work. | .32 | .17 | -.38 |
| 29. I avoid showing negative emotions towards individual employees. | .08 | .10 | .34 |
| Eigenvalue | 3.70 | 2.97 | 2.63 |
| Percent of variance explained | 12.76 | 10.23 | 9.07 |

*Note*. For an item to be considered part of a component, the item's loading had to be .45 or higher (Comrey & Lee, 1992). Component 1 = Downward Confirmation, Component 2 = Downward Conflict Avoidance, Component 3 = Downward Civility. The items above were adapted from Waldron's measure of upward maintenance communication (Waldron, 1991; Waldron, Hunt, & Dsilva, 1993). Permission was granted from Waldron to adapt the original items, and to print the adapted items.

**Conflict avoidance**. Viewing conflict avoidance as a set of strategies rather than as a singular strategy, Wang, Fink, and Cai (2012) identified three dimensions that they claimed underlie six distinct conflict avoidance strategies. The first dimension they identified is *person-avoidance* (p. 228), which deals with whether the other party to the conflict is physically avoided. The second dimension, *issue-avoidance* (p. 228), concerns whether discussion of the conflict issue with the other party is avoided. The last dimension, *temporal* (p. 229), addresses whether conflict avoidance is engaged in over a short (e.g., during a single conversation) or long time period (e.g., across multiple conversations) (Wang et al., 2012).

***Downward conflict avoidance.*** The Downward Conflict Avoidance component is comprised of items 15-20 (Cronbach's alpha = .71). These items deal mostly with avoiding discussion of conflict-laden issues, only broaching such issues at ideal times, and distorting issue content to avoid conflict. The approach to conflict avoidance reflected in these items is similar to what Wang et al. (2012) identified as *issue-avoidance* (p. 228).

**Civility**. In a 2009 study that explored the meanings of civility, Disbrow and Prentice administered a survey to communication scholars that asked them to define civility and to recall instances of civility. Disbrow and Prentice found that the three most frequently occurring themes in participants' definitions of civility were "Respect" (p. 10), "Polite, social norms, etiquette" (p. 10), and "Consideration, courtesy" (p. 10). In their analysis of participants' recalled instances of civility, they found that the three most frequently occurring themes were "difference of opinion handled professionally or with respect" (p. 11), "acts of polite behavior" (p. 11), and "supportive climate" (p.11). Looking back at their data, Disbrow and Prentice noted that "the theme of respect that appears to dominate respondent definitions of civility continued to be pervasive in the descriptions of civil incidents" (p. 9).

***Downward civility.*** The Downward Civility component is composed of items 24-26 (Cronbach's alpha = .71). Exhibiting politeness towards employees, displaying a positive attitude towards employees when they make requests (regardless of whether the requests are

granted), and complimenting employees for their accomplishments characterize the last component. Here, the item content closely parallels the meanings of civility identified by Disbrow and Prentice (2009), namely "Acts of polite behavior" (p. 11), "Difference of opinion handled professionally or with respect" (p. 11), and "Supportive climate" (p. 11). After identifying the three categories of downward maintenance communication, I then explored the possibility that McGregor's (1960) Theory X/Y assumptions function as cognitive determinants of such communication.

### Phase Two: Test of Model

#### Theory X and Theory Y Assumptions

McGregor (1960) claimed that superiors may view their subordinates in two principal ways. He labeled one perspective on subordinates "Theory X" (p. 35) and the other "Theory Y" (p. 47). Each perspective consists of a set of assumptions (McGregor, 1960). According to McGregor, a superior with a Theory X perspective believes that his or her subordinates do not like to work, require coercion to complete assigned tasks, look to others for guidance, and do not want to be held accountable. A superior with a Theory Y perspective, on the other hand, believes that his or her subordinates can be intrinsically motivated to work, are capable of regulating their performance, prefer to be held accountable, are often able to devise innovative solutions, and typically have cognitive abilities that are not fully utilized (McGregor, 1960).

Following publication of McGregor's (1960) book, researchers began to test some of the claims that he advanced, such as the claim that Theory X/Y assumptions influence superior behavior.

**Linking Theory X/Y assumptions to communication**. Past research suggests that superiors' Theory X/Y assumptions influence how they communicate with their subordinates. One of the earliest studies was conducted by Fiman (1973), who examined the relationship between Theory Y assumptions and leadership behavior. Fiman discovered that Theory Y orientation correlated positively with consideration but negatively with initiating structure.

Envisioning a similar link, Neuliep (1987) sought to uncover relationships between Theory X/Y orientation and compliance-gaining methods. Neuliep found that Theory X orientation correlated positively with reliance on particular anti-social compliance-gaining strategies, whereas Theory Y orientation correlated positively with reliance on certain pro-social strategies. Further evidence comes from a study by Ashforth (1997), who examined the relationship between Theory X orientation and "petty tyranny" (p. 127). Ashforth (1994) described the petty tyrant as "an individual who acts in an arbitrary and self-aggrandizing manner, belittles subordinates, evidences lack of consideration, forces conflict resolution, discourages initiative, and utilizes noncontingent punishment" (p. 772). As predicted, Ashforth (1997) found a positive relationship between manager Theory X beliefs and subordinate perceptions of manager petty tyranny.

More recently, Sager (2008) proposed that Theory X/Y assumptions were sources of variation in superior communicator style. Sager found that Theory X orientation correlated positively with the dominant and impression leaving superior communicator styles, whereas Theory Y orientation correlated positively with the supportive, nonverbally expressive, and impression leaving superior communicator styles, but negatively with the anxious style. Taking a similar approach, Russ (2011) examined the degree to which two elements of managers' propensity for participative decision making, anticipated effectiveness, and anticipated power could be predicted from their Theory X and Theory Y assumptions. He found that Theory Y assumptions positively predicted both anticipated effectiveness and anticipated power and that Theory X assumptions negatively predicted anticipated power. Taken together, the above studies suggest

that Theory X/Y assumptions are cognitions that influence communication behavior. In this way, I propose that Theory X/Y assumptions can be viewed as knowledge that is stored in relational schemata.

#### Relational Schemata

According to Andersen (1993), "schemata are memory structures that people rely on to summarize experience and guide future behavior" (p. 3). One particular class of schemata is known as *relational schemata*. Drawing on Baldwin's (1992) earlier work, Pierce, Baldwin, and Lydon (1997) defined relational schemata as "*cognitive structures representing regularities in patterns of interpersonal relatedness*" (p. 21). Relational schemata "provide interactants with definitions and interpretations of [different types] of interpersonal relationships" (Andersen, 1993, p. 3). Smith (1995) argued that "relational schemata can exist for any type of interpersonal relationship, such as friendships, romantic relationships, or family relationships" (p. 89). Construing relational schemata as cognitive structures naturally leads to a consideration of their parts.

**Parts of relational schemata**. Baldwin (1992) claimed that a relational schema contains three parts, an "interpersonal script," a "self-schema," and an "other-schema" (p. 468). According to Baldwin (1992), an *interpersonal script* contains typical sequences of behaviors enacted between self and other within a particular type of relationship, as well as "expectations about the thoughts, feelings, and goals of both self and other" (p. 468). Baldwin conceptualized *self- and other-schemas* "as generalizations or theories about self and other in particular relational contexts that are used to guide the processing of social information" (pp. 468-469). Researchers have envisioned associations between relational schemata and communication in both romantic and workplace relationships.

**Relational schemata in romantic relationships**. Treating couple types (Fitzpatrick, 1988) as relational schemata, Dainton and Stafford (2000) examined the link between such schemata and married individuals' maintenance behaviors. They discovered that an individual's endorsement of the traditional relational schema was a significant positive predictor of his or her self-reported display of two maintenance behaviors: positivity and conflict management. In a similar study, Weigel and Ballard-Reisch (1999) discovered that compared to separate couples, traditional and independent couples reported greater use of the maintenance behaviors of openness and assurances.

The above studies that linked couple type to communication may give the impression that relational schemata apply only to romantic relationships. However, Baldwin (1992) argued that relational schemata can apply to *non-romantic* relationships as well. In particular, Baldwin asserted that relational schemata may concern "conventional social role interactions, such as … doctor-patient or teacher-student interaction patterns" (p. 470). In the workplace, conventional interaction patterns include mentor-protégé interaction and superior-subordinate interaction.

**Relational schemata in workplace relationships**. Ragins and Verbos (2007) applied past theory and research on relational schemata to generate a theory of mentoring schemata. According to Ragins and Verbos (2007), *mentoring schemas* can be considered relational schemata and can be defined as "fluid cognitive maps derived from past experiences and relationships that guide mentor's and protégé's perceptions, expectations, and behaviors in mentoring relationships" (p. 101). Consistent with Baldwin's (1992) description of relational schemata, Ragins and Verbos argued that mentoring schemas consist of three parts: "cognitive representations of the role of mentor, the role of protégé, and *mentoring scripts* that guide the pattern of interaction in the relationship" (p. 101). The knowledge stored in mentoring schemas is not an end in itself; rather, it is a means to other ends – expectations, behaviors, and outcome assessments.

Of particular relevance to the present paper, Ragins and Verbos (2007) asserted that "mentoring schemas influence members' expectations and behaviors in the relationship, their satisfaction with the relationship, and their overall evaluation of the relationship's quality and effectiveness" (p. 108). More specifically, Ragins and Verbos envisioned the following sequence of causal flow: mentoring schemas influence mentoring expectations, which, in turn, influence mentoring behaviors. The mentoring behaviors exhibited are, in turn, evaluated based on mentoring expectations. The outcome of such evaluation determines perceptions of mentoring relationship quality, and such perceptions can cycle back to serve as a source of knowledge stored in mentoring schemas.
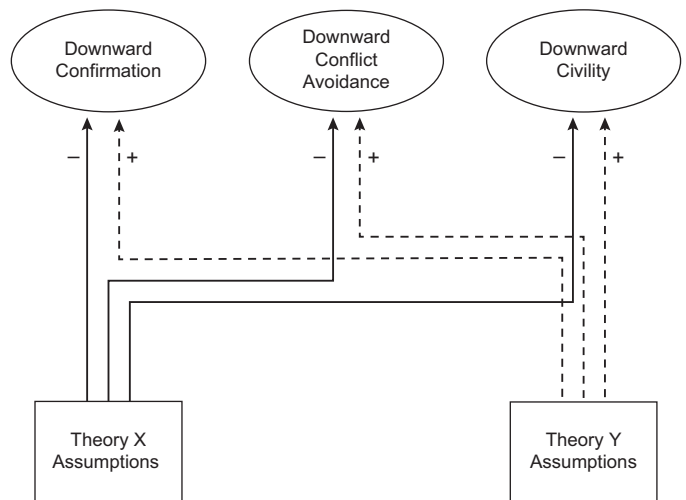
Another type of conventional interaction pattern in the workplace is superior-subordinate interaction. Although originally not conceived of as "relational schemata" per se, Henderson and Argyle (1986) studied conceptually similar cognitions consisting of role-related rules for the workplace. In particular, Henderson and Argyle examined participants' judgments of the appropriateness (applicability) of various rules of conduct for individuals enacting the roles of superior, subordinate, or work-mate. The rules judged appropriate for superiors included formulating plans, consulting with subordinates, providing rationales for tasks, encouraging subordinates, serving as an advocate, not monitoring subordinate performance too closely, and not talking about personal finances (Henderson & Argyle, 1986). In summing up their findings, they suggested that superior rules largely pertained to consideration behavior and the appropriate use of power.

***Linking Theory X/Y assumptions to downward maintenance communication via superior-subordinate relational schemata***. Building upon the work of Baldwin (1992), Henderson and Argyle (1986), and Ragins and Verbos (2007), I propose that Theory X and Theory Y assumptions constitute generalizations about subordinates that are stored in superior-subordinate relational schemata. In turn, I propose that superior-subordinate relational schemata shape superiors' expectations of how their subordinates will behave in the workplace and that such expectations influence superiors' downward maintenance communication. The above research findings linking Theory X/Y assumptions to communication (Ashforth, 1997; Fiman, 1973; Neuliep, 1987; Russ, 2011; Sager, 2008), along with the proposed treatment of Theory X/Y assumptions as elements of superior-subordinate relational schemata, suggest the plausibility of Theory X/Y assumptions functioning as cognitive determinants of downward maintenance communication.

## Hypotheses

The hypotheses below assert that superiors' display of Downward Confirmation, Downward Conflict Avoidance, and Downward Civility can be predicted from their Theory X and Theory Y assumptions. For ease of presentation, the hypotheses are also depicted visually in the model shown in Figure 1.

**Theory X/Y assumptions and downward confirmation**. McGregor (1960) argued that "Theory X leads naturally to an emphasis on the tactics of control – to procedures and techniques for telling people what to do, for determining whether they are doing it, and for administering rewards and punishments" (p. 132). Additionally, he claimed that the Theory X superior perceives subordinates "as prepared to take advantage of the employment relationship unless they are closely controlled and firmly directed" (p. 139). Viewing subordinates as potentially deceptive individuals who need to be monitored and controlled is likely to reduce superior desire to develop and maintain close superior-subordinate relationships, which, in turn, is likely to reduce superior display of downward confirmation. In addition, viewing subordinates as potential sources of threat is likely to lead superiors to question the validity of their subordinates' reported experiences, which is a form of disconfirmation (Cissna & Sieburg, 1981).



**Figure 1.** A model of Theory X and Theory Y Assumptions Functioning as Cognitive Determinants of Downward Maintenance Communication.

Research on the strategic use of maintenance communication leads to a similar conclusion. Lee and Jablin (1995) found that superiors used the maintenance behaviors of indirect and direct conversational refocus in escalating situations, which are characterized by *undesirable* movement towards increased superior-subordinate closeness. Their findings suggest that indirect and direct conversational refocus are maintenance behaviors designed to *decrease* superior-subordinate closeness. Both indirect and direct conversational refocus could be considered forms of disconfirmation because in each case the superior refuses to provide "relevant and direct response[s]" (Cissna & Sieburg, 1981, p. 269) to the subordinate's messages. Assuming that Theory X superiors seek to decrease superior-subordinate closeness and that superiors utilize disconfirming tactics to do so, it thus follows that Theory X orientation and downward confirmation are inversely related:

*H*1a: Theory X orientation is a significant negative predictor of Downward Confirmation.

McGregor (1960) argued that "Theory Y, on the other hand, leads to a preoccupation with the *nature of relationships*" (p. 132). He detailed the various roles that Theory Y superiors may enact with their subordinates: "the most appropriate roles of the [Theory Y] manager vis-à-vis his subordinates are those of teacher, professional helper, colleague, [and] consultant. Only to a limited degree will he assume the role of authoritative boss" (McGregor, 1960, p. 174). A Theory Y superior likely realizes that successful enactment of these various roles in the superior-subordinate dyad may require a relatively high degree of superior-subordinate closeness. Superior desire to develop and maintain superior-subordinate closeness is likely to increase superior display of downward confirmation.

A similar conclusion derives from Sager's (2008) research on superior communicator styles. Sager (2008) found a positive relationship between Theory Y orientation and the supportive superior communicator style, which is characterized by friendliness and conscientious listening. By engaging in friendly dialogues with subordinates and listening conscientiously to them, a superior is exhibiting confirmation behavior (Cissna & Sieburg, 1981). Therefore, Theory Y-oriented superiors are likely to confirm their subordinates:

*H*1b: Theory Y orientation is a significant positive predictor of Downward Confirmation.

**Theory X/Y assumptions and downward conflict avoidance.** According to McGregor (1960), "the central principle of organization which derives from Theory X is that of direction and control through the exercise of authority – what has been called 'the scalar principle'" (p. 49). The Theory X superior's reliance on authority as

a means of influence and lack of consideration for his or her subordinates' underlying interests provides a basis for hypothesizing an inverse relationship between Theory X orientation and Downward Conflict Avoidance.

Further justification comes from Sager's (2008) study. He found that Theory X orientation correlated positively with use of the dominant superior communicator style. The positive association between Theory X orientation and the dominant superior communicator style, which is marked by a controlling and argumentative demeanor, further suggests that Theory X superiors are unlikely to avoid conflict with their subordinates:

*H*2a: Theory X orientation is a significant negative predictor of Downward Conflict Avoidance.

In contrast, McGregor (1960) argued that "the central principle which derives from Theory Y is that of integration: the creation of conditions such that the members of the organization can achieve their own goals *best* by directing their efforts toward the success of the enterprise" (p. 49). From a Theory Y perspective, "authority is an inappropriate means for obtaining commitment to objectives. Other forms of influence – help in achieving integration, for example – are required for this purpose" (McGregor, 1960, p. 56). The Theory Y superior's preference for using integration rather than authority to influence subordinates may make it easier for him or her to avoid discussion of conflicts related to work goals since subordinates had a say in establishing those work goals. Using the nomenclature of Wang et al. (2012), I reason that initial alignment of subordinate and organizational goals may facilitate a superior's use of *issue-avoidance* (p. 228).

A similar conclusion can be drawn from Russ' (2011) study. Russ found that Theory Y assumptions positively predicted the disposition to utilize participative decision-making. The use of participative decision-making methods, such as the consensus decision rule, may make it easier for a superior to attribute particular decisions to "the group" rather than to him or herself. A likely consequence of such diffusion of responsibility is that a superior can more easily avoid conflict with subordinates who become dissatisfied with earlier decisions reached. Theory Y superiors' preferences for integration and participative decision-making undergird the next hypothesis:

*H*2b: Theory Y orientation is a significant positive predictor of Downward Conflict Avoidance.

**Theory X/Y assumptions and downward civility.** A Theory X superior "holds people in relatively low esteem. He sees himself as a member of a small elite endowed with unusual capacities, and the bulk of the human race as rather limited" (McGregor, 1960, p. 139). The Theory X superior's lack of respect for the typical subordinate is likely to be reflected in his or her communication with that subordinate.

The next hypothesis can also be justified on empirical grounds. Ashforth's (1994) taxonomy of petty tyranny includes several categories of behavior that are antithetical to Disbrow and Prentice's (2009) conceptualization of civility (e.g., belittling subordinates). Given that Ashforth (1997) discovered a positive association between Theory X orientation and petty tyranny, it thus follows that Theory X superiors may be inclined to treat their subordinates in an uncivil manner:

*H*3a: Theory X orientation is a significant negative predictor of Downward Civility.

In contrast, McGregor (1960) claimed that the Theory Y superior "regards his subordinates as genuine assets in helping him fulfill his own responsibilities, and he is concerned with creating the conditions which enable him to realize these assets" (p. 140). A Theory Y superior likely realizes that treating subordinates in a civil manner may facilitate superior–subordinate collaboration. Thus, the Theory Y superior is likely to exhibit Downward Civility.

The last hypothesis is also buttressed by Fiman's (1973) research on consideration behavior. Fiman found a positive relationship between Theory Y orientation and consideration behavior. According to Fleishman and Salter (1963), consideration behavior reflects a genuine *respect* for subordinates. Given that respect was a prominent theme in scholars' definitions of civility (Disbrow & Prentice, 2009), it thus follows that Theory Y superiors are likely to treat their subordinates in a civil manner:

*H*3b: Theory Y orientation is a significant positive predictor of Downward Civility.

## Method

### Participants

Of the 250 superiors who provided survey responses to the measure of downward maintenance communication, 240 of them also provided responses to the measure of Theory X/Y assumptions, which appeared second in the questionnaire booklet. The 240 superiors (148 females, 81 males, and 11 unreported) ranged in age from 20 to 72 (*M* = 48.28, *SD* = 10.60). They described themselves as White, non-Hispanic/Caucasian (90.42%), African-American (0.83%), American Indian (0.83%), Asian (0.42%), Hispanic (3.75%), Pacific Islander (0.42%), Multiracial (1.25%), and Other (2.08%).

### Measures

**Theory X/Y assumptions**. Superiors' Theory X/Y assumptions were measured using Sager's (2008) Theory X and Theory Y Inventory. The Theory X scale contains 11 items and the Theory Y scale contains 6. Each item is accompanied by a 9-point, Likert-type scale. Past research provides evidence for the reliability of Sager's inventory. For example, Sager (2008) obtained Cronbach's alpha values of .82 (Theory X) and .65 (Theory Y). In a later study, Russ (2011) found alpha values of .75 (Theory X) and .74 (Theory Y). Evidence for the factorial validity of the inventory is provided in Sager's (2008) study.

In the present study, the Theory X and Theory Y Inventory was used in its original format except that participants responded to each item using a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). A superior's score on each scale was determined by computing the mean of his or her responses to the items in that scale. The internal consistency reliability of each scale was adequate: Theory X (alpha = .84) and Theory Y (alpha = .65).

**Downward maintenance communication.** A superior's score on each of the three downward maintenance communication scales was determined by computing the mean of his or her responses to the items in that scale. Although the sample size was slightly reduced, the internal consistency reliability of each scale remained adequate: Downward Confirmation (alpha = .74), Downward Conflict Avoidance (alpha = .71), and Downward Civility (alpha = .71). Initial statistical analysis of demographic variables and downward maintenance communication revealed no significant differences between female and male superiors on their reported levels of use of the three types of downward maintenance communication (see Table 2). Similarly, superiors' age was not significantly correlated with Downward Confirmation, $r = -.10$, $p = .144$, or Downward Conflict Avoidance, $r = .09$, $p = .166$. However, superiors' age was significantly correlated with Downward Civility, $r = .17$, $p = .008$, a finding which highlighted the importance of controlling for demographic variables in subsequent statistical analyses.

## Results

In order to assess the relationship between one set of assumptions and each category of downward maintenance communication, while statistically controlling for the other set of assumptions as well as demographic variables, hierarchical multiple regression analysis was used to test the hypotheses. With a sample size of 240 superiors, the power to detect a relatively small effect size (i.e., $f^2 = .05$) in step 2 of the hierarchical multiple regression was .87 (Soper, 2013). Table 3

**Table 2**
Comparison of Female and Male superiors on their Reported Levels of Use of Downward Confirmation, Downward Conflict Avoidance, and Downward Civility

| Maintenance Communication | Biological Sex | M | SD | t | df | p |
|---|---|---|---|---|---|---|
| Downward Confirmation | Female | 4.70 | .90 | 0.12 | 227 | .904 |
| | Male | 4.68 | .98 | | | |
| Downward Conflict Avoidance | Female | 3.31 | 1.07 | 0.42 | 202.77 | .673 |
| | Male | 3.26 | .82 | | | |
| Downward Civility | Female | 6.28 | .72 | 1.65 | 227 | .101 |
| | Male | 6.12 | .67 | | | |

*Note.* The *t*, *df*, and *p* values shown for the comparison between females and males on Downward Conflict Avoidance are adjusted for equal variances not assumed, $F = 6.37$, $p = 012$.

**Table 3**
Means, Standard Deviations, Alpha Values, and Correlations for Superiors' Theory X, Theory Y, Downward Confirmation, Downward Conflict Avoidance, and Downward Civility Scores

| Variable | M | SD | α | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|---|
| 1. Theory X | 4.21 | .90 | .84 | -- | | | | |
| 2. Theory Y | 5.34 | .79 | .65 | -.12 | -- | | | |
| 3. Downward Confirmation | 4.70 | .93 | .74 | -.14* | .36** | -- | | |
| 4. Downward Conflict Avoidance | 3.28 | .99 | .71 | -.01 | .07 | .11 | -- | |
| 5. Downward Civility | 6.24 | .70 | .71 | .09 | .29** | .27** | -.01 | -- |

*$p < .05$, **$p < .001$

presents descriptive statistics, reliability estimates, and correlations for the principal variables analyzed in phase two.

### Theory X/Y Assumptions and Downward Confirmation

Superiors' race, age, and biological sex were entered in block one. Dummy variables were used to represent the categories of biological sex and race. The category of White non-Hispanic/Caucasian was omitted to facilitate the interpretation of race effects. As shown in Table 4, the set of demographic variables did not account for a significant proportion of the variance in Downward Confirmation, $R^2 = .04$, adjusted $R^2 = .00$, $F(9, 218) = .99$, $p = .448$. None of the demographic variables were significant predictors in the regression model. Theory X and Theory Y assumptions were entered in block two and explained an additional 14.0% of the variance in Downward Confirmation, $\Delta R^2 = .140$, $F(2, 216) = 18.48$, $p < .001$. Together, demographic variables and Theory X/Y assumptions accounted for a significant proportion of the variance in Downward Confirmation, $R^2 = .18$, adjusted $R^2 = .14$, $F(11, 216) = 4.30$, $p < .001$. Support was found for Hypotheses 1a and 1b. Theory X orientation was a significant negative predictor of Downward Confirmation ($\beta = -.14$, $p = .039$) and Theory Y orientation was a significant positive predictor ($\beta = .34$, $p < .001$).

### Theory X/Y Assumptions and Downward Conflict Avoidance

Superiors' demographic characteristics were again entered in block one, and as a set did not account for a significant proportion of the variance in Downward Conflict Avoidance, $R^2 = .05$, adjusted $R^2 = .01$, $F(9, 218) = 1.17$, $p = .313$. However, Asian superiors reported more Downward Conflict Avoidance than did White non-Hispanic/Caucasian superiors ($\beta = .15$, $p = .026$). None of the other demographic variables were significant predictors. Theory X and Theory Y assumptions were entered in block two, and explained an additional 0.6% of the variance in Downward Conflict Avoidance, $\Delta R^2 = .006$, $F(2, 216) = .69$, $p = .505$. Together, demographic variables and Theory X/Y assumptions did not account for a significant proportion of the variance in Downward Conflict Avoidance, $R^2 = .05$, adjusted $R^2 = .00$,

$F(11, 216) = 1.08$, $p = .376$. No support was found for Hypotheses 2a and 2b. Theory X orientation was not a significant negative predictor of Downward Conflict Avoidance ($\beta = .04$, $p = .609$), and Theory Y orientation was not a significant positive predictor ($\beta = .08$, $p = .269$).

### Theory X/Y Assumptions and Downward Civility

In the last hierarchical regression, superiors' demographic characteristics were again entered in block one, and accounted for a significant proportion of the variance in Downward Civility, $R^2 = .15$, adjusted $R^2 = .12$, $F(9, 218) = 4.27$, $p < .001$. African-American superiors reported displaying less Downward Civility than did White non-Hispanic/Caucasian superiors ($\beta = -.14$, $p = .027$). Similarly, American Indian superiors reported displaying less Downward Civility than did White non-Hispanic/Caucasian superiors ($\beta = -.26$, $p < .001$). None of the other racial categories were significant predictors of Downward Civility. However, superiors' age was a significant positive predictor ($\beta = .17$, $p = .007$). Additionally, controlling for all other demographic variables, female superiors reported displaying more Downward Civility than did male superiors ($\beta = -.16$, $p = .014$). Theory X and Theory Y assumptions were entered in block two, and explained an additional 7.1% of the variance in Downward Civility, $\Delta R^2 = .071$, $F(2, 216) = 9.84$, $p < .001$. Together, demographic variables and Theory X/Y assumptions accounted for a significant proportion of the variance in Downward Civility, $R^2 = .22$, adjusted $R^2 = .18$, $F(11, 216) = 5.57$, $p < .001$. Although no support was found for Hypothesis 3a, support was found for Hypothesis 3b. Theory X orientation was not a significant negative predictor of Downward Civility ($\beta = .12$, $p = .056$). However, Theory Y orientation was a significant positive predictor ($\beta = .26$, $p < .001$).

### Discussion

Conceptualizing Theory X and Theory Y assumptions as generalizations about subordinates that are stored in superior-subordinate relational schemata, this investigation examined the degree to which superiors' downward maintenance communication could be predicted from their Theory X and Theory Y assumptions. In the first phase

**Table 4**
Hierarchical Multiple Regression of Downward Maintenance Communication onto Race, Age, Sex, Theory X, and Theory Y

| Step and Predictor | Downward Confirmation | | | | | Downward Conflict Avoidance | | | | | Downward Civility | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | β | t | p | $R^2$ | $\Delta R^2$ | β | t | p | $R^2$ | $\Delta R^2$ | β | t | p | $R^2$ | $\Delta R^2$ |
| Step 1 | | | | .039 | | | | | .046 | | | | | .150*** | |
| African-American | -.12 | -1.82 | .071 | | | .00 | -0.02 | .987 | | | -.14* | -2.23 | .027 | | |
| Hispanic | .02 | 0.22 | .824 | | | .03 | 0.42 | .674 | | | .00 | -0.04 | .971 | | |
| Asian | .06 | 0.84 | .400 | | | .15* | 2.24 | .026 | | | .09 | 1.47 | .143 | | |
| Pacific Islander | -.04 | -0.56 | .578 | | | -.01 | -0.18 | .860 | | | .05 | 0.78 | .435 | | |
| American Indian | -.08 | -1.12 | .263 | | | .10 | 1.42 | .157 | | | .26*** | -4.17 | .000 | | |
| Multiracial | .05 | 0.69 | .492 | | | -.02 | -0.23 | .817 | | | .01 | 0.15 | .879 | | |
| Other | .06 | 0.87 | .385 | | | .08 | 1.12 | .265 | | | -.07 | -1.10 | .275 | | |
| Age | -.09 | -1.38 | .168 | | | .12 | 1.69 | .093 | | | .17** | 2.72 | .007 | | |
| Sex | -.02 | -0.30 | .762 | | | -.06 | -0.88 | .379 | | | -.16* | -2.47 | .014 | | |
| Step 2 | | | | .180*** | .140*** | | | | .052 | .006 | | | | .221*** | .071*** |
| Theory X | -.14* | -2.08 | .039 | | | .04 | 0.51 | .609 | | | .12 | 1.92 | .056 | | |
| Theory Y | 0.34*** | 5.41 | .000 | | | .08 | 1.11 | .269 | | | .26*** | 4.21 | .000 | | |

*$p < .05$, **$p < .01$, ***$p < .001$

of the study, a self-report measure of downward maintenance communication was developed. Principal components analysis yielded three categories of maintenance communication: Downward Confirmation, Downward Conflict Avoidance, and Downward Civility.

In phase two of the study, regression analysis was performed to test the six hypotheses in the model. As hypothesized, Theory Y was a significant positive predictor of both Downward Confirmation and Downward Civility, and Theory X was a significant negative predictor of Downward Confirmation. However, neither Theory X nor Theory Y was a significant predictor of Downward Conflict Avoidance. Similarly, Theory X was not a significant predictor of Downward Civility.

The mixed support for the hypotheses suggests that Theory X/Y assumptions do account for some of the variation in superiors' use of downward maintenance communication. At the same time, however, these findings suggest that other personal characteristics, as well as situational variables, may also shape superiors' use of such communication.

For example, the absence of predictive relationships between Theory X/Y assumptions and Downward Conflict Avoidance could be due to situational determinants of conflict style periodically overriding a superior's tendency to exhibit the level of conflict avoidance prescribed by his or her superior-subordinate relational schema. In support of this explanation, Callanan, Benzing, and Perri (2006) claimed that "individuals are not necessarily yoked to a particular [conflict] style as given by response hierarchy theory; they are willing to switch out of their presumably dominant style on the basis of the contingencies they perceive in a conflict-producing event" (pp. 282-283). According to Callanan et al. (2006), "such contextual factors as the relative criticality of the central conflict issue, the relative organizational power of the individuals involved in the conflict, and the perceptions of aggressive intent all serve to influence an individual's choice of conflict-handling strategy" (pp. 283-284).

A possible explanation for the absence of a negative predictive relationship between Theory X orientation and Downward Civility is that organizational rules may limit the extent to which a Theory X superior can express his or her disparaging beliefs about subordinates directly towards individual subordinates. Such situational limitations could obscure the unconstrained relationship between Theory X orientation and Downward Civility.

Treating Theory X/Y assumptions as elements of superior-subordinate relational schemata highlights the notion that expectations influence relational trajectories, a position consistent with other cognitive perspectives on relationships. For example, according to social exchange theory (Thibaut & Kelley, 1959), an individual's comparison level of alternatives, which is based on expectations of relational quality, plays a pivotal role in determining whether the interactant will pursue alternative relationships.

Integrating the present findings with past research on the communicative behavior of Theory X and Theory Y superiors (e.g., Neuliep, 1987) suggests that Theory X superiors tend to develop and maintain relatively distant and negatively-valenced relationships with their subordinates, whereas Theory Y superiors tend to develop and maintain relatively close and positively-valenced relationships. Such patterns of relating could account for the findings of past studies that documented better individual and organizational outcomes under the stewardship of Theory Y superiors than under Theory X superiors. For example, in a comparative study of eight organizations, Larsson, Vinberg, and Wiklund (2007) concluded "that leaders who favored the [Theory] X hypotheses [i.e., assumptions] had lower results concerning employee views of leadership and quality outcomes and, to some extent, had lower rankings for favorable [employee] health outcomes" (p. 1165).

The predictive relationships discovered herein also have implications for organizational practice. For example, the results of this study suggest that hiring committees could increase their ability to predict how job candidates would maintain their relationships with subordinates by measuring and characterizing the candidates' Theory X/Y assumptions. Because of the less obvious and indirect nature of predicting maintenance communication from beliefs about human nature, the assessment of Theory X/Y assumptions during the applicant screening process may be less subject to applicant social desirability bias and, as a consequence, have more predictive validity than more traditional, yet transparent, personality inventories.

The present study had two limitations. First, superiors' Theory X/Y assumptions and downward maintenance communication were measured via self-report, which could have led to biased reporting of assumptions and behavior. Second, data were only collected from superiors. Subordinate perceptions of superior attitudes and behavior were not measured.

Future research could address both limitations by observing and coding actual superior-subordinate interaction, and by collecting data on superiors' Theory X/Y assumptions and maintenance behavior from both superior and subordinate perspectives. Data collected from the vantage point of subordinates could be used to assess the reliability and validity of their superiors' self-reported assumptions and behavior.

## Conclusion

The results of this investigation suggest that Theory X/Y assumptions are a source of variation in superiors' downward maintenance communication. Consequently, Theory X/Y assumptions should be added to the list of personal characteristics to be considered when screening applicants for managerial or supervisory positions.

### Conflict of Interest

The author of this article declares no conflict of interest.

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