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**THE SOCIAL CONTEXT OF INTERPERSONAL CITIZENSHIP
BEHAVIOR: A MID-RANGE THEORY AND TEST OF A MODEL**

A Dissertation

**Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy**

in

The Interdepartmental Program of Business Administration

by

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ABSTRACT

Current day interest in acts of cooperation in organizations can be traced to classical writers such as Barnard (1938) and Roethlisberger and Dickson (1939), and more recently to Katz and Kahn (1966, 1978). Building on these foundations, considerable empirical research has examined what has been labeled organizational citizenship. Organizational citizenship behaviors are not specified in job descriptions or recognized by the organization's formal reward system. Yet, they are generally held to be essential to organizations in that they contribute to efficiency and effectiveness (Organ, 1988). Recently, researchers have called for the development of specific, mid-range theoretical models of organizational citizenship behavior (e.g., Barr & Pawar, 1995; Schnake, 1991; Van Dyne, Cummings, & McLean-Parks, 1995; Van Dyne, Graham, & Dienesch, 1994). The current study's focus is interpersonal citizenship behavior (ICB), which has been identified as one of several distinct classes of organizational citizenship behavior (Barr & Pawar, 1995; McNeely & Meglino, 1994; Williams & Anderson, 1991). Although interpersonal forms of citizenship behavior have been studied in the literature (e.g., Bateman & Organ, 1983; Organ, 1988; Smith, Organ, & Near, 1983; Williams & Anderson, 1991), a standard research framework and nomological network of antecedents and intervening processes have not been developed (Van Dyne et al., 1995). Based on a theoretically conceived conceptual framework, a model outlining the relationships among individual and situational variables, intervening variables, and ICB was proposed and tested. Results offered qualified support for the model. More specifically, relationships based on

exchange and status issues were found to have the most consistent direct and indirect effects on ICB. Also, as predicted, felt empathy mediated the relationships between situational variables and ICB. A revised theoretical model is presented and directions for future research are discussed.

CHAPTER 1: THE DISSERTATION TOPIC

Introduction

Over a decade ago, researchers were decrying the narrowness of the research occurring in micro organizational behavior (e.g., Staw, 1984). Traditionally researched outcome variables had been limited to job satisfaction, absenteeism, turnover, and job performance, the latter typically operationalized in studies as quantity or quality of worker output. In the job performance domain, much research energy had been devoted to investigating the job satisfaction-performance linkage; however, hundreds of studies had revealed only a weak relationship (Locke, 1976). In his review, Staw (1984) implored researchers to re-examine the criteria selected as the focus of their studies and offered a number of outcome variables which he suggested would be of interest to organizations. Among these were variations of individual performance in the form of cooperation, creativity and innovation.

Since then, performance-oriented variables of the character suggested by Staw (1984) have received research attention. Much empirical work has focused on social behavior that contributes to the organization, but falls outside the domain of more traditional definitions of performance. Based on the influential work of Katz (1964), this research has been guided by the presumption that organizations depend on non-mandatory, prosocial acts in order to deal with the nonprogrammable aspects of work. As noted by Katz (1964),

"An organization which depends solely upon its blueprints of prescribed behavior is a very fragile social system...No organizational planning can foresee all contingencies within its operation, or can anticipate with perfect

accuracy all environmental changes, or can control perfectly all human variability. The resources of people in innovation, in spontaneous cooperation, in protective and creative behavior are thus vital to organizational survival and effectiveness" (p. 132).

Organ (1988) and colleagues (Bateman & Organ, 1983; Smith, Organ & Near, 1983) used the label organizational citizenship behavior (OCB) to describe the behaviors noted by Katz (1964) and formally defined them as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1988, p. 4). Organ (1988) argued that citizenship behavior places more resources at the disposal of the organization and obviates the need for costly formal mechanisms to provide functions rendered informally by citizenship behavior.

For example, experienced workers may contribute to reduced training costs and reduced turnover by taking a personal interest in newcomers and voluntarily helping them learn their new jobs (Louis, Posner, & Powell, 1983; Nelson & Quick, 1991). Similarly, employees who make suggestions for change, engage in self-development activities, and challenge others to commit to higher performance standards help organizations remain viable when facing competitive challenges and other environmental demands. Also, citizenship related behavior may serve supportive and therapeutic functions for employees confronted with organizational stressors (Burke, Duncan, & Weir, 1976; House, 1981; McAllister, 1995; Wills, 1985, 1991). Finally, simply calling attention to a potential error, sharing supplies, or aiding someone behind in their work prevents seemingly minor difficulties from resulting in

more serious organizational liabilities (e.g., the production line being called to a halt; Katz & Kahn, 1966). In general, research has supported the association between citizenship behavior and individual performance (e.g., McAllister, 1995; Puffer, 1987), group performance (George & Bettenhausen, 1990), and organizational performance (e.g., MacKenzie & Podsakoff, 1992).

Research on citizenship has progressed rapidly from construct explication (Organ, 1988; Becker & Vance, 1993; Van Dyne, Graham, & Dienesch, 1994; Williams & Anderson, 1991), to antecedent identification (e.g., Bateman & Organ, 1983; Smith et al., 1983) and model specification (Konovsky & Pugh, 1994; Moorman, 1991; Organ & Konovsky, 1989; Schnake, 1991; Van Dyne et al., 1994). Particular forms of citizenship that have been identified include altruism and conscientiousness (Bateman & Organ, 1983), civic virtue, sportsmanship and courtesy (Organ, 1988), and obedience, loyalty, and participation (Van Dyne et al., 1994).

Studies focusing on understanding why individuals engage in these behaviors, what conditions facilitate them, and/or what personal characteristics are associated with the tendency to engage in them have found linkages to employee attitudes and perceptions such as satisfaction (Bateman & Organ, 1983), commitment (O'Reilly & Chatman, 1986), fairness (Moorman, 1991; Niehoff & Moorman, 1993), pay equity (Organ & Konovsky, 1989), and organizational support (Eisenberger, Fasolo, & Davis-LaMastro, 1990; Shore & Wayne, 1993). Other researched antecedents include intrinsic and extrinsic job cognitions (Williams & Anderson, 1991), task characteristics (Farh, Podsakoff, & Organ, 1988; Pearce & Gregersen, 1991), dyadic

exchange quality (Settoon, Bennett, & Liden, 1996; Wayne & Green, 1993), and group variables such as cohesiveness (George & Bettenhausen, 1990).

Statement of Purpose

Although a plethora of person and situational variables have been linked to citizenship behavior, closer inspection of the empirical record reveals that models of citizenship behavior typically account for small percentages of variance explained. On average, antecedents investigated account for approximately 10 percent of the variance in citizenship behavior (Barr & Pawar, 1995). For example, Konovsky and Pugh (1994) have recently proposed and tested a model based on Organ's (1988) social exchange interpretation and found the predictors in the model (i.e., procedural and distributive justice, trust in supervision) accounted for 9 percent of the variance in citizenship. As they noted, additional research is needed to identify other social exchange and non-social exchange variables that may account for citizenship behavior.

Furthermore, research findings have been mixed in the literature. There have been conflicting results regarding the predictive power of affect-oriented variables (e.g., George, 1991; Organ & Konovsky, 1989), attitudes (e.g., McNeely & Meglino, 1994; Moorman, 1991; O'Reilly & Chatman, 1986; Smith et al., 1983; Williams & Anderson, 1991), and job cognitions (e.g., Moorman, 1991; McNeely & Meglino, 1994). Further, there has been some confusion in the literature regarding the effects of citizenship on performance variables (e.g., MacKenzie & Podsakoff, 1992; McAllister, 1995).

Several possible explanations for the inconsistent research findings and limited predictive power have been offered. First, the antecedents examined may not generalize across a wide range of situations, thus contributing to apparent conflicting results. Second, methodological limitations, operationalizations of variables, and other study differences may account for some of the inconsistencies. Third, and most relevant to the focus of the current study, researchers have not adequately differentiated distinct forms of citizenship nor used these forms as the basis for developing theoretically-driven nomological networks of antecedent variables (Van Dyne, Cummings, & McLean-Parks, 1995).

Recently, researchers have noted that organizational citizenship is composed of several characteristically different though related categories of behaviors, and that employees selectively choose among these categories rather than engage equally in all (e.g., McNeely & Meglino, 1994; Morrison, 1994; Williams & Anderson, 1991; Van Dyne et al., 1994). Greater understanding would be facilitated by efforts directed toward developing a nomological network of related constructs for different classes of citizenship behavior (Brief & Motowidlo, 1986; George & Brief, 1992; Graham, 1991; Organ, 1988; Schnake, 1991; Van Dyne et al., 1995). More specifically, these researchers suggest that mid-range theories focusing on finer-grained citizenship conceptualizations would contribute to enhanced prediction as compared with a grand theory of a global citizenship construct.

The purpose of the current study was to propose and test a mid-range model of citizenship behavior. It has recently been suggested that dimensions of organizational

citizenship behavior can be categorized based on the intended primary beneficiary or target of the behavior (e.g., Van Dyne et al., 1995; Williams & Anderson, 1991). In other words, the behaviors can be classified based on an orientation toward individual employees within the organization or toward the organization itself. Further, it has been noted that distinct domains of antecedent constructs are associated with each class (e.g., Barr & Pawar, 1995; McNeely & Meglino, 1994; Williams & Anderson, 1991; Van Dyne et al., 1994).

At least one theoretically grounded, mid-range model of organizational citizenship behavior has been tested. Based on political philosophy, Van Dyne et al. (1994) proposed three dimensions of citizenship (i.e., obedience, loyalty, and participation) which may be described as citizenship behavior having "ramifications for the organization" (p. 794). In general, they found antecedents of organizational citizenship behavior to be mediated by perceptions of a two-way covenantal relationship between employee and organization.

In contrast to Van Dyne et al.'s (1994) focus on organization-based citizenship behavior, the current study's focus was interpersonal forms of citizenship behavior (Barr & Pawar, 1995; McAllister, 1995; McNeely & Meglino, 1994; Williams & Anderson, 1991), which may be described as "interpersonal behaviors that have consequences for interpersonal relationships" (Van Dyne et al., 1994). Consistent with this, interpersonal citizenship behavior (ICB) was used in the present study as a general label that describes behavior primarily intended to benefit other individuals such as coworkers and supervisors. As such, it includes prosocial behaviors such as

sharing resources with others, helping them with work-related problems, and providing emotional support. It is similar to Organ (1988) and colleagues' (Bateman & Organ, 1983; Smith et al., 1983) altruism dimension, which has been defined as "all discretionary behaviors that have the effect of helping a specific other person with an organizationally relevant task or problem" (Organ, 1988), and Williams and Anderson's (1991) OCBI dimension which they defined as behaviors that immediately benefit particular individuals and indirectly benefit the organization.

As conceptualized in this study, ICB is different from impersonal forms of citizenship such as working diligently, maintaining a positive attitude, or the forms investigated by Van Dyne et al. (1994), as these behaviors have no obvious benefit for other individuals. Also, ICB implies an interaction between two or more individuals. As such, social contextual variables such as mutual obligations and expectations, the interpersonal climate, differential status of interacting coworkers, and the nature of exchange relationships assume important roles as antecedents. Both theoretical (e.g., Brief & Motowidlo, 1986; Schnake, 1991; Van Dyne et al., 1995) and empirical research (e.g., George & Bettenhausen, 1990; Karambayya, 1990; McAllister, 1995; Moorman, 1991; Settoon et al., 1996; Settoon, Kidwell, & Bennett, 1994; Wayne & Green, 1993) suggest that interpersonal forms of citizenship behavior are influenced by social contextual variables. To be sure, interpersonal citizenship behavior, of which helping others is a fundamental component, is social in nature. It stands to reason that networks of interpersonal interactions and interdependencies among coworkers have an important influence on ICB.

Fiske's (1991) relational models theory was used as a conceptual framework with which to organize the myriad of social antecedents to ICB that have been examined in previous research. According to Fiske's (1991) theory, four basic relational perspectives comprise most human interaction: communal sharing, authority ranking, equality matching, and market pricing. Each suggests different types of antecedents that may influence positive social behavior. Individuals use one or more of these four implicit models to generate action, coordinate what they do with other people, anticipate and interpret what other people do, and evaluate their own and others' actions and reactions. These constitute the elementary alternative forms of transfer such as organizing bilateral exchange, contribution, and distribution of benefits. Based on the conceptual analysis using Fiske's (1991) framework, antecedent variables were selected for inclusion in the mid-range model.

Because interpersonal citizenship describes help-giving behavior, the model presented and tested in the current study borrows from the extensive research on help-giving in the social psychological literature. There, researchers have designated help-giving as an important construct and have articulated a nomological network of situational and individual constructs. Social psychological theory and research suggests that decisions to help others are the result of (a) an empathic concern for others that is rooted in social identification processes and (b) rational choice processes associated with the costs and benefits (e.g., material, psychological, social) of helping (e.g., Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1981; Schwartz & Howard,

1984). This stream of research provides additional theoretical underpinnings for the hypothesized relationships between ICB and its antecedents in the present study.

Summary of Remaining Chapters

The thesis of this study is that research and theory on citizenship behavior would benefit from a finer-grained analysis of its different forms. It is argued that such a research emphasis will contribute to better theory development and enhanced prediction. In this study, a mid-range theory of organizational citizenship focusing on interpersonal forms of citizenship behavior is proposed and tested. A general framework is offered to advance our current understanding of interpersonal citizenship in organizations by serving as a guide to future theory, research, and practice.

This chapter set the stage for the remainder of the dissertation by outlining research needs in the extant literature on interpersonal citizenship behavior. Chapter 2 develops the mid-range model and hypotheses concerning the antecedents, intervening variables, and interpersonal citizenship behaviors. Chapter 3 details the sample, measures, and statistical tests used to test the hypotheses. Chapter 4 presents the results of the hypothesis tests, and Chapter 5 discusses the findings of the study and implications for theory, research, and practice.

CHAPTER 2: MODEL DEVELOPMENT AND HYPOTHESES

Introduction

This chapter develops a model of interpersonal citizenship behavior and presents the expected relationships among the antecedents, intervening variables, and ICB. Figure 2.1 presents the proposed model.

As noted in Chapter 1, social variables are the primary antecedents of ICB. In order to place interpersonal citizenship behavior within a larger nomological network of relations, Fiske's (1991) relational models theory is used to organize the antecedents of citizenship investigated in the organizational literature. Fiske (1991) postulates that prosocial behavior between individuals occurs within the context of four elementary forms of social interaction: communal sharing, authority ranking, equality matching, and market pricing. This framework parallels Jones and Gerard's (1967) four patterns of social interaction, and includes elements of Clark and colleagues' communal and exchange orientation (Clark & Mills, 1979) and Blau's (1964) social and economic exchange.

Fiske's (1991) model, as well as the findings of social psychological research on help-giving in social psychology, suggest that a felt empathy for coworkers and a felt personal responsibility to help may largely account for the linkage between the social variables to be examined and interpersonal citizenship. As presented in the model, social contextual variables give rise to these two intervening processes, which in turn lead to interpersonal citizenship behavior.

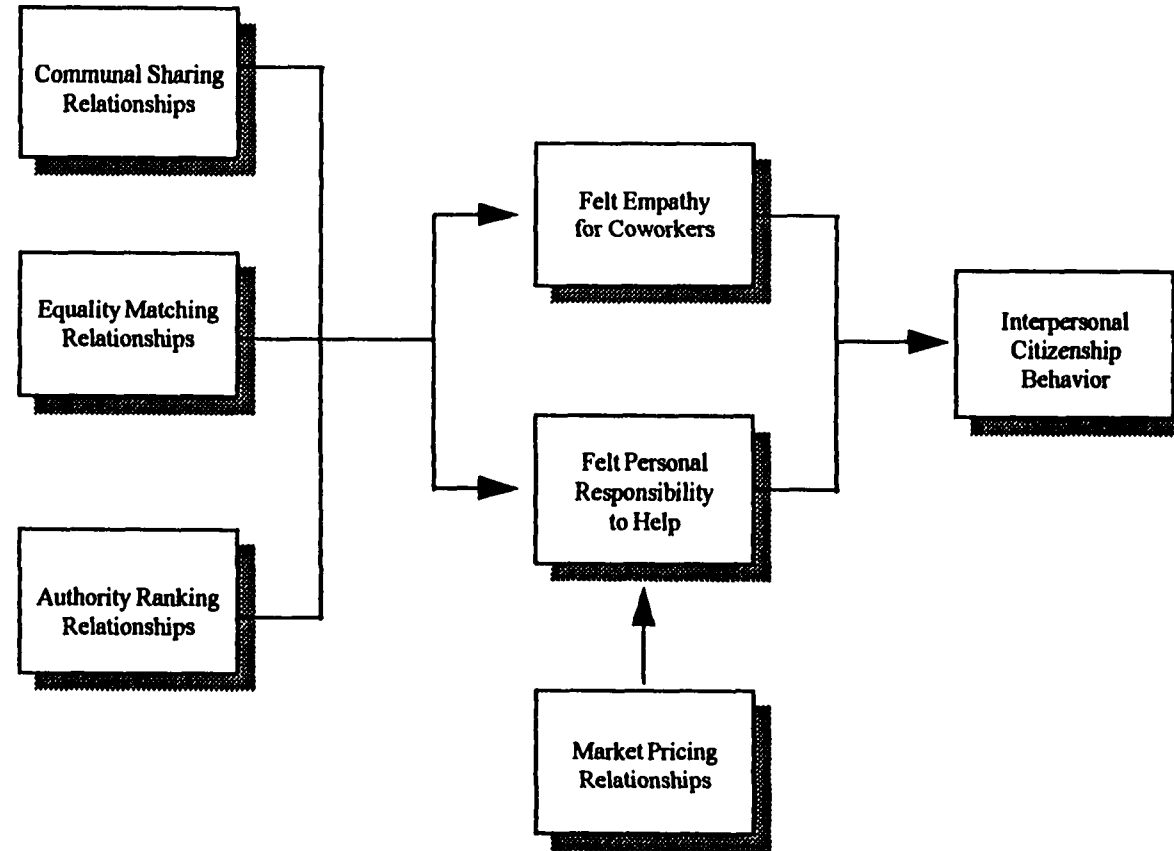


Figure 2-1: Conceptual Model

Consistent with the concept of psychological proximity from field theory (Lewin, 1943), more distal factors like the characteristics of the social context should have a less direct influence on behavior than more proximal variables such as individuals' reactions within that context. Also, field theory suggests that factors in one's psychological environment are interrelated such that the influences of more distant factors will be mediated, at least in part, by more proximal factors (for examples of this approach see Mathieu, 1988; Mathieu & Hamel, 1989; and Williams & Hazar, 1986). As will be discussed, felt empathy for coworkers and felt personal responsibility to help are hypothesized to be most directly proximal to interpersonal citizenship behavior and to explain the relationship between the more distal social contextual variables and ICB.

The hypotheses will be presented in the following three sections in this chapter. First, the different forms of helping behavior will be addressed. Theory and research has suggested two substantive dimensions of interpersonal citizenship behavior which are labeled as instrumental ICB and supportive ICB. Second, predictions concerning the influence of empathy and felt personal responsibility are presented. Finally, the hypothesized relationships between communal sharing, equality matching, authority ranking, and market pricing variables, intervening variables, and instrumental and supportive ICB are proposed.

Principal Forms of Interpersonal Citizenship: Instrumental ICB and Supportive ICB

Extant theory and research in the organizational citizenship literature have identified several interpersonal forms of organizational citizenship behavior. For

example, building on Katz (1964) and prior research (e.g., Bateman & Organ, 1983; Smith et al., 1983), Organ (1988) identified altruism as one of five important classes of citizenship behavior that has important implications within organizations.

According to Organ, altruism may be defined as "all discretionary behaviors that have the effect of helping a specific other person with an organizationally relevant task or problem."

Another dimension receiving research attention in the literature, courtesy (Organ, 1988), may also be described as an interpersonal form of citizenship behavior (e.g., Van Dyne et al., 1995). Courtesy has been defined as behavior that may be characterized as "touching base with...parties whose work would be affected by one's decisions or commitments" (Organ, 1988). Although altruism and courtesy have been found to be related to a multitude of individual difference variables and situational variables (see Van Dyne et al., 1995, and Podsakoff, MacKenzie, & Hui, 1993, for reviews), they have been derived without strong theoretical justification (Van Dyne et al., 1994).

More recently, researchers have begun to define dimensions of citizenship based on the referent of the behavior (e.g., Barr & Pawar, 1995; Williams & Anderson, 1991; McNeely & Meglino, 1994). For example, Williams and Anderson (1991) have suggested a broad category they called OCBI which appears to overlap considerably with altruism and courtesy. They defined OCBI as behaviors which immediately benefit particular individuals and indirectly benefit the organization. This definition of citizenship behavior appears to be most consistent with the focus of

the current study because it explicitly asserts the target of the behavior as other individuals. At the same time, however, its definition may be too broad. Again, while OCBI is empirically distinguishable from other dimensions of citizenship with different foci (Williams & Anderson, 1991), it was not derived from theory and its dimensionality has remained unexamined.

One consistency in all definitions of interpersonal forms of citizenship behavior is that they describe behavior that has the effect of helping another within an organization. The social psychological literature on help-giving offers some theoretical grounding for proposing dimensions of ICB. According to this literature, prosocial acts that have the effect of benefiting another are given with some applied end in mind such as improving the help recipient's performance or helping them cope with difficulties (DePaulo, Brown, & Greenberg, 1983). Further, they may be considered as instrumental or noninstrumental (e.g., DePaulo et al., 1983).

For example, they are instrumental if they are directly relevant to the solution of the problem at hand, subsuming cues or resources that are intended to leave individuals better off than before. They may also be instrumental if they allow persons in need increased opportunities to work at a problem, without at the same time directly resolving the circumstance which is causing them to be in need. Measures of ICB in the organization literature appear to emphasize instrumental behaviors (Organ, 1988; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). For example, measures of the altruism and courtesy dimensions of citizenship deal with employee behaviors that involve assisting employees who are behind in their work (modifying the

environment) and passing along important information (providing informational resources). Alternatively, prosocial acts may be noninstrumental, providing maintenance of self-esteem for the person in need as opposed to resolving a problem. Such behaviors include those that reassure needy others of their worth and demonstrate a concern for their welfare. The intended function of these behaviors is to raise others expectations for performance and overcome the problems that confront them.

Empirical research supports the distinction between instrumental and noninstrumental interpersonal citizenship behavior. Burke et al. (1976) identified two forms of behaviors, labeled problem-centered behaviors and person-centered behaviors, that are consistent with these categories. Problem-centered helping activities are directive with a focus on resolution of a problem and include providing advice, suggestions, and opinions, analyzing the situation and providing a new perspective, supplying factual information, and taking responsibility for the problem. On the other hand, helping that is person-centered deals with problems of a more intimate nature such as emotional or feeling-state problems or personal relationship problems. These behaviors include providing understanding, support, and listening.

More recently, McAllister (1995) examined two forms of ICB in his model of interpersonal trust relationships in organizations. His study provides support for this multi-dimensional view. More specifically, he constructed a measure of citizenship based on Williams and Anderson's (1991) measure of citizenship behavior directed at others. In an exploratory factor analysis, he extracted two factors with acceptable

psychometric properties. These factors were consistent with the instrumental and noninstrumental dimensions described by the social psychological literature, the problem-centered and person-centered acts described by Burke et al. (1976), and the instrumental and emotional forms of support described by House (1981). The two factors were labeled as citizenship behavior with strong affiliative content (affiliative citizenship behavior) and citizenship behavior involving congenial assistance (assistance-oriented citizenship). McAllister (1995) noted that affiliative citizenship behavior differed from assistance-oriented citizenship in that it involved personal assistance, was affect-laden and expressive, and served more of a maintenance than task function. His findings suggest that individuals distinguish between instrumental assistance from peers and assistance from peers that is primarily expressive.

Drawing on this distinction which has been given theoretical and empirical support, I hypothesize:

Hypothesis 1: Interpersonal citizenship behavior (ICB) is comprised of two behavioral forms -- instrumental ICB and supportive ICB.

Intervening Processes

Organ (1988) has offered that social exchange (Blau, 1964) and reciprocity (Gouldner, 1960) are foundations for understanding citizenship behavior, including interpersonal forms of citizenship. According to these views, citizenship behavior is the obligation of an individual who has entered into a relational contract with the organization. Acts of citizenship are the result of a long-run exchange that does not

require a precise accounting and is based on reciprocity in the sense of diffuse obligations to reciprocate fairly (Eisenberger et al., 1990; Konovsky & Pugh, 1994; Moorman, 1991; Organ & Konovsky, 1989). Trust and good faith emerging from the exchange relationship with the organization guide the form and timing of reciprocal gestures and lead to citizenship behaviors (Organ, 1988).

Empirical studies have provided some support for this conceptualization (e.g., Konovsky & Pugh, 1994; Moorman, 1991; Niehoff & Moorman, 1993; Organ & Konovsky, 1989). For example, Organ and Konovsky (1989) found that perceptions of fairness and justice in the overall treatment by the organization were associated with citizenship. Similarly, Moorman (1991) found that justice perceptions accounted for citizenship behavior. However, of the different sources of organizational justice investigated (i.e., procedural, distributive, and interactional justice), only fairness in the context of interpersonal interaction (i.e., interactional justice) had significant effects on altruism and other forms of citizenship. Justice perceptions were also completely mediated by trust in supervision. As noted earlier, the model accounted for less than 10 percent of the variance in citizenship behavior.

Recently, McNeely and Meglino (1994) studied prosocial behaviors intended to benefit specific individuals but having no obvious benefit to an organization and those intended to benefit an organization but having no obvious benefit to specific individuals. While they found support for the link between justice perceptions and prosocial behavior directed at the organization, they found that the relationship between perceptions of organizational fairness and prosocial behavior directed at

individuals was nonsignificant. These results suggest that the psychological processes which underlie prosocial behavior in the context of an organization are different depending upon the beneficiary of the behavior.

As noted in Chapter 1, ICB is framed as an interpersonal transaction among people rather than an obligation of the employee-organization exchange relationship. As such, it is proposed that the motivational basis of ICB is best understood within the context of interpersonal interaction. Because organizational research on the psychological processes leading to interpersonal forms of citizenship behavior is limited, extant research and theory on help-giving in social psychology is used to describe two variables proposed to be directly antecedent to ICB: felt empathy for coworkers and felt personal responsibility.

Felt Empathy for Coworkers

Two related theories from social psychology that explain behavior in social contexts are social identification theory (Turner, 1985) and promotive tension theory (Hornstein, 1972, 1976). According to social identification theory (Turner, 1985), the self-concept is comprised of a personal identity encompassing idiosyncratic characteristics (attributes, ability, psychological traits) and a social identity encompassing salient group classifications. Individuals define others according to some characteristic(s), group similar individuals, and personally identify with one or more of these psychological groups, deriving a self-concept from this group identification (Ashford & Mael, 1989). Therefore, social identification can be considered a perception of belongingness to some defined group. For example,

employees may define themselves in terms of others with which they work closely or who are their friends.

As noted by Ashford and Mael (1989), social identification involves "personally experiencing the successes and failures" of others (p. 21). Lerner and Meindl (1981) suggest that individuals who identify with others based on some group classification become psychologically indistinguishable from that group. In other words, individuals who are in an identity relationship with others experience what they perceive their group members to be experiencing. Kramer (1993) argues that when their personal identities are salient, individuals are more likely to focus on their own outcomes and, accordingly, cooperation is less likely. Thus, when the group identity is salient, individuals are more likely to take into consideration the collective consequences of their actions. Accordingly, they are more likely to be cooperative, responsive, and altruistic (Ashford & Mael, 1989; Kramer, 1993; Lerner & Meindl, 1981; Tsui, 1994).

Promotive tension may also be a source of positive social behavior. Hornstein and colleagues (Hornstein, 1972, 1976; Sole, Martin, & Hornstein, 1975) propose that people often help one another to reduce promotive tension, defined as tension aroused by the awareness of another's interrupted goal attainment. When individuals perceive others to be in need of help, their own need state can become linked, which then motivates behavior intended to reduce this tension. In other words, positive social behavior results when individuals become aware of the interrupted goal-related

activity of others and adopt the goals and the needs of those individuals as if they were their own.

Both social identification and promotive tension theory can be interpreted to suggest that empathy is a direct antecedent of ICB. Batson (1991) defines empathy as "an other-oriented vicarious emotion produced by taking the perspective of a person perceived to be in need" (p. 89). According to Batson, empathic emotion evokes a motivation to have the others' need or difficulty reduced, the goal of which is to increase the other's welfare. Empirical research in the social psychological literature provides strong support for empathy as a basic source of helping behavior in an interpersonal social context (see Eisenberg & Miller, 1987, for a review). For example, laboratory studies have found more helping to occur in the experimental conditions designed to encourage empathy (Aderman & Berkowitz, 1970). Other studies have found correlations between physiological indicators of empathy and speed of helping in emergency situations to range between .47 and .77 (Dovidio, 1984). Dovidio, Allen, and Schroeder (1990) found that empathy does not simply activate a general disposition to help; it increases the motivation to help relieve the specific need for which empathy is felt.

In sum, it is hypothesized that ICB is in part a function of processes that lead to an other-orientation (Ashford & Mael, 1989; Barr & Pawar, 1995; Kramer, 1993; Tsui, 1994; Van Dyne et al., 1995). This other-orientation implies an empathic concern, or enhanced sensitivity to the plight of others. Empathy has been found to be

associated with prosocial behavior directed at coworkers (McNeely & Meglino, 1994) and help-giving in general (Eisenberg & Miller, 1987). Thus, I hypothesize:

Hypothesis 2a: Felt empathy for coworkers will be positively associated with instrumental ICB such that the greater an individual's felt empathy the greater the amount of instrumental ICB an individual engages in.

Hypothesis 2b: Felt empathy for coworkers will be positively associated with supportive ICB such that the greater an individual's felt empathy the greater the amount of supportive ICB an individual engages in.

Felt Personal Responsibility to Help

Theoretical and empirical work in social psychology suggests that individuals' behavior in their interpersonal interactions is guided by the principle of maximizing rewards and minimizing costs to obtain the most profitable outcomes. Positive social acts directed at others can be instrumental in acquiring materialistic, social, or even self-reinforcing rewards (see Blau, 1964; Homans, 1961; Lerner, 1977). For example, Dovidio et al.'s (1991) help-giving model conceptualizes prosocial acts as the outcome of a calculative decision-making process, the end result being a decision to help or not to help. The model has two central propositions: (1) as material, social, and psychological costs for helping others increase, help-giving decreases, and (2) as material, social, and psychological costs for no help to others in need increase, help-giving increases.

Similarly, Schwartz (1977) presented a help-giving model that details the roles of cognitive awareness, abilities, and normative and nonnormative costs and benefits that are particularly relevant to helping. Briefly, the model suggests that if individuals become aware of someone in need, identify actions relevant to that need, and feel capable of performing those actions, they consider three types of implications: (a) physical and material implications that follow directly from the action; (b) psychological implications; (c) social implications dependent on the reactions of other people. Specifically, individuals consider the effort, time, and material resources that will be exhausted, the implications for their self-concept, and possible repercussions of violating group norms in deciding whether to engage in prosocial acts.

Research has found decreased help-giving to be associated with diverse operationalizations of costs such as psychological aversion based on physical stigma (e.g., Edelman, Evans, Pegg, & Tremain, 1983), potential embarrassment for the bystander associated with helping (e.g., Edelman, Childs, Harvey, Kellock, & Strain-Clark, 1984), and fear of disapproval (e.g., Midlarsky & Hannah, 1985). In contrast, rewards for helping such as monetary compensation (e.g., Deutsch & Lamberti, 1986) increased helping. Costs that have been found to be related to not helping include personal costs such as self-blame for inaction and public censure.

The central mechanism in these help-giving models is the extent to which an individual diffuses responsibility for helping (Darley & Latane, 1968; Latane & Darley, 1970). More specifically, the greater the costs (or lesser the rewards) for helping someone, the more likely individuals will diffuse responsibility for helping,

and the less individuals will view themselves as personally obligated to help.

Conversely, the lower the costs (or higher the rewards) for helping, the less likely it is that individuals will diffuse responsibility, and the more they will assume responsibility for helping.

According to Latane and Darley (1970), individuals in a situation where another needs help is in an unenviable position. They must be aware of the need, assume the responsibility to act, know an appropriate form of assistance, and act on the decision to help. Moreover, as noted above, individuals often risk incurring substantial personal and social costs by acting on their decision to help (e.g., failed helping attempt leading to embarrassment, loss of self-esteem and status). As do Schwartz and Howard (1984), Latane and Darley (1970) suggest that diffusion of responsibility may short-circuit individuals' decision to help. Research has consistently found diffusion of responsibility for helping to be a function of its costs. For example, across 14 experiments, Piliavin, Dovidio, Gaertner, and Clark (1981) found that diffusion of responsibility effects were greater when the costs for helping were higher.

Indirect support in the organizational literature for the influence of perceived costs on ICB is found in research investigating cooperation and social loafing, the latter being the antithesis of ICB. Cooperation has been found to be negatively related to diffusion of responsibility and social loafing has been found to be positively associated with diffusion of responsibility (Kidwell & Bennett, 1993).

It is hypothesized that individuals perceiving high costs for engaging in instrumental or supportive ICB will be more likely to cognitively reinterpret the helping situation to diffuse their responsibility to help. Feelings of reduced personal responsibility will be associated with a belief that others' needs will be met without their personal involvement (Fleishman, 1980; Weldon & Gargano, 1985; Weldon & Mustari, 1988). I hypothesize:

Hypothesis 3a: Felt personal responsibility will be positively associated with instrumental ICB such that those who feel an increased personal obligation to help others will engage in more instrumental ICB.

Hypothesis 3b: Felt personal responsibility will be positively associated with supportive ICB such that those who feel an increased personal obligation to help others will engage in more supportive ICB.

Summarizing, two intervening variables have been proposed: felt empathy for coworkers and felt personal responsibility. Accordingly, interpersonal citizenship behavior may be the result of the extent to which individuals identify with other coworkers or the extent to which the costs of such behavior are seen as minimal. Hence, an individual who has empathy for those with whom he or she works and is inclined to assume responsibility for helping (i.e., reduced diffusion of responsibility) is likely to engage in interpersonal citizenship behavior.

Nomological Network of Antecedent Variables

Individuals in organizations are party to a variety of exchange relationships with others in the organization, each having a different character. Fiske (1991) argued that there are four relational perspectives that organize most human interaction: communal sharing, authority ranking, equality matching, and market pricing. According to Fiske's (1991) relational models theory, individuals use one or more of these four implicit elementary perspectives to generate action, coordinate what they do with other people, anticipate and make sense of what other people do, and evaluate their own and others' actions and reactions. They constitute the elementary alternative forms of transfer (organizing bilateral exchange, contribution, and distribution). More importantly, Fiske (1991) argues that individuals rarely use a single one of the four. Thus, interaction among two individuals may involve aspects of two or more of the relational perspectives.

Fiske's (1991) relational models theory is used in the proposed study for two reasons. First, it captures the different research streams that have examined the antecedents to citizenship behavior and serves as an organizing framework for selecting salient antecedent variables. Second, each relational perspective suggests conditions under which empathy or felt personal responsibility are activated. Thus, using the relational models theory allows the linkage of important antecedent variables to ICB through empathy and felt personal responsibility, the two hypothesized intervening variables.

The Communal Sharing Perspective

Individuals seek to form close relationships with others in organizations. Research has demonstrated that individuals in close relationships are more likely to help their partners (Clark, Ouellette, Powell, & Milberg, 1987; McAllister, 1995; George & Bettenhausen, 1990). For example, affect-based trust, which is characteristic of close relationships (Johnson-George & Swap, 1982; Lewis & Wigert, 1985; Rempel et al., 1985), has been found to be associated with ICB and need-based monitoring (McAllister, 1995).

According to Fiske (1991), giving in close relationships resembles communal sharing. Communal sharing relationships are those in which there is a "sense of community, solidarity, and identity with a group, often in contrast to outsiders. Individuality is unmarked, some dimensions of selves are merged, and people show compassion and generosity to members in their group" (Fiske, 1991, p. 180). Individuals are committed to ensuring others' welfare and are responsive to others when they are in need. Also, individuals believe that others feel a special responsibility for answering needs, keeping track of needs, and responding when needs arise.

Giving is not predicated on generating future obligations, or reciprocating benefits received. "In a communal relationship, the idea that a benefit is given in response to a benefit that was received is compromising, because it calls into question the assumption that each member responds to the needs of the other" (Clark et al., 1987). Partners appear less inclined to keep track of personal inputs on joint tasks

(Clark, 1984) and to feel exploited by unrequited helping (Clark & Waddell, 1985). They take on their partners' problems as their own, develop a tacit awareness of partners' needs, and learn how to respond appropriately (Holmes & Rempel, 1989). In the current study, a personal orientation toward collectivism and a perceived similarity with others are proposed as two communal variables that lead individuals to form close relationships with their coworkers and be empathetically concerned with the welfare of their coworkers.

Parsons and Shils (1951) suggested individualism-collectivism as a way to distinguish between individuals who are oriented towards self-interest and reaching their own goals, and individuals who are oriented toward the collective and focus more on the social system (Earley, 1989). Individuals high in collectivism consider the interests of the collective as more important than personal interests. Additionally, individuals high in collectivism promote the welfare of the collective, even at the expense of their own personal goals (Earley, 1989; Wagner & Moch, 1986). Collectivism may encourage helping behavior through its effect on perceptions of interdependence and social identification (Tsui, 1994). People high in collectivism will tend to perceive a high level of interdependence with others and a "common fate" that binds them with others. These individuals also will have a stronger social identification with coworkers than persons with an individualistic orientation.

Recently, Moorman and Blakely (1995) found collectivistic values and norms to be associated with interpersonal helping. Similarly, Cox, Lobal, and McLeod (1991) found that individuals with a collectivistic orientation are more cooperative on

group tasks than persons with an individualistic orientation. Clark and colleagues (Clark & Mills, 1979; Clark et al., 1987) introduced the concept of communal orientation, referring to it as a desire to give benefits out of concern for others. Clark et al. (1987) found persons high in communal orientation helped one another significantly more than did persons low in communal orientation. Further, they found an interaction between communal orientation and perceptions of recipients' sadness. Communal orientation was associated not only with increased attention to others' needs, but also with increased responsiveness to their emotions.

One of the most firmly established findings in the social psychology literature is that similarity between individuals on such things as attitudes, personality, and demographic characteristics, is an important determinant of interpersonal attraction (Byrne, 1971; Homans, 1961; Weick, 1969). Perceived similarity may lead to feelings of affiliation and empathy, ultimately empowering individuals with the confidence and responsibility required to initiate action. Perceived similarity leads to in-group loyalties. As noted previously, individuals will tend to identify with similar others (Ashford & Mael, 1989; Tajfel, 1981; Tajfel & Turner, 1985; Turner, 1985), leading to a perceived identity of interests. Such an identity of interest implies an empathic altruism whereby the goals of others are perceived as one's own (Hornstein, 1972, 1976) and an empathic trust whereby others are assumed to share one's own goals (Turner, 1985).

Empirical research provides evidence of a relationship between similarity and helping. Dovidio (1984) reviewed 34 separate tests of the similarity-helping

relationship, and 82% of them demonstrated that subjects helped similar others significantly more than dissimilar others. Other research suggests that this relationship may be mediated by empathy. For example, demographic similarity has been found to be associated with increased communication (Zenger & Lawrence, 1989), satisfaction with coworkers and increased social interaction (O'Reilly, Caldwell, & Barnett, 1989), and commitment and affiliation (Tsui, Egan, & O'Reilly, 1992). These variables reflect an empathic concern for others and have been found to be associated with citizenship behavior. Similarly, research has consistently found a relationship between coworker similarity and group cohesiveness. Cohesiveness, which has been variously labeled "sense of community" and "solidarity," and is characterized by heightened member attraction to a group, friendliness, and mutual liking (Janis, 1982; Shaw, 1981), has been found to be associated to helping behavior (George & Bettenhausen, 1990).

In sum, it is hypothesized that a collectivist orientation and perceived similarity with coworkers influence helping behavior, as mediated by empathy. As noted above, empathy is a felt concern for an other person when they are in distress (Batson & Oleson, 1991). Experienced empathy is strong when the welfare of the other person is significant to the helper. Individuals with a collectivist orientation and who perceive themselves to be similar to coworkers are other-oriented, experiencing higher levels of empathy which leads to helping behavior. I hypothesize:

Hypothesis 4a: Individuals high on collectivism are more likely to engage in instrumental and supportive ICB as mediated by a felt empathy for coworkers.

Hypothesis 4b: Individuals who perceive themselves to be similar to their coworkers are more likely to engage in instrumental and supportive ICB as mediated by a felt empathy for coworkers.

Greater feelings of involvement with others may influence cost considerations as well. Most social psychological models propose that individual and situational factors promoting a shared identity also reduce the perceived costs of engaging in prosocial acts. For example, Dovidio et al. (1991) propose that close relationships, such as those that permit social identification may increase costs for not helping those in need and decrease costs for help-giving. Schwartz and Howard (1981) suggest that helping behavior is motivated partly by the desire to affirm one's own moral values. Because collectivism implies a value of concern for others and a standard for such behavior, individuals will feel morally obligated to engage in ICB. Collectivists who engage in ICB experience self-satisfaction; those who do not will experience psychological costs such as self-deprecation (Schwartz & Howard, 1984).

Similarly, the costs for engaging in ICB should be less for similar than for dissimilar others, because of more confidence about associated consequences. Also, categorizing others as in-group members brings them closer to the self, and increases the salience of costs for non-assistance. The costs for non-assistance to dissimilar

others should be lower, given that potential donors may be less concerned for their well-being, while personal costs for not helping might also be lower because the social censure for not intervening may be expected to be less. Thus, individuals who perceive their coworkers to be similar to themselves will engage in ICB because they are less likely to diffuse responsibility. I hypothesize:

Hypothesis 5a: Individuals high on collectivism are more likely to engage in instrumental and supportive ICB as mediated by felt personal responsibility.

Hypothesis 5b: Individuals who perceive themselves to be similar to their coworkers are more likely to engage in instrumental and supportive ICB as mediated by felt personal responsibility.

The Equality Matching Perspective.

The second basic type of relationship postulated by Fiske's relational models theory is equality matching. Individuals in this type of relationship engage in "turn-taking rotations, evenly balanced in-kind reciprocity, equal-share distributions or contributions" (Fiske, 1991, p. 181). Individuals seek equality in exchange among peers; they voluntarily make equal contributions, seek balanced exchanges, and feel obliged to restore equality. Individuals find equality and evenly matched relationships rewarding for their own sake. Hence, according to equality matching, the need to give help may be stimulated as a result of receiving help from others.

Equity theories (e.g., Adams, 1963; Blau, 1964; Thibaut & Kelley, 1959; Walster, Walster, & Berscheid, 1978) and related processes such as reciprocity and

indebtedness (e.g., Gouldner, 1960; Greenberg, 1980) assume that relationships are generally more satisfying and stable when reciprocity is perceived, and when the rewards for each partner are perceived to be equal (LaGaipa, 1977). Equity theorists have argued that being overbenefited or underbenefited in a relationship generates negative feelings (e.g., unfairness, resentment, guilt). This argument applies to many different types of relationships, including helping relationships (Walster et al., 1978) and has been supported by research (Greenberg & Westcott, 1983; Hatfield & Sprecher, 1983).

Equality matching resembles Blau's (1964) exchange framework which positions interpersonal exchanges along a continuum from economic to social. Whereas both social and economic exchange generate an expectation of some future return for contributions, economic exchange is based on transaction and as a result people do not feel a special responsibility for others' needs. They give benefits conditionally and reciprocally, in response to past help or with the expectation of receiving future benefits. Social exchange is also based on transaction, but its character is different from purely economic exchange. It refers more to relationships that entail unspecified future obligations. Although social exchange does not occur on an immediate quid pro quo basis, intermittent cognitive appraisals of the equality of the exchange do occur over time.

The empirical record suggests that interpersonal citizenship may result from individuals desiring to reciprocate gestures of goodwill directed toward them. For example, studies have demonstrated that employee perceptions of organizational

support (the commitment of an organization to its employees) are linked to employee attendance, commitment, performance, and citizenship behavior (Eisenberger et al., 1990; Eisenberger et al., 1986; Settoon et al., 1996; Wayne & Shore, 1993). Other research has found citizenship to be the outcome of role-making processes which require the exchange of reciprocal reinforcements (Settoon et al., 1996; Wayne & Green, 1993) and balanced contracts in which parties are seen as upholding their reciprocal obligations (e.g., Robinson, Kraatz, & Rousseau, 1994).

In line with Eisenberger et al.'s (1990) conclusions, it is suggested that the same arguments can be made regarding the level of received support from coworkers. For example, in addition to creating obligations that must be discharged (i.e., economic exchange), received support from others meets focal individuals' needs for approval, affiliation, and esteem and demonstrates that others will discharge their obligations faithfully. Thus, receiving help from others promotes a sense of mutuality through the incorporation of role status as party to a helping relationship into one's self-identity. This feeling of mutuality would lead to helping behavior by raising the tendency to interpret others' needs as their own and also because of an expectancy that any helping acts will be reciprocated.

In sum, it is hypothesized that coworker support leads to interpersonal citizenship. Also, it is hypothesized that felt empathy for coworkers and felt personal responsibility play important mediating roles. First, received support will be associated with an enhanced sense of shared identity and felt empathy because it may be perceived as expressions of concern from others. Second, perceptions of coworker

support will be associated efforts to reciprocate in the form of ICB because of the costs for not doing so (e.g., continued negative feelings, indebtedness). As a result, individuals will feel a greater obligation to engage in interpersonal citizenship and will be less likely to diffuse responsibility for helping. I hypothesize:

Hypothesis 6a: Received coworker support is associated with instrumental and supportive ICB as mediated by a felt empathy for coworkers.

Hypothesis 6b: Received coworker support is associated with instrumental and supportive ICB as mediated by felt personal responsibility.

The Authority Ranking Perspective

In various contexts, people obey their superiors out of a sense of deference and respect. On the other hand, people in positions of power commonly feel a sense of responsibility, looking out for their subordinates and protecting them because they are subordinates. Interpersonal relationships in which parties are "linearly ordered in precedence, prerogative, or power" (p. 180) are labeled by Fiske (1991) as authority ranking relationships. Authority ranking relationships are characterized by status differentials, whereby some control access to resources, make decisions, and give commands and others pay tribute, show respect, and defer (Fiske, 1991). However, the latter are entitled to protection and expects the superiors to look out for them.

In organizations, authority ranking relationships emerge from two sources. Formal authority associated with hierarchical level in an organization defines status

differences among organizational members. Authority ranking relationships may also arise from the informal organization where a variety of factors define social power and status differences (e.g., Brass, 1992; Brass & Burkhardt, 1993; Ibarra, 1993). Those with higher informal status are more likely to engage in ICB. Status has been viewed as the reward individuals earn for helping others achieve their goals and making personal sacrifices on behalf of their coworkers (Levine & Moreland, 1990). Rosen (1984) also noted that individuals of higher status expect and are expected by others to perform relatively better in task-oriented groups. These shared expectations legitimate the taking of more active roles and lead to the acquisition of greater status and power.

Classical and contemporary management philosophers have emphasized the influence of the informal organization on cooperative types of behavior and organizational effectiveness (Barnard, 1938; Katz & Kahn, 1966; Roethlisberger & Dickson, 1939). Organizations may be viewed as a network of interrelated individuals. Individuals are embedded in a larger context, and as activities are differentiated (e.g., division of labor), individuals become interdependent. Employees often need help getting their jobs done and emergent structures offer a network of interpersonal relationships that can potentially provide assistance. Repeated social interactions occur over time and become relatively stable, taking on an institutionalized, although informal, quality. This informal social structure defines authority relationships and may act as a constraint on behavior.

Two factors that define social power and status differences in the informal organization are network centrality and initiated task interdependence. Network

centrality is a structural source of power arising from holding a central position within emergent network relationships. Like formal authority, network centrality implies a high position in an informal status hierarchy, defining degrees of access to valued resources such as information, expertise, and powerful people. Employees who are able to control relevant resources and thereby increase others' dependence on them are in a position to acquire power. Most empirical studies have found that centrality in intraorganizational networks is related to power (Brass, 1984; Burkhardt & Brass, 1990; Fombrun, 1983; Krackhardt, 1990; Tushman & Romanelli, 1983).

Likewise, initiated task interdependence arises from dependencies in intraorganizational networks. However, it is more specifically considered to be a characteristic of the workflow structure (Brass, 1981; Kiggundu, 1981, 1983; Pearce & Gregersen, 1991). It is defined as the extent to which work flows from one job to one or more other jobs such that the successful performance of the latter depends on the initiating job. If removing a task position and its workflow links breaks the workflow chain, the position can be described as critical. However, if several other task positions can accommodate the acquisition of the same inputs or distribution of the same outputs when the focal position is removed, the focal position is described as being low in criticality (Brass, 1981). Persons occupying initiating jobs are in critical positions in the workflow of the organization and assume positions of power in organizations (Brass, 1981).

Research has shown some degree of relationship between status-related variables and citizenship behavior (e.g., Van Dyne et al., 1994). For the most part,

however, the findings are limited and concern formal indicators of status only (e.g., job rank, hierarchical job level). Some indirect support for the relationship between status and citizenship behavior has been provided by research investigating job scope. For example, Brass (1981) found that the greater the status of individuals, the more broadly they define their jobs. As noted by Morrison (1994), individuals who define their jobs more broadly engage in more citizenship behavior because they tend to perceive that it is part of their job.

In this study, it is anticipated that status-related variables influence ICB through empathy. Employees in central positions in intraorganization networks, in critical positions in the organization's workflow, and having expertise in certain areas have more of an impact on the tasks performed by others than those who do not occupy such positions. Employees often need assistance to achieve goals (e.g., completion of a task, project, etc.), and research has demonstrated that higher status individuals more frequently receive assistance requests (Burke et al., 1976; Ibarra, 1993). Higher status individuals may develop an empathic concern for those who are dependent upon them. More specifically, when individuals become aware of the interrupted goal-related activity of others, they adopt the goals and needs of the others as if they were their own (Hornstein, 1972, 1976; Pearce & Gregersen, 1991). This facilitates an other-orientation, stimulating intrinsic motivation and more ICB (Kiggundu, 1981, 1983).

Higher status may also influence ICB through its affect on a felt personal responsibility. For example, individuals engage in acts of citizenship in order to

comply with social norms and to avoid social censure. Berkowitz (1972) and associates (e.g., Berkowitz & Daniels, 1963) suggested the existence of a universal social responsibility norm prescribing that individuals should help those who are dependent and need assistance. The norm of social responsibility dictates that individuals should "act on behalf of others, not for material gain or social approval, but for their own self-approval, for the self-administered rewards arising from doing what is 'right'" (Goranson & Berkowitz, 1966, p. 228).

Similarly, theory and research in social psychology suggests that individuals who are in a better position to assist others (e.g., high-status individuals) and do not suffer individual costs (e.g., Dovidio, 1984; Midlarsky, 1984; Schwartz & Howard, 1984). For example, Schwartz and Howard (1984) have argued that the ability to help is a key input into an individual's felt obligation to help. Those who feel higher in competence may perceive helping as less difficult. They may also be more likely to expect helping to be successful and to anticipate positive outcomes for themselves and the other (for reviews see Midlarsky, 1984, and Clark, 1991). Similarly, research in the organizational literature has found individuals' self-efficacy perceptions to be positively associated with organizational citizenship behavior (e.g., Pierce, Gardner, Cummings, & Dunham, 1989).

In sum, it is hypothesized that individuals of higher status, as reflected by network centrality and initiated task interdependence, will engage in ICB in order to facilitate the work of others. This presupposes that others' goals have become their own, which contributes to felt empathy. Further, those most able to help, or perceive

themselves as most able to help will, be less likely to diffuse responsibility for helping because they have the requisite ability and motivation. I hypothesize:

Hypothesis 7a: Individuals in positions of high (vs. low) initiated task interdependence in the organization's workflow will be more likely to engage in instrumental and supportive ICB as mediated by a felt empathy for coworkers.

Hypothesis 7b: Individuals in positions of high (vs. low) initiated task interdependence in the organization's workflow will be more likely to engage in instrumental and supportive ICB as mediated by felt personal responsibility.

Hypothesis 8a: Individuals in positions of high (vs. low) centrality in intraorganization networks will be more likely to engage in instrumental and supportive ICB as mediated by a felt empathy for coworkers.

Hypothesis 8b: Individuals in positions of high (vs. low) centrality in intraorganization networks will be more likely to engage in instrumental and supportive ICB as mediated by felt personal responsibility.

The Market Pricing Perspective

Individuals relating according to market pricing principles perceive themselves as making rational decisions based on efficient cost-benefit, means-ends considerations. With rational actor models, there is an assumption that individuals

possess a utility function imposing order among all alternative choices they face (Homans, 1961).

Recently, Murnighan (1994) has offered a game-theoretic approach to understanding volunteerism and suggested that it could be applied to understanding forms of discretionary behavior like citizenship behavior. Volunteerism has been defined as nonmandated action that is essential for effective organizational action and has more market value to the recipient than it does to the volunteer (Smith, 1983). As noted by Murnighan (1994), "Although group benefits may increase if volunteers contribute or perform well enough for a goal to be achieved, volunteers typically incur more costs than other members of the group, even when their actions are successful" (p. 107). Consistent with the rational choice premise of the market pricing model, Murnighan (1994) suggests that the decision to engage in citizenship behavior may be conceptualized as a dilemma in which individuals weigh the costs and rewards of engaging in citizenship behavior.

The market pricing perspective on help-giving differs from the communal sharing, equality matching, and authority ranking perspectives in that it accommodates the occurrence of prosocial acts between individuals with no previous interpersonal history. Fiske (1991) suggests that only among strangers and others relating in market pricing terms should cost/benefit ratio assessments influence whether people will extend help. Dovidio et al. (1991) suggest that as a relationship departs from a sense of communal sharing, an analysis of costs and benefits becomes more important in determining helping behavior. Murnighan's (1994) review suggests that cost/benefit

analyses dictate volunteer behavior in the absence of anything more than a tacit relationship.

Research findings suggest that individuals who believe that their behavior is masked will act rationally and not engage in non-required behavior such as citizenship. Because it is oriented toward help-giving where benefits accrue primarily to those being helped, interpersonal citizenship is costly for individuals engaging in the behavior. Although empirical support for the influence of masking agents on citizenship behavior is sparse, a great deal of research has examined the relationship between the ability to mask behavior and noncooperative behavior such as social loafing and free riding (e.g., Wagner, 1995).

Research conducted in organizational settings suggests two masking agents that allow individuals to act rationally, identifiability and the availability of others to help. Identifiability involves the degree to which others can observe and assess an individual's behaviors (George, 1992; Szymanski & Harkins, 1987) and is often operationalized as task visibility (George, 1992). The level of task visibility depends in large part on whether individual performance can be monitored and evaluated by others (Jones, 1984). When individuals' on the job behavior and organizational contributions are unidentifiable, motivation to help may be low because the perceived relationship between helping and sanctions or rewards is weak. An individual may not be able to claim any benefits from helping others nor incur any penalties for not helping others when their behavior is not readily observable.

As with task visibility, individuals who believe that a number of others are available to help will be less motivated to help themselves. According to Latane and Darley (1970), when a specific individual is the only person available to help, "he carries all of the responsibility for dealing with [the need]; he will feel all of the guilt for not acting; he will bear all of the blame that accrues for nonintervention. If others are present, the onus of responsibility is diffused, and the finger points less directly at any one person" (p. 90). Settoon et al. (1994) found that employees were less likely to engage in helping behavior when they perceived others in their work groups were available to help.

In sum, individuals who perceive that their behavior is visible to others will feel a greater obligation to be cooperative. Likewise, individuals who perceive that only they are in a position to assist others will feel a greater obligation to help (e.g., Darley & Latane, 1968). On the other hand, individuals will feel less obligated to provide assistance that is perceived as readily available from others (Weldon & Mustari, 1988).

These variables are not expected to influence helping behavior as mediated by a felt empathy for coworkers. Empathy implies antecedents which contribute to a concern for the welfare of others. Perceived identifiability and the number of helpers are generally believed to be antecedents of self-interested behavior. Thus, I hypothesize,

Hypothesis 9a: Individuals who perceive their behavior to be identifiable will engage in instrumental and supportive ICB as mediated by felt personal responsibility to help.

Hypothesis 9b: Individuals who perceive that others are readily available to help will be less likely to engage in instrumental and supportive ICB as mediated by felt personal responsibility.

Summary

This chapter presented a model of interpersonal citizenship in organizations. Predicted relationships between the different forms of ICB, antecedents, and important intervening variables were presented. A typology of four interpersonal relationships was outlined to facilitate the development of the model. More specifically, the model predicts that variables indicating communal sharing, equality matching, and authority ranking relationships influence interpersonal citizenship through their effects on feelings of empathy and personal responsibility. Variables indicative of a market pricing orientation affect ICB only through diffusion of responsibility.

CHAPTER 3: METHOD

Introduction

In this chapter, the procedures used during the data collection phase of the study are described. The work sites sampled, survey administration procedures used, and sample characteristics are described. Also, the measurement scales and descriptions of their psychometric properties are presented. The results of exploratory analyses of new measures are presented in this chapter. Confirmatory factor analyses of the overall measurement model will be presented in Chapter 4.

Work Sites Studied

The data used to test the hypotheses were collected from two work sites in the southern United States: the auxiliary services division of a state university and a state regional medical center. These work sites were selected for the present study for several reasons. First, the nature of the work performed in these organizations required employees within departments to interact on a frequent basis to coordinate and complete their assigned tasks. Further, initial interviews with organizational officials revealed that the job activities of employees in these organizations were not routine; many unusual occurrences or problems had to be dealt with during the typical workday. As such, it was expected that these organizations provided a context where ICBs, team work, and interpersonal dependencies would surface.

Second, the employees surveyed performed a variety of different jobs requiring many different levels of education and expertise. Employees of the state hospital were registered and practical nurses, nursing assistants, lab technicians,

pharmacist and pharmacist trainees, respiratory therapy technicians, social workers, clerical workers, secretaries, computer programmers, data entry personnel, food services workers, accounting specialists, custodians, telephone operators, maintenance personnel, and stock clerks. The employees of the auxiliary services division were cafeteria workers, graphics artists, residential housing managers, and clerical workers. As a result, it was expected that the current study would capture increased variability in job, perceptual, and behavioral variables. Previous studies have been limited in the diversity of jobs studied and have noted that insufficient variability may be a cause for non-support of hypothesized relationships (e.g., Anderson & Williams, 1996).

Procedure

Prior to survey administration, a pilot study was conducted using employees from the administrative offices of a separate regional hospital in the southern United States. The purpose of the pilot study was to (a) assess reactions and gather comments regarding the clarity and readability of the survey instrument and (b) to collect data to be used to develop and validate several new scales used in the present study. The Human Resource Director, department heads, and supervisors of the hospital used in the pilot study were asked to provide their comments regarding the clarity of the items and the different response formats used on the survey. Comments were generally positive, but minor modifications were made to the instrument. Data were collected from the pilot site by sending surveys through the organization's mail system and having respondents mail completed surveys directly to me through the United States

mail system. Forty-five employees provided data to be used in testing the convergent and discriminant validity of new scales.

Data collection for hypothesis testing proceeded in two phases. Phase I included unstructured interviews with upper-level management in order to better understand the research context prior to survey administration. Phase II included administration of two surveys. One survey was given to all non-supervisory employees which included psychometric scales of the study variables, sociometric questions, and a place to provide background demographic information. The other survey was given to immediate supervisors and contained scales measuring evaluations of their subordinates on various criteria. Employees completing the non-supervisory survey were asked to provide the last five digits of their social security number so that their survey could be matched at a later time with the survey completed by their supervisor.

Prior to administering the survey instrument to the auxiliary services employees, I met with the Director of the Auxiliary Services division and his department heads. At this meeting I described the purpose of the study, presented the survey instrument, and solicited comments. Subsequently, I met with the employees' supervisors at which time on-site sessions for survey administration were scheduled. Over the course of three months, five employee sessions were conducted. In these sessions, participants were first informed of the purpose of the study and that their participation was voluntary. Those employees who did not want to participate were excused from the session. Surveys were then completed and given directly to me as

employees exited the session. Supervisors were given surveys, which they completed at their leisure. I returned at a later date to collect these surveys.

Prior to survey administration at the state regional medical center, I met on several occasions with the Chief Executive Officer, the Board of Directors, and the department heads. Following these meetings, I met with the supervisors from each department and described the study's purpose. It was agreed at these meetings that employee sessions would be impractical. Rather, non-supervisory and supervisory surveys were instead distributed by the department heads accompanied by a cover letter informing potential participants of the purpose of the study, that participation was voluntary, and that responses were confidential. Both supervisory and non-supervisory employees had a week to complete the surveys and place them in a postage-paid return envelope, and had the choice to either deliver them to a collection bin in the administrative offices or mail them directly to me through the United States mail.

Sample Characteristics

The auxiliary services work site elicited an employee response rate of 72%. A total of 66 employees completed surveys. Those employees not completing surveys were either absent on the day of the data collection sessions or did not wish to participate in the study. Seventy percent of the employees were female, 74.6% were white, the average age was 26.9 years, and average organizational tenure was 2.9 years. Interviews with supervisors indicated that the demographic characteristics of those employees who did not complete surveys were similar to those who did. The

supervisor response rate was 80%. Fifty-eight employee surveys were matched with supervisory surveys. These matched surveys were included in the tests of the hypotheses.

Three-hundred-seventy-four surveys were administered to employees at the state hospital work site. Two-hundred-fifty-three were completed and returned for a response rate of 68%. A total of 38 employee surveys could not be used in tests of the hypotheses due to either missing social security numbers or ones for which there were no matches on surveys provided by the supervisors. As a result, 215 surveys were used in tests of the hypotheses from this work site. Respondents were from 50 departments in the hospital. The response rate for departments ranged from 17% to 100%. Seventy-one percent of employees returning surveys were female, 69% were white, the average age was 37.5 years, and the average organizational tenure was 5.4 years.

Because hospital supervisors rated nearly all of their subordinates, I conducted an independent-samples *t*-test in order to test for differences in levels of ICBs between those hospital employees returning surveys and those who did not. The tests revealed no significant differences in the mean level of instrumental and supportive ICB between the two groups. Additionally, demographic information for those hospital employees who did not return surveys was obtained. Results of independent samples *t*-tests on gender, race, age, and organizational tenure revealed no significant differences. As a result, the sample of employees returning surveys were deemed representative of the total population of employees at the hospital. Similar tests could

not be performed for the auxiliary services data because information was gathered only on those employees who completed surveys.

In all, a total of 273 usable surveys from the auxiliary services division ($N=58$) and the state hospital ($N=215$) were used in the tests of the hypotheses. Although independent samples t -tests revealed no significant differences in respondent gender and race, there were statistically significant differences in age, $t(251) = 6.99$, $p < .01$, education level, $t(254) = 6.05$, $p < .01$, and organizational tenure, $t(252) = 2.70$, $p < .01$, across the two work sites with the hospital employees being on average older, more educated, and having longer tenure.

Measures

Data were collected from multiple sources and in different ways. As noted above, data were collected from (a) employees through self-reports, (b) employees' supervisors, and (c) employees' coworkers. Three formats were used to collect the data including (a) psychometric scales using 5-point Likert-type response formats -- ranging from (1) "Strongly disagree" to (5) "Strongly agree," (b) sociometric questions used to construct network measures, and (c) questions used to collect demographic information. Employees provided self-report data on empathy, felt personal responsibility, collectivism, perceived similarity, coworker support, initiated task interdependence, task visibility, and availability of others using psychometric scales. Employees also provided self-reports of demographic data. As is common in research investigating citizenship behaviors, data on employees' level of instrumental and supportive ICB was provided by their supervisors. Supervisors used a 5-point Likert-

type scale to indicate the extent to which each of their subordinates engaged in ICBs. Finally, focal employees' degree of network centrality was calculated through the responses to sociometric questions provided by their coworkers. More specifically, individuals were asked to list coworkers they interact with on a daily basis and indicate for each employee listed the nature of the interaction. Appendixes A and B present the employee and supervisor survey instruments used in this study.

Instrumental and Supportive ICB

A measure of ICB was developed for this study. As noted earlier, researchers have not developed theoretically grounded scales of interpersonal forms of citizenship behavior. Based on theory in the social psychology literature on help-giving, I expected two substantive dimensions of ICB. The first, labeled here as instrumental ICB, describes behaviors directly relevant to the solution of a coworker's problem, subsuming cues or resources intended to leave the coworker better-off as a result of the helping attempt. The second dimension, labeled supportive ICB, describes behaviors that provide maintenance of self-esteem for coworkers in need such as providing reassurance of their worth or demonstrating a concern for their welfare. The intended function of these behaviors is to raise others expectations for performance and for overcoming the problems that confront them.

Drawing on a review of the organizational behavior and social psychology literatures as well as available measures of citizenship behavior, help-giving, and social support, a pool of 98 items was created. The criteria for generating this initial item pool was that items had to reflect prosocial behavior directed at another

coworker. In some instances (e.g., Williams & Anderson, 1991), the referent in the item was changed to "coworker." Seventy-one of the items were taken from extant citizenship scales while the remaining 27 items were created for the present study based on extant social support scales published in the social psychology literature and exploratory research on help-giving. After eliminating essentially redundant items, 47 items remained (see Table 3-1).

Seven organizational behavior scholars were provided with definitions of instrumental and supportive ICB and were asked to classify the items in the pool as tapping instrumental ICB, supportive ICB, both forms of ICB, or neither form of ICB. Based on an analysis of the experts' evaluations, and an arbitrary selection criterion of allowing only one dissenting vote on the classification of an item, the item pool was further reduced to 16 items -- eight reflecting instrumental ICB and eight reflecting supportive ICB.

Exploratory factor analysis was performed on the pool of 16 ICB items using data on those employees who did not return surveys but whose supervisor provided complete ICB information ($N = 147$). Because the purpose of the exploratory analysis was to determine the minimum number of factors needed to account for the maximum portion of variance represented by the items for prediction purposes, principal components factor analysis was used (Ford, MacCallum, & Tait, 1986; Hair, Anderson, & Tatham, 1987). The Kaiser criterion of retaining factors with eigenvalues greater than one was used for identifying the number of factors retained prior to rotation. Although it is probable that forms of ICB are correlated, theory did

Table 3-1: Initial Item Pool for Interpersonal Citizenship Behavior Scales

-
1. Takes time to listen to coworker's problems and worries.
 2. Willingly helps coworkers, even at some cost to personal productivity.
 3. Takes a personal interest in coworkers.
 4. Passes on new information that might be useful to coworkers.
 5. Frequently does extra things not rewarded for, but which make cooperative efforts with others more productive.
 6. When making decisions at work that affect coworkers, takes needs and feelings into account.
 7. Tries not to make things more difficult for coworkers by careless actions.
 8. Helps coworkers with work when they have been absent.
 9. Helps coworkers with difficult assignments, even when assistance is not directly requested.
 10. Assists coworkers with heavy work loads, even though it is not part of job.
 11. Goes out of way to help new employees, even when not asked.
 12. Goes out of way to help coworkers with work-related problems.
 13. Frequently adjusts work schedule to accommodate other employees' requests for time-off.
 14. Always goes out of the way to make newer employees feel welcome in the work group.
 15. Shows concern and courtesy toward coworkers, even under the most trying business or personal situations.
 16. Often motivates others to express their ideas and opinions.
 17. Encourages others to try new and more effective ways of doing their job.
 18. Encourages hesitant or quiet coworkers to voice their opinions when they otherwise might not speak-up.
 19. Frequently communicates to coworkers suggestions on how the group can improve.
 20. Helps coworkers with personal problems.
 21. Shows someone where to go to get what they need.
 22. Takes time to explain regulations or procedures to someone who may have questions.
 23. Frequently makes creative suggestions to coworkers.
 24. Encourages coworkers to keep knowledge/skills current.
 25. Helps coworkers think for themselves.
 26. Obliges coworkers when they need a favor.
 27. Compliments coworkers when they succeed at work.
 28. Appears very interested in discussing with coworkers what is going on at work.
 29. Tries to cheer up coworkers who are having a bad day.
 30. Always seems to make time for coworkers who need to talk to someone about work-related or personal problems.
 31. Expresses concern for employees who are having problems at work.
 32. Often provides coworkers with suggestions or advice when questioned about a problem situation at work.
 33. Rarely burdens others with things that they should be able to handle on their own.
 34. Cooperates with coworkers.
 35. Runs errands for coworkers when necessary.
 36. Takes on extra responsibilities in order to help coworkers when things get demanding at work.
 37. Helps coworkers who are running behind in their work activities.
 38. Treats coworkers with dignity and respect.
 39. Provides encouragement to coworkers when they are having problems at work.
 40. Keeps personal information shared by coworkers confidential.
 41. Makes an extra effort to understand the problems faced by coworkers.
 42. After helping a coworker with a problem, always follows up to make sure the problem has been resolved.
 43. Voluntarily lends supplies or other materials to coworkers who may need them.
 44. Lets coworkers know that he/she will be around if they need assistance.
 45. Expresses an interest and concern in the well-being of coworkers.
 46. Listens to coworkers when they have to get something off their chest.
 47. Suggests actions that coworkers should take when they need to resolve a problem.
-

not provide sufficient justification for using oblique rotation as the method of rotation. Therefore orthogonal (varimax) rotation was used providing a more conservative test of simple structure. Proponents of this method of rotation have cited its simplicity, conceptual clarity, and amenability to subsequent analysis (Ford et al., 1986; Nunnally, 1978). Finally, only items with loadings greater than .40 on one factor were considered significant and used in defining a factor (Ford et al., 1986; Hair et al., 1987).

As shown in Table 3-2, two factors were extracted. Eigenvalues for each factor were greater than 1.0. The factors together accounted for 70 percent of the variance in the items. All items had loadings on one of the two factors of at least .40. Eight supportive ICB items and two instrumental ICB items loaded on one factor; six instrumental ICB items loaded on the other factor.

Based on the exploratory analysis, two instrumental ICB items (e.g., "Shows coworkers where to go to get what they need" and "Takes time to explain regulations or procedures to coworkers who may have questions") were eliminated. These two items were removed because of the incongruity between the conceptual and empirical analyses. Thus, the ICB measure used in testing the hypotheses consisted of two substantive ICB dimensions: instrumental ICB and supportive ICB. The instrumental ICB subscale contained 8 items whereas the supportive ICB subscale contained 6 items. According to Nunnally (1978), an alpha coefficient of .70 is acceptable in exploratory research. Coefficient alpha for the two subscales far exceeded this

Table 3-2: Exploratory Factor Analysis of Citizenship Items: Hold-out Sample

Items	ICB Category	Factor	
		1	2
Listens to coworkers when they have to get something off their chest.	(Supportive)	.8563	.0121
Takes time to listen to coworker's problems and worries.	(Supportive)	.8333	.1336
Takes a personal interest in coworkers.	(Supportive)	.7862	.1282
Shows concern and courtesy toward coworkers, even under the most trying business situations.	(Supportive)	.7539	.3477
Makes an extra effort to understand the problems faced by coworkers.	(Supportive)	.7500	.3619
Always goes out of the way to make newer employees feel welcome in the work group.	(Supportive)	.7464	.3893
Tries to cheer up coworkers who are having a bad day.	(Supportive)	.7448	.2664
Compliments coworkers when they succeed at work.	(Supportive)	.6566	.3933
Shows coworkers where to go to get what they need. ^a	(Instrumental)	.5982	.3733
Takes time to explain regulations or procedures to coworkers who may have questions. ^a	(Instrumental)	.4707	.3866
Takes on extra responsibilities in order to help coworkers when things get demanding at work.	(Instrumental)	.2351	.9093
Helps coworkers with difficult assignments, even when assistance is not directly requested.	(Instrumental)	.2317	.9049
Assists coworkers with heavy work loads even though it is not part of job.	(Instrumental)	.2340	.8912
Helps coworkers who are running behind in their work activities.	(Instrumental)	.2386	.8602
Helps coworkers with work when they have been absent.	(Instrumental)	.1835	.8440
Goes out of way to help coworkers with work-related problems.	(Instrumental)	.4367	.7858

^aItem deleted from final scale.

criterion. Alpha for instrumental ICB and supportive ICB using this hold-out sample was .95 and .87, respectively.

Mediating Variables

Felt empathy for coworkers. Felt empathy for coworkers was assessed using items from the Empathic Concern subscale of Davis' (1980) Interpersonal Reactivity Index. This subscale measures "other-oriented" feelings of sympathy and concern (e.g., "Sometimes I don't feel very sorry for my coworkers when they are having problems," [reverse coded]) and responsivity to others. Only items with others as a referent (as opposed to self as referent -- e.g., "I would describe myself as a pretty soft-hearted person") were selected for inclusion in the present study. Davis (1980) reported internal consistencies ranging from .68 to .73, and test-retest reliabilities ranging between .70 and .72.

Felt personal responsibility. In the present study, felt personal responsibility to help is conceptualized as the extent to which an individual experiences a general psychological state of obligation to help a coworker. Consistent with models of helping in the social psychology literature, this psychological state is considered to have motivational properties such that the greater the magnitude of the felt responsibility, the greater the arousal, and hence, the stronger the ensuing attempt to reduce it.

A review of the literature revealed no psychometrically validated measure of felt personal responsibility to help. Most studies of helping in the social psychology literature have examined the influence of personal responsibility in specific helping

incidents indirectly through experimental designs. For example, many studies have manipulated felt personal responsibility by varying the number of others present during a helping episode. As noted above, the greater the number of individuals, the easier it is for the bystander to diffuse responsibility and feel less of an obligation to help.

Because the present study was non-experimental and examined the relationships of non-episodic helping with general perceptions and attitudes which form through multiple interactions with coworkers over time, a self-report measure was developed. Theory suggests that a felt personal responsibility to help is a cognitive-affective construct that is reflected in (1) a feeling of obligation to help, (2) a feeling of discomfort and uneasiness, and (3) an increased alertness and sensitivity to cues relevant to reducing the obligation (Greenberg, 1980). These guidelines were used as a basis for constructing an initial pool of items to measure feelings of personal responsibility.

Exploratory analyses were conducted using the data obtained from the pilot work site. As noted earlier, surveys were administered to employees working in the administrative offices of another regional hospital ($N = 45$). Employees responded to seven felt personal responsibility items created specifically for the current study. For reasons stated above, a principal components analysis with orthogonal rotation was conducted on these items (see Table 3-3). Two factors emerged from the analysis. Both factors had eigenvalues greater than 1.0. All items had significant loadings (loading greater than .40) and explained 62.5% of the variance in the factors. Four

items loaded on the first factor and three items on the second factor. An inspection of the items and their loadings revealed that the first factor extracted may be described as a proactive orientation regarding helping others, consistent with the sensitivity to cues dimension offered by theory. The items loading on the second factor appeared to represent a felt obligation to coworkers. In this pre-test sample, coefficient alpha for the 4-item sensitivity subscale was .82. Alpha for the three items reflecting felt obligation was .54. One problematic item was dropped from this subscale leaving a 2-item measure with a coefficient alpha of .67. The sensitivity to cues measure exceeded the .70 criterion offered by Nunnally (1978), whereas the felt obligation measure approached it.

To further examine the subscales of the felt personal responsibility measure, its relationship with other theoretically relevant variables collected at the pilot site were examined. Research and theory on exchange theory have suggested that individuals feel personally responsible for helping others if they have received help in the past. The magnitude of felt personal responsibility is increased if individuals who receive help perceive it to be altruistic, or if there exist strong norms for helping in the immediate context. Given this, to the extent that the subscales reflect a felt personal responsibility, they should be positively correlated with variables that measure helping norms and contexts within which altruistic helping acts would be expected.

Table 3-4 presents the correlations using the pilot sample between the experienced obligation and sensitivity to cues subscales of the felt personal responsibility measure and (a) a 6-item measure of affect-based trust developed by

McAllister (1995), (b) a 6-item measure of perceptions of coworker support adapted from Eisenberger et al. (1986), and (c) a 3-item scale measuring the presence of helping norms in the immediate context (example item -- "The people I work with all share the responsibility equally for helping coworkers when they have a problem at work"). To the extent that affect-based trust and support characterize contexts in which altruistic acts are prevalent, they should be positively correlated with felt responsibility to help. Also, given the influence of norms on behavior and the threat of sanctions for violating such norms, the extent to which individuals perceive that others in their immediate context engage in helping acts should be positively correlated with the felt personal responsibility subscales.

Support for the construct validity of the new measure is seen in Table 3-4. The experienced obligation subscale was moderately correlated with the sensitivity to cues subscale ($r=.30$) and strongly correlated with affect-based trust, coworker support, and helping norms. Similarly, the sensitivity to cues subscale was positively correlated with trust, coworker support, and helping norms. In sum, felt personal responsibility was measured using a 2-item felt obligation subscale and a 4-item sensitivity to cues subscale.

Antecedents: Communal Sharing Variables

Collectivism. Individualism-collectivism captures the relative importance individuals accord personal interests and shared pursuits. It measures the tendency to be other-oriented and the need for psychological attachment to others. Individualism is the condition in which personal interests are given greater importance than are the

Table 3-3: Exploratory Factor Analysis of Felt Responsibility Measure: Pre-test Data

Items	1	2
If someone I work with needed assistance, I would want to be the one to help.	.8789	.1466
I frequently look for opportunities to help others at work.	.8522	.0716
I try to stay aware of when my coworkers are having difficulties.	.7497	.2262
I often feel that I have a special responsibility to assist my coworkers when they need help with their work.	.7474	-.2956
My coworkers have done things for me that I feel I should repay them for.	.2261	.7977
I often feel like I owe my coworkers.	.1728	.7455
Sometimes I do favors for my coworkers because I feel I am obligated to.	-.2503	.5714

Table 3-4: Tests of Construct Validity of Felt Responsibility Measure: Pre-test Data

Variable	<u>M</u>	<u>SD</u>	1	2	3	4	5
1. Felt obligation	3.58	.84	—				
2. Sensitivity to cues	3.58	1.07	.30*	—			
3. Affect-based trust	3.79	1.12	.52**	.49**	—		
4. Coworker support	3.60	1.07	.52**	.38**	.55**	—	
5. Helping norm	3.63	1.07	.33*	.30*	.23	.34*	—

* $p < .05$; ** $p < .01$.

needs of peers. Individualists look after themselves and tend to ignore group interests if they conflict with personal desires. On the other hand, collectivists look out for the well-being of the groups to which they belong.

Collectivism was measured using two subscales developed by Wagner (1995): value of working with others and subordination of self-interests. These two dimensions of collectivism were selected for the current study because they have been found to be related to interpersonal helping in previous research (Moorman & Blakely, 1995). The 3-item value of working with others subscale measures respondents' general preferences about working in a more collectivistic environment versus a more individualistic one. The 4-item subordination of self-interests subscale measures respondents' specific prescriptions for the behavior of other work group members. Wagner (1995) reported coefficient alphas of .83 for the value of working with others subscale and .80 for subordination of personal needs subscale.

Similarity with coworkers. Similarity with coworkers was assessed with three items based on the scale developed by Liden, Wayne and Stilwell (1993). Their scale measured subordinate perceptions of similarity with their supervisor and its reported alpha was .91. In the current study, items were adjusted to reflect perceived similarity with coworkers.

Antecedents: Equality Matching Variables

Coworker support. The measure of perceived social support from coworkers was developed for this study. The scale was based on Eisenberger et al.'s (1986) measure of perceived organizational support. Using the results of Eisenberger et al.'s

(1986) factor analysis in which they found that perceived support is a unidimensional construct, I selected the six highest loading items that were appropriately framed for gauging coworker support and adjusted the items such that the referent for the items was a focal employee's coworkers. Because the number of items were reduced and the referent was changed, an exploratory analysis using the pilot data was conducted. Results of a principal components factor analysis revealed that the scale remained unidimensional and was internally consistent ($\alpha = .80$).

Antecedents: Authority Ranking Variables

Network centrality. Social network methodology was used to measure individuals' status in informal organizational networks. Social network theory and methodology has been offered as a potentially powerful framework and tool for the analysis of organizational phenomenon (Fombrun, 1982; Tichy, Tushman, & Fombrun, 1979). It has been used to explain the influence of social structure on job and organizational attitudes and cognitions (e.g., Brass, 1981), power and political processes (e.g., Brass, 1984; Brass & Burkhardt, 1993), and innovation in organizations (e.g., Ibarra, 1993).

The social network approach views organizations as "a system of objects (e.g., people, groups, organizations) joined by a variety of relationships. Not all pairs of objects are directly joined, and some are joined by multiple relationships" (Tichy et al., 1979, p. 507). Network analysis is concerned with identifying the structural aspects of relationships and their causes and consequences. The social network

perspective has developed to the point of guiding data collection as well as data analysis.

Four types of networks were examined in the present study. Using a procedure similar to Ibarra (1993), the network centrality index was constructed by asking respondents to list the first and last names of up to five employees that they interacted with on a daily basis. For each coworker listed, employees were asked to indicate what type of involvement they had with this individual. In other words, they were asked to indicate if a coworker they listed is someone (a) with whom they discuss what is going on in the organization, (b) they approach if they have a work-related problem or when they want advice on a decision to they have to make, (c) who they know they can count on and who is dependable in times of crisis, and/or (d) who helps them when they have problems at work. Answers to these questions provided the raw data used to calculate the degree of centrality in the organization's communication, advice, support and help networks, respectively.

Freeman, Romney, and Freeman (1987) showed that informants can provide accurate measures of relatively long-term, stable patterns of interaction, such as those used in network analysis. Centrality was operationally defined as "in-degree" centrality (Burkhardt & Brass, 1993; Knoke & Burt, 1983). This index is a function of the number of different persons who chose a focal person. The greater the number of coworkers choosing a focal employee, the greater the centrality of that employee. This measure captures status and distinctions between subordination and superordination (Knoke & Burt, 1983).

The index for each network was calculated in the following way. First, I obtained a list of all employees names and social security numbers from the hospital. This list and the four network types were used as the basis for constructing a two-dimensional centrality matrix (i.e., employee x network) used to calculate the centrality indices. Each cell_{ij} (where i ranged from 1 to 234 employees and j ranged from 1 to 4 networks) in the centrality matrix contained a value representing the total number of respondents indicating on their survey an interaction with employee_i of the network_j type. Cell values for the communication network vector ranged from 0 (indicating no one listed employee_j on their survey) to 8 (indicating 8 coworkers listed their name); mean was 2.14. Cell values for the advice network vector ranged from 0 to 7 (mean = 1.31). Cell values for the support network vector ranged from 0 to 8 (mean = 1.66), whereas for the help network vector, values ranged from 0 to 9 (mean = 1.74). Previous research has shown that measures of centrality across networks are highly correlated. Consistent with this research, the centrality indices for the four networks were combined to form one measure of overall centrality (Ibarra, 1993).

Initiated task interdependence. Kiggundu (1981) conceptualized initiated task interdependence as multidimensional with three subdimensions: scope, resources, and criticality. Scope is the breadth of interconnectedness of a particular job with other jobs. Resources is the degree to which the interdependence between two or more jobs involves receiving or giving resources necessary to do the job. Criticality is the extent to which the interdependence between the focal job and one or more other jobs is crucial for the performance of the focal job.

Although Kiggundu (1981, 1983) proposed three dimensions of initiated task interdependence, in an exploratory factor analysis, he found one factor accounted for the variation in the interdependence items. I used the six items in his 1983 study with the highest item total correlations to measure initiated task interdependence in the current study. An exploratory factor analysis on this scale with the pilot study data revealed one factor with an alpha of .85.

Antecedents: Market Pricing Variables

Task visibility. To measure the extent to which an employee's actions and contributions to the work of the organization are identifiable, George's (1992) 5-item task visibility scale was used. George (1992) reported an alpha of .84 for this scale.

Number of others available to help. Two items measured an employee's perceptions of the number of persons willing and able to help others who were in need of help. Items included "Most of the time, my coworkers come to me when they have a problem because there is no one else available with the experience and job knowledge that I have," and "Often, I am the one who helps others with work-related or personal problems because nobody else is willing to take the time to help."

CHAPTER 4: ANALYSES AND RESULTS

Introduction

Structural equation modeling (LISREL 8) was used to test the hypothesized relationships. A covariance matrix was used as input for estimation of the measurement and structural models. Figure 4-1 depicts the constructs comprising the measurement model and the structural relationships hypothesized to exist among them. The data were analyzed in three distinct steps. First, the psychometric properties of the measurement model were assessed. Second, the hypotheses were examined through a combination of chi-square difference tests of nested structural models and *t*-tests of path estimates in the best fitting structural model. Third, post-hoc tests were conducted to assess the extent to which differences in variables across work sites and common method variance may have affected the results. Each of these steps are described in detail in this chapter.

Analyses

Assessment of measurement model. Using the two-step approach to structural equation model fitting and assessment offered by Anderson and Gerbing (1988), I assessed the measurement properties of the model (i.e., the relationships between the indicators and latent variables) prior to considering structural relationships between the constructs. Multiple indicators were used to measure latent constructs. Two issues must be considered when specifying structural equation models involving a large number of variables. First, there are computational limitations (Bentler & Chou, 1987) and other difficulties in fitting models with a large number of indicators

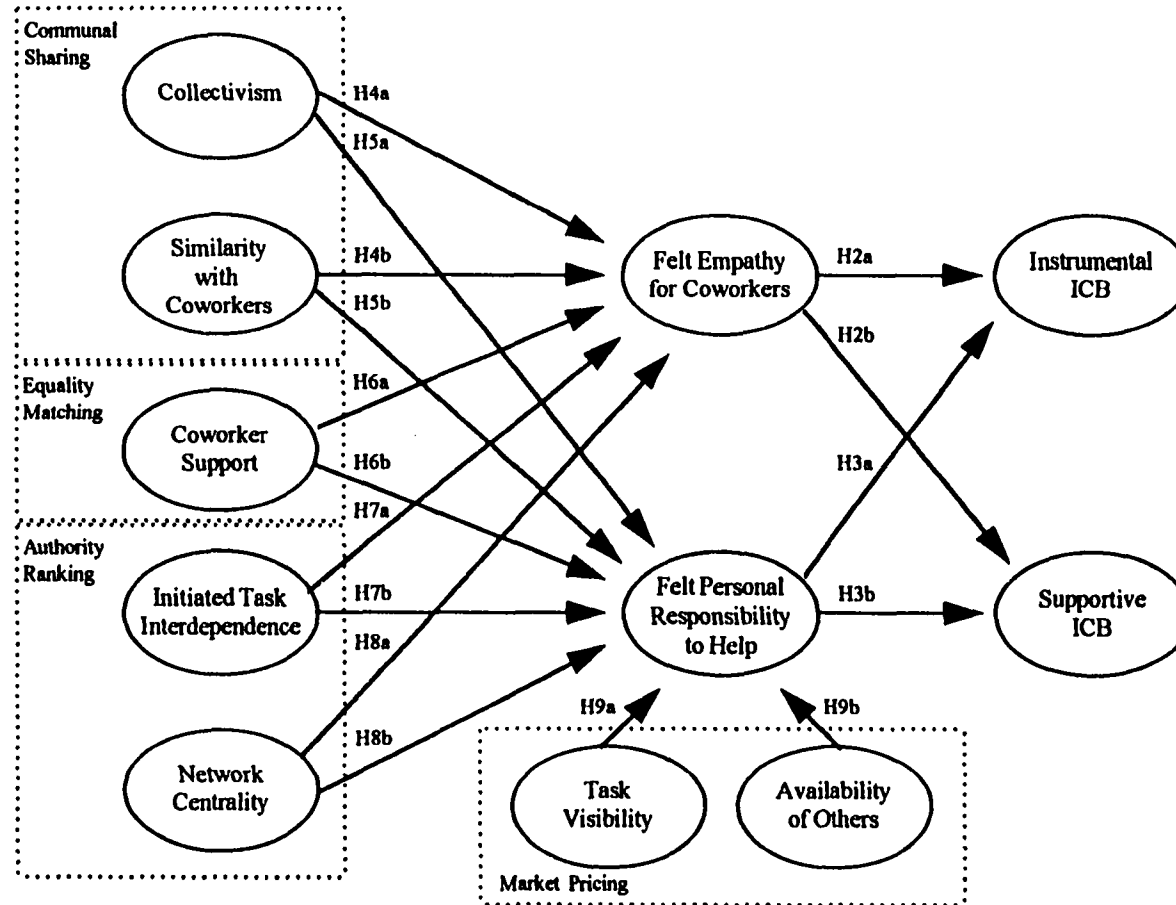


Figure 4-1: Hypothesized Relationships

(Moorman, 1991; Williams & Hazar, 1986). Models with more than 30 indicators are difficult to fit even when there exists strong theoretical support (Joreskog & Sorbom, 1986). Second, the number of parameters estimated relative to sample size is an important determinant of convergence, standard errors, and model fit in covariance structure models (Hayduk, 1987). A sample-size-to-parameter ratio of 5 or more is usually sufficient to achieve reliable estimates in maximum likelihood estimation (Bentler, 1985). Although the 5 to 1 ratio is only a guideline, a parsimonious estimation strategy should be followed when dealing with moderate sample sizes, as is the case with this study.

Consistent with common practice in the literature for reducing the number of indicators (e.g., Moorman, 1991; Niehoff & Moorman, 1993; Williams & Hazar, 1986), the following steps were taken. Prior to assessing the complete measurement model (including all study variables) used in the hypothesis tests, I conducted a separate analysis on the scales representing the exogenous portion of the structural model. These measures reflected aspects of the work context and all but one (i.e., availability of others to help) were established scales used in previous research (e.g., similarity with coworkers, collectivism, network centrality, task visibility) or closely resembled established scales (e.g., coworker support, initiated task interdependence). As noted previously, the one new measure was the 2-item scale assessing employee perceptions of the availability of others to help.

Analysis of the exogenous portion of the measurement model proceeded as follows. First, problematic items were eliminated. Such items were indicated by

nonsignificant loadings (less than .4; Hair et al., 1987) on their hypothesized latent variables and/or significant cross-loadings, as indicated by modification indices, on other latent variables. Second, tests for discriminability were conducted when latent variables were highly intercorrelated. Within the LISREL framework, discriminant validity between intercorrelated latent variables is often assessed by constraining the correlations between them to 1.0, refitting the model, and testing the resulting change in chi-square (Anderson & Gerbing, 1988; Bagozzi & Yi, 1988). A significant worsening in model fit as indicated by a significant chi-square difference would indicate that the two measures are not perfectly correlated. Third, the composite latent variable reliability was computed using the standardized item loadings for each latent variable. Finally, the quality of the exogenous measurement model was assessed by examining two fit indices, the comparative fit index (CFI, Bentler, 1990) and the Root Mean Square Error of Approximation (RMSEA -- Steiger, 1990). The CFI has been recommended as among the best among fit indices for assessing overall fit and performs well with smaller samples (Gerbing & Anderson, 1993). Values exceeding .90 indicate a good fitting model (Hair et al., 1987). The RMSEA provides information in terms of discrepancy per degree of freedom for a model, thus incorporating the notion of parsimony in assessing fit. Browne and Cudeck (1993) suggest that an RMSEA of .05 indicates a close fitting model and that values up to .08 represent reasonable errors of approximation for a model.

After assuring the overall acceptability of the measurement model of exogenous variables and the convergent and discriminant validity of the individual

latent variables, those retained items for each latent variable were used to calculate scale scores. Following the procedures outlined by Kenny (1979) and Williams and Hazer (1986), I created scale scores for each latent variable by averaging the items for each scale. I used the composite latent variable reliability to calculate the factor loading and measurement error for each manifest variable. The path from the latent variable to its manifest indicator (i.e., λ) was set to the square root of the composite reliability. As a covariance matrix was used as input, I set the error variance for each manifest indicator to the product of the variance of the average of the items by scale and the quantity one minus the composite reliability of the scale.

The complete measurement model including exogenous latent variables indicated by scale scores and endogenous latent variables indicated by scale items was assessed using the same guidelines noted above. With this analysis, problematic items were eliminated, discriminant validity tests were conducted on highly correlated factors, and overall model fit was assessed. Scale scores were not created for endogenous latent variables for several reasons. First, the ICB measure and the subscales of the felt personal responsibility measure had not been used in previous research, and reliabilities for the empathic concern scale have been shown to be low in previous research. To gather a more accurate view of the performance quality (when testing the structural model) of these measures, the scale items were used as indicators of latent variables. Second, some latent variables must have multiple indicators for model identification purposes. For example, in model comparisons involving a saturated model, the number of model parameters would equal the number of

variances/covariances used in the estimation procedures. This would result in a perfectly fitting, just-identified model, disallowing assessment of model plausibility through evaluation of fit. In other words, the perfect fit would not be indicative of model fit, but rather it would be indicative of the fact that there are just enough variances and covariances to allow one solution to be obtained for each parameter estimated.

Tests of hypotheses. In order to test the hypothesized structural relationships among latent variables, I used a nested-models comparison procedure in which plausible alternative models were compared with the proposed theoretical model (Bentler & Bonnett, 1980). This procedure addresses the prediction that the restricted paths in the nested models that are hypothesized to be zero, are indeed zero (James, Mulaik, & Brett, 1982). In the comparison procedure, a nonsignificant chi-square difference between two models suggests that the more restricted model is a better model because greater parsimony is achieved without a significant decrease in the overall fit of the model.

Alternative models were established a priori in order to provide rigorous tests of the relationships. Consistent with procedures suggested by Anderson and Gerbing (1988) and followed by Anderson and Williams (1996), the following model comparisons were conducted. First, a structural null model, which forced the paths from exogenous to endogenous variables and the paths among endogenous variables to zero, was specified. A comparison between the structural null model and the saturated structural model, which allowed estimation of structural parameters between

all latent variables, directly tested the restrictions contained in the structural null model. A significant chi-square difference indicates that some or all of the restrictions placed on structural parameters should be rejected. This comparison tested for the importance of the paths representing relationships among the latent variables.

A comparison between the theoretical model (which included only the hypothesized relationships depicted in Figure 4-1) and the saturated structural model provided an overall test of the theoretical model by directly testing the restrictions on specific paths proposed by the theoretical model. Because the hypotheses imply a full mediational model (all effects of the exogenous variables are indirect through empathic concern and felt personal responsibility), I restricted to zero the direct paths in the saturated model between the exogenous latent variables and instrumental ICB and supportive ICB. Because the market pricing variables were hypothesized to have an indirect relationship with ICB only through felt responsibility, the paths between the market pricing variables and felt empathy were set to zero. A nonsignificant chi-square difference between the saturated structural model and the theoretical model would indicate that the relationships hypothesized to be zero are indeed zero. A significant chi-square difference between the saturated structural model and the theoretical model would indicate that the restrictions (e.g., no direct paths) placed on some or all of the paths in the theoretical model should be rejected. This finding would result in testing a revised theoretical model that contained additional paths as indicated by significant path estimates in the saturated structural model. After identifying the best-fitting model via the chi-square difference tests, *t*-values

indicating the significance level of individual paths were examined to determine which particular paths described the relationships found in the model. The significance of the individual paths showed which specific paths accounted for the significant change in chi-square and served as a test of the hypotheses.

Results

Assessment of Exogenous Latent Variables

As noted, the large number of scale items representing the variables of interest in the current study required a parsimonious estimation strategy. In order to reduce the number of indicators used in model testing, assessment of the measurement properties of the exogenous portion of the theoretical model was conducted prior to overall model assessment. This model was assessed first to identify items to be used in constructing scale scores for the exogenous latent variables. These scale scores, used in lieu of multiple scale items, would subsequently be included in the analysis of the complete measurement model and tests of the hypotheses. Again, conservative tests for convergent and discriminant validity were applied; beyond eliminating items with loadings below .4, items with significant loadings on more than one latent variable were also eliminated.

This measurement model estimated the parameters linking each latent variable to its respective indicators, estimated the error variance for each indicator variable, and allowed all latent variables to be correlated. Analysis of this model indicated problems with items loading on the subordination of self-interests latent variable and the task visibility latent variable. Three of the four loadings for the subordination of

self-interests latent variable were statistically nonsignificant. Because only one item remained, this latent variable was not considered in subsequent analyses. This meant that collectivism was measured using only the value of working with others scale (Wagner, 1995). Two items loading on the task visibility latent variable had significant loadings on other latent variables and one other item was statistically nonsignificant. The remaining two items showed significant loadings and were used to create the scale score for the task visibility latent variable. Three more items were eliminated from the measurement model based on the criteria of eliminating items with significant loadings on more than one latent variable -- one each for the value of working with others, perceived similarity with coworkers, and initiated task interdependence.

The model was re-estimated minus these items. Table 4-1 reports the indicator loadings on each latent variable, the estimated error variance, and the composite reliabilities of each latent variable. The model fit the data acceptably well as indicated by a CFI = .94 and RMSEA = .06. Also, all items loaded significantly on their hypothesized latent variables. Estimates of the reliability for each latent variable suggested that the specified indicators were sufficient in their representation of the constructs. Composite reliabilities for the latent variables either exceeded .70, or in the instance of similarity with coworkers (i.e., composite reliability = .68) approached it. It should be noted that one of the items for the availability of others latent variable produced an offending estimate. More specifically, a standardized loading greater than 1.0 and a corresponding negative error measurement value was generated during

Table 4-1: Results of Assessment of Exogenous Latent Variables

Items	λ	Θ
Value of working with others (.85)^a		
1. I prefer to work with others rather than work alone.	.74	.45
2. ^c Given the choice, I would rather do a job where I can work alone rather than do a job where I have to work with others. (R)		
3. Working with others is better than working alone.	.70	.51
Subordination of personal needs^b		
People should be made aware that if they are going to work with others, they are sometimes going to have to do things that they don't want to do.		
People should realize that they're not always going to get what they personally want when working with others.		
People should realize that they sometimes are going to have to make personal sacrifices when working with others.		
People should be willing to make sacrifices for the sake of the department's well-being.		
Similarity with coworkers (.68)^a		
4. My coworkers and I are similar in terms of our outlook, perspective, and values.	.73	.47
5. ^c My coworkers and I see things in much the same way.		
6. My coworkers and I are alike in a number of areas.	.98	.04
Coworker support (.81)^a		
7. My coworkers really care about my well-being.	.66	.56
8. My coworkers are willing to extend themselves in order to help me perform my job.	.69	.52
9. Even if I did the best job possible, my coworkers would fail to notice. (R)	.56	.69
10. My coworkers care about my general satisfaction at work.	.62	.62
11. My coworkers show very little concern for me. (R)	.68	.54
12. My coworkers care about my opinions.	.65	.57
Initiated Task Interdependence (.79)^a		
13. What I do in my job has an impact on the work of my coworkers.	.67	.56
14. My job activities go on to affect other peoples' work.	.71	.50
15. Other peoples' work depends directly on me doing my job.	.68	.54
16. Unless my job gets done, my coworkers cannot do their work.	.65	.57
17. Unsatisfactory performance of my job would delay the work performance of my coworkers.	.56	.69
18. ^c My job requires me to spend a great deal of time giving help or advice other people need.		
Network Centrality (.95)^a		
19. Advice in-degree centrality	.88	.23
20. Help in-degree centrality	.92	.15
21. Support in-degree centrality	.93	.14
22. Talk in-degree centrality	.92	.16
Task visibility (.70)^a		
23. ^c My coworkers are aware of the amount of work I do.		
24. It is generally hard for my coworkers to figure out how hard I am working.		
25. ^c My coworkers usually notice when I am not working as hard as I should be.		
26. It is difficult for my coworkers to determine how much effort I exert on the job. (R)	.77	.41
27. ^c My coworkers are generally aware of when I am putting forth below average effort. (R)	.70	.52
Availability of Others to Help (.70)^a		
28. My coworkers come to me when they have a problem because there is no one else available with the experience and job knowledge that I have.	.54	.01
29. Often, I am the one who helps others with work-related or personal problems because nobody else is willing to take the time to help.	.90	.18

Note: The lambdas reported are from the completely standardized solution; Chi-square with 210 degrees of freedom = 367.97 ($p < .01$); CFI = .94, calculated from null of 2705.27 with 253 degrees of freedom; ^aComposite reliability for latent variable with superscripted items deleted; ^bScale deleted from subsequent analyses; ^cItem deleted from subsequent analyses.

estimation of the measurement model. Such estimates are theoretically inappropriate and must be corrected before the model can be interpreted and the goodness-of-fit assessed (Hair et al., 1987). As others have done, the error variance of the item was set to a small positive value (e.g., Anderson & Williams, 1996).

Although the factor intercorrelation matrix (i.e., phi matrix) indicated that the latent variables in this model met one criterion for discriminant validity used in testing measurement models in that factor correlations were substantially less than a correlation of .90, one of the 21 correlations was sufficiently large that further analyses were warranted. The factor correlation between coworker support and similarity with coworkers was $r = .72$. To assess the discriminant validity of these two variables, I constrained the factors' intercorrelation (i.e., phi coefficient) to 1.0 and refitted the exogenous measurement model. I compared this model with one allowing the correlation between coworker support and task visibility to be estimated. Constraining the correlation to 1.0 and then allowing it to be estimated resulted in a significant improvement in model fit; chi-square change for change in 1 degree of freedom was 26.03, $p < .01$. This significant improvement in the fit of the model when the restriction placed on the phi coefficient was relaxed provides support for considering the two measures as distinct.

Assessment of Complete Measurement Model

Scale scores for the value of working with others, similarity with coworkers, coworker support, initiated task interdependence, network centrality, task visibility, and availability of others were created based on the items which met the criteria for

convergent and discriminant validity in the tests of the exogenous latent variables measurement model. As noted, I used the composite latent variable reliability to calculate the factor loading and measurement error for each manifest variable.

These scale scores along with scale items measuring instrumental ICB, supportive ICB, empathic concern, felt obligation, and sensitivity to cues comprised the indicators of the complete measurement model to be used in hypothesis tests. Table 4-2 reports the indicator loadings, the estimated error variance, and the composite reliabilities. Initial analysis of this model indicated a few problems. First, two of the four items measuring the sensitivity to cues latent variable had small loadings (less than .4) which contributed to a low composite reliability and the remaining two items had significant loadings on other latent variables. As a result, this scale was not included in subsequent analyses. Two of the indicators hypothesized to load on empathic concern exhibited loadings less than .40 and were dropped leaving three indicators that demonstrated acceptable composite reliability.

Items loading on instrumental and supportive ICB exhibited cross-loadings. Because instrumental and supportive ICB describe behaviors that help another, there exists theoretical justification for one dimension of ICB (which is indicated by cross-loadings). Thus, unlike instances where cross-loadings were indicated for items on two or more latent variables with conceptually distinct and different construct domains (items were eliminated in these instances), I considered the possibility that one factor accounted for the variance in all of the ICB items. Several models were compared and are presented in Table 4-3. A model with all items loading on one ICB factor was

Table 4-2: Assessment of Complete Measurement Model

Items	λ	Θ
1. Similarity with coworkers	.83	.31
2. Value of working with others	.92	.15
3. Coworker support	.90	.19
4. Initiated task interdependence	.88	.23
5. Network centrality	.98	.05
6. Task visibility	.84	.30
7. Availability of others to help	.83	.31
Instrumental ICB (.94)^a		
8. Takes on extra responsibilities to help coworkers when things get demanding at work.	.86	.27
9. Helps coworkers with difficult assignments, even when assistance is not directly requested.	.87	.24
10. Assists coworkers with heavy work loads even though it is not part of his/her job.	.84	.29
11. Helps coworkers who are running behind in their work activities.	.88	.22
12. Helps coworkers with work when they have been absent.	.89	.20
13. ^b Goes out of way to help coworkers with work-related problems.		
Supportive ICB (.93)^a		
14. Listens to coworkers when they have to get something off their chest.	.70	.51
15. Takes time to listen to coworker's problems and worries.	.77	.40
16. Takes a personal interest in coworkers.	.80	.35
17. Shows concern and courtesy toward coworkers, even under the most trying business situations.	.80	.36
18. Makes an extra effort to understand the problems faced by coworkers.	.81	.34
19. Always goes out of the way to make newer employees feel welcome in the work group.	.81	.34
20. Tries to cheer up coworkers who are having a bad day.	.83	.30
21. Compliments coworkers when they succeed at work.	.73	.46
Empathic Concern (.66)^a		
22. ^b When I see a coworker being taken advantage of, I feel kind of protective towards them.		
23. ^b When I see a coworkers treated unfairly, I sometimes don't feel very much pity for them.		
24. I often have concerned feelings for my coworkers, especially those less fortunate than me.	.43	.82
25. Sometimes I don't feel very sorry for my coworkers when they are having problems. (R)	.79	.38
26. My coworkers' misfortunes do not usually disturb me a great deal. (R)	.64	.59
Felt Obligation (.73)^a		
27. I often feel like I owe my coworkers.	.73	.46
28. My coworkers have done things for me that I feel I should repay them for.	.79	.38
Sensitivity to Cues^c		
I frequently look for opportunities to help others at work.		
I try to stay aware of when my coworkers are having difficulties.		
If someone I work with needed assistance, I would want to be the one to help.		
I often feel I have a special responsibility to assist coworkers when they need help with work.		

Note: The lambdas reported are from the completely standardized solution; Chi-square with 227 degrees of freedom = 470.68 ($p < .01$); CFI = .93, calculated from null of 3651.37 with 300 degrees of freedom; ^aComposite reliability for the latent variable with superscripted items deleted; ^bItem deleted from subsequent analyses; ^cScale deleted from subsequent analyses.

Table 4-3: Tests of the Discriminant Validity of ICB Dimensions

Model	df	χ^2	$\Delta\chi^2$ ^a	RMSEA	CFI
Full Measurement Model One ICB Factor	329	908.30		.083	.85
Full Measurement Model Two ICB Factors (phi coefficient constraint relaxed)	227	470.68		.065	.93
Full Measurement Model Two ICB Factors (phi coefficient restricted to 1.0)	228	670.18	199.49 ^{*b}	.087	.87

Note. CFI = comparative fit index, calculated from null of 2020.00 with 136 degrees of freedom; ^aBecause the models with two ICB factors are nested models, $\Delta\chi^2$ was calculated; ^bCompared with the model with phi estimate relaxed.
^{*} $p < .05$.

compared to a model that preserved the hypothesized two-factor structure. As seen in the table, the model specifying a one-factor structure of ICB exhibited a poorer fit as indicated by a CFI = .85 and RMSEA = .083. To further test the viability of the two-factor structure, a nested-model restricting the correlation between instrumental and supportive ICB to 1.0 was compared with a model where this parameter was allowed to be estimated. The comparison test revealed that the more restrictive model, where the correlation between instrumental and supportive ICB was constrained to 1.0, resulted in a statistically significant decrease in fit as indicated by a change in chi-square for change in 1 degree of freedom equal to 199.49, $p < .01$. The results of these model comparisons and the results of the exploratory factor analyses conducted on the hold-out sample provide support for Hypothesis 1.

As a result of these analyses and the conceptual similarity of the two constructs, the items (1 instrumental ICB, 3 supportive ICB) exhibiting significant loadings on both ICB latent variables were retained. One instrumental ICB item loading on the task visibility latent variable and the similarity with coworkers latent variable was discarded, however. The overall measurement Model fit the data acceptably well as indicated by a CFI = .93 and RMSEA = .065. Also, all retained items loaded significantly on their hypothesized latent variables. Estimates of the reliability for each latent variable exceeded .70 for instrumental ICB, supportive ICB, and experienced obligation. The composite reliability for empathy was .66.

Assessment of Nested Models

Descriptive statistics including the means and standard deviations of scales used in the study are presented in Table 4-4. Also seen in Table 4-4 are the correlations calculated from scales for all variables and the estimated latent variable correlations (appearing above the diagonal) reported in the phi matrix. In support of previous research, statistically significant correlations were found between a number of the study variables and ICB. Felt empathy and coworker support were positively correlated with supportive ICB at the $p < .05$ level of significance, whereas similarity with coworkers and the value of working with others were marginally associated with supportive ICB at the $p < .10$ level. Coworker support was positively correlated with instrumental ICB at the $p < .05$ level of significance whereas empathic concern, was marginally associated at the $p < .10$ level. Of the variables not examined in previous research, network centrality was positively associated with both instrumental and supportive ICB at the $p < .01$ level.

As noted earlier, the purpose of the nested-model comparisons conducted in the current study was to test the soundness of the restrictions placed on the proposed theoretical model. Ideally, as a first step in judging the accuracy of a proposed model, those relationships hypothesized to be zero, as opposed to those hypothesized to be non-zero, should not contribute significantly to the overall fit of the model. The results of the nested model comparisons will identify any paths expected to be zero that should be considered non-zero and included in any revisions of the proposed model. Support or non-support for the hypothesized relationships will be provided

Table 4-4: Descriptive Statistics and Intercorrelations among Study Variables

Variable	<u>M</u>	<u>SD</u>	1	2	3	4	5	6	7	8	9	10	11
1. Instrumental ICB	3.75	.89	--	.85**	.13†	-.03	.07	.06	.15*	.05	.18**	.05	-.06
2. Supportive ICB	3.83	.72	.79**	--	.18*	.07	.12†	.14*	.17*	.06	.23**	.10	-.08
3. Empathic concern	3.81	.66	.11†	.15*	--	.20*	.17*	.08	.39**	.20*	.05	.35**	-.35**
4. Felt obligation	2.72	.96	-.02	.07	.14*	--	.21**	.43**	.45**	.25**	-.13†	.12	-.03
5. Value of working with others	3.65	.96	.06	.11†	.12†	.16**	--	.35**	.35**	.05	-.19**	.15†	-.11
6. Similarity with coworkers	3.42	.82	.04	.11†	.03	.30**	.27**	--	.72**	.14†	-.11	.39**	-.05
7. Coworker support	3.69	.63	.13*	.15*	.27**	.33**	.28**	.54**	--	.12	.00	.46**	-.19*
8. Initiated task interdependence	3.92	.79	.05	.06	.19**	.21**	.02	.11†	.11†	--	-.08	.05	-.02
9. Network Centrality	1.71	1.56	.17**	.22**	.03	-.10	-.17**	-.09	.00	-.06	--	-.16*	.11
10. Task Visibility	3.29	.92	.04	.09	.24**	.08	.12*	.27**	.35**	.05	-.12	--	-.29**
11. Availability of Others	2.46	.91	.05	.05	.20**	-.01	.08	.03	.12*	-.03	-.09	.22**	--

Note. Estimated latent variable correlations appear above the diagonal; † $p < .10$; * $p < .05$; ** $p < .01$

through examination of the significance levels of individual structural paths between latent variables.

Figures 4-2 and 4-3 graphically depict the nested model comparison tests. The dotted lines represent the constraints that are tested during the comparison process. The chi-square values, associated degrees of freedom, CFI, and the RMSEA for each of these structural models are presented in Table 4-5. Also reported is the chi-square difference between adjacent models and the corresponding level of significance. Two initial nested-model comparisons were conducted with three models: the structural null (the model of least fit specifying no relationships between latent variables), the saturated model (the model of best fit specifying relationships between all latent variables) and the theoretical model (specifying only hypothesized relationships). The first comparison examined the change in fit associated with freeing all restricted paths in the structural null model (see Figure 4-2). Doing this tested the a priori assumption that at a minimum some relationships, hypothesized or non-hypothesized, exist between the latent variables examined in the study. As can be seen in Table 4-5, the change in chi-square for the change in 34 degrees of freedom was 388.61, which is significant at the .01 level of significance. Thus, support for rejecting the restrictions placed on the structural parameters in the null was indicated.

The second nested-model test compared the theoretical model and the saturated model (see Figure 4-3). This comparison tested whether the restrictions specified in the theoretical model result in a model that fits less well relative to the saturated model. In other words, if a significant decrease in model fit is obtained as a result of

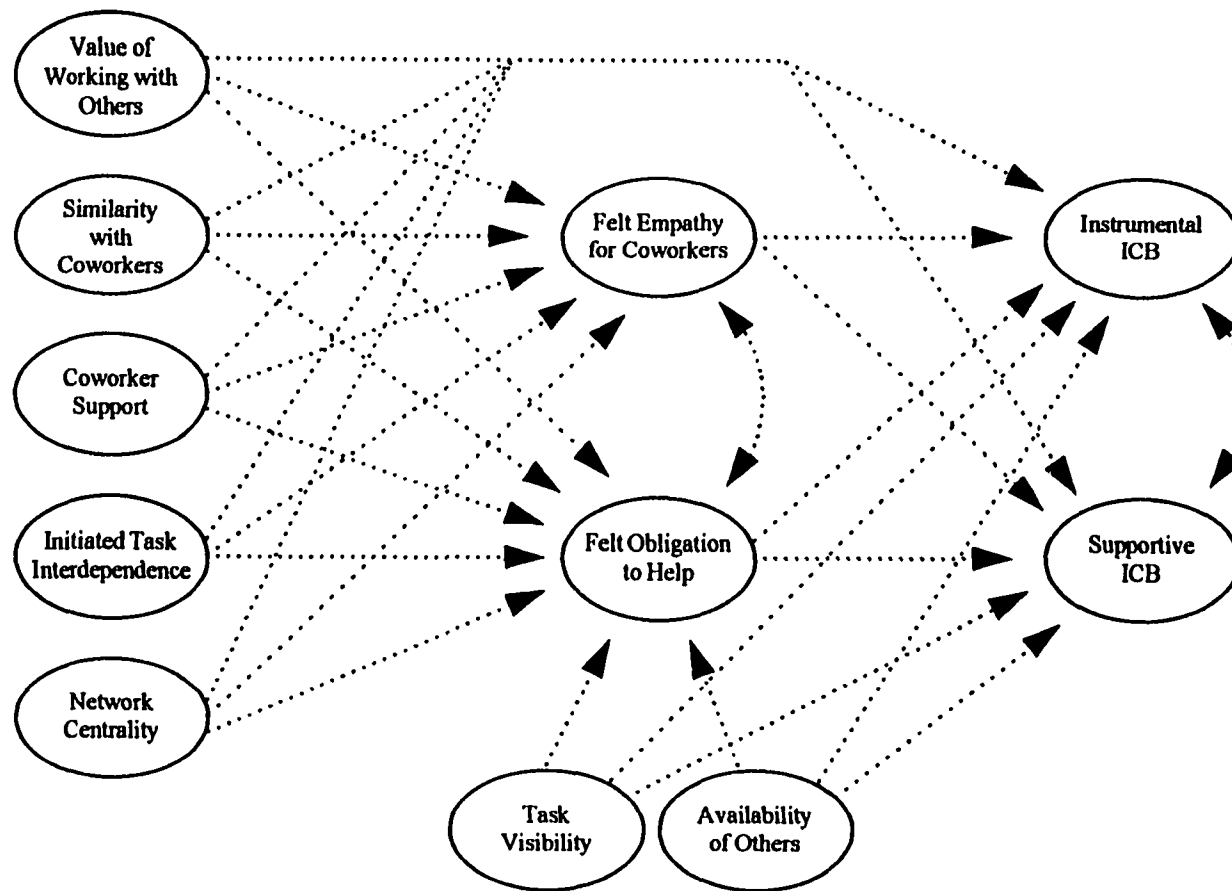


Figure 4-2: Structural Null Model vs. Saturated Model

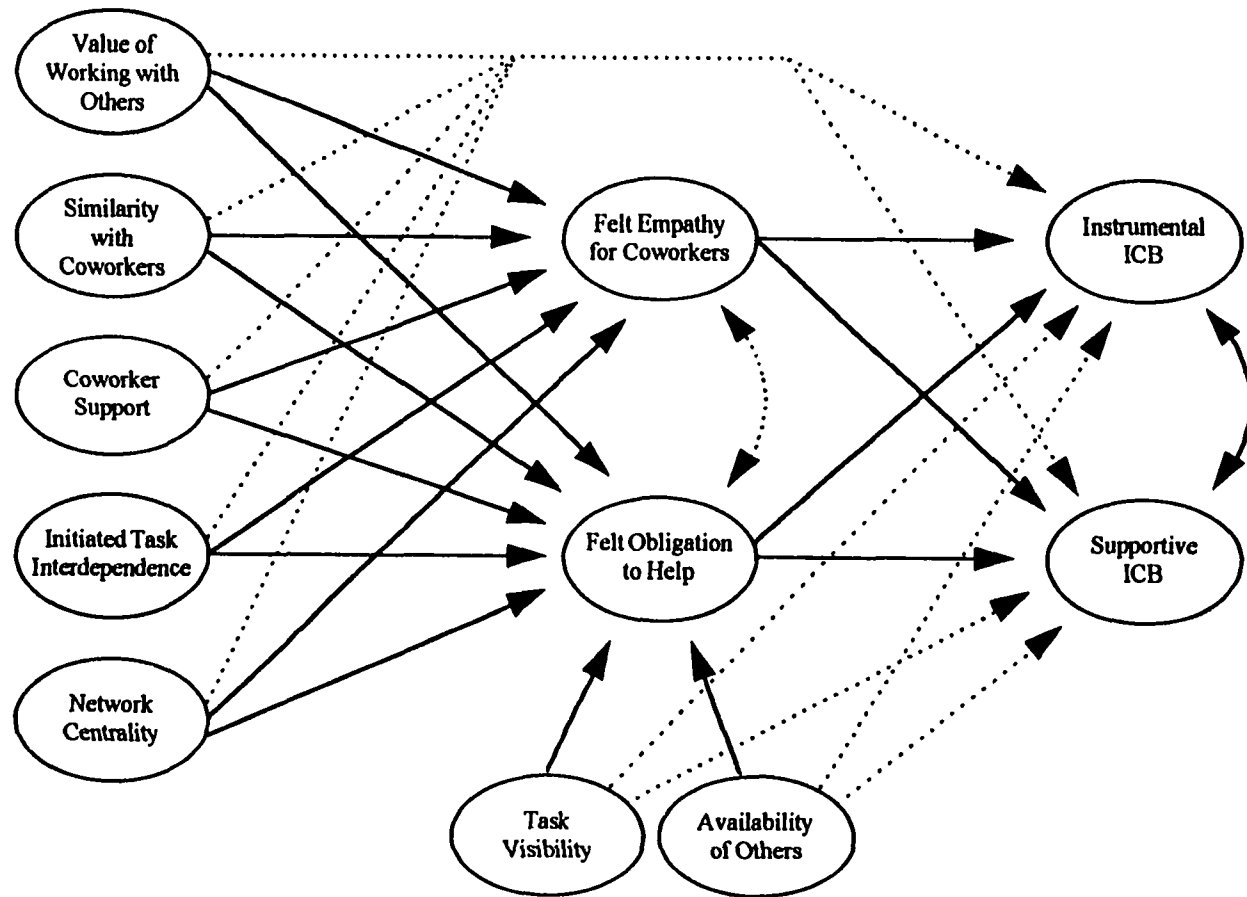


Figure 4-3: Theoretical Model vs. Saturated Model

Table 4-5: Nested-model Comparison Tests of Restricted Paths in Theoretical Model

Model	χ^2	df	$\Delta\chi^2$	Δdf	RMSEA	CFI
Structural Null Model (relationships between latent variables restricted to zero)	859.29	261			.072	.90
Saturated Structural Model (relationships between latent variables freely estimated)	470.68	227			.065	.93
Theoretical Model (non-hypothesized relationships restricted to zero)	506.71	244			.065	.92
Absolute Null Model	3651.37	300				
Model Comparison Tests						
Structural Null Model vs. Saturated Structural Model (tested assumption of no structural relationships)			388.61**	34		
Theoretical Model vs. Saturated Structural Model (tested restrictions on specific paths contained in the theoretical model)			36.03**	17		

* $p < .05$; ** $p < .01$.

constraining to zero the paths indicated by dotted lines in Figure 4-3, empirical support for including additional paths in the theoretical model is offered. The purpose of this comparison was to determine if any of the restrictions in the theoretical model were unjustified. Non-support for the theoretical model would suggest that some additional paths should be added to the theoretical model. The comparison test revealed a change in chi-square for the change in 17 degrees of freedom was 36.03, which was significant ($p < .01$). Thus, support for rejecting some of the restrictions placed on the theoretical model is indicated. Examination of the individual paths in the saturated model revealed that four of the 16 paths hypothesized to be zero in the theoretical model were statistically significant. More specifically, network centrality was associated with both instrumental and supportive ICB, and task visibility and availability of others were associated with felt empathy. Because these paths could be theoretically justified, the decision was made to include them in a revised theoretical model.

Assessment of Structural Path Estimates

To provide support for the revised model, two additional model comparisons were conducted. Figure 4-4 and Figure 4-5 depict graphically these model comparisons. The dotted lines in the figures represent the constraints that are tested during the comparison process. The results of the comparisons are presented in Table 4-6. The first test compared the revised theoretical model with the original theoretical model in order to provide support for rejecting the restrictions contained in the theoretical model. The chi-square difference for a difference of 4 degrees of freedom

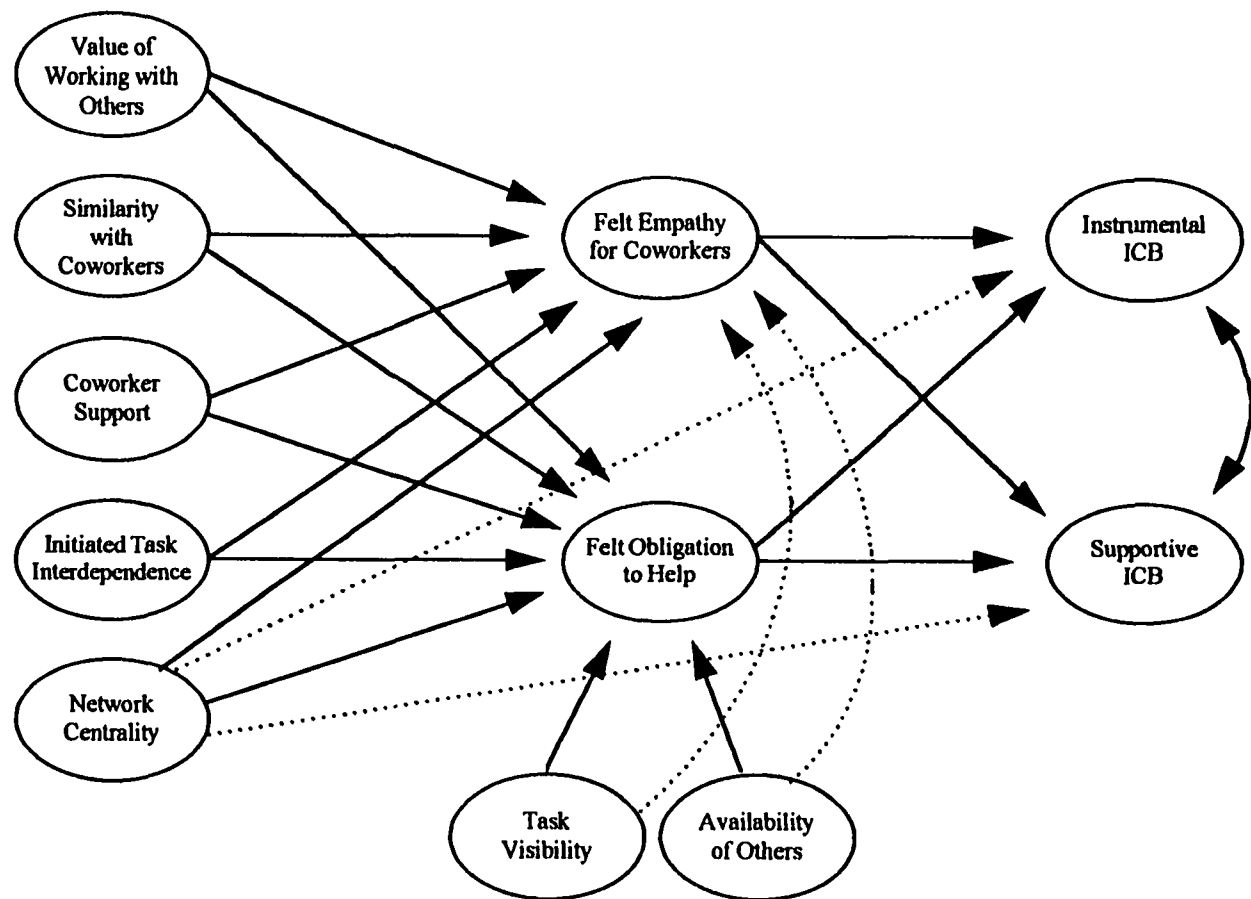


Figure 4-4: Revised Theoretical Model vs. Proposed Theoretical Model

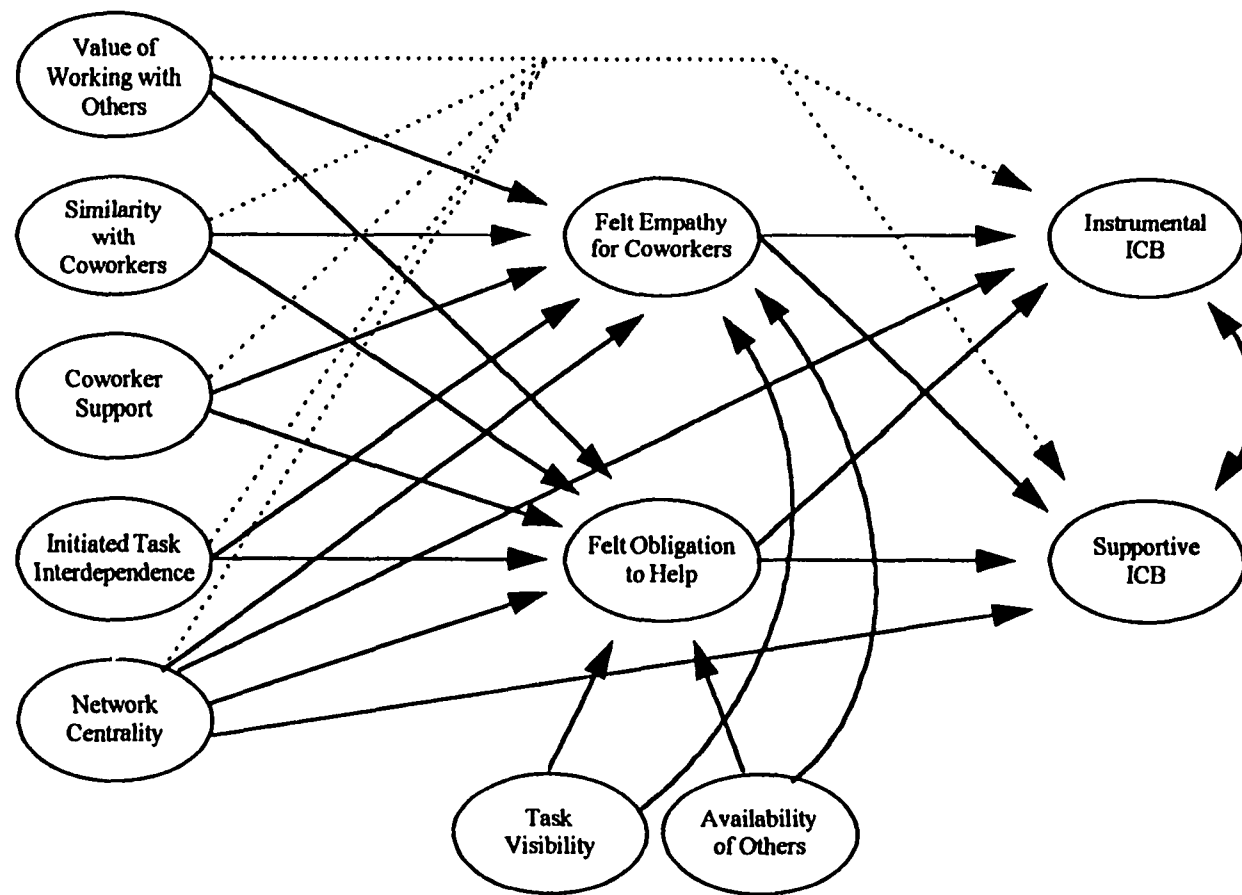


Figure 4-5: Revised Theoretical Model vs. Saturated Model

Table 4-6: Nested-model Comparison Tests of Restricted Paths in Revised Theoretical Model

Model	χ^2	df	$\Delta\chi^2^a$	Δdf	RMSEA	CFI
Theoretical Model	506.71	244			.065	.92
Revised Theoretical Model	482.57	240	24.14**	4	.063	.93
Saturated Structural Model	470.68	227	11.89	13	.065	.93

^a $\Delta\chi^2$ was calculated from adjacent model.

*p < .05.

was 24.14 ($p < .01$). Thus, support for rejecting the restrictions contained in the theoretical model was indicated. Finally, a comparison of the revised theoretical model and the saturated structural model showed a nonsignificant change in chi-square fit. As a result, support for the restrictions in the revised theoretical model was indicated and this model was retained as it was the more parsimonious model.

Considering the results of the model comparisons alone, partial support for the proposed model of interpersonal citizenship behavior was found. As hypothesized, the intervening variables appear to play an important role as mediators of the relationships between ICB and the communal sharing, equality matching, authority ranking, and market pricing variables. Unexpectedly, however, four paths hypothesized to be zero were found to be non-zero. Support was found for a direct relationship between network centrality and instrumental and supportive ICB and between task visibility and felt empathy and availability of others and felt empathy.

To consider the hypothesized relationships in greater detail, structural parameter estimates in the revised model were examined for statistical significance. Figure 4-6 reports the parameter estimates and associated significance levels. As seen, of the two intervening variables, only felt empathy was related to ICB. As predicted in Hypothesis 2a, the greater the level of felt empathy the greater the level of supportive ICB. However, the marginally significant association between felt empathy and instrumental ICB offered only qualified support for Hypothesis 2b. Hypotheses 3a and 3b were not supported; felt obligation was not associated with either form of ICB.

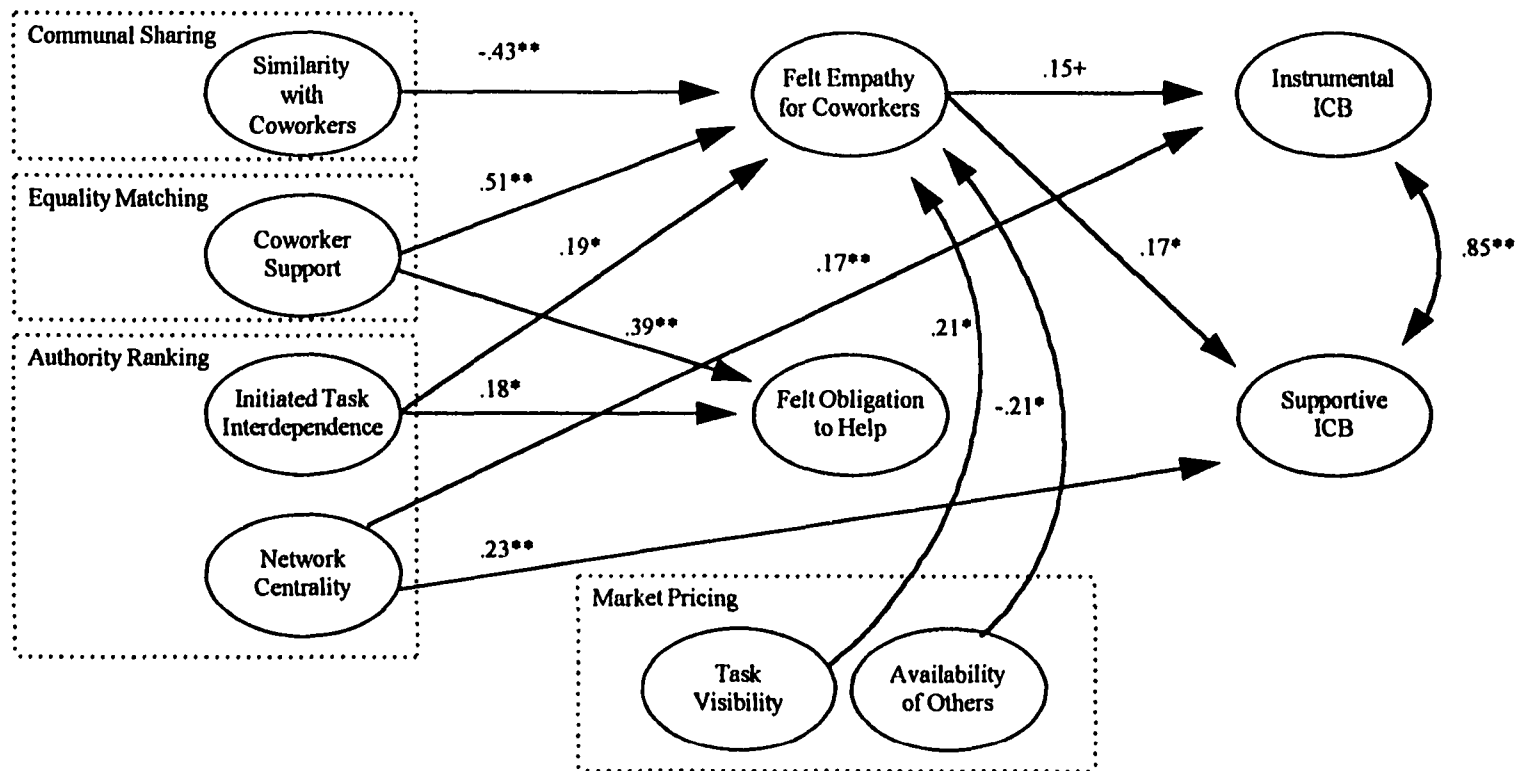


Figure 4-6: Statistically Significant Parameter Estimates for Revised Theoretical Model

Examination of the structural parameter estimates for paths between the communal sharing variables and felt empathy provide mixed results. First, the path between value of working with others and felt empathy was not significant. Second, although the path from similarity with coworkers and felt empathy was statistically significant, the direction of the relationship was opposite to that which was expected. More specifically, similarity with coworkers exhibited a negative association with empathic concern. Therefore, support for Hypothesis 4a and Hypothesis 4b is not found. Also, neither similarity with coworkers or the value of working with others was associated with felt obligation. Thus, support for Hypotheses 5a and 5b was not found.

Coworker support exhibited a strong, positive association with both felt empathy and experienced obligation providing partial support for Hypotheses 6a and 6b. The greater the perceived support from coworkers, the greater the felt empathy and the greater the felt obligation to help. Hypotheses 7a and 7b predicted that initiated task interdependence would influence ICBs through felt empathy and experienced obligation. Partial support for the hypotheses was indicated. Initiated task interdependence was positively associated with both felt empathy and felt obligation as expected. No support for Hypotheses 8a and 8b were found. Network centrality demonstrated a direct effect on instrumental and supportive ICB, unmediated even partially by felt empathy or felt obligation. Finally, of the market pricing variables, task visibility and the availability of others had a significant association with felt empathy that was not predicted. Further, neither variable was

associated with felt obligation as predicted. Thus support for Hypothesis 9a and 9b is not found.

Post-hoc Analyses

Two additional tests were conducted as a check on possible methodological artifacts. First, because two work sites were used to generate the sample used in the present study, I assessed the extent to which differences in the two samples may have affected analyses of the structural aspects of the model. Although *t*-tests of behavioral and perceptual measures indicated that there were few statistically significant differences in mean levels across work sites, demographic differences in age, education level, and organizational tenure warranted additional comparisons. As a result, a two-groups analysis with LISREL 8 was used.

Two-groups analysis compares the covariance matrices from each group and determines through a chi-square test whether one or more sets of relationships exist between the latent variables. More specifically, a model that freely estimated the covariances between latent variables in both groups was compared with a model that restricted these estimates to be equal across the two groups. A nonsignificant chi-square indicates that a single structural model accounts for the covariance structures within each group (Joreskog & Sorbom, 1989). This would indicate that demographic differences between the groups had no effect on variable interrelationships.

The scale scores for the exogenous latent variables and the items for the endogenous latent variables were used to generate the covariance matrices for each work site's sample. Results of the two-groups analysis indicated a nonsignificant chi-

square difference between a model where the structural parameters were held invariant across the two samples and a model where the structural parameters were freely estimated across the two samples. Thus, there were no differences in the estimates of the structural parameters across the two groups. Even though there were differences in mean levels of demographic variables across the two worksites, these differences did not influence the structural relationships in the revised theoretical model. This finding is consistent with previous research which has concluded that demographic variables such as age are neither direct antecedents of ICB or moderators of ICB relationships.

The second post-hoc analysis examined the extent to which common method variance may have affected the results. Because a number of study variables were collected from the same source, I followed the procedure outlined by Moorman and Blakely (1995) to test the extent to which common method variance may have influenced the correlations among study variables. This required specifying one final model in which indicators of the latent variables in the revised theoretical model were double loaded onto a method factor. In this way, any shared variance based on the source of the rating would be controlled when assessing the significance of the structural paths. Structural parameters remaining significant after controlling for shared method variance would indicate that common method variance alone does not account for the relationships between variables.

The revised theoretical model was modified such that all items originating from the same source were double loaded onto its substantive latent variable and a method

variable as well. The model was reestimated. Examination of the individual paths in this methods model revealed that all paths statistically significant in the revised theoretical model remained significant in the methods model. Therefore, the relationships among latents can not be attributed solely to common method bias.

CHAPTER 5: DISCUSSION AND CONCLUSION

Introduction

This chapter discusses the nested-model comparisons which tested the hypothesized relationships in the model of interpersonal citizenship behavior. More specifically, discussion focuses on further elaboration of the supported hypotheses, possible explanations for non-support of hypotheses, and a detailed analysis of unexpected findings. The results of post-hoc analyses are presented which shed further light on the non-supported hypotheses. The strengths and limitations of the study are discussed as well as avenues for future research. The chapter concludes with suggestions for practical application of the research findings.

Research Findings

The impetus to the current study was the prevailing view that research and theory on citizenship behavior would benefit by a more resolute focus on its different forms. Such an emphasis would contribute to more exacting theoretical development and enhanced prediction. Toward this end, I proposed a model of interpersonal citizenship behavior in which variables reflective of different types of interpersonal relationships among coworkers influenced ICB through their effect on felt empathy and felt personal responsibility. Fiske's (1991) theory of interpersonal interaction and theory and research on helping from social psychology provided the theoretical underpinnings for the hypothesized relationships in the model.

In general, the results of the current study provide support for the multidimensionality of ICB suggested by theory. In addition, the results of the study

show that ICB is primarily the result of variables that contribute to a felt empathy for coworkers. Variables reflecting relationships based on communal sharing, equality matching, authority ranking, and market pricing exhibited statistically significant associations with felt empathy. For similarity with coworkers and coworker support, felt empathy played the role of a true mediator; the relationships between these variables and ICB disappeared when controlling for felt empathy (Baron & Kenny, 1986). These findings offer support for the model. On the other hand, although the equality matching and authority ranking variables predicted felt personal obligation as expected, there was no support found for a relationship between felt personal obligation and ICB. At first blush, this suggests that while being the recipient of supportive actions or having others dependent may create a state of obligation, this felt obligation does not lead to ICB in any straightforward manner.

The model as originally proposed did not account for several relationships between variables that should have been included, as indicated by the nested-model comparison tests. More specifically, network centrality had unmediated, direct effects on both forms of ICB, whereas the variables reflecting market pricing relationships were associated with felt empathy for coworkers. These relationships were included in a revised model; the revised model was compared to the original model and found to fit the data better as indicated by a significant chi-square difference. Table 5-1 provides a summary of the results of the hypothesis tests. Inspection of the revised model and *t*-scores of the estimated path coefficients revealed that 7 of the 17

Table 5-1: Results of Tests of Hypotheses

Hypothesis	Outcome
Hypothesis 1 Two dimensions of ICB: supportive and instrumental	Supported
Hypotheses 2a and 2b Felt empathy associated with ICBs	Supported
Hypothesis 3a and 3b Felt obligation not associated with ICBs	Not supported
Hypothesis 4a and 4b Coworker similarity negatively associated with felt empathy, as opposed to positively as expected; value of working with others not associated with felt empathy	Not supported
Hypothesis 5a and 5b Coworker similarity or value of working with others not associated with felt responsibility	Not supported
Hypothesis 6a and 6b Coworker support associated with felt empathy and felt responsibility	Partially Supported
Hypothesis 7a and 7b Initiated task interdependence associated with felt empathy and felt responsibility	Partially Supported
Hypothesis 8a and 8b Network centrality not associated with felt empathy or felt personal responsibility	Not supported
Hypothesis 9a and 9b Task visibility and availability of others not associated with felt personal responsibility	Not supported

hypothesized relationships were either supported or partially supported, with 11 of 17 relationships statistically significant in the revised model.

Two-factor Structure of ICB

Merging theory and research in social psychology on help-giving and social support, and theory and research on citizenship behavior in organizations, I expected two distinct types of ICB: instrumental ICB and supportive ICB. Exploratory factor analysis and confirmatory factor analysis provided support for a two-factor structure. Although these dimensions were highly correlated and item cross-loadings were found during assessment of the factor structure of ICB in the complete measurement model, model comparison tests provided stronger support for a two-factor model, as opposed to a one-factor model.

Maintaining a distinction between instrumental and supportive ICB as conceptualized in the current study is important for several reasons. First, the antecedents in the present study differed in their ability to explain variance in the two types of ICBs. The model explained more variance in supportive ICB than instrumental ICB. Further, although a strong relationship between empathy and supportive ICB was found, only a marginally significant relationship was found between empathy and instrumental ICB. It is probable that instrumental ICBs overlap considerably with what other researchers have labeled "in-role" behavior, and supportive ICB may closely resemble "extra-role" behavior (e.g., Williams & Anderson, 1991; Van Dyne et al., 1995).

Instrumental ICB, like in-role behaviors, includes actions that help coworkers in their assigned tasks and duties. Consistent with arguments offered in previous research, instrumental ICBs may be seen by employees as required, or part of their job. As a result, they are less discretionary than supportive ICBs. This suggests that the two types of ICB may have slightly different motivational bases with interpersonal factors less predictive of instrumental ICB. For example, instrumental ICB may be better predicted by formal, structural aspects of the organization (e.g., employment contracts, etc). Considering this possibility, the interpersonal variables included in the model would be expected to be less predictive of instrumental ICB. Nevertheless, while previous research has had difficulties finding common antecedents of in-role and extra-role behavior (e.g., Konovsky & Pugh, 1994; Konovsky & Organ, 1996; Williams and Anderson, 1991), the findings of the present study provide two variables which have direct effects on both types of ICBs -- felt empathy and network centrality.

A second reason for maintaining the distinction is that while instrumental ICB has primarily performance-related implications (i.e., contributes to work efficiency, a high quantity of output, and timely output), supportive ICB serves a therapeutic function for employees (Burke et al., 1976; House, 1981; McAllister, 1995; Wills, 1985, 1991). Organizational members depend on their coworkers for support and guidance when they experience stress. Researchers have pointed out that the sources of greatest stress for individuals will be those areas of life in which they most heavily invest themselves, such as the work situation. Studies have shown that individuals seek helpful relationships in order to mitigate or resolve their stressful experiences

(see Cohen & Wills, 1985). As such, while instrumental ICBs may be important for individual, group, and/or organizational performance, supportive ICB serves a maintenance function for the individual, group, and organization.

Third, instrumental and supportive ICB may differ with respect to the ease with which each is rendered. More specifically, instrumental ICB may be viewed by employees as a less attractive ware for exchange than supportive ICB. For example, the helping act must be perceived as effective by help-givers and help-recipients. Help-givers desire that helping be effective to guard against possible decrements to self-esteem, self-efficacy, or status that may result from inadequate resolution of problems (Ashford & Cummings, 1983; Bandura, 1977). On the other hand, help-recipients desire help that is effective so that they will not continue to bear both the difficulty causing the current need state and the prospect of future problems. Persisting problems become embarrassing, and ineffective help may suggest one is being ingratiated (Fisher, Nadler, & Whitcher-Alagna, 1983).

Considering the onus of perceived effectiveness, employees may require some degree of technical expertise, political savvy, or other qualities as a precondition to engaging in instrumental ICB (Borman & Motowidlo, 1993; Organ & Ryan, 1995). Further, instrumental help involves granting access to resources (e.g., supplies, information, etc.) that another has not explicitly earned (Walster, Bersheid, & Walster, 1973). Ineffective help would amplify the cognitive dissonance and perceived costs associated with over-benefitting others at the help-giver's expense. Because supportive ICB requires less expertise and technical competence, more employees

may feel able to engage in it than instrumental ICB. The results of the present study provide some indirect support for this in that network centrality, which is indicative of power and expertise, explained more variance in instrumental ICB than other variables in the model.

Proximal Antecedents to ICB

As predicted in Hypotheses 2a and 2b, felt empathy for coworkers outperformed all variables, except network centrality, in prediction of ICB. This stands in contrast to the findings of some organizational research investigating links between empathy and discretionary behavior. At best, empathy has been an inconsistent predictor of citizenship. Some research has found no relationship (e.g., Anderson & Williams, 1996), whereas other research has found positive correlations approximating $r = .18$ (see McNeely & Meglino, 1995). A reason for the inconsistency in past research may be that empathy was measured as a disposition. Research has consistently found dispositions to be a weak predictor of behavior (see Davis-Blake & Pfeffer, 1989; Organ & Ryan, 1995). Weak situations (Mischel, 1977) and close correspondence between specific personality dimensions and specific types of behavior (Schneider & Hough, 1995) are necessary to find any existing relationships. The present study measured felt empathy as situational as opposed to dispositional empathy (Eisenberg & Fabes, 1991). It can be described more as a contextual attitude that is the result of cumulative experience in the workplace (Konovsky & Organ, 1996). As such, it may be a better predictor of ICB than dispositional empathy.

As noted above, felt empathy played the role of a true mediator (e.g., Baron & Kenny, 1986) in instances of similarity with coworkers and coworker support. These variables were associated with both ICB and felt empathy, but when controlling for felt empathy, the relationship with ICB became nonsignificant while the relationship with felt empathy remained significant. This is consistent with recent research that has suggested that important intervening variables play a role in the relationships between various contextual variables and citizenship behaviors (Van Dyne et al., 1995). This is also consistent with the concept of psychological proximity (Lewin, 1943), in that more distal factors such as organizational contextual variables have a less direct influence on behavior than more proximal variables such as individuals' reactions within that context.

Consistent with social identity theory and promotive tension theory, the findings regarding felt empathy emphasize that in cultivating ICB, employees must be encouraged to become active participants in helping partnerships with coworkers. Such helping partnerships increase identification processes that lead individuals to personally experience the difficulties of others and foster the interactions necessary to encourage promotive tension processes suggested by Hornstein (1978). As noted earlier, when individuals become aware of others' interrupted goal-related activity, the goals and needs of those individuals are adopted as their own. Hence, through helping partnerships, employees become aware of coworkers' struggles with problems and develop an altruistic empathy in adopting those problems as their own.

Some research provides evidence that the development and maturation of helping partnerships among coworkers in organizations is a natural process. As noted, merely providing opportunities for coworkers to establish helping partnerships may provide a vehicle for reaffirming altruistic values and for strengthening identification processes. Studies have shown that helping relationships are pervasive in organizations and often involve help-givers other than those with a legitimate interest in or formal responsibility over the area where the problem resides (e.g., Burke et al., 1976; Gabarro, 1990; McAllister, 1995). Individuals often look to the same help-givers over time suggesting that they derive considerable satisfaction and progress in resolving problems as a result of these interactions (for a review of help-seeking research, see Fisher et al., 1983). The findings of the present study suggest that encouraging coworker support networks, sensitizing employees to the interconnectedness of their job with others, and structuring the workplace in such a way as to encourage employee interactions would foster helping partnerships that contribute to the rendering of ICB.

In contrast to the findings regarding felt empathy and ICB, no support was found for a relationship between felt personal responsibility (measured in the current study as felt obligation) and either form of ICB. Several empirical and theoretical possibilities may account for these null findings. First, the operationalization of the construct may have contributed to the failure to find a relationship. Two dimensions consistent with theory were found in the pilot study. However, only two items from one of the subscales could be used in tests of the hypotheses. These two items may

not have sufficiently captured the content domain of the construct, leading to reduced predictive power. Although the scale was developed in adherence with accepted practice for assuring content adequacy during scale generation and refinement (Schriesheim, Powers, Scandura, Gardiner, & Lankau, 1993), low reliability and significant item loadings on other latent variables prevented use of the sensitivity to cues subscale. As such, questions of content validity can not be satisfactorily answered.

Theoretically speaking, the lack of a relationship between felt obligation and ICB may call into question the view that ICB is the result of anything other than pure altruism. In the social psychological literature, opinion has diverged as to whether helping is due primarily to selfish or selfless behavior. Egoistic and altruistic motives suggest different sets of variables that would lead individuals to engage in helping behavior. Batson (1991) defined altruism as "a motivational state with the ultimate goal of increasing another's welfare" (p. 6). This stands in contrast to egoism, which he defined as "a motivational state with the ultimate goal of increasing one's own welfare" (p. 7).

Recently, Tsui (1994) has suggested that responsiveness to others is part self-interest and part mutual-interest. Similarly, Clary and Snyder (1991) reviewed the literature on volunteering and offered a functional analysis suggesting that a volunteer's action may be guided by multiple motives. They cited surveys that found respondents reporting multiple reasons for volunteering, including altruistic reasons such as helping out of concern for another, and more egoistic reasons such as

normative conformity and ego-defensiveness. As regards the context of the current study, researchers have suggested that citizenship behavior may have elements of altruism and egoism. Previous research finding relationships between citizenship and empathy and collectivism (e.g., McNeely & Meglino, 1995; Moormann & Blakely, 1995) supports the altruism viewpoint, whereas research on the relationship between OCBs and performance ratings and expectancy-based job cognitions appears to support the egoism viewpoint (see Podsakoff et al., 1993; Kemery, Bedeian, & Zacur, 1996). Consistent with Tsui (1994) and others, the model included variables that reflect self- and other-interested motives. For example, the two key intervening variables of felt empathy and felt obligation may reflect these two views, differing with respect to the extent to which they reflect self-oriented (i.e., felt obligation) and other-oriented (i.e., felt empathy) processes. As the findings suggest, when controlling for altruistic motives, self-interested motives may not play a significant role.

An intriguing possibility is that the relationship between felt obligation and ICB may only be manifested in certain situations. Baron and Kenny (1986) suggest that a search for moderators should be conducted when relationships are inconsistent across studies or where theoretically justified relationships fail to occur. Theory provides several potentially important moderators of the felt obligation-ICB relationship. First, employees may experience decisional conflict when the anticipated costs and benefits of engaging in ICB are relatively balanced (Schwartz & Howard, 1984). Ambiguity concerning the potential consequences of engaging in a particular helping act may

lead employees to weaken their feelings of personal obligation through defensive denial. Denying the severity of the need is one form of defensive denial. For example, in organizations where strong helping norms do not exist, individuals may be more likely to redefine their perceptions of helping situations by reducing the perceived severity of others' needs. At a minimum, when the various costs and benefits of helping do not point clearly to a decision, employees may delay helping while the decisional conflict is reduced.

Second, Schwartz and Howard postulated the existence of various "boomerang" effects that may moderate the relationship between felt personal obligation and ICB. Boomerang effects may occur in highly political organizations. For example, if a request for help is framed in a highly pressuring manner, the target of the appeal may become suspicious of the motives of the person seeking help. Perception of manipulateness in an appeal may elicit reactance (Brehm, 1966), stimulating the need to retain behavioral freedom by resisting the pressure to help. Thus, in situations of decisional ambiguity or perceived manipulateness, the relationships between felt personal obligation and ICB may be tempered somewhat.

Third, in the absence of close working relationships among coworkers, felt obligation may become more important as a predictor of ICB. As noted, employees who have established close relationships with their coworkers follow a need-based rule for helping. In other words, they help because they are concerned for the others' welfare. Because the current research context was one in which close relationships, teamwork, and cooperation were encouraged, it might be expected that felt empathy,

and not felt obligation, would be the predominant antecedent of ICB. However, in contexts where individuals do not work in teams and where close relationships between coworkers are not pervasive, reciprocity and responsibility norms (to which felt obligations are inherently linked) may become important. More specifically, in contexts oriented toward individualistic or self-interested behavior, there should be a stronger, positive relationship between felt obligation and ICB.

To test this idea, I conducted a moderated multiple regression analysis (Cohen & Cohen, 1983) using the communal sharing variables, as these reflect close relationships among employees. In these analyses, felt obligation served as the independent variable, coworker similarity and the value of working with others functioned as the moderator variables, and instrumental and supportive ICB served as the dependent variables. Analyses were performed by first regressing each ICB dimension on felt obligation and one of the moderators. Then, the cross-product term formed by felt obligation and the particular moderator variable was entered into the equations. Where there was a significant interaction, a procedure outlined by Stone (1988) was used to plot the felt obligation-ICB relationship for values of ± 1 standard deviation units around the mean of the moderator variable.

The results of the moderated multiple regression analyses revealed significant moderating effects for similarity with coworkers only. An examination of the regression equation revealed that the cross-product term (felt obligation \times similarity with coworkers) accounted for a modest amount of variation in supportive ICB above and beyond the main effects ($p < .10$). Figure 5-1 depicts the nature of the interaction.

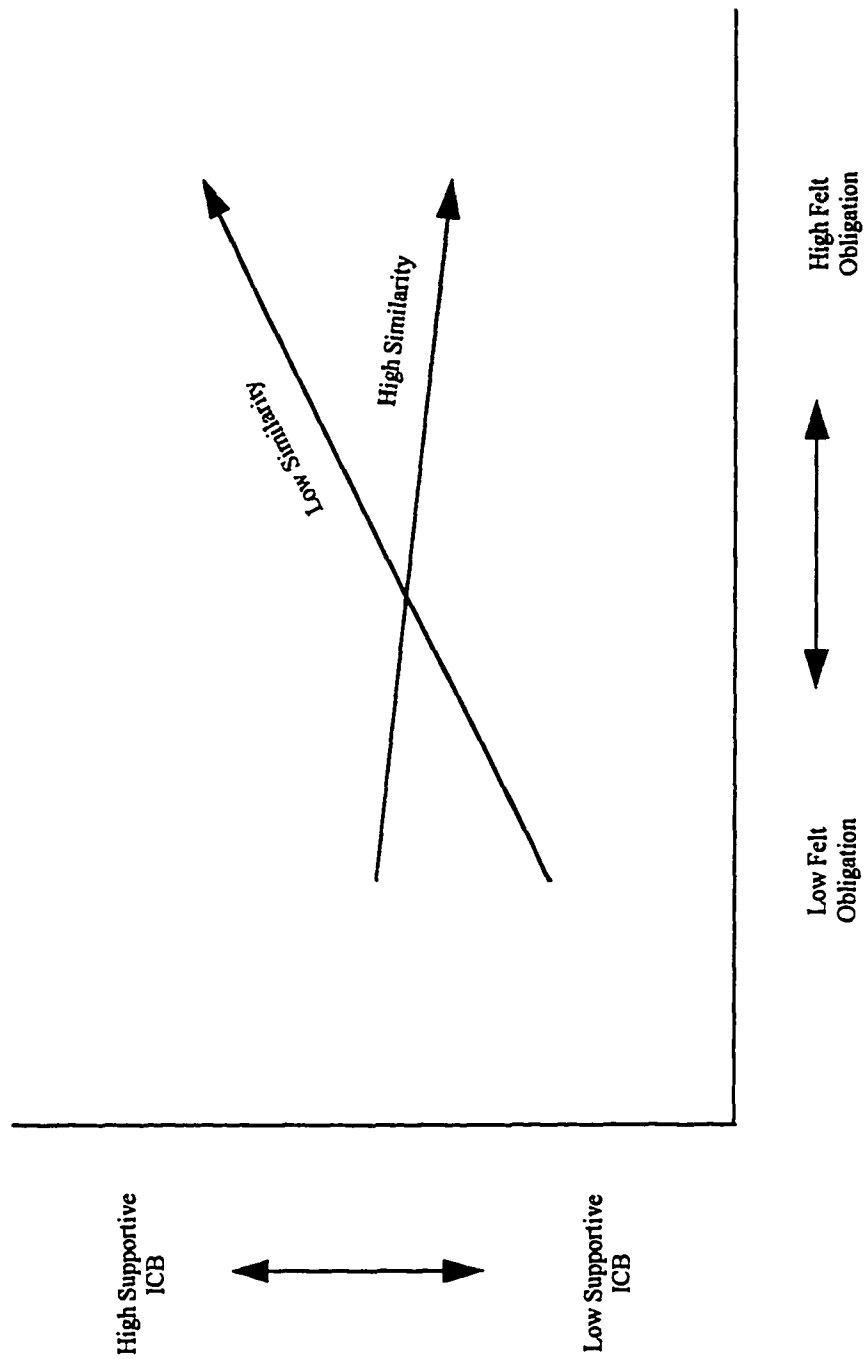


Figure 5-1: Moderated Regression Analyses

As seen, the relationship between felt obligation and supportive ICB was stronger when perceived similarity with coworkers was low. Although admittedly post-hoc, the moderated regression analysis suggests that felt obligation may have a greater association with supportive ICB outside of communal, or close, relationships. It may be that ICBs can occur outside of high-quality relationships between coworkers.

Communal Sharing and Equality Matching Variables

The communal sharing variables of coworker similarity and the value of working with others exhibited significant bivariate correlations with supportive ICB and felt obligation. The value of working with others was correlated with felt empathy. However, when entered into the model, the value of working with others was unrelated to these variables, and similarity with coworkers exhibited a negative association with felt empathy. No relationship was found between similarity with coworkers and ICB and felt obligation.

Several possibilities may explain these findings. First, the value of working with others, although constructed to represent a contextual attitude, may reflect more of a disposition than an attitude. As noted previously, variables measuring dispositions have been found to be relatively less predictive of behavior than variables measuring aspects of the context. When controlling for perceptions and attitudes reflecting different types of relationships (e.g., equality matching, authority ranking, market pricing), this variable did not explain any additional variance in felt empathy.

The negative relationship between coworker similarity and felt empathy is puzzling given that theory and research does not support such a finding. Empirically

speaking, the problem may be due to the high correlation between similarity with coworkers and coworker support. The negative path coefficient may be indicative of multicollinearity or a suppressor effect. Multicollinearity among predictor variables can inflate standard errors and cause parameter estimates to be unstable. Whereas the latent variable correlation between similarity with coworkers and coworker support is high ($r = .72$), it is less than .90, which is the level considered to be indicative of multicollinearity in structural equation modeling (Hayduk, 1987). Nevertheless, additional analyses were performed to determine the extent to which multicollinearity may have affected the results. All study variables were entered into a regression equation with felt empathy serving as the dependent variable, and the variance inflation factor (VIF) was examined. The VIF shows the degree to which each independent variable is explained by other independent variables. High values for the VIF (above 10) indicate high collinearity (Hair et al., 1987). Results indicate that multicollinearity was not a problem in that all values fell well below the cutoff of 10.

Generally, a suppressor effect may occur when predictor variables A and B are correlated, predictor variable A is correlated with criterion variable C, and predictor variable B is not correlated with criterion variable C (Anastasi, 1968). As seen in the correlation matrix (see Table 4-4), there is potential for a suppressor effect to occur. That is, two of the exogenous variables, similarity with coworkers and coworker support, are moderately correlated. Coworker support is moderately correlated with felt empathy, but similarity with coworkers is uncorrelated with felt empathy. In and of itself, similarity with coworkers is thus unrelated to felt empathy. Its role in the

structural equation model may be more as a facilitator of supportive exchanges, causing the relationship between coworker support and empathy to be inflated. For example, as noted above, employees actively seek to engage in helping interactions at work (Burke et al., 1976). It may be that employees seek out those who are similar to themselves on different dimensions when establishing such partnerships. Similarity engenders the familiarity necessary in helping relationships that allow helping partners to feel confident in their assessment of what the needs of the others are and to effectively respond to them. As a result, the statistically significant, negative path between similarity with coworkers and felt empathy may be due to a suppressor effect involving the observed relationship between coworker support and felt empathy.

At a more fundamental level, the findings for the communal sharing variables may indicate that Fiske's model operates differently depending on the behavior being predicted or the organizational context being studied. The high correlation between similarity with coworkers and coworker support may indicate that in predicting ICBs, particularly supportive ICB, the communal sharing and equality matching domains overlap considerably. More specifically, the equality matching variable of coworker support gauged the extent to which coworkers exchange supportive ICB. Exchange of a socio-emotional commodity like support reflects more than an economic transaction between two parties; it conveys concern and caring for another's well-being. Because communal sharing relationships are defined by the exchange of support among coworkers, the effects of communal sharing and equality matching variables may not be easily separated when predicting felt empathy and ICBs.

I re-estimated the revised theoretical model minus the coworker support measure. Results revealed a CFI = .92 and RMSEA = .066. Examination of the parameter estimates showed that the value of working with others latent variable, which was nonsignificant when the coworker support measure was in the model, was marginally significant at the .10 level of significance ($\gamma = .16$). Counter to what was found previously, the relationship between similarity with coworkers and empathy became nonsignificant, which provides further evidence of a suppressor effect discussed above. Interestingly, however, the relationship between coworker similarity and felt obligation became positive and significant ($\gamma = .38, p < .01$). No relationship was found between value of working with others and felt obligation. It should be noted that one other relationship, previously nonsignificant, became significant when omitting the coworker support measure. The relationship between network centrality and felt empathy became significant at the $p < .05$ level of significance. It is possible that when using Fiske's model to predict other, less emotionally laden behaviors such as traditional forms of performance, creativity, or group decision-making, communal sharing and equality matching variables will account for unique variance in the dependent variable.

According to Fiske, individuals rarely construct social relationships using only a single one of the four (i.e., communal sharing, equality matching, authority ranking, market pricing). Pure types are rare. Also, Fiske notes that each of the four types of relationships vary in intensity (i.e., strong versus weak) and breadth of application (e.g., scope of interpersonal interaction). The importance of the type of relationship in

predicting ICB could vary by group or organizational context. For example, as noted above, in contexts where employees frequently interact and work closely together, communal sharing relationships are likely to emerge and explain ICB, whereas market pricing relationships are less important as predictors of ICB. Equality matching relationships emerge in contexts where individuals share equal status and authority ranking relationships emerge in contexts where status is unequal. In the current research context, many employees surveyed were professional (e.g., nurses, technicians, etc.) with varying degrees of experience and technical expertise. As a result, because status issues were salient in the sample, it might be expected that variables reflecting equality matching and authority ranking relationships were found to be most predictive of ICB (Burke et al., 1976).

Network Centrality's Unmediated Association

Network centrality exhibited an unmediated, direct effect on both forms of ICB, whereas the other authority ranking measure (i.e., initiated task interdependence) exhibited only indirect effects through felt empathy. This finding is intriguing in that it suggests several possibilities that warrant future investigation.

First, based on the concept of promotive tension (Hornstein, 1978), felt empathy and felt obligation were hypothesized to develop when potential assistance providers become aware of other individuals' interrupted goal-related activity. However network centrality predicted ICB independent of felt empathy and felt obligation. According to some social network research, individuals who assume central positions in networks usually have some form of expertise or resource that is

highly valued by others in the network. As suggested indirectly by Morrison (1994), it may be the case that individuals in central positions in networks define their jobs more broadly and, as a result, see ICB as requirement of their job. For these individuals, interpersonal issues contributing to felt empathy and felt obligation to coworkers may play less of a role in motivating ICB than structural contingencies such as employment contracts, performance expectations, and incentive systems.

Second, unlike initiated task interdependence which measures individuals' perceptions of the extent that their work effects others, the network centrality index measures the number of requests for assistance an individual receives. The direct paths may simply indicate that individuals help others when they are asked. Necessary preconditions for helping acts to occur are (1) someone must be in need, and (2) a potential helper must be aware of that need. Some research suggests that many helping interactions are initiated by the one in need of help (Anderson & Williams, 1996) and persons in need of help ask coworkers of equal or greater status or position for assistance (Burke et al., 1976). The results of the current study suggest that individuals in central positions in social networks may not initiate helping interactions, but instead, delay helpful intervention until direct and concrete problem expression from the person in need is received (Burke et al., 1976). In other words, felt empathy for coworkers may reflect helper-initiated acts of ICB, whereas the unmediated association of network centrality may reflect helpee-initiated acts of ICB.

Market Pricing Variables

The relationship found between task visibility and felt empathy was not hypothesized, whereas the predicted relationship with felt obligation was not supported. There were some empirical problems with this measure. It initially exhibited low reliability which required removal of problematic items to raise its reliability to .70. Coupled with the aforementioned problems with the felt obligation measure, this may have mitigated against finding the hypothesized relationship.

Task visibility was predicted to be associated with felt obligation because individuals whose behaviors are identifiable may feel extra pressure to help others out of fear of coworker sanctions for visibly not doing so. As such, it was considered in the current study as reflecting primarily a characteristic of the work structure of the organization. However, task visibility was correlated with similarity with coworkers, value of working with others, and coworker support, suggesting that it may reflect interpersonal rather than structural relationships. Research suggests that employees involved in close relationships with their coworkers engage in need-based monitoring (McAllister, 1995). As such, task visibility, as measured in the current study, may be gauging not only the extent to which behavior is visible to others, but also the extent to which others with whom individuals work engage in need-based monitoring. Further, because the research context was comprised of employees interacting in team-like circumstances, as opposed to a context where output was more individually based (e.g., sales context), task visibility may have reflected an individual's availability to others more so than high individual performance.

Similarly, the extent to which an individual perceived that others were available to help was also associated with felt empathy, suggesting it too is an indicator of the quality of the relationship with coworkers. In both instances, these two scales appear to measure the quality of the relationship with coworkers in addition to purely structural characteristics of the workplace. Other variables such as employee workload or job autonomy may be more appropriate indicators of market pricing variables. For example, a heavy work load may provide an employee with sufficient justification for not engaging in non-required behaviors.

Implications for Future Research

Researchers have called for more systematic studies examining the expressive aspects of working relationships and the expressive qualities of various forms of interpersonal conduct. As noted by McAllister (1995), the role of affective factors in ongoing working relationships has been viewed as less important than that of task-based variables. While working relationships serve instrumental purposes, employees also make significant emotional investments in their working relationships and engage in behaviors that demonstrate care and concern (e.g., Burke et al., 1976; Gabarro, 1990; McAllister, 1995). The findings of the current study lends support to the duality of work relationships. Employees discriminate between two types of interpersonal citizenship behavior. ICB may be directive, problem-focused, dealing with objective issues and events such as work procedures or performance. ICB may also be more intimate in nature, demonstrating a concern for the welfare of others, focusing on personal relationships at work. Both types of ICB were found to be the result of felt

empathy. However, supportive ICB exhibited the strongest relationship with felt empathy. This is important in light of the fact that previous research has primarily examined instrumental forms of ICB. As a result, potentially important relationships between citizenship behavior and interpersonal variables may have been obscured. Future research should identify other forms of interpersonal behavior which have instrumental and supportive qualities. For example, supportive behavior may be further divided into esteem support, informational support and companionship (House, 1981; Wills, 1985). Although the current study found supportive ICB to be unidimensional, future research should more closely examine its dimensionality.

Using social identification theory, I hypothesized felt empathy for coworkers to be a proximal antecedent of ICB. In all but one instance, this was the case. In other words, when controlling for felt empathy for coworkers, only network centrality had a direct effect on ICBs. Considering felt empathy as a direct antecedent of ICB in the context of Fiske's framework has the potential to link personality, social, and structural variables into one logical framework; thus, reconciling what appears at the surface as conflicting explanations of citizenship behavior. For example, based on Blau (1964), researchers have proposed models of citizenship behavior grounded in perceptions of fairness and trust (Konovsky & Pugh, 1994; Organ, 1988). Because fairness issues are important in equality matching relationships, and communal sharing relationships are characterized by trust among coworkers, it is likely that these variables influence ICB through felt empathy (Kramer, 1993).

Other research on citizenship behavior has concentrated on the role of positive affect, a personality trait that predisposes individuals to be in a good mood, as an antecedent (George, 1991; Organ & Konovsky, 1989; Williams & Anderson, 1991). The results emerging from this line of research have been inconsistent. Positive affect explained variance in citizenship behavior beyond job cognitions (e.g., fairness) in some studies (e.g., George, 1991), in other studies this was not the case (e.g., Organ & Konovsky, 1989). Like fairness and trust, positive affect and positive mood may have an indirect effect on ICB through felt empathy. Research has shown positive moods to increase liking for others, generate more positive evaluations of others, and promote more positive interaction with others (Forgas & Bower, 1987; Forgas, Bower, & Krantz, 1984), all of which involve social identification processes. Also, positive mood may increase the salience of one's relatively advantageous resources, leading to an empathic concern to help those less fortunate (Salovey, Mayer, & Rosenhan, 1991). Future research should use the model proposed in the current study to compare the predictive power of variables such as fairness cognitions, trust, positive affect and mood, and felt empathy for coworkers.

The current study found the variables reflecting equality matching and authority ranking relationships to be the predominant antecedents to felt empathy. As noted earlier, the different types of interpersonal interactions leading to identification processes that promote ICB may become more or less important depending on the group or organizational context. For example, authority ranking variables may be more important as antecedents to ICB in traditionally structured groups and

organizations with formalized control and centralized decision-making. In groups or organizations where decentralized decision-making occurs, variables reflecting communal sharing relationships may be more predictive of ICB. Additionally, the nature of interpersonal interaction may change over time. As a result, within Fiske's framework, the forces that lead to ICBs may be different depending on variables such as the stage of group development, or the tenure of employees. For example, the communal sharing variables may create the empathy that leads to ICBs in mature work groups only, whereas market pricing variables are most important in the early stages of group development. Future research is needed to examine Fiske's model in different work contexts and over time.

The results of the current study suggest that felt empathy may be an important intervening variable in authority-ranking relationships receiving research attention such as leader-member-exchange (Danserau, Graen, & Haga, 1975) and mentoring (Kram, 1985). Research in these areas have focused on how role-making processes and expectations lead to either low-quality or high-quality relationships. Research has found high-quality dyads to be characterized by higher levels of interpersonal citizenship behavior than lower-quality relationships. Consistent with the present framework, an alternative view may be that social identification and promotive tension processes partly explain why interpersonal citizenship behavior occurs in high-LMX and mentoring relationships.

Two explanations were given for the unmediated association of network centrality with interpersonal citizenship behavior. First, it was suggested that

individuals in central positions in social networks may define their job responsibilities more broadly. In other words, discretionary behaviors such as helping others who have been absent or providing support may be viewed as part of the job and not discretionary. If this were the case, network centrality might explain variance in ICB independent of socio-emotional variables such as felt empathy. Future research should more closely examine this proposition. Further, the types of behaviors defined as in-role by employees may also vary by social network. For example, individuals central in task-focused networks may be more likely to define instrumental ICBs as part of their job than those who are isolates, whereas individuals in emotion-focused networks may be most likely to define supportive ICBs as part of their job.

On the other hand, it was suggested that the direct relationship between network centrality and ICB could have resulted from help-seeking behavior. That is, individuals central in social networks may engage in ICB behavior because they are often on the receiving end of requests for help. More research is needed to examine the interaction between help-givers and help-seekers. As noted by some, a clear understanding of those variables that influence decisions to seek help is necessary if organizations are to create conditions where people needing help are willing to seek help to solve problems (Anderson & Williams, 1996; Shapiro, 1984).

Although not the direct focus of the current study, future research is needed to investigate the consequences of interpersonal citizenship behavior. Employees look to the same helpful sources over time, suggesting that they derive considerable satisfaction and progress in resolving problems as a result of these interactions (see

Fisher et al., 1983). Due to its supportive quality, received ICB may stimulate a sense of predictability and stability in one's life situation, and a recognition of self-worth (Cohen & Wills, 1985). Research has found supportive behaviors to be associated with higher levels of job satisfaction (e.g., Beehr & Drexler, 1986; Fisher, 1985; Seers, McGee, Serey, & Graen, 1983), organizational commitment (e.g., Fisher, 1985), and reduced turnover (e.g., Fisher, 1985) and intentions to leave (e.g., Nelson & Quick, 1991).

It is possible that help-givers themselves may derive benefits from ICB as well (Midlarsky, 1991). Engaging in ICB may lead to an enhanced sense of meaningfulness and value. This might especially be the case for employees performing jobs that are perceived as less meaningful. Engaging in ICBs may preserve a sense of meaning if they produce important outcomes for others. Another outcome for the help-giver may be enhanced self-evaluations such as self-efficacy. Successful helping may lead to perceived competence (Midlarsky, 1984) and "enactive attainment" (Bandura, 1986). The latter is defined as performing successfully on behalf of others and is an important source of information about one's effectiveness. Finally, engaging in ICBs may serve to promote social integration in situations where communal relationships have yet to be established.

The current study may serve as a bridge across different literatures in the field of organizational behavior. For example, interpersonal acts of citizenship play a focal role in research examining work stress and socialization. Much work stress research has identified several forms of supportive behaviors that overlap conceptually with

interpersonal forms of citizenship. Work stress research has focused on the implications for employee well-being, coping, and performance of received social support. Similarly, research on socialization has focused on interpersonal assistance behaviors that "insiders" offer to newcomers and the consequences of help for social integration. The model proposed in the current study may be used to explain related behaviors and contribute to the existing body of knowledge in these areas.

Finally, consistent with calls for cross-disciplinary approaches to the study of behavior in organizations, the current study relied on the extensive work in social psychology concerning help-giving. Because helping others is a fundamental component of interpersonal forms of citizenship behavior (Organ, 1988; Williams & Anderson, 1991; Van Dyne et al., 1995), there exists the potential for increased insight as a result of integrating the two literatures.

Implications for Practice

The importance of ICB to practicing managers can be seen in light of its effect on group and organizational performance. ICB may place more resources at the disposal of work groups and obviate the need for costly formal mechanisms to provide functions rendered informally by citizenship behavior. In other words, ICB may conserve organizational resources. For example, experienced workers may contribute to reduced training costs by taking a personal interest in newcomers and voluntarily helping them learn their new jobs. Not only does this form of informal socialization reduce training costs, but it is effective in the sense that newcomers may get "up-to-speed" faster, be more satisfied with their work, and be less likely to entertain

thoughts of quitting. This helps work groups avoid losses in productivity associated with employee turnover. Similarly, ICBs serve supportive and therapeutic functions for coworkers confronted with the stresses of work life. Finally, willingly sharing supplies and coming to the aid of coworkers can prevent minor difficulties from resulting in more serious liabilities such as missing important project deadlines.

The practical importance of this study is also evidenced by the use of current management practices. For example, interpersonal relations, teamwork, and empowerment are critical success factors in many organizations. The successful application of management practices such as self-directed work teams and total quality management is dependent on employees' utilizing organizational resources effectively and sharing critical resources (e.g., information, expertise, materials) with others. In work settings where employees have decision making control through participation in task interdependent teams, the need to interact with others will increase greatly and employees may be party to various exchange relationships (Brass, 1984; Ibarra, 1993; Krackhardt & Brass, 1994). Because citizenship behavior has been viewed as vital due to its role in providing the flexibility needed to manage unseen contingencies (Smith et al., 1983), the present study offers insight into those social forces that contribute to employees' willingness to cooperate and assist others.

Arguably, when employees experience a "we are in this together" kind of mentality, they are more likely to do things for the good of those in their work group. Organizations may contribute to such identification processes by encouraging and nurturing helping partnerships among employees. Helping partnerships would

discourage competitive and individualistic orientations. In team-oriented organizations, competitive behaviors would be counterproductive. Among the options organizations have for encouraging the creation of helping partnerships are establishing formal mentoring programs between experienced workers and less experienced workers, promoting a positive communication environment, and equipping employees with interpersonal and helping skills through training programs. Simply providing opportunities for employees to interact, through the structure of work or the sponsoring of social events, may serve to promote identification processes.

Alternatively, organizations may include instrumental and supportive behaviors as important responsibilities in job descriptions. Organizations may also choose to include some readily measurable forms of instrumental and supportive ICB as performance dimensions in performance evaluation. Although the latter contradicts early conceptualizations of citizenship behavior as unenforceable and so “trivial...that in and of themselves [they] do not often invite public scrutiny or official documentation” (Organ, 1988; p. 6), the emphasis on teamwork, cooperation, and empowerment in today’s workplace may require a rethinking of what organizations can do to encourage ICB.

The establishment of helping partnerships or networks in which ICBs are exchanged may, at a more general level, encourage individual initiative among employees and an active orientation toward their work roles. Helping partnerships would foster the collaboration with coworkers necessary for creating an environment

of empowerment (Velt & Murrell, 1990). Employees could more readily become aware of the needs of other coworkers and be in a better position to offer assistance. Employees would better understand how their jobs interrelate with others and how what they do on their job can reduce subsequent problems for others. Through identification processes, helping partnerships would create a sense of ownership of coworker problems, encouraging behaviors that attempt to resolve them. Ownership of problems is essential to effective empowerment. Further, helping partnerships could contribute to high involvement systems by providing access to sociopolitical support, information, and resources among employees (Spreitzer, 1996).

The findings of the current study as regards the authority ranking variables suggest that technical expertise, competence, and ability may have direct effects on ICB. As noted previously, theory and research in social psychology has examined the relationship between expertise and helping behavior (e.g., Dovidio, 1984; Midlarsky, 1984; Schwartz & Howard, 1984). In general, findings suggest that people who feel more competent perceive helping as less difficult. Further, individuals are more likely to expect helping to be successful and to anticipate positive outcomes for the other and themselves (see Midlarsky, 1984, and Clark, 1991, for reviews). Managers may increase ICB in their work groups by reducing the perceived costs of helping. As noted earlier, training programs used primarily for job-related skill enhancement can be expanded to include a focus on interpersonal skills necessary to render effective support. Further, because employees in need of help are more willing to approach other employees of greater expertise, managers should identify those in their work

group with the requisite ability, and encourage others to seek those individuals when assistance is needed.

Limitations

Several caveats must be offered regarding the findings of the current study. First, the present study was nonexperimental. Statements of causality based on the results of even the most sophisticated statistical techniques for making causal inferences, including structural equation modeling, must be treated with caution when using nonexperimental designs. However, because model development and testing were based on theoretical issues, greater confidence in the study's results can be assumed.

Second, caution should be exercised when considering the additional paths included in the revised theoretical model. Specification searches are exploratory in nature and take advantage of variance in the sample that may not be present in the population. To ensure that the parameters added during respecification of a model are substantively meaningful and not simply capitalizing on chance covariation in the sample, the respecified model should be cross-validated using an independent sample. Because this was a cross-sectional study, generalizability beyond the sample is open to question until additional data are collected. Thus, future replication efforts are needed, with particular interest paid to network centrality, task visibility, and the availability of others to help.

Conclusion

Researchers have called for studies that examine conditions under which particular forms of citizenship behavior occur (e.g., Van Dyne et al., 1994). This study focused on citizenship behavior directed at other individuals in the organization. A nomological network of antecedent variables framed within Fiske's (1991) theory of interpersonal interaction was tested. Given the recent emphasis placed on relational issues in the field of organizational behavior (e.g., Mowday & Sutton, 1993; O'Reilly, 1991), the current study appears warranted and timely.

Several important theoretical issues were addressed. This is important because empirical research on organizational citizenship has outpaced theoretical development. Attempts to organize the many correlates into logical frameworks have been few (Van Dyne et al., 1994). Research has tended to view citizenship as a global construct, resulting in a blurring of conceptual boundaries between distinct types of citizenship behavior. As noted by Osigweh (1989), "concept stretching," in which constructs are subsumed under other more general constructs, can result in a loss of precision at the expense of breadth of coverage. Inadequate separation of citizenship behaviors on the basis of intended beneficiary may partly explain the apparent mixed findings in the literature. Researchers have used measures of citizenship which combine behaviors clearly intended to benefit the organization with those that seem designed to help specific others. The position taken in the current study was that different antecedents and processes are associated with citizenship directed at different targets. Whereas operationalizations of the citizenship construct in previous research may have

confounded observed relationships, this study offered two dimensions of helping behavior based in theory on helping in social psychology which provides the potential for a sharper focus and better prediction in future research.

A contribution of the current study is that it has provided a framework, built on Fiske's theory of interpersonal relationships and social identification theory, that has the potential for integrating the different streams of research that have investigated citizenship. As noted earlier, much research has been guided by Organ's (1988) social exchange interpretation and has studied organizational actions promoting trust and fairness as precursors to citizenship behavior (e.g., Eisenberger et al., 1990; Moorman, 1991; Niehoff & Moorman, 1993; Konovsky & Pugh, 1994; Organ & Konovsky, 1989). Other research has investigated positive affect (e.g., George, 1991). The current model accommodates both of these perspectives. Additionally, while fairness cognitions and mood may influence the rendering of ICB, considering ICB within the context of interpersonal processes highlights other variables that may provide additional explanatory value. The relationships among ICB, felt empathy, coworker support, and network centrality suggest future research should pay more attention to social factors.

In conclusion, ICBs are an important form of behavior occurring between coworkers. The objective of the present study was to examine various interpersonal variables that contribute to the occurrence of these types of behaviors. Using theory as a guide to model development, support was indicated for a number of the hypothesized relationships. Several unexpected findings emerged which have been

offered as opportunities for future research. Although research has yet to be conducted which offers definite conclusions about potential ICB benefits, the findings of the current study offer insight for organizations that desire to establish and nurture helping partnerships among their employees.

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APPENDIX A:
Employee Survey

Please enter the last five digits of your social security number in the blank provided below. This will be used for survey identification by the researchers. Remember, only the researcher has access to this individual survey. Last five digits of social security number: _____

Below are statements regarding the nature of the work that you do at North Oaks and how your job impacts other coworkers. Please indicate the degree of your agreement or disagreement with each statement. In the blank next to each statement, write the number 1, 2, 3, 4, or 5 which corresponds to the following:

1. STRONGLY DISAGREE 2. DISAGREE 3. NOT SURE 4. AGREE 5. STRONGLY AGREE

- ___ What I do in my job has an impact on the work of my coworkers.
- ___ My job activities go on to affect other peoples' work.
- ___ Other peoples' work depends directly on me doing my job.
- ___ Unless my job gets done, my coworkers cannot do their work.
- ___ Unsatisfactory performance of my job would delay the work performance of my coworkers.
- ___ My job requires me to spend a great deal of time giving help or advice other people need to do their work.
- ___ I am given enough time to do what is expected of me on my job.
- ___ It often seems like I have too much for one person to do.
- ___ The performance standards on my job are too high.
- ___ I have too much work to do everything well.
- ___ The amount of work I am asked to do is fair.
- ___ I never seem to have enough time to get everything done.
- ___ My coworkers are generally aware of when I am putting forth below average effort.
- ___ My coworkers are aware of the amount of work I do.
- ___ It is generally hard for my coworkers to figure out how hard I am working.
- ___ My coworkers usually notice when I am slacking off.
- ___ It is difficult for my coworkers to determine how much effort I exert on the job.

At work people often go to their coworkers for help. For example, an employee may need help with their job activities when they are overloaded, when they are unsure about how to do something, or when they have missed a few days due to illness. Also, an employee may go to their coworkers for advice about how they should resolve a personal problem or when they simply need someone to talk to. Please indicate below the degree of your agreement or disagreement with each statement. In the blank next to each statement, write the number 1, 2, 3, 4, or 5 which corresponds to the following:

1. STRONGLY DISAGREE 2. DISAGREE 3. NOT SURE 4. AGREE 5. STRONGLY AGREE

- ___ The people I work with all share the responsibility equally for helping coworkers when they have a problem at work.
- ___ My coworkers sometimes don't feel individually responsible for helping others.
- ___ Everybody I work with is responsible for helping a coworker with a problem or a special need.
- ___ I often feel that I have a special responsibility to help my coworkers when they need help.
- ___ In most cases, I believe that my coworkers problems can be solved without my personal involvement.
- ___ Generally speaking, if I don't help a coworker, someone else will.
- ___ I rarely feel that I am solely responsible for helping a coworker when he or she has a problem at work.
- ___ Very few of my coworkers are able to help others with their problems.
- ___ I often feel that I am the only one who can help my coworkers when they have a problem.
- ___ There are a number of individuals in my work area that are able to assist someone when they have problems.
- ___ Most of the time, my coworkers come to me when they have a problem because there is no one else who can help them.
- ___ I am the only one who can help others with work-related or personal problems because no one else is usually available.

The following statements represent feelings people might have about themselves and others with whom they work. In terms of your feelings about yourself and about those you work with at North Oaks, please indicate the degree of your agreement or disagreement with each statement. In the blank next to each statement, write the number 1, 2, 3, 4, or 5 which corresponds to the following:

1. STRONGLY DISAGREE 2. DISAGREE 3. NOT SURE 4. AGREE 5. STRONGLY AGREE

- ___ Before criticizing my coworkers, I try to imagine how I would feel if I were in their place.
- ___ If I'm sure I'm right about something, I don't waste much time listening to my coworkers' arguments.
- ___ I sometimes try to understand my coworkers better by imagining how things look from their perspective.
- ___ I believe that there are two sides to every question and try to look at them both.
- ___ I sometimes find it difficult to see things from my coworkers' point of view.
- ___ At work, I try to look at everybody's side of a disagreement before I make a decision.
- ___ When I'm upset at a coworker, I usually try to "put myself in his/her shoes" for a while.
- ___ When I see a coworker being taken advantage of, I feel kind of protective towards them.
- ___ When I see a coworker being treated unfairly, I sometimes don't feel very much pity for him/her.
- ___ I often have concerned feelings for my coworkers, especially those less fortunate than me.
- ___ I would describe myself as a pretty soft-hearted person.
- ___ Sometimes I don't feel very sorry for my coworkers when they are having problems.
- ___ My coworkers' misfortunes do not usually disturb me a great deal.
- ___ I am often quite touched by things that I see happen.
- ___ My coworkers fail to appreciate any extra effort from me.
- ___ My coworkers strongly consider my goals and values.
- ___ My coworkers disregard my best interests when making decisions that affect me.
- ___ Help is available from my coworkers when I have a problem.
- ___ My coworkers really care about my well-being.
- ___ My coworkers are willing to extend themselves in order to help me perform my job the best I can.
- ___ Even if I did the best job possible, my coworkers would fail to notice.
- ___ My coworkers are willing to help me when I need a special favor.
- ___ My coworkers care about my general satisfaction at work.
- ___ If given the opportunity, my coworkers would take advantage of me.
- ___ My coworkers show very little concern for me.
- ___ My coworkers care about my opinions.
- ___ My coworkers take pride in my accomplishments at work.
- ___ My coworkers and I are similar in terms of our outlook, perspective, and values.
- ___ My coworkers and I see things in much the same way.
- ___ My coworkers and I are alike in a number of areas.
- ___ My coworkers and I have a sharing relationship. We freely share our ideas, feelings, and hopes.
- ___ I can talk freely to my coworkers about difficulties I am having at work and know that they will listen.
- ___ There would be a sense of loss if I or one of my coworkers were transferred.
- ___ If I had a problem at work, I know my coworkers would respond constructively and caringly.
- ___ My coworkers and I have made considerable emotional investments in our working relationships.
- ___ I often feel like I owe my coworkers.
- ___ My coworkers have done things for me that I feel I should repay them for.
- ___ Sometimes I do favors for my coworkers because I feel I am obligated to.
- ___ I frequently look for opportunities to help others at work.
- ___ I try to stay aware of when my coworkers are having difficulties.
- ___ If someone I work with needed assistance, I would want to be the one to help.

This section concerns views people might have about working with others. In terms of your views about working with others at North Oaks, please indicate the degree of your agreement or disagreement with each statement. In the blank by each statement, write the number 1, 2, 3, 4, or 5 which corresponds to the following:

1. STRONGLY DISAGREE 2. DISAGREE 3. NOT SURE 4. AGREE 5. STRONGLY AGREE

- ___ I prefer to work with others rather than work alone.
- ___ Given the choice, I would rather do a job where I can work alone rather than do a job where I have to work with others.
- ___ Working with others is better than working alone.
- ___ People should be made aware that if they are going to work with others then they are sometimes going to have to do things they don't want to do.
- ___ People should realize that they're not always going to get what they personally want when working with others.
- ___ People should realize that they sometimes are going to have to make personal sacrifices when working with others (such as working late now and then, going out of their way to help, etc.).
- ___ People should be willing to make sacrifices for the sake of the department's well-being
- ___ Work groups are more productive when its members do what they want to do rather than what the group wants them to do.
- ___ Work groups are most efficient when its members do what they think is best rather than doing what the group wants them to do.
- ___ Work groups are more productive when its members follow their own interests and concerns.

In the eight blank lines below, place the first and last name of eight employees that you interact with on a regular basis at North Oaks. For each employee that you list, do the following in the area beside the name:

Circle **TALK** if you discuss what is going on in the organization with that person:

Circle **ADVICE** if this person is an important source of professional advice when you have a problem or a decision to make

Circle **SUPPORT** if this person is someone you know you can count on and who is dependable in times of crisis.

Circle **FRIEND** if this person is a very good friend of yours and is someone whom you see socially outside of work.

Circle **HELP** if this person is someone who helps you when you have problems at work.

THERE MAY BE INSTANCES WHERE YOU MAY CIRCLE MORE THAN ONE CHOICE FOR A PARTICULAR EMPLOYEE. THERE ALSO MAY BE INSTANCES WHERE YOU CIRCLE NONE FOR A PARTICULAR EMPLOYEE.

- | | | | | | |
|----------|------|--------|---------|--------|------|
| 1. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |
| 2. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |
| 3. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |
| 4. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |
| 5. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |
| 6. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |
| 7. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |
| 8. _____ | TALK | ADVICE | SUPPORT | FRIEND | HELP |

THANK YOU VERY MUCH FOR ANSWERING THESE QUESTIONS!

APPENDIX B:
Supervisor Survey

Supervisor Survey

Below are statements regarding behaviors that employees may or may not engage in at work. These behaviors are typically not part of a persons job requirements. Please complete one of these one-page surveys for each employee you supervise. Indicate the degree of your agreement or disagreement with each statement as it relates to the employees you supervise. In the blank next to each statement, write the number 1, 2, 3, 4, or 5 which corresponds to the following:

1. STRONGLY DISAGREE 2. DISAGREE 3. NOT SURE 4. AGREE 5. STRONGLY AGREE

This employee . . . (Please enter last five digits of employee's social security number here: _____)

- ___ takes time to listen to coworker's problems and worries.
- ___ takes a personal interest in coworkers.
- ___ helps coworkers with work when they have been absent.
- ___ helps coworkers with difficult assignments, even when assistance is not directly requested.
- ___ assists coworkers with heavy work loads, even though it is not part of his/her job.
- ___ goes out of his/her way to help co-workers with work-related problems.
- ___ always goes out of the way to make newer employees feel welcome in the work group.
- ___ shows genuine concern and courtesy toward coworkers, even under the most trying business or personal situations.
- ___ shows coworkers where to go to get what they need.
- ___ takes time to explain regulations or procedures to coworkers who may have questions.
- ___ compliments coworkers when they succeed at work.
- ___ tries to cheer up coworkers who are having a bad day.
- ___ takes on extra responsibilities in order to help coworker(s) when things get demanding at work.
- ___ helps coworkers who are running behind in their work activities.
- ___ makes an extra effort to understand the problems faced by coworkers.
- ___ listens to coworkers when they have to get something off their chest.

VITA

Randall P. Settoon received his bachelor of science degree in Computer Science and master of science degree in Business Administration from Southeastern Louisiana University. He worked as a computer programmer/consultant prior to entering the doctoral program at Louisiana State University. He has authored articles appearing in the Journal of Applied Psychology, Journal of Management, and the Journal of Business and Psychology. He has presented papers at the Southern Management Association meetings, the Society for Industrial and Organizational Psychology meetings, and the Academy of Management meetings. His research interests include extra-role behavior, social support in organizations, and research methodology.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Randall Patrick Settoon

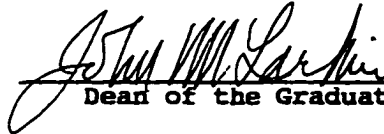
Major Field: Business Administration (Management)

Title of Dissertation: The Social Context of Interpersonal Citizenship
Behavior: A Mid-Range Theory and Test of a Model

Approved:



Major Professor and Chairman

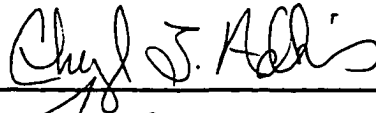


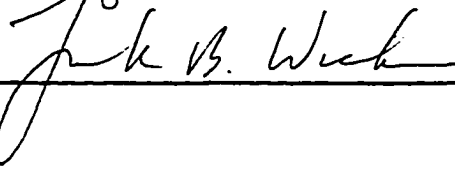
Dean of the Graduate School

EXAMINING COMMITTEE:









Date of Examination:

