

INFORMAL COMMUNICATION PRACTICES BETWEEN PEERS IN THE REMOTE  
WORK CONTEXT

DISSERTATION

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By

Martha J. Fay, B. A., M. A.

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The Ohio State University

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Dissertation Committee:

Associate Professor Susan L. Kline, Adviser

Associate Professor Laura Stafford

Professor Donald Cegala

Approved by

\_\_\_\_\_

Adviser  
Graduate Program in Communication

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## ABSTRACT

The shift toward more horizontal and distributed organizations has presented communication challenges to the growing numbers of individuals and institutions who are physically separated from one another. The role of informal talk has been largely ignored as it relates to these new organizational structures. To address this gap, ninety-seven remote employees from a variety of companies were asked about their informal communication with co-workers, specifically their casual talk activities, experiences with messages of inclusion and exclusion, and frequency of social support. The remote employees also assessed their relationships with co-workers, as well as their felt inclusion, organizational identification, organizational commitment and job satisfaction.

Two types of casual talk activities emerged from analyses: common ground talk was positively associated with organizational identification, while a second cluster of casual talk activities served an out-grouping function, and correlated negatively with commitment and job satisfaction. Satisfaction with informal communication was associated with all three organizational outcomes.

The remote employees also provided recalled experiences of messages that helped them feel included and excluded from their companies, which were coded with two systems developed for the study. A high level of expressed inclusion was positively associated with identification and commitment, as was general social support; expressed exclusion was negatively associated with identification and commitment.

In regression analyses, common ground, out-group talk, informal communication satisfaction, liking for co-workers and felt inclusion accounted for 31%, 30% and 16% of the variance, respectively, in organizational identification, commitment, and job satisfaction. Expressed inclusion, exclusion and liking accounted for 37% and 36% of the variance in organizational identification and commitment. Social support, liking and felt inclusion accounted for 27% and 23% of the variance in organizational identification and commitment.

Other regressions showed that felt inclusion moderated the effects of common ground talk on organizational identification. Mediation tests showed that co-worker liking and felt inclusion mediated the effects of common ground, general support, expressed inclusion, and informal communication satisfaction on organizational identification and commitment.

The results provide evidence of specific links between the informal communication practices of remote employees and their levels of organizational identification, commitment and job satisfaction.

Dedicated to my mother, Rita Ann Belfield Whitlatch, with my deepest love, gratitude  
and respect.

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I am so blessed by the family and friends I have been given, who make everything possible. Thank you, Jack, for encouraging me to do this, for understanding so much so often, and for your enduring love. Thank you, Mom, Dad, and Mary Jo, for bringing me this far with your unfailing belief in me. Thank you, Bell, for your invaluable friendship and support from the beginning; you are a cherished gift. Thank you, Shuang, for sharing your lovely self with me. Thank you, all my beautiful friends and family, for knowing how much I love you even when I couldn't be there.

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## VITA

December 15, 1956 .....Born – Martins Ferry, Ohio

1979.....B.A., Journalism  
Kent State University

1985.....M.A., Communication and Business  
University of Dayton

2002-2004.....Independent Instructor, Graduate Teaching and  
Research Associate, The Ohio State  
University

2005.....Adjunct Faculty, Northland College,  
Ashland, WI

2006-present ..... Assistant Professor, University Of Wisconsin,  
Eau Claire

## PUBLICATIONS

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## CHAPTER 1

### INTRODUCTION

#### *Remote Work: Growth, Challenges, and Opportunities*

Remote work, or the business arrangement in which employees work away from a central office, holds potential benefits for employees, organizations and society (e.g., Mallia & Ferris, 2000; McCloskey & Igarria, 1998). As more people and organizations have realized these benefits, remote work, or telework, has increased dramatically (Gossett & Tompkins, 2001; Kurland & Bailey, 1999). Corporate volatility and ever-improving technological capabilities have fueled much of this recent growth, such that some level of telework is almost a fixture in most organizations today (DeSanctis & Monge, 2004; McCloskey & Igarria, 1998; Wellman, Salaff, Dimitrova, Garton, Gulia & Haythornthwaite, 1996).

In spite of greater levels of acceptance and demand for telework opportunities, very little is known about the remote experience of either the employees or their organizations (Duxbury & Neufeld, 1990; Hylmo & Buzzanell, 2002). What literature exists is based largely on factors not representative of telework today and/or on perceptions of people who are not themselves remote workers.

The purpose of the present study is to build the base of knowledge in this context by examining the ways in which remote employees informally communicate with their co-located peers, and how these informal communication practices may be associated with organizational identification, commitment and job satisfaction. This will be

accomplished by obtaining data directly from remote workers and testing for relationships important to both organizations and individuals.

This chapter introduces the unique context of telework and provides an overview of the proposed study based on the issues telework raises for both organizations and individuals. The general reasoning for the research questions and hypotheses advanced in this research emerge through this description.

### *Telework: Origin, Definition and Growth of an Idea*

Rush hour in a big city encourages colorful language practices. It should not be surprising, then, that it is the urban context in which the term “telecommuter” originated (Ellison, 1999; Kurland & Bailey, 1999). Communing with thousands of other motorists in a Los Angeles traffic jam, Nilles (1977, 1998) developed an interest in finding a viable, mobile way to make use of time while stuck in traffic...and a new term was born (Kurland & Bailey, 1999).

Researchers have defined telework in many different ways (Qvortrup, 1998). Some label telework as a social innovation and a form of organizational change (Aichholzer, 1998), as work done outside a central office in which other employees are co-located (Ellison, 1999), and as work performed by people whose connection to the central office is primarily via mediated communication (Gainey, Kelley, & Hill, 1999). Telework has also been defined as work that takes place outside of conventional workplaces (Kurland & Bailey, 1999; Morgan & Symon, 2002) and the replacement of transportation with technology (Nilles, 1977). Nilles (1998) describes telework as based on a minimum of one day per week working away from a central office. By contrast, Kraut, Steinfield, Chan, Butler & Hoag (1999) have emphasized the virtual aspects of

organizations, such as outsourced production processes, instead of focusing on those performing the work.

This general lack of consistency in defining telecommuting is reflected in the number of different terms used to refer to it (McGrath & Houlihan, 1998). The terms *telecommuter*, *teleworker*, *distributed worker*, *open-collar worker*, *distance worker* and *remote worker* have been used somewhat loosely in the literature with more and less distinguishing characteristics and levels of specificity (Ellison, 1999; McGrath & Houlihan, 1998). This complexity is one reason the available body of literature remains fragmented and lean (McCloskey & Igbaria, 1998). However, there is broad agreement in the field that telework signifies the work context, not content (Qvortrup, 1998). For purposes of this research, the terms *remote work*, *distance work* and *telework* will be used interchangeably. Based on the lack of research on people who work primarily (versus occasionally) away from the office, teleworkers are defined herein as full-time employees working a minimum of three days per week away from their employing company's central office. This more restrictive definition should provide a more accurate depiction of the experience of telework today.

Because of the many ways telework has been defined and operationalized (Qvortrup, 1998), figures describing its prevalence and growth vary widely (Baruch, 2000; Ellison, 1999; McCloskey & Igbaria, 1998). The International Telework Association & Council (ITAC), a non-profit organization whose mission is to support the advancement of "work independent of location" (ITAC, 2004), reports that approximately 44 million people in the U.S. worked from home (ITAC's definition of telecommuting) anywhere from one day a year to full time in 2004. When considering

only those who work remotely at least one day a month, the figure reduces to 24.1 million. ITAC further reports that this 24.1 million includes 16.5 million who are self employed. While telework is difficult to precisely quantify, researchers and practitioners agree that it represents a sizeable and growing phenomenon (Hylmo & Buzzanell, 2002; Mallia & Ferris, 2000; Qvortrup, 1998).

The development of telework is also marked by shifts in the types of work performed in the remote context. Early teleworkers were primarily defined by those in more menial positions, such as stuffing envelopes, or by women (labelled *pink collar workers*) who needed to stay home with their children (Aichholzer, 1998; Heilmann, 1988; Nilles, 1998; Olson, 1987). Technology and expanding global markets have changed the face of telework such that many other types of jobs can be successfully performed in the remote context. Today, the ranks of remote workers include professionals and laborers at all levels in the organization and in such varied roles as distributors, consultants, researchers, writers, and educators. These workers perform their job responsibilities primarily away from the office in a variety of physical contexts, including at home, in their cars or on planes and trains, or in small satellite offices. A main defining feature of their jobs as remote lies in the locus of their work, i.e., some responsibilities are by definition performed away from an existing central office. The central office may be located in the same geographic area, or it may be located in another state or country. Sometimes the nature of the company's business dictates a need for people to serve as representatives in outlying areas (e.g., product distributors), and sometimes the nature of the business is such that it can be operated from anywhere (e.g., catalog distribution).

*An attractive--and challenging--alternative.* The reasons people are drawn to telecommuting also vary. Telecommuting may provide an opportunity to work for those with reduced physical capabilities, an opportunity to work from home for those with particular familial needs, or a chance to be located in a more personally desirable geographic area (GSA, 2001; Herman, 2000). The physical distance between oneself and one's supervisor may make telework preferred over working in closer quarters as well. At the other end of the continuum, people may choose to work remotely for environmental reasons, such as reducing air pollution and conserving fuel (GSA, 2001; Herman, 2000). Alternately, people may not *choose* to work remotely at all, instead being pushed out of the office to meet the needs of their employing organization. Regardless of the reasons or motivations behind working remotely, this context represents unique challenges and opportunities for those working remotely.

Some distinctive features of this arrangement may help to explain how it may benefit both employees and organizations. Organizations realize the benefits of expanded geographic representation, cost savings (overhead), and higher productivity (Heilmann, 1988; Mallia & Ferris, 2000). For example, AT&T reports that its telework program generates more than \$150 million in business efficiency improvements annually, improves productivity by 12% annually, and has resulted in two of three people reporting higher satisfaction with their jobs (ITAC, 2004). Remote work programs also broaden companies' access to talented people who may be disabled or otherwise unable or unwilling to work from the central office location. Employees gain control over their working arrangements, flexibility and autonomy, as well as savings in time (traveling to

and from work) and money (usually no-cost parking, fewer restaurant and fuel bills, and reduced clothing expenditures).

However, remote arrangements also mean corporate and individual challenges. Managers need expanded and sometimes different skills to manage these employees effectively (Schilling, 1999). In organizations with tightly structured hierarchies, managers may also experience perceived loss of control (Ellison, 1999) and may struggle to maintain a coherent identity (DeSanctis & Monge, 1998; Wiesenfeld, Raghura, & Garud, 2001). Finally, telecommuting arrangements pose an inherent risk of fragmenting organizations (Wiesenfeld, Raghura, & Garud, 2001), with remote workers physically and sometimes psychologically removed from the usual visual cues, rituals, and spontaneous opportunities for the social interactions which facilitate getting the job done.

This distal arrangement poses challenges to individuals as well. Because remote workers are physically distanced from the parent organization, they operate in a fairly unsupervised fashion, typically with high levels of autonomy, managing their own time and schedule (Mallia & Ferris, 2000). Co-located workers sometimes perceive their remote colleagues' advantages as conferring special privilege or permitting slacking (Baruch, 2000), which can put remote workers in a defensive position. Remote workers also have fewer spontaneous (and possibly fewer face-to-face) opportunities for interacting. It follows that the arrangement can result in a sense of isolation (Monge & Contractor, 2001; Reinsch, 1997; Wiesenfeld, Raghura, & Garud, 2001), loss and detachment (Hylmo & Buzzanell, 2002), reduced visibility (Reinsch, 1997), especially as it relates to promotion opportunities (Olson, 1987), and compromised feelings of



belonging (Morgan & Symon, 2002). In other words, telecommuters report simply feeling “left out” (Reinsch, 1997).

These practical problems and advantages associated with remote work bring the intersection of the individual and the organization into stark relief. Organizations have an ongoing need for employees to connect in ways that facilitate getting the job done. Similarly, employees possess both practical and interpersonal needs that affect their ability to do their jobs. These needs create a variety of reasons for interacting. In a larger sense, it is through social interaction that organizations themselves are instantiated, or literally *talked* into being (McPhee & Poole, 2003; Weick, 1983).

*Building remote work connections.* Given that existing research clearly shows that remote employees report an overall sense of isolation and disconnection (Kurland & Bailey, 1999; Mallia & Ferris, 2000; Wiesenfeld, Raghura, & Garud, 2001), it is important to understand how employees can interact to form connections with their organizations. Informal communication is especially challenging given inherent characteristics of the remote setting. Formal types of communication, as between supervisors and subordinates or as in reporting requirements, are still obligatory for remote workers and particular people in the co-located setting. By its nature, informal communication is not, however, obligatory and becomes a more conscious effort. In addition, the visual cues, rituals, traditions and opportunities for casual talk which co-located employees share are not readily available to remote employees. These opportunities provide the means for interacting, through which common ground is established (Arnseth, Ludvigsen, March, & Wasson, 2004; Cronen, Pearce, & Harris,

1982). Thus, informal communication between co-workers may play an important role in bridging the distance between remote employees and their organizations.

Informal communication between equal-status peers has been linked in a general way with various topics in co-located contexts, but no equivalent literature exists within remote contexts. Research in co-located contexts has linked informal communication to workplace friendships (Sias & Cahill, 1998; Sias, Krone, & Jablin, 2002; Sias & Perry, 2004), social capital (Knoke, 1999), and instrumental support directly related to accomplishing tasks (Albrecht, Burleson, & Goldsmith, 1994). However, *how* informal communication works to facilitate organizational goals has been largely ignored. Instead, informal interaction has often been treated as a disruptive and/or negative force, e.g., using organizational e-mail systems for personal messages on company time (Michelson & Mouly, 2000; Spacks, 1985). In fact, Duxbury & Neufeld (1990) report increased *formalization* of communication as an advantage of telework, implicitly assigning informal communication a non-role, at best. Examining interactions in the remote context, where many traditional sources of connection may be missing, provides an opportunity to study the co-worker connections that are made through everyday, informal talk, and to study what remote workers themselves report.

Such an examination fills a gap in the literature as well. A number of studies and practitioner-oriented articles have focused on the relationship between remote workers and their managers (Handy, 1995; Kraut, Steinfeld, Chan, Butler, & Hoag, 1999; Nilles, 1998). The general consensus is that formal communication between managers and workers, such as standardized performance reviews and corporate policy manuals, takes

on additional importance in the remote context. However, no equivalent research on informal communication between remote employees and their co-located peers exists.

This project will be accomplished using an interpretive and discursive perspective, incorporating arguments from constructivism (Delia, O'Keefe, & O'Keefe, 1982), structuration (Giddens, 1991) and activity theory (Leont'ev, 2002), with its central concern as studying communication as a social, situated activity (Tracy, 2001). The general theoretical commitments of constructivism, which gives significance to the role of both cognitive and behavioral aspects in coordinating intentions (Delia, O'Keefe, & O'Keefe, 1982), guide the research questions and hypotheses. The basic tenets of structuration (Giddens, 1991; Kasperson, 1995; Poole & McPhee, 1983) are also used to tie communication to the discursive production of identification, and activity theory (Kuutti, 1999; Leont'ev, 2002) helps explicate contextual considerations of computer-mediated communication (CMC). In this study, communication is viewed as multifunctional and as the achievement of a sense of understanding through shared resources, coordination moves and conventional cooperative practices. How this is achieved in the remote context is this study's central focus, with emphasis on determining what basic communication practices are important to particular outcomes.

Thus, the specific objective of this study is to uncover informal communication practices used by remote workers, and to examine the role of three specific types of informal communication in fostering positive outcomes: (a) inclusive messages, (b) casual talk, and (c) social support.

### *Informal Communication*

Research conducted among co-located employees shows that informal communication is viewed as a key vehicle through which employees form meaningful interpersonal relationships, meet social needs and exercise some control in their working lives (Eisenberg, Monge, & Miller, 1983; Jablin, 1985). Informal communication is also an important means for making useful work and non-work connections (Sproull & Kiesler, 1986), tends to be more personal (J. D. Johnson, Donohue, & Johnson, 1994), and has been endowed with greater “cognitive authority,” since people tend to trust informal sources more than formal ones (Leenders & Gabbay, 1999). Far from being insignificant, informal communication, such as small talk and gossip, make up the everyday interactions that most closely affect identity concerns (Metz & Westenholz, 2003), and through which common ground is established. More precisely, sensemaking emerges through human social connections, but social and task dynamics are fundamentally altered in the remote context (Thatcher & Zhu, 2006). Thus, how remote workers come to understand the remote context and their own roles as organizational members may, at least in part, emerge through the informal connections they have with co-located peers.

Because the remote setting offers fewer spontaneous occasions for everyday, informal interaction, and usually increases reliance on technological means, it is important to ask to what extent, and how, this significant form of communication facilitates critical functions. The fundamental premise of this study is that, not only is establishing common ground possible in the remote-to-co-worker context, but the idea of ‘belonging with’ is essential to often-researched concepts such as organizational identification, commitment and job satisfaction. These outcomes are then perceived in

certain ways by remote employees, and are instantiated in a dynamic concept of what it means to ‘be a member of’ (H. Clark, 1996).

The perspective taken here reflects the constructivist (Delia, O'Keefe, & O'Keefe, 1982; O'Keefe, Delia, & O'Keefe, 1980; O'Keefe & Shepherd, 1989) approach in that it views identity (and, by extension, organizational outcomes as experienced by individuals) as created in talk-in-interaction. Further, it emphasizes the often-ignored realm of informal communication as playing an important role in many ways. As Ellis and Smith (2004) point out, it is within the microworld of everyday communication that people coordinate and create meaning that produces social structure and that is produced by social structure. This perspective views the social world as created by the coordinated actions between persons-in-conversation (W. B. Pearce & Pearce, 2000), and reflective dialogue and linguistic practices as the process by which an organizational sense occurs (Shotter & Cunliffe, 2003).

Any act of communication serves to forward tasks, relationships and identities (R. A. Clark & Delia, 1979). From the constructivist view, certain activities increase common ground, enabling joint meaning making, or “social poetics” (Shotter, 2005). Increased common ground facilitates work flow and builds relational ties (Arnseth et al., 2004). To communicate successfully, mutual knowledge must first be established (DeSanctis & Monge, 1998); many of the inferences people make about such knowledge are gleaned from physical and linguistic proximity (co-presence).

This research focuses on the multifunctionality of communication, examining how communication functions to help produce the outcomes of interest described. An interpretive commitment drives an interest in meaning, with multiple communicative

functions examined to illuminate how informal communication helps to accomplish perceptions of inclusion that may foster enhanced organizational identification, as well as job satisfaction and commitment. This emphasis on informal interaction will also focus on equal status colleagues (versus supervisor/subordinate dyads). Finally, three basic communication goals -- task, identity and relational -- are treated as intertwined and simultaneously affecting and being affected by each other. However, given that the focus of this study is on the informal processes that foster inclusion in the whole, primary task goals are less emphasized than identity and relational goals.

Perhaps because it seems inconsequential, informal communication often goes unnoticed. Informal communication is also often viewed as negative because it often pertains to non-work topics. However, the basic function of providing interactants with a sense of codified meaning structures and processes endows informal communication with an importance in the simple premise that two people have a similar view of what this communication means. This study examines particular discursive practices that result in remote workers feeling more or less included in the organization, and further seeks to link specific discursive practices to outcomes of importance to individuals and organizations. The focus is on how communication functions to include or exclude distal employees, how it functions to increase or decrease identification with, and commitment to, the organization, and how it functions to increase or decrease job satisfaction, by examining the discursive practices enabling people to coordinate actions and routines that make work flow smoothly and effectively. In the telework context, work activity tends to be treated as an individual endeavor vs. as a communal activity, which allows communication to reflect meanings created and changed by interactants together.

The practical challenges with which this study is concerned are united in the core proposition that informal communication plays a significant (though unknown) role in addressing remote employee needs, just as it has been shown to play in the co-located context (Eisenberg, Monge, & Miller, 1983; Jablin, 1985). Practical, work-related needs include guidance, assistance and encouragement on tasks. These needs make evident a variety of purposes for interacting. For one thing, some degree of collaboration is usually needed for the practical activities involved in getting the work done. However, employees also have interpersonal needs that give rise to interaction. The research suggests that, when interpersonal communication needs are met, the work taking place around such interactions is positively affected (Jablin, 1985; Sias, Krone, & Jablin, 2002). In some cases, this informal communication may be the primary impetus to get through a tedious day (e.g., Roy, 1983). Thus, research that looks simultaneously at individual and social needs fills a gap in the literature, since both types of needs exist regardless of the practical activities in which people are involved.

When employees are co-located, they experience organizational culture, tradition and rituals in a more spontaneous, visual, and nonverbal way than do their remote counterparts. Research has shown that rituals and routines, which are often enacted in casual talk, are sources for understanding (Feldman & Rafaeli, 2002), and that nonverbal cues are important sources for reducing uncertainty (Short, Williams, & Christie, 1976; Walther, 1992; Walther & Tidwell, 1995) which can lead to greater interpersonal trust (Elsbach, 2004). The absence of nonverbal and other physical and visual cues, which are traditional sources for developing and sustaining values, cultures, attitudes and norms, requires remote workers to rely more heavily than their co-located peers on spoken or

written communication to develop shared meanings leading to a representation of an organization's identification (Wiesenfeld, Raghura, & Garud, 2001). Accordingly, this study affords talk the central role in the dynamic process of identity construction, change and maintenance (Metz & Westenholz, 2003), and the related outcomes of commitment and job satisfaction, and seeks to illuminate how informal communication helps to create and change these outcomes. It is argued, then, that everyday informal communication is an important vehicle for providing connections between remote workers and their organizations.

Three types of informal communication between remote employees and their co-located peers are examined in this study: casual talk, inclusion and social support.

*Casual talk.* In engaging in practical tasks at work, individuals are constantly enacting a complex process involving both individual and social needs. These practical tasks include communication activities and are also enacted in communication. Holmes and Marra (2004) suggest that small talk and social talk are discourse strategies that assist in establishing and maintaining good relations with co-workers. Such strategies are important factors in the process they call *creating team*. In fact, language practices described on the level of organizations themselves continually generate an organization's identity (Robichaud, Giroux, & Taylor, 2004). More basically, if the process of grounding (H. Clark, 1996) depends on "the participant's prior beliefs, knowledge, and the material artifacts that are available in any communicative encounter," (Arnseth, Ludvigsen, March, & Wasson, 2004, p. 190) then contexts in which potentially fewer (or different, e.g., computers) artifacts and cues exist may necessitate different communicative strategies -- or simply more work -- to establish grounding. This concept



of grounding has been studied with regard to technological tools from both the constructivist (e.g., Arnseth et al., 2004) and the structuration (e.g., Scott, Corman, & Cheney, 1998) perspectives. Researchers from both traditions have argued that people appropriate such tools differently, and that their meaning is instantiated through communication. Further, the effect that technological tools have depends on the constraints and creativity that exist within each interaction or use (Eisenberg, Monge, & Miller, 1983; Poole, 1999; Poole, Seibold, & McPhee, 1996).

*Inclusion messages.* Inclusion messages are those words, phrases or communicated themes that result in felt inclusion. One goal of this study is to glean a more precise idea of what inclusion messages look like from participants in open-ended questions. This is important because feeling included is a basic human need (O'Sullivan, 1999; Schutz, 1966). The extent to which such personal needs are satisfied also impacts organizational concerns, neatly intersecting both levels. The basic individual need for belonging, then, can be juxtaposed with the organizational need for employees to identify with the company, since this identification has been shown to effect greater congruence of goals and citizenship behavior (Dutton & Dukerich, 1994), and has also been tied to such important constructs as commitment (Becker, Billings, Eveleth, & Gilbert, 1996; Cheney & Tompkins, 1987; Mathieu & Zajac, 1990) and job satisfaction (Hurlbert, 1991; Mathieu & Zajac, 1990). Given reports by teleworkers themselves as feeling isolated and left out, it seems clear that the need for inclusion is not often met. Understanding what types of messages help remote employees feel included is necessary if employers are to work to facilitate their realization; hence, this study asks what type of messages accomplish feelings of inclusion.

*Social support.* In co-located contexts, high levels of social support have been shown to generate innovation (Albrecht & Hall, 1991; Albrecht & Ropp, 1984), alleviate stress or burnout (Albrecht, Burleson, & Goldsmith, 1994), improve performance on problem-solving tasks (Albrecht, Burleson, & Goldsmith, 1994; Sarason, Pierce, & Sarason, 1990), and ameliorate negative work environments (Ray, 1987). No equivalent research on social support exists in the remote environment, even though remote workers certainly experience stress, are sometimes required to be innovative, and are faced with similar problem-solving tasks. The remote context may suggest a greater potential need for social support than exists in the co-located context. For example, the remote environment constitutes a relatively new domain, which likely taxes the ability of interactants to take the other's perspective. Perspective-taking is an important skill in providing support (e.g., Burleson, 1989). Thus, this study also examines the possible links between the perception of, and satisfaction with, support provision and availability, and organizational identification, commitment and job satisfaction, hypothesizing that satisfaction with social support from co-located peers is positively related to these outcomes.

### *Outcomes*

New organizational forms present employees with the challenge of dealing with “new kinds of boundaries (sic) new expectations, and new contexts within which to construct a sense of identity and community” (Garsten, 2003, p. 244). Hence, it is reasonable to examine changes in important organizational outcomes, and the role of communication in such outcomes. This study focuses on the links that may exist

between specific types of informal communication (inclusion, casual talk and social support) and the three primary outcomes of identification, commitment and job satisfaction, because such communication creates the common ground necessary for changes in outcomes to emerge.

In co-located contexts, scholars have argued that informal interaction in general is directly related to the discursive construct of organizational identification (Dutton & Dukerich, 1994), that frequency of informal communication is linked to higher job satisfaction (Hurlbert, 1991; Rosenfeld, Richman, & May, 2004), and that involvement in informal communication networks is linked to higher organizational commitment (Eisenberg, Monge, & Miller, 1983). However, little is known about the messages or communication practices through which these outcomes are manifest, particularly in remote contexts.

Hence, this study hypothesizes that inclusive messages, casual talk and social support between remote workers and their co-located colleagues positively correlate with their level of organizational identification, job satisfaction and organizational commitment. It is further hypothesized that satisfaction with, and frequency of, informal communication (inclusion, casual talk, and social support) will be positively associated with a) organizational identification, b) organizational commitment and c) job satisfaction.

To achieve the objectives set forth in this study, remote workers from a variety of organizations completed an on-line questionnaire consisting of both open-ended and closed-ended questions about their communication. In recreating several informal interactions, participants provided self-reports of messages and message practices that

resulted in feelings of inclusion or exclusion. Specific communication practices were also provided and participants supplied information on frequency and satisfaction with such communication. Existing instruments were used to examine organizational identification, commitment, and job satisfaction.

The research literature specific to remote workers and communication is reviewed in the next chapter. The review also discusses the theoretical commitments informing this study and advances specific research questions and hypotheses. Chapter 3 explains the methods and data analysis procedures, and Chapter 4 reports the results. Finally, Chapter 5 discusses the findings.

## CHAPTER 2

### LITERATURE REVIEW

Telework has drawn the attention of both corporate and academic scholars (Aichholzer, 1998; Baruch, 2000; DeSanctis & Monge, 2004; Heilmann, 1988; Mallia & Ferris, 2000; Schilling, 1999). Not surprisingly, corporate researchers have focused on the bottom-line effects of instituting and operating remote work programs. The non-profit International Telework Association and Council ([www.workingfromanywhere.org/telework/twaresearch.htm](http://www.workingfromanywhere.org/telework/twaresearch.htm)) reports that telecommuting allows organizations to enjoy expanded geographic representation, cost savings and productivity gains. AT&T reports that its telework program improves productivity by 12%, generates more than \$150 million in business efficiency improvements, and results in two of three people reporting higher satisfaction with their jobs (ITAC, 2004).

Early academic researchers concerned themselves with determining the viability of going virtual along with potential organizational gains (Connor, 2003). Recent research has focused on virtual companies, partnerships or strategic alliances (Oliver & Barry-Oliver, 2004). This research typically assesses the relative advantages of technological capabilities, but is of limited utility for understanding how individuals interact using these capabilities. Hence, the emphasis here is primarily on literature that focuses on telework as defined in the previous chapter, as well as literature conducted in co-located settings that closely reflect this study's concerns.

This chapter begins with a review of the literature on remote work, organized around five topics. These include (a) work/family balance and boundary management, (b) compromised organizational culture, (c) limitations of computer-mediated communication (CMC), (d) new management challenges, and (e) remote worker isolation. After reviewing telework research, literature in two additional areas relevant to the study is examined: informal communication, and the organizational outcomes of identification, commitment, and job satisfaction. The theoretical framework of constructivism (Delia, O'Keefe, & O'Keefe, 1982) is then presented with an explanation of how it informs this work. This is followed by a section on activity theory (Leont'ev, 2002) and structuration theory (Giddens, 1984). As this review unfolds, the rationale for studying the informal communication practices of remote workers is made evident, and the chapter culminates in the questions and hypotheses advanced.

### *Remote Work*

Early teleworkers were largely comprised of people working in menial or clerical work who were not dependent on collaboration with others. Women who needed an income but wanted to stay at home with their children provided the most significant impetus for developing the option of working at home. Accordingly, most existing knowledge about telework relates to routine task laborers and so-called pink collar workers (Hylmo & Buzzanell, 2002), which may be less applicable today (Duxbury, Higgins, & Neufeld, 1998; Ellison, 1999).

Corporate restructuring and widespread mergers and acquisitions activity, along with the explosive growth of technology and high-technology firms in the 1970s and 80s, fueled further scholarly interest in temporary and contract laborers and professionals

(Ashcraft & Kedrowicz, 2002; Davis-Blake & Uzzi, 1993; Metz & Westenholtz, 2003; Seibold, 2003). This was followed by a general interest in networked organizations, virtual project teams, and mostly speculative work on 100% virtual organizations. All of these arrangements characterize telework today, but perhaps one of the most common—people working full time for a company whose central office is located in a separate geographic area—remains understudied.

Most of the research on telework to date has sought to uncover the physical, technological and temporal factors conducive to working out of the home. In their review of empirical research on telecommuting, McCloskey and Igarria (1998) found 32 scholarly articles on participation and perceptions of co-located employees on telecommuting. They concluded that serious limitations characterized the research conducted up to that time. However, a number of these early studies helped inform later work. For example, Kurland and Bailey (1999) provided structure to telework discussions by identifying different types of telework, including home-based telecommuting, satellite offices, mobile work, neighborhood work centers and virtual teams. Virtual teams, perhaps because they are easier to define, have received more recent attention (see, for example, the 2004 issue of *Organizational Science* devoted to virtual arrangements).

Remote work has not really been examined as a social context with its own unique characteristics and communication processes (DeSanctis & Monge, 2004). Yet social context suggests a way in which researchers can integrate micro and macro concerns in their analyses (Salancik, 1978). As it relates to remote work, the macro perspective on social context would encompass the organization, and the micro perspective would address such individual constructs as salience, identification and

commitment, as they are instantiated in everyday communication. When remote work is conceptualized as a social context, it can be viewed as dynamic and fluid, i.e., as both shaping and being shaped by discourse. Hence, meaning and context can be seen as interdependent (Jacobs, 2002).

This interplay between individual and context, or structure, is not well addressed in the literature, at least in part because the focus has been on perceptions of the desirability and viability of remote work from a business point of view. Little is actually known about the meaning of telework as created by teleworkers themselves, in context and through communication. When communication has been studied in the remote context, the focus has been on the need to provide and receive adequate information necessary to get the job done (Rosenfeld, Richman, & May, 2004). What is missing is research on all other types of communication, and research on remote workers themselves.

The next section reviews the telework literature, beginning with work/family balance and boundary management; In each section of the review, I will first cover relevant literature in the co-located setting and then review the research on teleworkers.

#### *Work/Family Balance and Boundary Management*

In the last decade, scholars have shown a renewed interest in meso-level analyses, including individual, work-family, and community-level issues (e.g., Duxbury, Higgins, & Neufeld, 1998; Qui, 2002; Voydanoff, 2001). The general research interest is in studying different levels simultaneously and considering their interplay, based on the belief that they affect one another. For instance, work/family issues touch on multiple



levels, and researcher interest has been primarily on the blurred boundaries between the spheres and the potential for role conflict as a result.

In general, the flexibility teleworkers enjoy enables more involvement in family life (Depew & Peters, 2001; Olson, 1987; Shepherd, 2001). However, O'Reilly and Caldwell (1980) showed that when teleworkers decide to work from home instead of from a central office, they may become less satisfied with their jobs and less committed to their organizations.

Two conceptual models are usually applied in studying interaction between work and family lives: spillover theory (Duxbury, Higgins, & Neufeld, 1998) and segmentation theory (Hill, Hawkins, & Miller, 1996). Spillover theory (Ellison, 1999) states that the work/home environments overlap such that attitudes and experiences in one area carry over into the other; this influence may be both positive and negative (Voydanoff, 2001). By contrast, segmentation theorists argue that the home and work realms are distinct (see Zedeck, 1992). While more support exists for spillover theory, scholars have called for some revision to address the complexities inherent in interpersonal, negotiated relationships (Stevens, Kiger, & Riley, 2002).

Although most research on work-family issues relates to self-employed people, part-time workers or those involved in pyramid organizations (e.g., Amway, Mary Kay), teleworkers face similar challenges. Organizational researchers have identified role conflict and boundary management as two interrelated challenges for home workers. Role conflict arises from the removal of geographic and temporal barriers separating work and home life (Kraut, 1987), and the blurred lines between the two realms that result (Ellison, 1999). People working from their homes devise strategies to reduce this conflict.

Ahrentzen (1990) interviewed 104 people who worked out of their homes and found that they reported using particular behaviors to signal a change in roles and to demarcate their boundaries. For example, some people used getting dressed or changing clothes and exercising as signals that they were or were not at work. Similarly, some home workers report contracting outside child care (Hartman, Stoner, & Arora, 1992), which facilitated role separation. If one definable factor of remote work is the lack of boundaries, and people prefer clear boundaries between their various roles, then remote workers face the added challenge of constructing what the workplace looks like for themselves, and differentiating it from other spheres of their lives.

However, precisely how to define the boundaries has been debated (Panteli, 2003; Ray & Miller, 1994). Panteli (2003) contends that, since boundaries can be managed in CMC, defining them is unimportant. He conducted two case studies involving one manager from each of two organizations and found that each of them managed client impressions of their physical location using CMC, such that boundaries were non-existent. One manager used CMC to create the client perception that he was proximally located when he was actually overseas; the other manager used CMC to give the impression to her client that she was in the office when she was actually in a cemetery. Panteli concluded that boundaries were defined not by whether an organization was virtual or not, but by the behaviors of those involved. Thus Panteli (2003) has argued for a conception of boundaries in virtual organizations as dynamic, flexible and defined by participants in context as opposed to fixed and inflexible. In this view, spatial and temporal delimiters are replaced by individual agency, affording persons a

higher degree of control by managing their preferred identities through impressions (Panteli, 2003).

Individual agency, however, is itself challenged by practical issues that arise in the home. Researchers have noted interruptions (usually by other family members, but sometimes as simple as a ringing doorbell) and family impressions of time spent working as two primary problems of home workers. For example, researchers have demonstrated that interruptions directly impact worker satisfaction. In a questionnaire study of 97 teleworkers from different companies, Hartman, Stoner and Arora (1992) found that family disruption was inversely related to teleworkers' satisfaction with the telecommuting portion of their jobs. They also reported a positive relationship between worker satisfaction with the telecommuting portion of their jobs and life satisfaction in general (instrument not identified; results not reported). Teleworkers in their study also reported the desire to feel they are included in, and a part of, the organization, and the desire to maintain interaction with supervisors and co-workers; however, too much supervisor contact was interpreted as a lack of trust.

At least one study has examined how a company whose representatives all work at home reacted to family complaints that workers spent too much time on the job. Pratt (2003) conducted an ethnographic study of a group of Amway distributors and found that the company intentionally blurred the boundaries between work and family. Amway used familial labels, such as referring to the distributor network as "family trees," or "extended families," and to relationships within them as, for example, "sister" or "father". An organizational goal was to allay family members' complaints about work time requirements by involving them in the primary employees' success. Pratt and Rosa

(2003) concluded that the effect was to tie the family's well-being to the degree that all family members were involved in the representative's work.

In summary, the literature on work/family conflict has primarily focused on self-employed people and various types of subcontractors versus full-time remote workers employed by an organization. However, remote workers face similar issues, especially if they work out of their own homes. Some scholars have called for an approach that considers the integrative effects of the primary spheres in peoples' lives, including the community, neighborhood, school, corporation and family (Ball-Rokeach, Kim, & Matei, 2001; Friedland, 2001; Voydanoff, 2001). The overall concept is that the various contexts within which people live are interdependent; however, the need to achieve an acceptable separation and/or balance between contexts exists and must be dealt with individually. Hence, teleworkers who wish to maintain separate home/work spheres are personally obliged to create whatever physical and temporal boundaries they need, and to avoid interruptions, if they are to be satisfied. Similarly, teleworkers face the task of clearly defining their work roles. Both teleworkers and their employing organizations can devise strategies to clarify such roles. Teleworkers may be able to use CMC to intentionally blur temporal and geographical boundaries to foster the perception of proximity in cases where clients may perceive distance to be detrimental.

#### *Compromised Organizational Culture*

Defined as shared norms, values and assumptions (Schein, 1996), culture develops in the wider society just as it does within organizations. Organizational culture develops in a manner similar to organizational identification (Cheney, Christensen, & Larson, 2001), and is therefore of interest in considering the challenges of remote

workers and their organizations. Schein (1996) has argued that cultures arise in occupational communities such that the organization and the individual reflect each other. While differences exist in scholars' conceptions of culture, most agree that norms represent a visible symbol of an organization's culture, and that these norms emerge in interaction. Mallia and Ferris (2000), for example, contend that one of the major challenges of telework is to create an organizational culture. They argue that organizational norms, skills and information are difficult to learn in the remote context because assimilation depends on first hand observation and modeling. For this reason, culture may be threatened or redefined in the remote context (Hylmo & Buzzanell, 2002).

Research on culture in traditional organizations supports the view that culture is instantiated in informal interactions (Adkins & Caldwell, 2004; Burke & Moore, 2004; Cyr & Trevor-Smith, 2003). Specifically, scholars have shown that storytelling and discussion of stories (Eisenberg & Riley, 2000; Smith & Eisenberg, 1987), socialized language practices (Harwood & Giles, 1992; Robichaud, Giroux, & Taylor, 2004; Tietze, Cohen, & Musson, 2003), and rituals (Deal & Kennedy, 1982; Feldman & March, 1981; Feldman & Rafaeli, 2002) reinforce corporate culture. For example, the simple display of information through artifacts and visual cues can symbolize culture and importance in organizations (Feldman & March, 1981). In an early study on electronic mail use in a co-located organization, Sproull and Kiesler (1986) found that reduced social context cues in electronic mail led to feelings of anonymity. These findings pose another challenge to remote workers, whose exposure to organizational artifacts, visual cues and everyday routines, is qualitatively and quantitatively different.

Gainey, Kelley and Hill (1999) also contend that the effect of geographic dispersion is a compromised organizational culture. They proposed a model of the relationships between telework and corporate culture based on culture as context dependent (and therefore adaptive). Gainey et al. (1999) suggested that the relationship between the employee level of isolation and cultural strength is mediated by the type of culture that exists, and that this in turn affects individual outcomes such as comfort, satisfaction, turnover and commitment. They offer no empirical test of their model, but do provide the conceptual tie between culture, isolation and important outcomes.

Co-located managers also have concerns about individual remote employees and organizational culture. Using primarily anecdotal evidence, Kurland and Bailey (1999) found that managers were concerned about missed opportunities for spontaneous learning and the challenge of communicating an organization's culture to physically distanced workers (p. 60). Hence, Kurland and Bailey (1999), as well as Morgan and Symon (2002), have argued that isolation deters remote employees from learning their organization's culture.

Although researchers have suggested such effects, only one study has empirically examined culture and communication in the remote setting, and this study examined provision of information on policies and procedures, not communication in the symbolic, interpretive sense. Using the Work Environment Scale (WES) in a health care organization, Rosenfeld, Richman and May (2004) measured perceptions of information adequacy and compared these with distributed employees' reports of the organizational environment (referred to in their study as culture). Results showed that field and office personnel differed in their need to receive certain kinds of information. Office personnel

reported greater need for routine information and less need for overall corporate performance information than did field personnel. Rosenfeld et al. speculated that field personnel may perceive that their performance is more directly tied to the overall performance of the organization, and that when combined with physical separation, this higher perceived importance may lead them to conclude that information received about the current and future direction of the organization is insufficient. Based on their results, Rosenfeld et al. (2004) suggested that in dispersed organizations, how an organization's environment (culture) develops and is perceived may rely on relational dimensions of involvement, peer cohesion and supervisor support.

In summary, little is known about the effect of distance on an organization's culture, yet research in co-located settings provides evidence that culture may be threatened in the remote context. In co-located settings, visual and nonverbal cues are available for discerning culture and greater opportunities for interaction serve as resources through which culture is instantiated. However, with fewer opportunities to interact, remote workers have less knowledge with which to learn and experience a particular organization's culture. Although researchers have begun to examine communication and culture in the remote context, results have often been based on a linear model of information adequacy, rather than on a dynamic concept of communication.

#### *Limitations of Computer-mediated Communication (CMC)*

A third challenge in remote work centers on the increased dependence of employees on technology to communicate with each other. Indeed, the phenomenal growth in remote work parallels technological improvements, primarily because

information and communication technology (ICT) have given rise to novel forms of organizing such as virtual organizations (DeSanctis & Monge, 1998), telework, and knowledge management possibilities (Senge et al., 1999). The term telework itself reflects the original conceptualization of the remote context as embedded within technology, versus as a unique setting enabled by technological tools (Ellison, 1999). Two extensive lines of research on CMC help shape discussion of this literature in the remote context: organizational use of CMC (e.g., Bultes, 2002 ; DeSanctis, 1998) and the interpersonal use of CMC (e.g., Ellison, 1999; Lea & Spears, 1995; Ramirez, Walther, Burgoon, & Sunnafrank, 2002; Walther & Parks, 2002). The next section is divided accordingly, and begins with a preview on CMC research overall.

*CMC overview.* Early CMC research tended to reflect one of two discourses about new media (Rice & Gattiker, 2003): utopian or dystopian. The dystopian view criticizes technology as deterministic and reductionist (Tanis & Postmes, 2003). The utopian view is characterized by studies showing that computers have no deterministic effects on organizational structure; rather, they tend to enhance existing cultures and tendencies (Tompkins & Cheney, 1985). For example, Johnson and Rice (1987) studied the implementation of word processing systems in the insurance industry, and found that employees in different offices developed different ways to use the same word processing system based on their own ideas.

As technical capabilities evolved, researchers' attention turned to human-computer interface issues. Kuutti (1999) argues that research and theory have shifted focus away from automating work (as in much CMC research) toward supporting it.



This is reflected in Bargh and McKenna's (2004) recent classification of CMC perspectives within three approaches: 1) The reduced information model (Sproull & Kiesler, 1991) predicting that the effect of media is consistent across contexts; 2) The social science perspective (Lea & Spears, 1992, , 1995), in which personal goals and needs predict CMC effects; and 3) Interaction between communicators' goals and needs and CMC features, with social context impacting this interaction (e.g., Tidwell & Walther, 2003; Walther & Parks, 2002; Zack & McKenney, 1999). The last category is perhaps most useful for conceptualizing remote work, and is the approach adopted here.

The relevant literature on CMC for the present study falls into two main areas: use of CMC in organizations (e.g., McPhee & Poole, 2003; Monge & Contractor, 2001; Poole, 1999) and in interpersonal communication (e.g., Parks, 1996; Walther & Parks, 2002). Research in each of these areas is summarized next, with representative research examples.

*Organizational goals and CMC.* Early CMC research concentrated on pressing technology into service for organizational goals in co-located contexts, on the use of technology to connect groups for temporary projects or meetings (see Bultes, 2002), and on group productivity (DeSanctis & Monge, 1998; Orlikowski, 1992). The use of technology to connect dispersed groups or teams for temporary projects may serve as precursor to more permanent remote work arrangements.

For example, Orlikowski and Yates (1994) examined the communication practices of a dispersed group that was assigned the task of defining a new computer language. Using group e-mail, they analyzed interaction over time and found that members enacted identifiable formal genres (organizational structures), such as soliciting

opinions, documenting results and offering proposals. Particular genres shaped and were shaped by group members in response to norms, media capabilities, project events and time pressure. They further argued that the communication purpose of a genre is created and reinforced within a community.

Because computer-mediated communication (CMC) research has focused on issues of adoption and institutionalization of technology into organizations (Rice & Gattiker, 2003), studies examining interaction practices, such as Orlikowski and Yates' (1994) work, are rare. Instead, communication scholars have initially concentrated on arguing that technologies are socially defined as compared to objectively presented (Scott, Corman, & Cheney, 1998). One line of research reflective of this argument is adaptive structuration (Desanctis & Poole, 1994; Scott, Corman & Cheney, 1998). This theory holds that technological properties do not directly affect processes (particularly attachment and identification); instead, processes will vary across groups based on how technology is appropriated during interaction; i.e., as people interact using a technology, they enact structures that in turn shape their emergent use of that technology. Hence, changing technology and emerging, flattened organizational forms are concurrent phenomena, such that "acceptance of telework is associated with change in both areas" (Ellison, 1999, p. 342).

One application of CMC, Computer Information Systems (CIS), may represent an opportunity for organizations to institutionalize changes in power (by controlling access to information), participation (CISs should reduce organizational complexity), and meanings (Christiansen, 1996; Steinfield, 1990; Wellman et al., 1996; Zack & McKenney, 1999). Organizations can also impart meaning by choosing particular media.

For example, Sitkin, Sutcliffe and Barrios-Choplin (1992) demonstrated the symbolic impact of the choice to use new technology as resulting in being perceived as more progressive and cutting edge.

Jarzabkowski (2003) argues that people use media in purposive, as well as symbolic, ways. He uses activity theory to suggest that people use media as “a mediating artifact between themselves and the object of interest, thereby enabling them to act more effectively” (p. 46). Activities have individual histories and are always changing (Kuutti, 1996). Thus, in the remote context, computers may be seen as an artifact included in an activity (similar to the structuration view of CMC). The recursive nature of CMC has a parallel in Vygotsky’s concept of interiorization, which posits that higher mental processes are derived from social activities (Leont'ev, 2002). Activity theory further suggests that these processes continuously define and redefine the basic features of interactional behavior such as tool-mediated behavior (Leont'ev, 2002, p.48).

In addition to group processes, the leveraging of intellectual and learning capabilities has been widely studied in the co-located context (e.g., Bliss & Saljo, 1999; Senge et al., 1999; Weick & Ashford, 2001), and interest has increased given the general increased use of technology. However, this line of study has not been pursued in the remote context. Tretheway and Corman (2001) argue that virtual environments *encourage* development of knowledge resources, which are in turn a primary resource for virtual organizations. They suggest that virtual workers may be most expert at locating, developing and using knowledge processes as a result.

Finally, issues of trust and organizational goals have been examined in technology studies, primarily as they relate to negotiation. Paulsen and Naquin (2003) linked lower

levels of trust to negotiations conducted by e-mail, but also found that pre-negotiation tactics (such as preceding negotiation with casual chat) may ameliorate the effect.

In sum, issues related to the use of CMC to accomplish work tasks (organizational goals) have dominated early telework literature. Research shows that groups and teams using CMC to come together can be productive, that the anonymity inherent in CMC can facilitate the exchange of ideas, and that, while the use of e-mail may lower trust between negotiators, prior casual interaction can ameliorate the effect. In addition, people who rely more heavily on CMC may develop skills that assist in harnessing resources through networking and in transferring knowledge. Finally, CMC may provide organizations with the capability for unobtrusive control; however, individuals have considerable agency in defining technology for themselves.

Although new technologies and applications will probably always emerge, the novelty of CMC has waned, people are less intimidated by it, and the learning curve has risen considerably. These factors and research findings combine to suggest that the more technical aspects are now more accessible to more people; however, the use of CMC to meet organizational goals in remote contexts remains understudied.

*Relational development and maintenance challenges in CMC.* Recent research shows that the adoption of communication technology requires attention to interpersonal, as well as technological and organizational practices and processes (Reinsch, 1999). However, as has already been mentioned, the use of CMC to meet employees' interpersonal (personal and social) needs is understudied in remote contexts. Zorn (1995) suggests that the general lack of research on interpersonal relationships in organizations may be related to the emphasis on topics of managerial concern more directly attributable

to achieving organizational goals. Thus, dialogue in organizations has traditionally been studied as a special form of communicating with the purpose of improving the thinking processes associated with mastery of the system (Barge & Little, 2002). This approach forces an emphasis on situations that are inherently problematic or require solutions. Borrowing from Bahktin, however, Barge and Little (2002) argue that dialogue in organizations is an important relational practice that serves to connect people through linguistic tools. Such a position foregrounds the mundane, everyday and routine interactions through which relationships develop in the co-located setting. Hence, the literature on CMC and interpersonal communication is important to review.

Waldron contends that personal relationships at work differ from personal relationships outside of work in the use of some maintenance behaviors. Power imbalances and formal role requirements, he maintains, explain much of the difference between personal relationships within, and outside of, the work context. Further, formal structures and procedures “compel communication,” which differs from the voluntary nature of informal communication between peers. The present study focuses only on peer communication in order to eliminate any potential effects of power differences between supervisors and subordinates.

Most existing studies on interpersonal communication using mediated channels focus on topics such as developing romantic relationships and friendships (Parks, 1996; Walther, Anderson, & Park, 1994; Walther & Parks, 2002), but the context is most often outside of an organizational setting (see Sias, Krone and Jablin, 2002, for an exception). Thus, the CMC literature on personal relationships in general (not necessarily work-related) will be reviewed broadly, with a focus on the concepts of trust and liking, which

are covered next. (See Lea & Spears, 1995, for an overview of early research on relational development via CMC.)

Interpersonal communication researchers show clearly that people like those with whom they feel they are most similar (Byrne, 1997), and people trust those they like (Roloff & Anastasiou, 2000). Hence, trust may precede the disclosure found to facilitate interpersonal relationship development. Although face-to-face contact has been argued as essential for building trust (Handy, 1995), CMC researchers have shown that the trust necessary to form interpersonal relationships (Baskin & Aronoff, 1980; Larzelere & Huston, 1980; Roloff & Anastasiou, 2000) can develop via CMC (Jarvenpaa & Leidner, 1999).

Romantic relationship and friendship development via CMC have been found to develop in a manner similar to face-to-face relationships, except more slowly (Walther, 1996; Walther, Anderson, & Park, 1994; Walther & Parks, 2002). Observation of others' behavior (Bradac, 2001), and nonverbal communication (Leathers, 1969), have been argued to facilitate the process of gauging similarity and managing impressions. Such opportunities are less accessible in remote settings. This reduced accessibility of nonverbal and visual cues associated with relational development and maintenance using CMC has been the subject of study and debate. On one hand, in research on romantic couples and geographic separation, researchers suggest that romance may strengthen precisely because there are fewer individuating cues and less salience accorded to cues related to social category (Drigotas, Whitton, Rusbult, & Weiselquist, 1999). Short, Williams and Christie (1976) have argued, however, that mediated interaction is less

effective for highly involving interpersonal tasks in proportion to the decreasing amount of social presence of the medium (Rice & Gattiker, 2003).

According to Short et al.'s (1976) social presence theory, the social presence of a medium is linked to nonverbal signals, which, in turn, relate to specific communication-related functions (mutual attention and responsiveness, channel control, feedback).

Bimber (1998) supports this position by positing that face-to-face interaction exerts social force through empathy, avoidance of conflict and other face concerns (p. 151). In an early study on communication and technology within the co-located context, Sproull and Kiesler (1986) provided evidence for Bimber's argument by finding that people are more willing to communicate negative information via e-mail, and more willing to break convention, such as violating the boundary between work and play. The central theme of these early findings was that CMC involved a reduction in nonverbal social and relational cues, resulting in depersonalized communication to the detriment of interpersonal relations (For reviews, see Parks & Floyd, 1996 and Walther, 1996).

Social information processing theory (SIP) has been used to explain the relational dependence on social cues, which facilitate positive impressions (Walther, 1992).

Walthers' (1997) later hyperpersonal model recognized both the cognitive processes of the SIDE model and the communication features unique to CMC, explaining overattributions as based on minimal cues, and more stereotyped (social categorization processes) impressions. This overattribution phenomena has since been demonstrated. For example, Tanis and Postmes (2003) found that even minimal physical cues (e.g., photos) affect the ambiguity and positivity of impressions, and Hancock and Dunham (2001) demonstrated that impressions formed in CMC were less detailed but more intense

(e.g., ratings on personal attractiveness and affection for interactional partner were higher) than impressions formed in face-to-face interaction.

Social Identification Deindividuation (SIDE) (Postmes, Spears, & Lea, 1998) theorists also hold that the feelings of anonymity lead to a deindividuating effect that can be positive. According to the SIDE model, technology provides opportunities for developing conditions for social interaction more than it weakens the social conditions in which communication takes place (Jarvenpaa & Leidner, 1999). More recently, researchers have suggested that a number of alternatives exists for seeking information via CMC with which to reduce uncertainty, form impressions, and develop relationships (Flanagin & Metzger, 2001; Hancock & Dunham, 2001; Parks, 1996; Walther, Anderson, & Park, 1994).

For example, linguistic cues have been shown to differentiate e-mail messages of men and women (Walther & Tidwell, 1995) and paralinguistic cues (emoticons) have been shown to be capable of carrying emotional tones (Walther, 2004). Lea, Spears and Rogers (2003) argue that, the capability of communicating such cues means that CMC offers a way to reduce dependency on physical proximity in relationships. At least one study supports this contention. Sproull and Kiesler (1986) conducted a field study of 513 co-located employees and found that both work and non-work communication increases with the use of technology. They concluded that “the real value of this (e-mail) could be increased sociability and organizational attachment,” in co-located settings (p. 1511). Other studies also provide evidence that heavier reliance on personal linkages diminishes the potentially negative consequences of electronic networks (Kraut, Steinfield, Chan,



Butler, & Hoag, 1999, p. 722). However, what happens when e-mail assumes greater responsibility for the communication load (as in the telecommuting context) is not known.

Early research focused on the limitations of CMC in developing interpersonal relations, and concluded that the CMC environment was impoverished relative to face-to-face communication environments. Bargh and McKenna (2004) summarize the research on relational development via CMC this way: whether relationships are work-related or private, it is possible to create and maintain them via CMC. Such relationships depend on finding common ground (Sias & Cahill, 1998), which Vega and Brennan (2000) argue reduces feelings of isolation. This has not been studied in remote work contexts.

*CMC and remote contexts.* The effects (and possible effects) of distance on personal relationships, and the use of technology to bridge the gap, has been contested among scholars. Nie (2001) asserts that “telecommuting will have consequences for the sociability of the workplace,” (p. 430); he cites the loss of face-to-face contact, and the source of friendships, romantic interests and daily socializing that arise in routine office talk, as examples. However, Morgan and Symon (2002) suggest that the appropriate use of technologies “can facilitate shared understanding and help remote staff to view their company as alive and exciting” (p. 302). Studies on electronic mail in personal and co-located organizational settings support this view, suggesting that e-mail can remove not only geographic barriers to communication in order to develop relationships (Stafford, Kline, & Dimmick, 1999), but temporal, departmental and hierarchical barriers as well (Sproull & Kiesler, 1986). However, Waldron (2003) suggests that electronic networks may magnify the effects of small talk and of destructive relational behaviors.

Additionally, he speculates that maintaining relationships in the absence of unplanned, unscripted opportunities for interaction may make relationship maintenance a “more deliberate and mindful process.” (p. 180).

Similarly, Wiesenfeld et al. (2001) argue that norms emerging in the virtual context by way of leaner media (e.g., e-mail) can have a greater impact on communicators and convey more meaning (p. 780). Because virtual employees of necessity develop their own norms and co-create subjective meanings, Wiesenfeld et al. contend that they may actually have a clearer shared perspective on the organization’s identity which may lead to stronger identification, commitment and job satisfaction.

Using this argument, Wiesenfeld et al. (2001) surveyed 276 employees in a company that had recently instituted a mandatory remote work program, and found that e-mail was a more critical means for developing and sustaining organizational identification for higher virtual status members (i.e., those working away from the office relatively more than others) than for those working at the central office relatively more often. No significant results were found with regard to face-to-face communication; they concluded that the centralized office “may no longer have the same level of importance” (p. 785-6), and that, since less information is available in e-mail with which to uniquely identify individuals and set them apart, e-mail may actually encourage remote workers to view themselves as members of the larger collective.

Still, the actual communication that takes place in forming impressions, developing relationships, and coordinating activity has received little research attention in remote contexts, even though scholars have recently linked psychological mechanisms of identification to important work outcomes in telecommuting (Thatcher & Zhu, 2006).

One of the few studies on interaction in the remote context examines only the opportunities for interaction. In their interview study of 13 teleworkers and 24 co-located workers in a government agency, Hylmo and Buzzanell (2002) found that opportunities for interaction increased as the amount of time spent in co-located settings increased.

In sum, interaction in the remote context is more dependent on mediated channels than in the co-located setting. Remote workers rely on technology not only to do their jobs, but to meet some of their informal, social needs as well. Although research on friendships in the workplace is limited mostly to co-located employees, results indicate that the formation and continuance of such informal relationships at work is important to a number of specific outcomes, such as job satisfaction and commitment (Sias & Cahill, 1998; Sias, Krone, & Jablin, 2002; Waldron, 2003). These (and other) complexities of mediated interaction have only superficially been addressed (Boiney, 2004). Researchers have shown, for example, that speed of response and choice of media can affect interactant impressions (Boiney, 2004; Palmer, 1998). In another study, Rosenfeld et al. (2004) found that the amount of information needed and the amount received differed for office and field personnel, supporting the argument that communication adequacy decreases as horizontal complexity increases (p. 43). However, Boczkowski and Orlikowski (2003) have argued for studies that more finely conceptualize discourse and new media as emergent and dynamic.

*CMC summary.* As the preceding section has illustrated, CMC researchers' interests are closely integrated with developments in the remote work context in both interpersonal and task issues. Because remote workers, more than co-located workers, rely heavily on CMC for task and interpersonal communication, the remote context offers

a unique opportunity for studies on work and social relationship development using mediated means.

CMC is a necessary element of telework. This study's focus on communication between remote workers and their co-located peers gives centrality to technology as one part of the context within which remote workers communicate. This literature base provides the knowledge that relationship development is possible via CMC and that employees and managers need to learn and use different, more precise communication.

### *Management Challenges*

The flatter structures that typically result from dispersed organizational arrangements mean that leading is no longer determined by position alone (Cheney, Christensen, Zorn, & Ganesh, 2004). If managers of remote employees are uncomfortable with this difference, it may affect the remote workers' experience in a number of ways. Hence, the research on management challenges with remote work arrangements is important to review.

Because remote workers are physically distanced from the parent organization, they operate with little supervision, with higher levels of autonomy, and managing their own time and schedules. Both the scholarly and the practitioner literatures suggest that managers are challenged by these differences, for several reasons. In interviews with 40 IT consultants who worked remotely and follow-up interviews with 18 of these six months later, Morgan and Symon (2002) discovered several problems from the remote worker point of view: information overload (management sent too much); lack of thought (with how messages were constructed); and compromised attachment and belonging. Research from a critical perspective also suggests that the unobtrusive control desired by

organizations (e.g., Barker, 1993; Gossett & Tompkins, 2001; Tompkins & Cheney, 1985) may be at risk because visual status cues and rituals used by management to reinforce existing power structures are missing in non-traditional contexts. This is in part because non-traditional contexts, such as remote work arrangements, require different management (including communication) skills and practices, the ability to exert authority without the use of visual cues, and the ability to decipher the appropriate amount of communication (Morgan & Symon, 2002). However, research on management and telework to date is largely limited to technical aspects of remote work and the impact of the employee/supervisor relationship on the decision to telecommute (Cheney, Christensen, Zorn, & Ganesh, 2004; Constant, Sproull, & Kiesler, 1999; Kurland & Bailey, 1999; Reinsch, 1997; Sproull & Kiesler, 1986).

In one study on remote work decision factors, Reinsch (1997) used vignettes to describe an interaction between a manager and an employee. He found that participants believed that the longer a relationship between employee and manager had existed prior to telecommuting, the less likely an employee would be to choose to work remotely, presumably because they wanted to maintain the relationship as it was. He also found that when remote employees believed that their manager reacted well to criticism and was loyal to the employee, the likelihood of accepting an offer to telecommute would be greater. In another study, Reinsch (1999) found that teleworkers and their managers enjoyed an initial happy (honeymoon) phase. After this honeymoon stage, some relationships tended to deteriorate, with teleworkers complaining that managers were difficult to reach, and that managers perceived them as not working hard (17% of participants).

Anticipating that conflict between managers and remote employees might be one communication challenge, Reinsch (1999) also examined the effects of conflict on the decision to work remotely by studying the effects of selected communication behaviors. Participants read vignettes describing an employee/supervisor relationship; some of these vignettes introduced an element of conflict and others did not. Reinsch (1999) then asked participants to advise the employee on a decision of whether to work remotely. Reinsch's participants perceived that the longer employees and supervisors had worked together, the more likely they would be able to work together in the remote context.

In their study on technological efficacy among remotely-managed workers, Staples, Hulland and Higgins (1999) suggested that remote managers need strong communication skills to effectively manage in this context. Sproull and Kiesler (1991) point out the need for supervisors to be more explicit in dealing with teleworkers due to the lack of nonverbal and status cues traditionally used to exert influence. Some supervisors prefer to rely more heavily on visual cues for asserting their power, while managers of remote employees may not know how to compensate for the lack of such cues (Morgan & Symon, 2002).

Clearly, managing employees who are far more autonomous and independent requires some different skills than those useful in traditional and more hands-on contexts. Communication skills are particularly important, especially in light of findings suggesting remote worker sensitivity to message channel, content and delivery options. Managers must also be prepared to position and sometimes defend the role of remote workers to their co-located peers, who sometimes perceive that their remote colleagues enjoy special privileges.

### *Telework and Isolation*

That teleworkers report feeling isolated from their organizations and co-workers is the unifying theme in the telework literature. Although this finding is consistent across studies (Gainey, Kelley, & Hill, 1999; McLaughlin & Cheatham, 1977; Vega & Brennan, 2000), it is primarily supported by small numbers of participants, often with people who do not work remotely, and sometimes using unstandardized measures. Because researchers often use the term isolation interchangeably with alienation, (lack of) affiliation and (lack of) attachment, and often treat all of these as conceptually similar, no precise, unified body of literature exists. However, these reports of isolation and the related issues of detachment in the telework literature are important to review.

In an essay on isolation and technology, Vega and Brennan (2000) examined representative views from nine social sciences, as well as management and engineering fields, which resulted in a set of 13 codes identifying organizational factors associated with isolation; they argued that these factors are linked with advances in telecommuting. These factors included external boundary control, community integration, organizational culture, meaningfulness of work role, degree of power, common ground, group norms, group values, authority, collegial interaction, meaningful feedback, artifacts of status, and face-to-face interaction. Although they presented no supporting data, they argued linkages were grounded in a wide variety of cross-discipline literature. They proposed that avoiding isolation (either physical or social) requires meeting individual information sharing needs, a task necessarily involving both task and social interaction components (p. 477). Their review resulted in a number of further observations about telecommuters and their experiences predominantly off-site. First, telecommuters operate without

identifiable artifacts of status, such as required working hours, assigned office space, and required attire. In addition, they experience limitations in meaningful feedback, especially with the absence of visual cues, which result in feeling “out of the loop.” Identifying group norms or values is more difficult for teleworkers, and their opportunities for shared experiences are diminished. Finally, Vega and Brennan note a “fragmentation of work that limits their understanding and participation in the whole” (p. 479).

In addition to a sense of isolation (Monge & Contractor, 2001; Reinsch, 1997), remote work has been shown to result in a sense of loss and detachment (Hylmo & Buzzanell, 2002), reduced visibility (Reinsch, 1997), especially as it relates to promotion opportunities, compromised feelings of belonging (Morgan & Symon, 2002), and feeling “left out” (Reinsch, 1997). Mallia and Ferris (2000) suggest that feelings of detachment arise because the usual sources of assimilation (i.e., modeling and observation), and for learning skills and acquiring information, are not available. In addition, the organizational routines engaged in on any given day at any office (e.g., employee birthday cake gatherings, regular staff meetings, coffee breaks) are sources for connection and understanding, which help influence the way organizations adapt to change (Feldman & Rafaeli, 2002). These routines are not as accessible to remote employees.

Nickson and Siddons (2004) have argued that employees have different needs for affiliation, which they define in opposition to felt isolation. In their survey of students responding to hypothetical remote work situations, they found that people with high need for affiliation make an effort to develop strong working relationships, and to coordinate different departments and teams.



Feldman and Rafaeli (2002) and others have shown that physical proximity and/or close contact is often associated with the connections people make (Ibarra & Andrews, 1993; Monge, Rothman, Eisenberg, Miller, & Kirste, 1985; Newcomb, 1990), and connections with friends and respected co-workers are important resources for reducing feelings of isolation. Miller (1975) studied 335 organizational members from five organizations, finding that isolation was correlated with the amount of contact with other organizational members.

Ibarra and Andrews (1993) found more support for informal interaction network effects in an examination of innovation and creativity. In their surveys and interviews with 74 full-time employees of an advertising firm, they first determined the instrumental networks (sources of professional advice or work-related assistance) and expressive networks (good friends) that existed. Within these networks, they found that interaction in the friendship network affected perceptions on five types of empathic behaviors: risk taking, acceptance, information access, interdepartmental conflict and autonomy. Thus, informal interaction networks, particularly proximal ones, significantly impacted the perception that the existing conditions at the firm facilitated innovation and creativity ( $p < .05$ , all correlations). Newcomb (1990) has argued that rather than spatial propinquity, it is resource sharing and role interdependence that explain such connections.

Hardy, Lawrence and Grant (2005) argue that collective membership depends on the individual awareness that employees are connected, which depends on social interaction. Hardy et al. (2005) showed that identities emerge from collective discourse in interorganizational teams, postulating that two types of conversations are especially critical to the creation of a collective identity among collaborators: 1) conversations

connecting participants to the common issue (generalized membership ties) and conversations directly connecting individuals to each other (particularized memberships).

Finally, the relative amount of time remote workers spend outside of the office compared to in the office affects the way individuals experience telework (McCloskey & Igbaria, 1998; Wiesenfeld, Raghura, & Garud, 2001). Wiesenfeld et al. (2001) conducted a study of 276 employees at a computer company that had recently implemented a mandatory virtual program in which employees went from full time in the office to varying amounts of time out of the office. For this study, all employees were located in the same general geographic area as the central office. They found that, among higher virtual status workers (reverse measured in number of days working in the office), frequency of e-mail communication (but not telephone communication) was associated with higher organizational identification as compared to less virtual employees.

#### *Telework Literature Summary*

While relatively little research has been conducted in remote contexts, interest is growing. From an organizational standpoint, telework has reduced overhead expenses, allowed access to otherwise unavailable talent, and provided companies with broader geographic presence in client and potential client markets. However, as telework has expanded, organizations have begun to consider the implications on remote employee identification and commitment to their companies, on employee job satisfaction, and on employee communication needs, as remote contexts lack the traditional means of connection that foster such positive outcomes.

Remote workers who work in their homes are challenged by the need to separate home from work lives, and to balance the various aspects of their lives. Without the usual

sources of assimilation, remote workers face difficulties in understanding the organization's culture, and are limited by the various forms of technology they employ. Technology, however, has been variously appropriated, and provides access to many of the forms of communication available to proximal employees. Managers may face some difficulty in attempting to direct, supervise or simply communicate with, their remote employees. Finally, remote employees have reported feeling isolated and left out; some may experience reduced visibility and decreased feelings of belonging. Co-located employees may perceive that their remote colleagues have in some way been favored or are not working as hard. The fragmentation characteristic of remote work thus poses significant communication challenges.

#### *Limitations of Telework Literature*

Overall, the literature on remote work is limited in a several ways. First, remote work encompasses areas of concern to practitioners and scholars from business, the social sciences and the humanities. While such interdisciplinary interest can add strength to the overall knowledge of any subject, it requires more effort on the part of researchers to collaborate and to fruitfully apply theory. Some methodological weaknesses in this literature base are undoubtedly a result of inconsistent or no use of theory.

Second, the number of different definitions used by researchers, and/or the lack of clear definitions, makes comparison of findings difficult, at best. Operationalizations of telework range from use of technology for work (Olson, 1987) to extent of participation (McCloskey & Igbaria, 1998), and from occasional employees to full-time employees (ITAC, 2004; Labor, 2000). A related factor hampering research is the number and array

of telework arrangements (McCloskey & Igarria, 1998), which make participant selection difficult. Even more problematic is the tendency to treat all remote workers as a homogenous group. Thus, studies on temporary workers (Davis-Blake & Uzzi, 1993), displaced workers (Gossett, 2002), contract and independent workers (Hylmo & Buzzanell, 2002), and project groups (Orlikowski & Yates, 1994) have all been considered along with general teleworker studies. Similarly, studies do not differentiate between full- and part-time employees, employees working from both the home and the central office, employees working from homes located near the central office (Mallia & Ferris, 2000), or employees working remotely for different durations (e.g., one day/week, one day/month). The remote experiences are likely to be very different, for example, between those working four days a week in the office and one day out (a “perk” offered by many employers), and those working full time away from a central office located in another state (e.g., Discover Card and Scott’s Company employees). These types of workers represent very different sets of constraints and opportunities which help shape their experience.

Yet, full-time, professional remote workers, whose ranks continue to grow, have been largely ignored in favor of more accessible participant bases. Difficulty in finding remote workers is perhaps the major reason most researchers have relied on hypothetical scenarios in lab settings. College students asked to imagine remote work situations may not accurately report the experience of a 50-year-old professional worker who has been asked to work from home for the first time. In fact, most studies examine perceptions of the telework experience as reported by people who have never worked in this context (Bailey & Foley, 1990; DeSanctis, 1984; McCloskey & Igarria, 1998), or by non-

professional employees (Hylmo & Buzzanell, 2002; Kraut, 1988). Thus, full-time, professional-level employees performing their jobs primarily from a distance are an understudied population (Baruch, 2000).

Finally, these difficulties are reflected in the general amount of research on telework: there is, simply, too little of it. Of the 32 empirical studies reviewed in McCloskey and Igbarra's (1998) literature review, ten recorded perceptions of people who were not themselves teleworkers, 14 involved either part-time or self-employed people, and four reported no data or analyses. The remaining few studies were characterized by one or a combination of problems, including non-generalizability of findings due to cultural differences, mixed professional/clerical participant base, inclusion of clerical employees only, and no random selection (relevant results reported elsewhere). The few empirical studies that have been conducted since their review have been plagued by similar problems, particularly inconsistent definitions and lack of theory. Still, interest is growing and there is reason to believe that much more rigorous research will be possible with the increasing interest among both organizations and individuals.

Given that telework represents a relatively new context for communication inquiry, it is even more important for researchers to lay out the specific communication assumptions with which we approach our questions, and to explicitly describe theoretical commitments. This is the goal of the next section.

#### *Theoretical Foundation: Constructivism*

One primary weakness of research on communication in co-located as well as remote settings is that theoretical claims related to its constitutive nature have not been empirically tested. In a recent review of the literature on telecommuting, Thatcher and

Zhu (2006) suggest that fundamental social processes are altered in the remote context, and such processes are integral to the formation and continuance of important organizational outcomes, particularly identification. Identity and identification-related interpretive communication theories have maintained the fundamental position that these constructs are instantiated in talk. Yet, how communication functions to accomplish this is unknown. The remote context provides an ideal opportunity to test the fundamental premises of structuration and constructivism, the theoretical commitments that inform this study.

The philosophical and epistemological foundations of constructivism (Delia, O'Keefe, & O'Keefe, 1982) guide this study. Because informal communication in the remote context represents not only a new area of study but overlaps several disciplines and involves several areas of organizational communication, the need exists to draw from a number of sources to guide research and to construct a framework.

*Conception of persons.* Constructivist theorists have built a substantive body of work which clearly distinguishes the basic assumptions about the nature of persons and the nature of science. First, it is an interpretive orientation; people approach the world through continuing processes of interpretation (Delia, O'Keefe, & O'Keefe, 1982). When people communicate, they are actively, creatively and dynamically designing and revising reality. Hence, reality is socially constructed and reconstructed (O'Keefe, Delia, & O'Keefe, 1980). While this suggests that communication is not fixed in time, people do apply their own interpretive processes which develop in particular social and historical contexts (O'Keefe & Delia, 1982). Hence, the individual and the social are set up

simultaneously, and communication between people brings about understanding, or the intersubjective relationship (Grossberg, 1982).

Constructivism holds that people both structure and give meaning to the world by way of “groupings” or constructs which provide the means for organizing events based on their similarities and differences. Interpretive schemes are the more general classifying devices by which constructs are grouped with regard to context as well as in relation to similar or dissimilar constructs. This underlying sense of context is central to this study, guiding its treatment of telework as one such context. In serving the functions of both identification and placement, interpretive schemes may be more difficult to construct in the context of telework. In this unique context, the organizing schemes (as they relate to the “organization”) with which most people are familiar are presumed to shape interaction according to both previous organization history in general and knowledge of the current organization’s culture. Constructivism holds that individuals are able to coordinate activities through shared schemes, which serve as resources with which this coordination is made possible.

Individuals’ interpretive processes develop with time and social experience. They organize their experiences cognitively, as both biological entities (whose behavior originates in natural activities) and members of particular sociocultural communities. People behave in particular situations by applying cognitive schemes, which are the means by which they organize and segment their experience (Delia, O’Keefe, & O’Keefe, 1982).

People make choices about how to behave based on beliefs and intentions that are relevant to particular contexts. As situations unfold, people choose certain behaviors

based on their current beliefs and these beliefs come from their interpretation of their own histories. The selected behavior, in turn, reflects the cognitive schemes used to select it such that past, present and future are reflected in every act. Interpretive schemes, which channelize behavioral alternatives, are applied based on the situation, context and other particulars. People interact by coordinating their actions through shared schemes. There are general interpretive devices appropriate to every part of an interaction (e.g., Grice's principle of cooperation), and there are more specific, or organizing schemes for more particular situations. Organizing schemes categorize behaviors relative to other behaviors, such that people can "know" what consequences a selected course of action will likely carry (Delia, O'Keefe, & O'Keefe, 1982).

*Communication processes.* People communicate by coordinating meaning through socioculturally developed speech codes and cooperative practices (O'Keefe & Delia, 1985). Distinctive communication practices exist among various cultures (Gumperz, 1997); speech codes reflect the particular culture and specific context in which social interaction takes place. The symbols and resources that are available and appropriate for use depend on the context. Hence, communication in organizations involves a coordinative task involving codified meaning that may be quite specific to that organization, and resources for creating shared meaning that may be appropriated only with reference to that organization (context). According to the constructivist perspective, relevant communication processes include codifying meaning through shared codes, coordination practices, and cooperative practices, including perspective-taking and empathy. These processes are engaged in as individuals pursue multiple goals (Delia, O'Keefe, & O'Keefe, 1982).



Constructivism provides an overall framework for a general theory of communication development (R. A. Clark & Delia, 1979). Cognitive development is taken to be central to communicative development, and the two have been empirically linked (e.g., Clark and Delia's 1977 study linking social cognitive development and persuasive skill). Thus, constructivists meld Kelly's (1955) personal constructs with Werner's (1957) developmental theory, ascribing varying and changing levels of cognitive and communicative competence to people, and allowing researchers to analyze message behavior based on social cognitive processes and structures. More highly developed schemas are expected to result in behaviors characterized by greater flexibility, freedom and autonomy (B. Burleson & Caplan, 1998). These same characteristics are regularly linked to the remote context as well, where the constructivist approach toward context-specific perceptions may well be tested. Further, that feature of cognitive development taken as basic to communicative development—the ability to take the perspective of the other—allows people to adapt messages to fit the situation (B. R. Burleson & Macgeorge, 2002).

Constructivist researchers have examined variations in the adaptation of messages designed to persuade (Delia, Kline, & Burleson, 1979), to comfort (B. R. Burleson, 1984; Egbert, 2003) and to regulate (Applegate, 1980), as well as student perceptions of their own communication competence (Almeida, 2004). Messages functioning to help remote workers feel more included in their organizations may represent another application of the constructivist conceptualization of communication that holds real practical utility.

*Communication and action.* The constructivist perspective views communication as situated and as social. The present study's focus on informal communication allows

both of these aspects to emerge. Clark and Delia (1979) emphasize communicative behavior within particular speech communities who share certain social knowledge as well as personal constructs. This sense of interactional organization is multifaceted (O'Keefe, Delia, & O'Keefe, 1980). O'Keefe, Delia and O'Keefe (1980) have explicated how interactional segments are local (behavioral schemes are selected based on the participant's understanding of what is taking place), hierarchical (e.g., schemes can be embedded, reflecting both specific individual history and the relationship's history), historically emergent (situationally and temporally), and an interactional achievement. From this, it is logical to argue that organizations themselves comprise a community, but the question arises as to how remote employees coordinate their actions using shared schemes, and how similar their interpretive schemes for the organization may or may not be to their co-located peers. If remote employees and their co-located peers share these more general interpretive schemes, it is still possible that the more specific organizing schemes for classifying and characterizing interactional sequences may differ, if only because each exists in different contexts (O'Keefe & Delia, 1982). That is, the coordinating devices co-located employees use to interact necessarily reflect their social history of shared meaning in the co-located context but not in the remote context.

The customary ways through which shared meaning is made possible vary for employees not enjoying close proximity to the people and situations that serve as venues for developing shared constructs with which to inform future lines of action. As a voluntary everyday activity, informal communication may be fundamentally altered in remote contexts; thus, sensemaking, the co-construction of meaning, and coordination must also be affected. As a situated process wherein people jointly negotiate a dynamic

agreement about their shared realities, and in which their intentions in communicating are the focus for coordinating activity, communication is structured, organized and goal-oriented, and there is meaning and importance in even the simplest of communication routines (Zimmerman & Applegate, 1994). If people interpret messages and responses based on norms of the social context (DeSanctis & Monge, 1998), then interaction in new and relatively unknown contexts, such as remote work, assumes an even greater importance. If remote workers and their co-located peers co-construct a code system through informal communication, specifically casual chat, social support and inclusion messages, it is reasonable to think that task, identity and social functions are facilitated as a result of the common ground that results.

#### *Activity theory*

The argument that context (remote work, in this case) is critical must be addressed either from the macro (organizational) or micro (individual) levels, or ideally both. Using activity theory (Engestrom, 1999; Kuutti, 1996; Leont'ev, 2002) allows isolation of interactions such that the unit of study is an activity which includes context in its definition (Kuutti, 1999). Including context in the analysis enables study of individual actions (interaction) without precluding a collective approach (Kuutti, 1996). In other words, the individual and the collective are integrated. According to activity theory, communication strategy emerges from four primary components of interaction: the organization's collective structures, the primary actors (defined herein as equal-status co-workers not co-located), the practical activities forming the backdrop for interactions, and the practices in which organizational members interact (Jarzabkowski, 2003). Activity

theory has recently been used as underpinning for what Kuutti (1996) calls “contextually embedded interactions” (p. 38), or precisely the object of study in this research.

Whatever the reason for interacting, relationships as well as organizations and organizational constructs become instantiated in talk (Cheney, 1983a; Shotter, 2005; Shotter & Cunliffe, 2003). Activity theory, as conceived originally by Vygotsky (Cole, John-Steiner, Scribner, & Souberman, 1978) and furthered by Leont’ev (Engestrom, 1999; Leont’ev, 2002), holds that, as individuals act, their activities become infused with meaning; discourse takes on meaning and force and organization is enacted (Shotter & Cunliffe, 2003; Weick, 1983). In this way, organizational cultures are produced and reproduced, as opposed to “handed down” in formal patterns. Thus, organizations may try to effect a certain image, but it is the employees who accept, reject, modify or alter completely the existing culture (Monge & Contractor, 2001; Monge & Eisenberg, 1987). Hence, organizations may be thought of as sets of interdependent people acting to accomplish sets of tasks and functions using various communication strategies.

### *Structuration*

Consistent with these last conceptions and with a constructivist view (O’Keefe, Delia, & O’Keefe, 1980; O’Keefe & Lambert, 1995), this study approaches organizational identification as a dynamic construct, shaped by individuals using previously developed interpretations and adapting them in conversation. Thus, identifications are changing and context-dependent. The relational, co-constructed nature of identity suggests that interpersonal communication also plays a significant and ongoing role in its formation, change and maintenance (Metz & Westenholz, 2003; Scott & Stephens, 2005).

Structuration scholars have provided a theoretical basis for a view of identification that both shapes and is shaped by communication. Constructivism provides a way to add to the development of this linkage of structuration and identification such that the issues of interest can be studied and understood from a communication perspective.

Structuration theory provides a perspective that reconciles the theoretical dichotomies of social systems (e.g., macro/micro, agency/structure) by focusing on both the individual and society as represented in social practices that are considered temporally and spatially. Hence, the influence of structure and agency are treated equally (Giddens, 1984). As originally conceived by Giddens, structuration theory provides an explanation of structures as rules and resources which are organized as properties of social systems (Scott, Corman, & Cheney, 1998). Behavior is conceived of as constrained and enabled by structures which are, in turn, produced and reproduced by that behavior. It is the repeated behavior that reproduces the structure. This approach is similar to others developed from Giddens' (1991) foundational work (Cheney, 1983a; Cheney & Tompkins, 1987; Ellis & Miller, 1993). For structuration theorists, social structure is neither permanent nor sacrosanct (Kasperson, 1995). Based on this understanding, social structure is instantiated, modified, and recreated in interaction, or as Weick (1983, p. 60) notes: "People in organizations repeatedly impose that which they later claim imposes on them."

Structuration has been affirmed as interpretive study of organizational culture (Riley, 1983), as solution for the critiques of systems/networks theories (Monge & Eisenberg, 1987), and as having potential for studying organizational symbolism (Conrad & Haynes, 2001). It has been used to aid understanding of small group

development (Poole, Seibold, & McPhee, 1996), organizational climate (Poole & McPhee, 1983), group decision making (Poole & DeSanctis, 1992; Poole & McPhee, 1983; Poole, Seibold, & McPhee, 1996), and emergent communication genres on the world-wide web (Crowston & Williams, 1996). Conrad and Haynes (2001) further maintain that this communication-centered approach is ideal for studying social action in organizations (p. 57). However, it is the research program of Cheney and colleagues that warrants the use of structuration theory in this study.

Using structuration theory, Scott, Corman and Cheney (1998) argue that the process of attachment (identification) is symbolic; individuals, as well as the contexts in which they act, serve as agents in shaping the process. Thus, Scott et al. (1998) propose a model incorporating concepts related to this duality of structure and to the situated nature of identities. Duality of structure refers to the process whereby individuals, through communication, both produce and are produced (mediated) by structure. Structure, in turn, refers to available resources and rules which people use to inform behavior, which may result from behavior they themselves previously enacted. As an example, Scott et al. (1998) note that symbols are meaningfully arranged through procedures that guide language use, and language use shapes the procedures on which future communication depends. Situated activities explain how certain identities may be more salient based on the situation (Berger & Luckmann, 1966; Pittam, 1999). This dynamic approach to identification has been suggested by a number of scholars as well (Ashforth & Humphrey, 1993; Ashforth & Johnson, 2001; Cheney, 1983a; Larson & Pepper, 2003; Scott, 1999; Scott & Stephens, 2005); even the earlier work of Ashforth and Mael (1989) resulted in their conclusion that relevant settings activate particular identities. This

situated-action view is especially useful in conceptualizing identification in the remote setting, and in guiding research questions related to salience of identification targets.

Consistent with these last conceptions and with a constructivist view (O'Keefe, Delia, & O'Keefe, 1980; O'Keefe & Lambert, 1995), this study approaches organizational identification as a dynamic construct, shaped by individuals using previously developed interpretations and adapting them in conversation. Thus, identifications are changing and context-dependent. The relational, co-constructed nature of identity suggests that interpersonal communication also plays a significant and ongoing role in its formation, change and maintenance (Metz & Westenholz, 2003; Scott & Stephens, 2005). Structuration, then, has provided a theoretical basis for a view of identification that both shapes and is shaped by communication. Constructivism provides a way to add to the development of this linkage of structuration and identification such that the issues of interest can be studied and understood from a communication perspective.

### *Theoretical Summary*

Everyday, informal interaction is taken up in the present study as essential to both organizational and individual activity. The practical tasks and activities that comprise work require the basic communication process of coordination (Cronen, Pearce, & Harris, 1982). Thus, it is through coordination that activity can occur. That is, when people communicate, they develop shared interpretive structures that enable them to coordinate and that build a shared meaning system (Delia, O'Keefe, & O'Keefe, 1982; Grossberg, 1982). Yet informal communication practices have been largely ignored, although talk referred to as “small” is anything but trivial (Coupland, 2003). The next section reviews the literature on informal communication in organizations.

### *Informal Communication in Organizations*

Informal communication has been broadly described as the social glue of the workplace, but few empirical studies on its effects have been conducted within organizations, and none in the remote context. Existing research in the co-located setting provides a base from which to define and examine informal communication in the remote context. Informal communication is defined here as voluntary talk that is not necessarily directly task-related. This definition arises from Johnson's (1994) work on differences in formal and informal channels and compliments similar conceptualizations in the literature (Bordia, DiFonzo, & Chang, 1999; C. Conrad & Poole, 2002; Crampton, 1998; Lievrouw & Finn, 1996). Definitions for selected types of informal communication appear within the subsection for each one: inclusion messages, casual chat, and social support. This section also includes literature pertaining to the rationale for studying informal communication between only equal-status peers.

The importance of everyday, or informal, communication in organizations (co-located employees) is often emphasized (Bultes, 2002; Coupland, 2003; Feldman & March, 1981; Tracy & Naughton, 2001) but remains understudied (Ray & Miller, 1994). From Blau's (2000) identification of informal "relations" as one of two essential integrative processes ongoing in organizations (J. D. Johnson, Donohue, & Johnson, 1994) to the widespread acknowledgement of the central role such communication plays in meeting a variety of employee needs (Ray & Miller, 1994), informal communication is recognized as a basic part of organizational life.

It is perhaps because informal types of communication are often glossed as a common and rather benign occurrence that specific informal communication practices



have not been clearly articulated in co-located contexts, much less in remote contexts. As a joint activity with structure and function, informal talk should not be dismissed as unimportant to either individuals or to organizations. Through such talk, people establish the commonalities of understanding essential to achieving coordination. It is even argued that informal interaction may be a primary means by which common ground is established (C. Conrad & Poole, 1997; Cronen, Pearce, & Changsheng, 1989/90), through which work is accomplished, (C. Conrad & Poole, 1997; Poole, 1999) and through which employees form meaningful interpersonal relationships (Duck, 1993).

Research on personal social *networks* within organizations, also shows that the worker-constructed group is where the work is getting done: “. . . the most fundamental unit of analysis for computer-supported cooperative work is not at the group level for many tasks and settings, but at the individual level as personal social networks come to be more and more important” (Nardi, Whittaker, & Schwarz, 2002, p.1) . Informal communication networks help make up for weaknesses in formal communication (Poole, 2002), and improve decision making and encourage innovation (Albrecht & Hall, 1991; Albrecht & Ropp, 1984). Johnson and colleagues (1994) also posit that information communicated informally may be more accurate than that provided in formal communication channels.

#### *Informal Communication at Work: Findings*

Like informal networks and relationships, informal communication serves both organizations and individuals in critical ways (Tschan, Semmer, & Inversin, 2004), including the instantiation of the relationships themselves. Because this research project hypothesizes that informal communication plays a key role in providing a sense of

connectedness between remote employees and their organizations which may be tied to important outcomes, what is known about informal communication is reviewed next.

Research has shown that it is through informal means that people make strong connections (Duck & Miell, 1986) *and* get the work done. Communication helps people create what they observe about their environment and how they evaluate it (Chen, Wigans, & Nilan, 1999; Tracy, 2002; Tracy & Naughton, 2001; Weick, 1979).

Informal communication has also been shown to serve direct and buffering effects against organizational stress (Ray & Miller, 1994), influence turnover beliefs and behaviors (Burke & Moore, 2004) and clarify and reinforce underlying values, ‘thereby facilitating later problem solving’ (Gottlieb, 1981, p. 165). Similarly, Kraut et al. (1999) have demonstrated that a common context is created through informal interactions in group work; this common context facilitates coordination and planning. They further suggest that the characteristics of formal communication (e.g., pre-set agendas) can lead to “impoverished” content as compared to informal communication.

At least one study has demonstrated that lack of informal communication is detrimental to organizations and individuals: Cheney’s (2001) study of the Mondragon worker-cooperative complex, conducted over a period of several years in the 1980s. In its quest for continual improvement, the Mondragon cooperative experienced a breakdown in informal group relations, “...the ones that existed, for example, over lunch, in the break room, after work” p. 145. Cheney found that people in every entity of the cooperative network experienced a sense of distance between their individual shops and the cooperative’s offices, prompting him to suggest that management provide work forums for “the informal exchange of ideas and for general relationship building” (p. 146).

Because it serves to build and solidify relationships (Tracy, 2002) and often plays a role in providing a sense of connectedness and belonging (Waldron, 2003), informal communication may play an even bigger role in the remote context. Some studies and business press pieces have suggested that managers can use technology to help remote employees feel attached to the organization (Morgan & Symon, 2002). O'Sullivan, Hunt and Lippert (2004) showed that this sense of psychological closeness can be fostered through the use of CMC. Defining psychological closeness as *immediacy*, O'Sullivan and colleagues conducted a series of studies using various immediacy cues, or a "language of affiliation", within a learning web site. O'Sullivan et al. (2004) found that all participants mentioned that mediated cues functioned the same as face-to-face cues in creating a sense of closeness. They developed two macro categories, *approachability* and *regard for other*, based on cues identified by focus groups. For example, approachability was considered to be conveyed through such behaviors as the use of slang, vocal inflection, displaying photos portraying experiences outside of the office and sharing jokes. Regard for other was reflected in behaviors such as inviting future interaction and returning phone and e-mail messages. O'Sullivan et al. assigned 95 student participants to one of two learning web sites, one including immediacy cues and one not using immediacy cues. Those viewing the immediacy cues site reported reduced uncertainty and higher affective learning than those viewing the site with fewer such cues. A third study then tested which specific cues were more effective than others, by manipulating linguistic immediacy elements such as less formal language and use of punctuation. O'Sullivan et al. found that linguistic immediacy produced a main effect on the dependent variables of attitude toward the course, perception of instructor and instructor credibility; no effect was found

on motivation to take the course. They concluded that immediacy, and thus a sense of affiliation and closeness, can be communicated via mediated channels. Given that isolation is a central challenge in the remote context, helping remote employees feel this affiliation and closeness with their organizations is especially important.

Although the O'Sullivan et al. (2004) study suggests that distance can be bridged and feelings of closeness obtained using CMC, their work did not specifically examine teleworker interaction. Only one study examining informal interaction among teleworkers was found. In their study on teleworkers and organizational identification, Wiesenfeld et al. (2001) found that teleworkers who engaged in more informal interaction with their home-office colleagues identified more strongly with the organization. Similarly, Elsdon (2003) has included reduced contact and communication with others in his definition of social isolation. Frequency of personal interactions at work has been positively associated with familiarity with colleagues (Tschan, Semmer, & Inversin, 2004), and with adjustment of geographically transferred individuals (Kramer, Brewer, & Hanna, 1996). Finally, Morgan and Symon (2002) have argued that accretion over multiple encounters gives connection to the organization.

In summary, findings in this area provide evidence that informal communication is one of the means by which people establish the common ground that is necessary to understand one another and that facilitates coordination and planning. Informal communication provides important connections that help people get work done and that increases innovation and problem solving. The literature generally suggests that teleworkers who communicate informally feel less isolated (Mallia & Ferris, 2000) and may be more committed to the organization as a result (Illegems & Verbeke, 2004); one

study has demonstrated a positive correlation between informal communication frequency and organizational identification. However, specific communication practices and findings remain to be established.

To begin to fill this gap in the literature, the present study examines the specific informal communication practices of inclusion messages, casual talk and social support. Each of these is defined and related research is described in the following sections.

#### *Inclusion Messages and Felt Inclusion*

Researchers have argued that informal communication may reduce remote worker feelings of isolation (Mallis & Ferris, 2000) and increase their identification with the organization (Wiesenfeld, Raghura, & Garud, 2001). Thus, informal communication in general may affect a global feeling of inclusion. However, particular communication practices may function more specifically to engender remote workers' perceptions of belonging. Accordingly, inclusion messages may be thought of first as a subset of informal communication.

Some time ago, Schutz (1966) argued that people have three primary needs in their interpersonal relationships: inclusion, affection and control. Inclusion is a feeling of mutual interest between people, which includes one's accessibility to, and relationship establishment with, others, or as "the need to establish and maintain satisfactory relationships with people with respect to interaction and association" (Schutz, 1966, p. 18). Inclusion-exclusion has been identified as one of 12 conceptually distinct dimensions that comprise essential relationship-defining message themes (Burgoon & Hale, 1984). For the purposes of this study, inclusion is defined as the perception of being a part of, or belonging to, a larger group. The related construct of affiliation, (with its

polar value, detachment), has been used to refer to behaviors that serve to reduce distance (physical or psychological) between people. Thus, research on affiliation is also covered.

Drawing from sociological literature on social capital, Pearce and Randel (2004) developed a similar concept called workplace social inclusion, defined as "...the extent to which employees have ties with others at work and feel as if they belong and are socially included with others in their workplace" (p. 84). Based on questionnaire results from employees at two different organizations, they found a significant positive relationship between workplace social inclusion and employee job performance, suggesting an important benefit of social inclusion for both individuals and organizations.

Such studies support the importance of felt inclusion, but do not examine how inclusion is experienced. If attitudes and perceptions are socially constructed (Berger & Luckmann, 1966; Salancik & Pfeffer, 1978), it is reasonable to argue that certain kinds of talk can result in feelings of inclusion. For example, Holmes (2003) proposes that the construction, maintenance and reinforcement of solidarity and social relationships between co-workers is the most fundamental function of small talk.

The body of literature on linguistic practices and group membership offers some insight for the telework context, in that it suggests that language that expresses similarity rather than an assumed understanding of another's differences may be preferable if the goal is to encourage feelings of inclusion. In other words, co-located employees who use messages that convey otherness to remote workers may impart a feeling of out-group status to remote workers.

Identification may also be linked to ways of speaking that convey feelings of inclusion. For example, Banks (1987) noted that technical language involved in certain

occupations may mark speech patterns and norms for communicating. He also found that individuals sometimes changed their style of conversation to fit what they perceived to be the management culture in order to advance professionally. These studies indicate that the role of context might be important when examining communication.

Finally, inclusion has been studied with regard to in- and out-groups, by focusing on whether a person is invited into a group or left out of it within the parameters of an event. If an event can be considered roughly equivalent to an interaction that takes place between a remote employee and a co-located peer, then a sensible approach to studying interaction is to simply ask remote employees to recall and relate an interaction in which they felt more or less included in the general employee group. Sunwolf and Leets (2004) took this approach, using a bona fide groups perspective (L. Putnam & Stohl, 1996) to study childhood and adolescent peer group rejection events. They asked young people to relate social dilemmas dealing with people being left out, conducted a theme analysis of the open ended responses, and found the following behavior categories: ignoring, disqualifying, insulting, blaming, and changing the rules.

If a sense of inclusion is related to group membership and belonging, it is reasonable to argue that inclusion is also related to an individual's level of organizational identification. Researchers have argued that it is communication in the informal organizational structure that accomplishes shared identity (Gossett & Tompkins, 2001); thus, informal communication may also accomplish a sense of inclusion. Cheney's (1983a) suggestion that organizations encourage employees to identify with their colleagues through the use of inclusive language supports this idea. For example, the simple word "we" arose as one example of inclusive language in Cheney's (1991)

analysis of how a pastoral letter on war and peace developed among U.S. Catholic bishops. From a structuration perspective, identification is a product and process of social interaction; thus, social interaction that makes one feel like a part of something would seem to lead to identification as well. However, the communication practices and specific messages by which people acquire, develop and change their perceptions of inclusion—and organizational identification--has not been addressed.

In summary, inclusion is a basic human need (Schutz, 1966) that depends on negotiation and interaction with others. Sociologists have pointed out the importance of network connections, weak ties, and social capital (Burt, 1992; Granovetter, 1985; Knoke, 1999; Pfeffer & Salancik, 1978; Raider & Burt, 1996), and communication scholars have shown that the rhetoric constitutive of organizations (Cheney, 1991) is important to study because “all types of rhetoric involve some appeal to the identification (sic) of human beings,” (p 20). Being interactionally connected to one’s organization should, therefore, decrease feelings of isolation while strengthening ties to the organization. However, the specific messages that result in remote employees feeling included in their organizations have not been studied.

Informal communication that results in feelings of inclusion represents an understudied area of research that may be associated with the outcomes of interest in this study, but such communication in and of itself is not sufficient to account for the connections facilitating common ground that take place within everyday talk. A substantial category of informal communication may be subsumed within the next section on casual talk.



### *Casual Talk*

‘Casual talk’ is the term used in this study to refer specifically to the type of informal communication that includes small talk, gossip and rumor. Because researchers have not clearly defined differences between formal and informal communication, no precise conceptualization of what constitutes casual (let alone informal) talk has been formulated or widely accepted. This study takes casual talk to be any voluntary talk consisting of messages that satisfy interpersonal needs versus organizational or task needs; such talk may take place as part of a work-related conversation, and/or it may constitute the whole conversation. To further operationalize casual talk, I draw on activity theory (Leont'ev, 2002), considering casual talk to be an activity in and of itself, with the effect of developing new interactional patterns as the outcome of the activity (Kuutti, 1999). That is, the talk itself is the principle activity which connects individual actions to the collective activity (Engestrom, 1999). This approach takes up telework as the context in which the activity of casual talk occurs. Thus, casual talk between remote workers and their co-located colleagues may be seen as the interactional region in which certain interpersonal goals may be accomplished (Wells, 2002). Research on small talk, gossip and rumor provides the basis for this definition, as well as this study’s underlying premises, and is briefly reviewed in the following paragraphs.

‘Small talk’ has been defined in comparison to all other so-called ‘purposeful’ talk. Coupland (2003) refers to this distinction as an implied contract between small and “full” forms of talk, which carries assumptions about the importance of each. That is, because “full”, or more formal, talk is taken to be the site where ‘real’ or ‘useful’ work gets done, the sociality functions of small talk are marginalized as less important

(Coupland, 2003; Tracy, 2002; Tracy & Naughton, 2001). This is often cited as the reason researchers and practitioners have tended to consider small talk to be insignificant and sometimes negative, in the organizational setting. However, constructivism offers a different perspective, recognizing that, through such communication, people socially reconstruct their own realities. Further, this emergent process involves the context as well as the individual's processes of interpretation (Delia, O'Keefe, & O'Keefe, 1982). Research examining the functions of various forms of small talk reflects this attachment of importance to individual agency, and suggests a far larger and more important role for small talk in the workplace.

First, the notion that talk of all kinds has both task and social components is widely acknowledged (Coupland, 2003; Tracy, 2002; Tracy & Naughton, 2001). Second, all language has been described as having primary functions in meaning making: content, or idea expression; interpersonal, or relationship expression; and textual, or meaning enacted through the structure of the message itself (Halliday, 1979, cited from Coupland, 2003). Finally, researchers have argued that small talk helps structure social interaction, reduce uncertainty and bring about social cohesion (P. Brown & Levinson, 1987; Coupland, Coupland, & Robinson, 1992; Laver, 1975; Tannen, 1989). This suggests that small talk may be quite important in any context, yet little evidence exists to support such claims in the workplace.

Research on interaction among friends has shown that “superficial” conversation assumes a central role in the relationship, with “chat” often indicated when participants record interactions (Duck & Miell, 1986). Duck (1993), and Duck and Miell (1986), argue that routine interaction plays a central role in relationship development, and

provides reprieve and comfort from stress. However, even in this personal realm, researchers criticize the tendency to focus on the extraordinary (Duck, 1993; Duck, Rutt, Hurst, & Strejc, 1991; Goldsmith & Baxter, 1996), such that mundane, everyday talk remains understudied in the personal context as well.

Citing this gap in the research, Goldsmith and Baxter (1996) developed a taxonomy of 29 everyday speech events in interpersonal relationships based on a series of four diary studies. From these, they identified and tested 12 semantic differentials used by participants to help distinguish between the categories that resulted in a set of common event types that participants use to enact personal relationships. They then examined the frequency of these identified speech events and their occurrence in acquaintanceships, friendships, close friendships, nonmarital romantic relationships, marital, parent-child, sibling and other relationship types. Superficial (small talk) and informal (e.g., gossip, joking around, catching up) types of talk dominated all types of relationships, signaling their relative importance over categories such as formal, goal-directed talk. However, the specific kinds of superficial and informal talk differed based on the relationship type.

How small talk functions in the workplace has received even less attention than small talk within personal relationships outside of the workplace, and casual, everyday interaction among peers has not been studied in remote contexts at all. One large-scale study does address how co-workers interact: The New Zealand Foundation for Research, Science and Technology and the Eastern Institute of Technology collaborated to conduct the Wellington Language in the Workplace Project under the direction of Janet Holmes. Over a period of five years, a research team collected more than 1500 taped interactions and 500 hours of talk from workplaces including large and small commercial businesses,

factories and government agencies. Interaction duration ranged from 20-second exchanges to four-hour meetings, and included both task-related communication and social talk. Data from this project has been analyzed in a number of different studies, some of which are published in the 2003 special volume of *Research on Language and Social Interaction*.

Findings from this large-scale study support some general observations previously discussed. For example, Holmes and Marra (2004) studied taped interactions, finding that small talk was used to express friendliness, and to both construct and maintain relationships. Examining talk involving workers with mental challenges, Holmes (2003) also demonstrated that small talk functions to “do collegiality” (p. 66), or to create, maintain and develop positive workplace relationships, or co-worker solidarity. Holmes showed that the inability of mentally-challenged workers to master the intricacies of small talk resulted in others’ perceptions of their job incompetence, even when these workers, in fact, performed tasks well (Holmes, 2003). She also found that small talk usually takes place at interactional boundaries (such as at the beginning and end of work days and meetings), that small talk expands under certain conditions (such as when interactants know each other well, when they know nothing pressing awaits the other, or when they haven’t seen each other for longer periods of time), and that the ending time for small talk is often decided by the more senior person (Holmes, 2003).

Based on these findings, Holmes (2003) concluded that small talk is “the social glue of the workplace,” (p. 5), arguing that it is through such talk that people learn and continuously enact interaction norms of their organizations. Drawing on Gumperz (1997) and Brown and Levinson (1978), she posits that small talk is carefully tailored to context,

negotiated, and considerate of face needs through the accounting of “power and solidarity” relationships (p. 5). Given these results and the results of research on small talk in interpersonal relationships, casual talk is clearly important in the co-located setting, but it has not been taken up for study in the remote context.

Similar to definitions for casual talk, definitions for rumor and gossip tend to be general and vary based on characteristics or functions. Goldsmith’s (1989/90) analysis of gossip in five different cultures demonstrates how this one speech event is defined differently based on the community in which it is enacted. Gossip, however, is commonly recognized as “evaluative talk about absent others,” (p. 185). Definitions from the literature reveal that both rumor and gossip are conceptualized as informal types of communication.

Michelson and Mouly (2000) define rumor and gossip as spontaneous, usually unplanned and topical; Kimmel (2004) additionally notes that rumor is informal communication with no factual certainty, whereas gossip is idle conversation which may or may not be factual. Shibutani (1966) also defines rumor based on informality, and Allport and Postman (1965) characterize rumor as unconfirmed and lacking evidence. Gossip has been described as more amorphous and superfluous than rumor and is often identified by the context in which it occurs (Kimmel, 2004). As one such context, the grapevine at work has been shown to serve a number of important functions: (a) it helps employees manage uncertainty effectively; (b) it creates a venue for interaction that reinforces the feeling that others feel the same (thereby decreasing anxiety); (c) it validates claims; (d) it provides an opportunity for venting; and (e) it provides social and emotional benefits (Kimmel, 2004) that enhance job satisfaction and group cohesiveness

(p. 204). Thus Kimmel's work suggests that gossip may be an important form of casual talk to remote workers in that it often conveys and/or demands a sort of relatedness among participants.

Rumor and gossip may appear with relative frequency in the literature because many employers believe such talk is inherently negative (Goldsmith, 1989/90; Jaeger, Skleder, Rind, & Rosnow, 1994; Kimmel, 2004; Michelson & Mouly, 2000). Researchers have generally argued that gossip functions in a variety of ways (Jaeger, Skleder, Rind, & Rosnow, 1994; Michelson & Mouly, 2002; Spacks, 1985). For example, Noon and Delbridge (1993) assigned gossip the role of preserving and perpetuating the organization and more: "It can communicate rules, values and morals; it facilitates the diffusion of organizational tradition and history; and it maintains the exclusivity of the group" (p. 33). Because gossip functions in group-oriented ways, research on interpersonal relationships and gossip is perhaps relevant in the organizational setting. For example, Spacks' (1985) notion that gossip "helps to define the relationships of its objects to their community" (p. 261) and his contention that gossip defines and affirms group values and membership suggest a possible role in ameliorating isolation. Spacks (1985) argues that gossip functions to engender a feeling of belonging, and Jaeger and colleagues (1994) contend that it serves to build, enhance or maintain group cohesiveness, to clarify confusing issues, to entertain and to relax.

In summary, researchers have long argued for the importance of casual talk in the organizational setting (C. Conrad & Poole, 2002; Crampton, 1998; J. D. Johnson, Donohue, & Johnson, 1994; Noon & Delbridge, 1993), but only a few empirical studies provide evidence, and these include only co-located workers. Research on small talk,

gossip and rumor in the co-located workplace provide evidence that these informal communication types perform important functions for interpersonal as well as work relationships, including reducing uncertainty, facilitating social cohesion, maintaining relationships and alleviating stress. Through casual chat, organizational members learn and recreate interactional norms. Finally, and perhaps most importantly to this project, casual chat serves a validation role and conveys relatedness.

As a site for accomplishing some interpersonal goals, casual chat represents an important area to study. However, casual chat does not completely capture communication perceived to be supportive. Given that remote contexts present a unique set of challenges, supportive communication may assume greater significance to those working at a distance and is therefore also included in the present study.

### *Social Support*

In addition to general sociability functions, informal communication often serves as social support (B. R. Burleson, 1984; B. R. Burleson & MacGeorge, 2002). Supportive communication is defined as “verbal and nonverbal behavior produced with the intention of providing assistance to others” (B. R. Burleson & MacGeorge, 2002). Burleson and MacGeorge’s (2000) work defines effective features of supportive messages as containing supportive intentions, politeness and facework, informative message content and person-centered message quality.

The literature on supportive communication draws from the larger traditional study of social support, a more global conception that centers on perceived availability of supportive acts and/or individuals’ involvement in social roles. (For a comprehensive review of this literature, see Burleson and MacGeorge, 2000.) The interactional nature of

social support was not always apparent (Newcomb, 1990), perhaps because most of the early development related to health and the reduction of stress (Albrecht & Goldsmith, 2003). Gottleib (1985) notes that early social support studies defined the concept also as social integration, social attachment and prosocial resources; consequently, support was not studied as a process, but as a means to an end (good health).

There is broad agreement that it is in the course of interaction that supportive messages are produced, and that characteristics of these interactions influence such messages (B. R. Burleson & MacGeorge, 2002). Burleson and MacGeorge (2002) use these findings as evidence that supportive messages should be “examined and understood within the context of these interactions,” (p. 404). Taking this direction, this study seeks to examine peer support in the context of remote work.

Although most studies on social support focus on intimate relationships, Sarason and Sarason (1986) showed that supportive messages improve performance on problem-solving tasks in non-intimate relationships. Tardy (1992) has also found that support messages from non-intimate others can affect performance, and supportive messages at work have been shown to enhance satisfaction in life in general (Sias, Krone, & Jablin, 2002). Duck (1990), however, brought social support into the day-to-day communication in personal and social relationships.

*Workplace support.* Fewer studies have focused on social support within organizational contexts (Monge & Contractor, 2001), even though high levels of social support have been shown to facilitate a number of positive outcomes. These include innovation (Albrecht & Hall, 1991; Albrecht & Ropp, 1984), reduced uncertainty and enhanced control, such as when an employee changes a job or the organization undergoes



a transition (Albrecht & Halsey, 1991), enhanced satisfaction in work (Cummins, 1989; Hurlbert, 1991), and improved task performance (Tardy, 1992). Finally, social support has been shown to have positive direct effects on organizational members who have experienced stress or burnout (Albrecht, Burleson, & Goldsmith, 1994).

The research program of Albrecht, Adelman and colleagues (Albrecht & Adelman, 1987; Albrecht & Goldsmith, 2003; Albrecht & Hall, 1991; Albrecht & Ropp, 1984) has produced perhaps the largest body of work on supportive interaction in the workplace to date. In the work setting, Albrecht and Adelman (1987) define supportive interaction as a process of reducing uncertainty and enhancing personal control. This conception was influenced by earlier psychological approaches, which were primarily based on a model developed by J. House in 1981 (B. R. Burleson & Macgeorge, 2002). This model delineated features of social support as follows: Instrumental, or the provision of tangible assistance or materials; Informational, or the provision of information one needs to act or make a decision; Appraisal, or the provision of useful and accurate feedback about one's actions; and Emotional, or reassurance, expressions of concern, caring or understanding about what one is experiencing.

Albrecht and Adelman (1987) have described five features of supportive interactions, as follows: First, supportive messages work to create shifts in perspectives that help one to view desired goals as more attainable, negative effects as more avoidable, and attainable and unattainable goals as more and less desirable, respectively. Supportive messages also help others acquire necessary skills, and acquire tangible aid. Fourth, social support helps restore one's confidence by providing reassurance and/or acceptance, and fifth, social support allows people to vent their feelings. Finally, Albrecht and

Adelman have pointed out a number of risks associated with social support, such as being judged negatively, violating one's privacy and getting bad advice.

Researchers have primarily studied social support among supervisors and subordinates (Apker & Ray, 2003; B. R. Burleson & Macgeorge, 2002; Ray, 1987; Zimmerman & Applegate, 1994). In this work, high levels of support have been associated with high levels of trust between supervisors and subordinates in service-oriented organizations (Albrecht & Halsey, 1991), and lower levels of burnout among subordinates (Ray, 1987; Ray & Miller, 1994). Researchers who have also addressed social support among work friends have shown that workplace friendships are an important source of social support (Sias & Cahill, 1998), but that proximity and shared socializing characterize these relationships. Finally, Albrecht and colleagues (Albrecht & Adelman, 1987; Albrecht & Hall, 1991; Albrecht & Ropp, 1984) have shown that innovation, or talk about new ideas, is facilitated by, and instantiated through, personal relationships with colleagues versus hierarchically-defined channels or role relationships.

Supportive *communication* in the workplace has been linked to the development of social capital (Lesser, 2001), defined by Stohl and Cheney (2001) as “those connections that foster reciprocity, engender new competencies and skills, enhance collective action, enlist social support and broaden and enrich social identities” (p. 376). At least one study has shown that social integration of co-workers outside of the workplace is linked with job satisfaction. Hurlbert (1991) found that employees whose social contacts outside of work consist mainly of co-workers reported the highest levels of job satisfaction.

Social support has been related to an “overall sense of identity” through social interactions that provide people with a feeling of attachment to a person or group (Hobfoll, Freedy, Lane, & Geller, 1990). Hobfoll and his colleagues (1990) proposed a model in which social support is conceptualized as a resource and an integral part of individual identity; the motivation to maintain support, then, would be to meet individual needs and manage individual identity. Thus, social support “serves both an instrumental function and a self-defining function necessary to insure a stable sense of self,” (p. 467).

*Work peers and support.* Myers, Knox, Pawlowski and Ropog (1999) used supportive communication as one way to distinguish between type of colleague in the workplace, using information, *collegial* and *special* peer types to compare communication openness and functional communication skills in workplace relationships. Questionnaire responses from 138 organizational members showed that information peers primarily interacted to share information about work tasks and the organization in general, with little emotional support or personal exchange. Collegial peers interacted to provide job-relevant information and to share work and family issues, and were characterized by emotional support, moderate closeness, and more intimate communication than information peers. Finally, special peers provided each other with social confirmation and emotional support and enjoyed the highest level of closeness.

General research findings on peer relationships in organizations show that, more than supervisor/subordinate relationships, peer relationships are characterized by higher levels of trust and self-disclosure (Sias & Cahill, 1998), serve as sources of information not provided from other organizational members, are more adaptive and intimate, and last longer (Kram & Isabella, 1985). Research also shows that, as peer relationships develop,

communication about work *and* non-work issues increases (Sias & Cahill, 1998). Peer relationships positively correlate with job satisfaction and productivity (Hurlbert, 1991) and are usually distinguished by more interactions than characterizes supervisor/subordinate communication (Kram & Isabella, 1985).

Distinguishing communication based on interactants is important for several reasons. First, if outcomes are considered as emergent, then outcomes are implicitly also conceptualized as varying based on with whom one interacts. For example, Scott and Stephens (2005) argue that one's interaction partners may greatly influence the sense of identification experienced at key moments in the organization. In addition, Cheney, Christiansen, Zorn and Ganesh (2004) contend that most people interact with co-workers more often than with supervisors. Yet supervisor/subordinate communication research has far outpaced peer communication research (Ferres, Connell, & Travaglione, 2004).

*Remote work and support.* Only one study to date has examined social support in the remote context. Wiesenfeld et al. (2001) suggested that co-workers with whom remote workers interact may come to personify the organization, given an overall lack of communication with the overall organization imposed by physical distance and the removal of visual cues. Conducting field studies of virtual work practices and semi-structured interviews, they developed and tested a survey prior to administering it to employees participating in a mandatory virtual work program initiated six months earlier by their technology firm. Using a scale with endpoints of 'supportive' (7) and unsupportive (1), they measured social support by asking participants to indicate how much friendship and support they felt they received from peers, their direct supervisor

and upper management, then summed the three to create an overall index. They found that perceived support was positively correlated with organizational identification.

Similarly, Wiesenfeld et al. (2001) found a significant main effect for perceived work-based social support and strength of organizational identification among their sample of 250. They also found a significant effect for the interaction of need for affiliation and perceived support ( $p < .01$ ). However, among remote workers with a high need for affiliation, high organizational identification was reported even when perceived support was low. Conversely, those scoring low in need for affiliation, reported stronger organizational identification when social support was perceived to be high.

Social support may be especially important in the remote setting, where a lack of integration may result in feeling isolated. For example, Thoits (1986) argues that the direct effect of social support develops from positive information gleaned from the ongoing relationships that condition people's perceptions of belonging (covert support). Such relationships are part of the social networks within which social identities are embedded (Hirsch, 1981). The integrity of these identities depends on interactant recognition of them. Thus, the ability to deal effectively with stressful situations and change may depend on the extent to which the newly emerging identities are recognized by others in the network. DuCharme and Martin (2000) maintain that the extent to which support provision is a structural part of work roles is the critical issue in assessing its effect on the integration of individuals into the workplace, as well as other social settings.

In summary, research on social support in the remote context is limited to one study, which found somewhat unusual results, i.e., remote workers reporting a high need for affiliation had high levels of organizational identification even when perceived

support was low; however, those with lower need for affiliation reported stronger organizational identification when social support was perceived to be high. Such results point out the need for additional research. However, the literature on social support in other settings has shown that support functions in ways that may be directly related to the challenges remote workers face. These include reducing uncertainty, providing a sense of belonging and connection, enhancing job satisfaction, encouraging innovation and integration. Hence, social support may be especially important in the remote setting, where the reported feeling of isolation may be the result of lack of the integration that social support provides.

The next section addresses organizational identification as well as the outcomes of commitment and job satisfaction.

#### *Organizational Identification, Commitment and Job Satisfaction*

The concepts of organizational identification, commitment and job satisfaction are among the most widely studied outcomes in organizational literature. Organizational identification has been considered to be both a product of interaction, and correlated with job satisfaction and commitment (Cheney, Christensen, & Larson, 2001). The present study takes the position that the process of identification is made possible through communication, and is associated with higher levels of commitment and job satisfaction. A detailed literature review on any one of these constructs is beyond the scope of this project; however, the next section provides background literature on each one in relation to telework.

### *Organizational Identification*

Organizational identification has been linked with a large number of other variables that impact individuals and organizations. This study approaches organizational identification as a dynamic construct that is instantiated through verbal and nonverbal communication. Because remote workers communicate differently than those who physically work together, identification is a key construct to measure. This section begins with a review of scholarly conceptions of organizational identification and identification as an individual's relationship to the collective organization. Literature on the antecedents, correlates and consequences of identification is summarized, followed by literature specific to communication and identification. Finally, research on organizational identification and remote workers is reviewed.

*Definition.* Organizational identification has been viewed as the “process by which the goals of the organization and those of the individual become increasingly integrated or congruent” (Hall & Schneider, 1972, p. 176; Hall, Schneider, & Nygren, 1970). Scholars have also described identification as both what employees perceive to be distinctive, lasting and vital about the company and how they perceive that outsiders view their company's identification (Dutton & Dukerich, 1994). Identity is viewed as a discursive production (Hogg, Abrams, Otten, & Hinkle, 2004; Larson & Pepper, 2003; Scott, Corman, & Cheney, 1998), as shaped by activity patterns (Kuhn & Nelson, 2002), and as “a process of attachment and a product of that process” (Scott, Corman, & Cheney, 1998).

As put forth by Cheney and Tompkins (1987) “Identity ... is a term that is commonly used to represent an individual or group; identification is the process by which

identity is appropriated,” (p. 19). In his case study of the National Conference of Catholic Bishops, Cheney draws on Burke’s conception of identification and divergent identities. Burke viewed identification and identities as integrative and dynamic versus more traditional conceptions of the two as dichotomous and confining (vii). Burke’s conception informed Cheney’s later development of the Organizational Identification Questionnaire. Cheney (1983a; Cheney, 1983b) viewed identification as an active process by which individuals define themselves in terms of their social/organizational setting (Cheney, Christensen, & Larson, 2001). Thus, identification involves an interplay between personal identity and organizational behavior, as illustrated in Dutton and Dukerich’s (1994) case study of the New York Port Authority. Finally, identification processes have been viewed as ongoing and in flux because interpretations and evaluations of people’s experiences affirm or disconfirm their identities with organizations (Eisenberg, 2001).

Mael and Ashforth (1995) argue that identification is the perception of belongingness to a group classification. Pratt (1998) asserts that identification happens when “an individual’s beliefs about his or her organization become self-referential or self-defining” (p. 172). One ramification of this view is that organizations may be able to “manage” identification by changing members’ self-concepts (Pratt & Foreman, 2000). Such conceptions of identification imply a cognitive construct that develops over time into a relatively stable and enduring idea (Albert & Whetten, 1985; Dutton & Dukerich, 1991), and that interaction is not necessary for the formation of identification (Kuhn & Nelson, 2002). Others have viewed identity and identification as “adaptively unstable,” (Gioia, 1986) and emergent (Chen, Wigans, & Nilan, 1999; Weick, 1983), dynamic and multifaceted, and as requiring interaction for its existence.



Research on individual and organizational identity/identification suggests a number of parallels between the two constructs. Social identity theory (SIT) (Hogg, Abrams, Otten, & Hinkle, 2004; Tajfel & Turner, 1985) has perhaps spawned the most research related to this dichotomy (Pratt & Foreman, 2000). Social identity theory (SIT) holds that people have multiple layers of self that include an individual identity and a variety of social identities (Tajfel & Turner, 1985). The self is internalized through a social identity; these identities represent shared conceptions of the characteristics that define social structures with which people identify. Thus, individual identity is a source for individual expression and is a feature of social or organizational structures, and identification is a process shaped by expression (Kuhn & Nelson, 2002).

*Identification antecedents, correlates and consequences.* While organizational identification is important for individuals, researchers have become increasingly aware of the primacy of social group membership to work behavior (Cheney, 1983a; Ellemers, 2001; Ellemers, Haslam, Platow, & van Knippenberg, 2003). Researchers consistently identify three conditions that enhance identification in traditional organizations: a) The organization is distinctive, such that employees can separate it from other organizations; b) perceived differences between one's organization and others are salient and valued; and c) inter-organizational competition exists (Pratt, 2001).

Extensive research has established a variety of connections between organizational identification and both antecedents and outcomes. Kinicki et al. (2002) identified organizational commitment, work and non-work perceived stress, poor health symptoms, job involvement and life satisfaction as correlates of organizational identification. Researchers have also linked higher levels of organizational identification

with the extent of contact with the organization (Bullis & Bach, 1991; Wiesenfeld, Raghura, & Garud, 2001), the visibility of membership in the organization (Gainey, Kelley, & Hill, 1999), and the extent to which the organizational identity enhances members' self-distinctiveness (Ashforth & Mael, 1989; Dutton & Dukerich, 1991). For example, O'Reilly and Chapman (1986) found that university tenure and degree of pride and ownership were positively correlated.

Identification has also been positively correlated with prosocial and citizenship behaviors (C. A. O'Reilly & Caldwell, 1980), satisfaction with the organization, organizational reputation, frequency of contact and visibility of affiliation (Ashforth & Humphrey, 1993; Dutton & Dukerich, 1991), and satisfaction of higher order needs (Hall, Schneider, & Nygren, 1970). In keeping with the findings connecting prosocial behavior and identification, Tompkins and Cheney (1983) assert that one consequence of identification is that individuals base decisions on what they believe to be in the best interest of the organization. Studies also show that employees who identify strongly with their organizations use similar adjectives to describe themselves and the organization (Dutton & Dukerich, 1994) and report lower intentions to leave (Meyer & Allen, 1997; C. A. O'Reilly & Caldwell, 1980), increased length of service (Kramer, 1991) and higher productivity and job satisfaction (Cheney & Tompkins, 1987; Hurlbert, 1991; Mathieu, Hofmann, & Farr, 1993).

*Identification and communication.* Less work has focused on identification and communication processes. One recent study has examined the role of informal communication and shared social identity, but as separate parts of a negotiation: Blind (2004) showed that shared cognition and shared social identity improved a negotiator's

ability to reach integrative solutions *when interactants communicated about other topics prior to negotiating* (emphasis mine). In their recent review of literature on telecommuting and organizational identity, Thatcher and Zhu (2006) have argued that telecommuters' work-related identities are challenged in that reduced presence, visibility and face-to-face communication opportunities affect the self-verification processes involved in the process of conveying one's identity. They cite only two working papers that directly address the communicative aspects of identity (Bartel, 2004, and Bartel, Wrzesniewski & Wiesenfeld, 2004, from Thatcher & Zhu, 2006).

Nonverbal communication has been identified as a resource for constructing identities, although it has not been directly examined in association with identification. Research in co-located settings has shown that physical identity markers, such as award plaques and inspirational posters are interpreted as cues of workplace colleagues' status and rank, distinctive abilities and work ideals (Cahill & Sias, 1997; Sproull & Kiesler, 1986; Tanis & Postmes, 2003). Feldman and Rafaeli (2002) find that organizational routines are also sources of connectedness and belonging.

*Identification and remote workers.* In the absence of physical cues, which are sources for developing and sustaining values, cultures, attitudes and norms, remote workers must rely more heavily on communication to develop shared meanings leading to one's organizational identification (DeSanctis & Monge, 1998). In the only work to date on identification and remote workers, Wiesenfeld et al. (2001) linked communication theoretically to organizational identification through employee attitudes. They conducted a field study of 250 remote workers, and found that workers' need for

affiliation was positively correlated with identification. However, perceived social support attenuated this relationship. They concluded that individual cognitive differences were an important part of identification that remains understudied, yet their own results suggest that identification is more accurately conceived as a dynamic communicative process.

Changes in organizational forms (including distributed networks) parallel a renewed focus on sources of identification in the literature, and the idea of varying and multiple sources for identification has been taken up by a number of scholars (Larson & Pepper, 2003; Scott, 1997). In co-located contexts, Brown (1969) found that having fewer competing objects of identity (e.g., task groups, committees) was associated with higher levels of organizational identification. In the remote context, Scott (1997) suggests that distal employees may view clients to be as salient an identification target as is the organization itself. Indeed, Panteli (2003) argues that one important practice that virtual workers engage in is defining their organizational identifications based on multiple situations in which they act. Thus, one situation may call for the virtual worker to create an image of a physically bounded organization to (for example) a client, and another may more effectively be presented managed by presenting a boundary-less image. She contends that in some cases individuals work to maintain a traditional image of a bounded organization because it is the model with which clients are most familiar (p. 88). This fluid conception of identification echoes Hagstrom and Wertsch's (2004) suggestion that identification may be more usefully conceived of as a verb. If remote employees are faced with the need to create and/or maintain a company identification for their clients, as Pantelli's work has shown, the importance of their own clear sense of identification

becomes even more critical. In a longitudinal case study of a telecom operator shifting from a traditional bureaucracy to strategic partnership units, van Marrewijk (2003) found that individuals had difficulty constructing an organizational identity. He found that the ambiguous contexts stemming from an employees' lack of clarity about their own membership status made the process of organizational identification more difficult.

Organizational identification is one of the most widely studied outcomes in organizations. Research specifically related to identification and communication has shown that both verbal and nonverbal communication are important resources for creating and maintaining organizational identification

### *Commitment*

In a review of various conceptions of commitment, Meyer and Allen (1997) noted that three overall themes were commonly reflected in the definitions: 1) an affective orientation toward the organization; 2) a recognition of the costs that would accompany leaving the organization; and 3) a moral obligation to stay with the employing organization. Thus, commitment may be defined as having three components. Affective commitment describes an individual's identification with, involvement in and emotional attachment to the employing organization. Continuance commitment refers to the awareness of the cost of leaving, and normative commitment reflects feelings of obligation.

Given that both identification and commitment have been used to define each other, it is perhaps not surprising that the concepts are not clearly delineated in the literature. For example, commitment (Ellemers, Haslam, Platow, & van Knippenberg, 2003) has been viewed variously as an outgrowth of identification (Ashforth & Mael,

1989), as individual level outcome largely motivated by individual differences (Mathieu & Zajac, 1990), and as behaviorally related to an individual's intention to stay with the organization (Rousseau, 1997). Meyer and Allen (1997) suggest that identification might be viewed as a mechanism by which commitment develops.

Hogg, Terry and White (1995) and Hunt and Morgan (1994) believe that there are three behaviors that describe commitment: (a) a desire to maintain organizational membership; (b) a belief in and acceptance of the organization's goals; and (c) a willingness to put forth effort for the good of the organization. All of these concepts suggest that commitment is a binding force between individuals and the organizations that employ them. These factors stem from a definition of commitment as the strength of one's identification with, and involvement in, an organization, as proposed by Porter and Smith in 1970 (Rubin, Palmgreen, & Sypher, 1994).

Organizational commitment has been tied to psychological ownership of the organization (Meyer & Allen, 1997), to a willingness to exert energy on the organization's behalf (Mowday, Porter, & Steers, 1979), and to job satisfaction (Kuhn & Nelson, 2002; VanDyne & Pierce, 2004). Employees with higher levels of organizational commitment have been shown to be less likely to leave (Salancik & Pfeffer, 1978), and more likely to show up regularly for work, gain tenure and perform their jobs better (Mowday, Porter, & Steers, 1982; Price, 1997). Stinglhamber and Vandenberghe (2003) found that intrinsically satisfying job conditions positively related to commitment. And, in a study of 279 managers at eight public and private organizations, Buchanan (1974) found that advancement and job achievement were associated with higher levels of organizational commitment, with tenure mediating the importance of commitment.

Communication, relationship quality, and the presence of quality programs in organizations are also associated with organizational commitment. In a study of a large service organization, Guzley (1992) found that superior-subordinate communication, organizational clarity, and employee participation were significant predictors of commitment (41% of the variance explained in the regressions). In addition, Allen and Brady (1997) linked organizations in which Total Quality Management (TQM) programs were used (compared to those not using TQM) with higher levels of employee commitment, greater perceived organizational support, and more positive relationships with co-workers and managers.

In summary, organizational commitment and identification have sometimes been treated interchangeably in the literature, with research suggesting that the two are related but distinct. Regardless of specifically how organizational identification and commitment are interrelated with job satisfaction, organizational commitment is clearly associated with outcomes of importance to both organizations and individuals. These include work performance, intention to stay, a willingness to exert effort for the organization, and job satisfaction.

### *Job Satisfaction*

Locke (1984) defines job satisfaction as a positive affective state arising from the appraisal of one's job experiences. Like commitment and identification, job satisfaction and identification have often been alternately equated and variously interrelated in the literature (Hurlbert, 1991; Mathieu, Hofmann, & Farr, 1993; Muchinsky, 1977; Scott & Stephens, 2005). In a meta-analysis of quantitative organizational identification studies, for example, Fontenot and Scott found that job satisfaction was often related to

organizational identification, although they are empirically distinguishable (Scott and Stephens, 2005).

In another meta-analysis, Kinicki, McKee-Ryan, Schriesheim and Carson (2002) examined six major industrial-organizational psychology journals from 1975-1999 and found 152 studies that met their criteria of sufficient information for inclusion. They established four main categories in which higher levels of job satisfaction were positively linked with antecedents in the literature: job characteristics, role states, group and organizational characteristics and leader relations. Antecedents of higher job satisfaction included in the job characteristics category were variety (of tasks), identity (tied with task performance), task significance (perceived importance of work), autonomy (freedom to work as one sees fit), feedback (useful and regularly delivered), and job richness (personally meaningful). The role states category included role conflict and role ambiguity (clear direction on role expectations and greater understanding of one's role.) Group and organizational characteristics included group goal arousal (collective awareness and effort toward goal), cohesiveness and integration (members work well together), communication quality (perceived quality of supervisor communication), participative involvement (ability to contribute one's ideas), work stressors (absence of sources of stress), inequity of work environment (equitable work environment), organizational structure (structure perceived as appropriate and fair) and climate (perceived as open and friendly). Finally, antecedents grouped as leader relations included leader initiating structure (leader provides initiative and direction), leader consideration (leader exhibits empathy and concern), leader production emphasis (leader



values hard work), leader reward and punishment behavior (fair and equitable), and leader-member exchange (relationship development based on reciprocal effort and trust).

Dispositional variables and job satisfaction have been extensively studied as well (see Dormann & Zapf, 2001 ); the work of Staw and colleagues (Staw, Bell, & Clausen, 1986) is representative of the position that job satisfaction is a reflection of genetically determined, stable dispositions, such as extroversion. This position has been contested, notably by Dormann and Zapf (2001), whose meta-analysis led to their conclusion that dispositions only indirectly affect job satisfaction. Similarly, other researchers have linked attitudes with job satisfaction (Ostroff, 1992).

Job characteristics, including task activities, rewards, working conditions, and management practices (Locke, 1984), are also related to job satisfaction. Hackman and Lawler's (Hackman, Lawler, & Porter, 1983) model holds that job characteristics have a direct effect on job satisfaction. However, according to social information processing theory (Salancik & Pfeffer, 1978), this relationship may be actually reversed, with job satisfaction predicting job characteristics.

Seeking to show that the relationship direction was from performance to satisfaction, Pettit, Goris and Vaught (1997) conducted a survey of 279 employees from two companies. Overall, they found that organizational communication was an important predictor of both job performance and job satisfaction, regardless of the direction of relationship between the two main variables. They also found a direct relationship between performance and satisfaction, but the effect was only moderate. Mathieu, Hofmann and Farr (1993) suggested a model placing job satisfaction and job characteristics in a reciprocal relationship, and tested all three models using 450 survey

responses from engineers in seven different organizations. They found support for the reciprocal model, with no significant difference between the two paths. However, it is possible that the variables may influence each other over time, and this was not tested.

A substantial body of work that more closely reflects a communication approach provides evidence that social aspects of work are important to job satisfaction (Hackman, Lawler, & Porter, 1983). For example, Riordan and Griffith (1995) showed that opportunities for friendships at work had a positive direct effect on job satisfaction. In a study of 722 faculty and staff at two universities, Winstead, Derlega, Montgomery and Pilkington (1995) examined the relationship between workplace friendships between peers, supervisors and subordinates and job satisfaction and found that the quality of the relationship between one's best friend in the workplace predicted job satisfaction.

Friendship variables studied included frequency of interaction, voluntary interdependence (degree partners commit free time to interacting), exchange and communal orientations, person-qua-person (mutual concern and interest in the other as unique and irreplaceable), and maintenance difficulty. Only in relationships of varying status were some aspects of friendship challenging for those involved. Number and availability of friendships were the focus of another study using an on-line questionnaire with 412 participants from a variety of companies. Morrison (2004) found that the perception of more opportunities for informal workplace relationships was directly related to job satisfaction, further demonstrating that job satisfaction was associated with decreased intention to leave and higher levels of organizational commitment.

A number of studies have examined job satisfaction, information adequacy and strategic ambiguity during organizational change. For example, Zhu, May and Rosenfeld

(2004) examined information adequacy and job satisfaction before and after the merger of two Chinese internet companies. They found significant post-merger decreases in job satisfaction among employees of both firms on all variables except coworker satisfaction, which they speculated was due to co-workers seeking each other out as sources of information. When examining the relationship between information adequacy and work satisfaction, Zhu et al. (2004) found differences between employees of the acquiring company and employees of the acquired company. Specifically, work satisfaction for acquired employees increased with information adequacy related to organizational decision making and supervision.

In the Pettit et al. (1997) study, results were somewhat different. Because the correlation between performance and satisfaction with work was greater for those with high communication accuracy scores than for those with low communication accuracy scores, Pettit et al. (1997) concluded that receiving accurate information may help people perform adequately which may then result in positive feelings about their jobs, or vice versa. The individual organizational communication variables (making up the overall organizational communication scale) found to predict job satisfaction were accuracy of information, desire for interaction, communication load (too much or too little), direction of communication, trust in superior, perceived influence, and communication satisfaction.

*Job satisfaction and remote workers.* One study in the remote context links frequency and satisfaction with social interaction at work to higher levels of job satisfaction (Tschan, Semmer, & Inversin, 2004). Tschan and colleagues (2004) examined information adequacy in a distributed organization consisting of several dispersed offices, and found that employees in outlying offices of a distributed

organization reported higher job satisfaction when information on organizational policies and individual performance were viewed as adequate by those employees. These employees were less concerned with receiving information about organizational performance than were their co-located colleagues. In a similar study, Rosenfeld, Richman and May (2004) concluded that field employees perceived their jobs to be separate from the operations at the main office.

Staples et al. (1999) reported results of a focus group study suggesting that virtual employees' perceptions of job satisfaction would vary based on self-perceptions of competence in this environment and on management support and activities. In a study of 376 remote employees, they found that remote workers' perceived self-efficacy was positively correlated with job satisfaction, and with organizational commitment.

Finally, in a survey of human resource managers at co-located companies and a mixed sample of remote and co-located employees, Illegems and Verbeke (2004) compiled a list of perceptions on the telework experience from which they concluded that teleworkers did not experience negative effects on their job satisfaction. Their findings should be interpreted cautiously, given the large number of non-teleworkers included in the study and the lack of reported results for statistical analyses.

As with organizational identification and commitment, job satisfaction has not been widely studied in the remote context. However, studies on remote work can borrow from the large body of research on job satisfaction in traditional organizations in making initial predictions. Of primary interest are the findings on social relationships and communication, as these factors are critical to employees when they are together in one

location. Communication would seem to bear even more responsibility for job satisfaction when physical distance is introduced.

*Summary: Organizational Identification, Commitment and Job Satisfaction*

Research has shown that organizational identification, commitment and job satisfaction are important to both individuals and to the organizations employing them. All three outcomes are associated with attitudes toward work and intention to continue working, citizenship behaviors, acceptance of the organization's goals and a willingness to put forth effort for the good of the organization. Importantly, the literature clearly shows that social relationships and social opportunities impact job satisfaction, commitment and identification; the underlying assumption is that communication is essential to the social life of organizations.

*Research Questions and Hypotheses*

*Informal Communication and Organizational Outcomes*

This section integrates research findings and theory, and identifies the gaps in the knowledge base. Based on the rationale described, research questions are advanced and hypotheses are proposed. A synopsis of all questions and hypotheses concludes the rationale.

The day-to-day informal casual talk practices between remote workers and their central office colleagues represent one possible factor in connecting people to their organizations, but it is not known even *whether* remote employees interact with central office employees, let alone how or how frequently. One way to tease out specific preferences in the remote context is to uncover regularities or patterns for informal, casual talk as defined. Thus, this study first asks:

RQ<sub>1</sub>: What types of casual talk practices do remote workers use when interacting with their central office colleagues?

Extent of contact has been more specifically related to organizational identification, commitment and job satisfaction (Bullis & Bach, 1991; Wiesenfeld, Raghura, & Garud, 2001). Tschan et al. (2004) have shown that more interactions and higher satisfaction with those interactions predict commitment and greater job satisfaction in the co-located context, but this has not been tested in the remote context. These relationships will be tested with the following hypothesis:

H<sub>1</sub>: Frequency of casual talk between remote workers and their central office colleagues is positively associated with (a) organizational identification, (b) organizational commitment and (c) job satisfaction.

Importantly, Scott et al. (1998) argue that it is through communication that we express our belongingness to various collectives (p. 305). Organizational identification, commitment and job satisfaction should therefore be related to informal communication because each is enacted and/or reproduced in interaction (Shotter & Cunliffe, 2003; Weick, 1979). The remote context offers a unique opportunity for studying interaction and identity, for “it is in daily routines and activities in a given locale that provide the context for identification” (Scott, Corman, & Cheney, 1998).

Researchers continue to alternately assume and argue that identities are appropriated in the expression of identifications (Cheney, 1983b; Cheney & Tompkins, 1987; Dutton & Dukerich, 1994), but the specific role of interaction has yet to be described (Scott & Stephens, 2005). Higher levels of organizational identification have been linked with involvement in communication networks in general (Eisenberg, Monge,

& Miller, 1983; Hurlbert, 1991) and in informal communication networks in particular (C. Conrad & Poole, 2002). More recently, Eisenberg (2001) has suggested that a renewed focus on language and social interaction may enhance understanding of how identity develops. Drawing from Scott, Corman and Cheney (1998) and Larkey and Morrell (1995), Morgan (2004) pointedly argues that a “language of identification” has not been adequately considered; yet that language, she says, is “at the core of identity formation and expression,” (p. 363).

However, research does show that contact (communication) creates a sense of connection and immediacy (O'Sullivan, 1999), constructs which have been associated with identification (Scott & Stephens, 2005). In their study of volunteer interaction and identification, Scott and Stephens suggest that interactional activities “may be associated with varying levels of attachment,” (p. 23) which has, in turn, been linked to inclusion. However, this link between communication practices and inclusion has not been made explicit.

Feeling excluded and isolated may harm organizations as well as virtual workers. Research suggests that a language of (mediated) affiliation is possible, but how this is so and what it might look like is not clear. The questionnaire used in this study gives remote workers the outcomes (feeling more and feeling less included), and asks them to retrospectively work through the interactions that resulted in these feelings. Thus, it is reasonable to think that identifiable message types will emerge from employee reports of feeling more included. If feelings of isolation are related to fewer or qualitatively different interactions (as suggested by extant research), and interaction is the site of a co-construction of reality, it is plausible that organizational identification--and by extension,

commitment and job satisfaction--will be negatively affected. Thus the next research question asks:

RQ<sub>2</sub>: What message types do central office peers use that result in remote workers feeling (a) more included, and (b) less included in the organization as a whole?

Uncovering a language of inclusion may add to an understanding of inclusion as a dynamic construct. Asking remote employees whether they currently feel as though they are a part of something, and comparing that report with measures of organizational identification, commitment and job satisfaction may provide insight on the connection between these constructs at a given point in time. It is reasonable to think that the affective state of felt inclusion will coincide with reports of inclusive messages, and will be associated with these outcomes, which leads to the next hypothesis:

H<sub>2</sub>: Remote workers reporting higher levels of felt inclusion also report higher levels of (a) organizational identification; (b) organizational commitment; and (c) job satisfaction.

Inclusion messages and casual talk may include elements of supportive communication, but may not cover all aspects of social support. Wiesenfeld et al. (2001) demonstrated a connection between a general feeling of support and identification among remote workers, but their participants did not conform to the definition of remote worker used in this study, and their measure of support was weak. Given that social support has been associated with a number of positive relational and organizational outcomes, it is important to test these earlier findings, and so the following hypothesis is advanced:



H<sub>3</sub> Remote workers reporting higher levels of social support also report higher levels of (a) organizational identification; (b) organizational commitment; and (c) job satisfaction.

Because all three types of informal communication may also be generally experienced as satisfactory or not satisfactory, the link to organizational identification, commitment and/or job satisfaction is also important to establish. For example, frequency of communication alone does not adequately measure satisfaction with communication. Rosenfeld, Richman and May (2004) showed that frequent but insincere communication was judged negatively and as “too frequent” by employees. Thus this study seeks to separate frequency of casual talk from satisfaction with informal communication overall, and advances the next hypothesis:

H<sub>4</sub>: Remote workers’ satisfaction with their informal communication with central office colleagues is positively associated with (a) organizational identification, (b) organizational commitment, and (c) job satisfaction.

#### *Quality of Co-Worker Relationships, Informal Communication, and Organizational Outcomes*

People who work together develop particular kinds of relationships with co-workers which impact, and are impacted by, how they interact. Three facets of relational quality most often associated with communication behaviors in this literature are trust, liking and relationship satisfaction (Muchinsky, 1977). Rubin, Palmgreen and Sypher (1994) define liking as basic affection, admiration and respect for one’s partner. Liking for interactional partner has been measured within the realm of close personal relationships, and found to affect interaction quality and quantity (Burgoon & Hale,

1984). Trust has been defined as the extent to which one feels comfortable with the risks of closeness in particular relationships, and as “a belief by a person in the integrity of another individual,” (Larzelere & Huston, 1980, p. 595).

Organizational research on trust has focused on trust between supervisors and subordinates (Ferres, Connell, & Travaglione, 2004) or trust between employees and their organizations (Kramer, Brewer, & Hanna, 1996; Sheppard & Sherman, 1998). Both are generally agreed to be critical to organizational members’ well being and to the organization’s stability (J. D. Cook & Wall, 1980; K. S. Cook, 1977). Trust between peers has been examined to a lesser extent as it relates to friendship development at work (e.g., Sias & Cahill, 1998).

Relational satisfaction has been linked with both trust and liking, and is often associated with interaction frequency and quality (Kline & Stafford, 2004). Kline and Stafford (2004) posit that relational quality may, in fact, be judged based on interactant reliance on the basic rules for interaction. Finally, satisfaction with relationships is typically defined with reference to a number of communication behaviors, including creating/demonstrating cohesion, routine contact, intimate disclosure, politeness and respect. Satisfaction has been linked with self disclosure, for which trust is a prerequisite (Altman & Taylor, 1973; Larzelere & Huston, 1980). Interpersonal research often examines variables suggestive of belongingness and team membership in measuring overall relational satisfaction (Norton, 1983). It is therefore reasonable to think that many of the same behaviors lead to relational satisfaction with others in the workplace. Tschan, Semmer and Inversin’s (2004) findings support this view; they found that the quality of

interpersonal relationships influences the amount of task-related communication between co-workers.

Most of what is known on relational development and trust in mediated contexts comes from interpersonal communication research. The general conclusion on trust in CMC reflects findings on trust developed in face-to-face literature, i.e., trust increases security in relationships, reduces inhibition and enables people to share feelings and thoughts of a more personal nature (cf Walther, Anderson, & Park, 1994). Morgan and Symon (2002) assert that building trust is more difficult over distances, and that it requires higher levels of open communication (p. 303). Poole (1999) and others have suggested that e-mail, the internet and conference systems can provide an alternate route to building the trust necessary for relationships to develop. Shared social norms and experiences, and managing interactions are important to developing trust (Jarvenpaa & Leidner, 1999). Thus the importance of trust may be elevated in the remote context, as it may “prevent the geographic and organizational distances of global team members from becoming psychological distances” (Jarvenpaa & Leidner, 1999, p. 791).

Based on this study’s focus on informal relationships and interaction at work, then, these relational facets are hypothesized as central to informal communication and the outcomes of interest in this study. Hence, the following hypothesis is advanced:

H<sub>5</sub>: Remote workers reporting a) greater liking for; b) greater trust in; and c) greater relational satisfaction with- co-workers with whom they most often informally communicate also report higher levels of organizational identification, organizational commitment, and job satisfaction.

A first set of questions concerns the combined influence of remote employees' informal communication practices on the outcomes examined in the study.

RQ<sub>3</sub>: What is the combined influence of remote employees' casual talk, expressed inclusion and exclusion, and supportive communication with co-workers, on organizational identification, organizational commitment, and job satisfaction?

While the collective effect of all predictors is important, it will also be informative to understand whether, and how, the predictors influence each other in terms of their effects on organizational identification, commitment and job satisfaction. It is possible that the relationship quality either affects the direction or strength of any effects of informal communication on organizational outcomes, or that it may actually explain (account for) the relationship between informal communication and organizational outcomes. To examine these specific relationships, the following research questions are advanced:

RQ<sub>4</sub>: Does relationship quality moderate the effect of remote employees' informal communication with co-workers on organizational identification, organizational commitment, and job satisfaction?

RQ<sub>5</sub>: Does relationship quality mediate the effect of remote employees' informal communication with co-workers on organizational identification, organizational commitment, and job satisfaction?

Similarly, the affective state of felt inclusion may impact the effects of informal communication on all three organizational outcomes. Hence, the final research questions examine the specific nature of the relationship between felt inclusion and the effects of remote employees' informal communication on the organizational outcomes, as follows:

RQ<sub>6</sub>: Does felt inclusion moderate the effect of remote employees' informal communication with co-workers on organizational identification, organizational commitment, and job satisfaction?

RQ<sub>7</sub>: Does felt inclusion mediate the effect of remote employees' informal communication with co-workers on organizational identification, organizational commitment, and job satisfaction?

### *Conclusion*

Based on these research questions and hypotheses, the aim of this study is to further understand the role informal communication plays in the experience of remote workers and their organizations. It is hoped that these results will also shed light on the communication patterns and practices that produce and reproduce remote employees' identification, commitment and job satisfaction.

## CHAPTER 3

### METHOD

This chapter presents the methods and procedures of the study. A description of participants is followed by an explanation of each task and measure used. The basic analytic strategy is explained in the final section. The questionnaire and recruitment scripts that were used are contained in Appendices A and B.

#### *Participants and Procedures*

Participants in this study were full-time employees who were working in a location other than their company's central office for at least three business days each week. Participants were recruited from area businesses either by contacting company representatives by phone, through personal contacts and referrals, through the International Telework Association, and also from undergraduates enrolled in introductory communication courses. Two recruitment scripts were prepared, one for the actual participants and one for the purpose of eliciting businesses' interest.

Following a demonstration of interest, e-mail addresses were obtained either from participants themselves, from students, or from business representatives, and an explanatory letter was then e-mailed with a link to one of four versions of the questionnaire. These versions were randomly varied to prevent question-order bias. Most of the letters offered a chance to win one of four \$50 cash prizes in a random drawing. Participants who wished to be included in the drawing were instructed to send contact

information via separate e-mail to maintain confidentiality. One participating business preferred not to offer cash remuneration, and the letter was changed to reflect this. Participants were asked to complete the questionnaire at their own locations within a given time frame based on the solicitation date. A distinct e-mail address (faystudy@yahoo.com) was set up for questionnaire distribution, student credit, and cash award contact information.

Approximately 400 participation request letters were e-mailed and a total of 112 completed questionnaires were returned. Fifteen of these were dropped, either due to insufficient data or because the participant did not meet the defined criteria for remote workers, which left a total working sample size of 97. One large Midwestern company accounted for 30 of the 97 final responses used, and these participants worked from locations all over the country.

The questionnaire was initially pilot tested with 18 people. Eleven were remote workers, who were contacted by the students in order to obtain extra credit in their undergraduate communication class. Seven were students who were asked to answer questions from their perspective as a member of any group to which they belonged. Participants were asked to indicate any areas of the questionnaire that were unclear or confusing, and the wording was changed to clarify as appropriate. For instance, one free-response item was rewritten to better elicit the desired type of response, and the social support instrument used in the pilot was dropped in favor of three other measures.

Using the research data software program PERSEUS, the questionnaire was set up such that the responses were coded into SPSS categories electronically. Thus, for both closed- and open-ended questions, data was entered as it was received. Open-ended

responses were analyzed using grounded theory and other coding strategies discussed later in this section. Demographic information was gathered using single items for age, income, educational level, sex and race. Questions related to the length of time teleworking, length of time working for their current company, and on whether teleworking was a choice or not, were included, along with general information about the business, including number of employees, type of company, and number of offices. These responses were used for general comparison purposes. Participants were also asked to report on their past-year absenteeism and their intentions to stay with the company. Finally, participants were asked one question about corporate monitoring of employee communication, to determine whether surveillance might be a factor in informal interaction type and frequency.

### *Tasks and Measures*

The tasks and measures used for all three forms of informal communication are presented first. The tasks and measures related to the three primary outcome variables (organizational identification, commitment and job satisfaction) follow the section on informal communication. Co-worker relationship and technology tasks and measures are presented last. For all measures, missing values were replaced with each measure's series mean, and accounted for less than 5% of responses on any given scale. The Job in General scale handles missing values differently, as reported in the section on that measure.

### *Casual Talk*

Participants completed two tasks designed to uncover the behaviors, topics and content of casual talk between distal workers and their central office peers. Casual talk



was defined for participants in the way the first task was set up, as follows: “Much interaction at work consists of simply chatting, small talk or ‘shooting the breeze’ with other members of the organization. This type of informal interaction can create and solidify relationships, foster ideas and build common bonds between people.” Two tasks, one consisting of casual talk activities or behaviors, and one consisting of a variety of casual talk topics, were used. These tasks and measures are described next.

*Casual talk activities task.* Participants were asked to rate the extent to which they engaged in a number of routine communication activities throughout the course of a typical day. They were prompted to think only of the interactions they have with co-workers that were not specifically job- or task-related, and told that such communication might take place between co-located workers at the water cooler, in the coffee break room or when passing each other in the hall.

The casual talk activities task list consisted of 34 items taken from several bodies of interrelated literature. Items were selected from existing literature on small talk (Holmes, 2003), gossip and rumor (Michelson, 2000; 2002), the grapevine (Crampton, 1998), informal interaction at work (C. Conrad & Poole, 1997; J. D. Johnson, Donohue, & Johnson, 1994), and general interpersonal communication practices (Baskin & Aronoff, 1980; Jacobs, 2002). Sample items included “Catching up on personal news,” “Small talk with co-workers,” “Gossiping with co-workers,” and “Joking around.” Items were also taken from Goldsmith and Baxter’s (1996) work on speech events in interpersonal relationships and O’Sullivan et al’s (2004) work on immediacy behaviors. Examples of speech event items include “Recapping the day’s events” and “Catching up.” Immediacy communication behaviors function to reduce distance between people

and cultivate affiliation (O'Sullivan, 1999) and were included in the casual talk activities task for that reason. Sample items were “Expressing similarities” and “Getting to know each other”. Participants were asked to indicate the extent to which they engage in each casual talk activity using a 7-point Likert-type scale ranging from 1 (*Not at all/Never*) to 7 (*Constantly/More than 15 times per week*).

*Casual talk topics task.* Participants were also asked to rate the extent to which they engaged in a number of routine communication activities and topics throughout the course of a typical day. The list was developed from results of the Wellington Language in the Workplace project (Holmes, 2000), and the general interpersonal literature, and was designed to assess casual message content. A total of 16 topics was provided, including “Talking with co-workers about each other’s families,” “Talking with co-workers about sports,” and “Talking with co-workers about personal problems.” Using a 7-point response format (1, *Not at all/Never*; 7, *Constantly/More than 15 times per week*), participants indicated how frequently they communicate with co-workers about each topic.

#### *Inclusion-Relevant Communication Tasks and Measures*

Participants responded to two open-ended questions: one asked them to recall and report an informal interaction which made them feel more included in the organization; the other asked them to recall and report an interaction with a co-worker that made them feel less included.

*Inclusion and exclusion recall tasks.* Using formats based on interaction record studies (e.g., Nezelek, Wheeler, & Reis, 1983), and memorable message techniques (e.g., Ellis & Smith, 2004), participants were asked to recall two informal interactions as

described below. While recall methods have been criticized for their sole reliance on memory, they do allow for retrospective sensemaking (Duck, Rutt, Hurst, & Strejc, 1991; Weick, 1995). Further, this situated action perspective (Arnseth, Ludvigsen, March, & Wasson, 2004) is helpful in uncovering how remote workers display what is normative in this context *for them* (Suchman, 1987).

*Inclusion message task.* The general lead-in to the open-ended recall inclusion question stated: “In the process of working full time, people often develop feelings of connection and inclusion with their companies. One way these feelings of being connected and included can be intensified, either positively or negatively, is through interactions with others at the same company.” Participants were then directed to think about a specific interaction they have had with a peer in the last month that made them feel more like a part of the company; they were also instructed that this interaction can have taken place using any media. They were asked to write down as much of the interaction as they could remember, using exact words of both interactants (themselves and other). The PERSEUS program feature that allowed unlimited response space was used.

Participants were then asked to answer three questions on their satisfaction, comfort level and desirability of the related communication. Semantic differential scales with values of 1-7 were provided, with anchors as follows: *Extremely dissatisfied-Extremely satisfied*; *Extremely uncomfortable-Extremely comfortable*; and *Extremely undesirable-Extremely desirable*.

*Inclusion message coding procedures.* Each participant response was examined to determine specifically how the messages functioned to help people feel included in their

organizations, and to allow the participants' own sense of inclusion through communication to emerge. To arrive at a set of practices and distinctions that reflected the way in which inclusion communication appeared to be functioning for individuals required the examination of several literatures. The work of Applegate (1980), Clark and Delia (1979), O'Keefe and Delia (1982), and Granovetter (1985) was consulted for a framework that would most closely depict how inclusion functions for the individual member of an organization. A hierarchy based on message complexity, person-centeredness and interpersonal and organizational goals emerged from these analyses. A hierarchy is suggested by the presence of task, relational, and identity concerns in the messages, such that messages addressing multiple needs were considered to reflect higher, more complex categories than unidimensional messages. In addition, the role of the organization in message creation was considered. For example, if the organization merely served as circumstantial backdrop for social relating, that message was placed in a lower category than messages representing an organizational role as facilitator of such messages. Hence, one-dimensional messages that addressed either relational, task or identity concerns, and in which the organization played no role, were considered lower in the hierarchy than were multifunctional messages operating on more than one level, and for which the organization was directly (e.g., through active engagement with one's ideas) or indirectly (e.g., through procedures) involved. Categories and message examples are displayed in Table 3.1.

Messages functioning solely to achieve basic relational goals, such as simple greetings and social plans, were considered the least complex if they appeared to serve only relational goals, for which the larger organizational setting happened to provide a

context. These messages worked to create or maintain a cordial connection grounded in normal convention, and were placed in level 1. An example of a message placed in the first level is: “So, once the day is done, wanna meet me at the bar for happy hour?”

A second level of messages reflected not only relational, but task goals as well, and reflected some measure of organizational involvement. These messages cohered in two ways. First, a conventionally friendly message that also included reference to previous knowledge addressed a deeper level of relating--a level that ongoing contact, vis a vis the organization, appeared to facilitate. Messages on this second level also cohered in that a basic task component was introduced, such that individual and organizational goals were addressed in a minimal way; for example: “One of the girls, who is in the same position as I, called me and asked my advice on how to execute her promotions more effectively.”

A third grouping of messages clustered in that they represented an acknowledgement of an individual’s personal as well as professional identity concerns, which included task-related support. These messages addressed affective and identity concerns in that the other is recognized as a professional member of the larger entity, with certain skills to offer the organization. Relational and task goals are addressed through providing and soliciting help and support, as in this example: “I got a call from a peer with a question regarding policy coverage on a policy. We went through the policy and found the answer to his question.”

The fourth level of messages reflected a more mutual pursuit of either a task, relational or identity goal, with the organization now clearly the basis for interaction. These messages were not yet collaborative, in that they reflected one of these goals

within the limits of a single, finite interaction. Hence, messages reflecting one's involvement in a previous discussion, recognition of one's finite effort, an exchange involving planning, or a simple compliment, were included; for example: "My opinion was requested regarding another agent's potential."

The fifth level of messages was more complex in that task, relational and identity goals were more directly and mutually pursued, and were structurally embedded within the organization. At this level, messages functioned to foster inclusion by spanning individual and institutional boundaries, i.e., participants engaged in discussions of ideas relevant to the organization's success or functioning. An example in this category is: "A coworker and myself had an opportunity to present an idea to the company that we felt would benefit the company as a whole. The idea was taken into consideration and as a result we were recognized for our ideas and effort."

The fifth and sixth group of messages reflected task, relational and identity concerns that were bound with the organization as whole based on these particular concerns. However, the sixth level reflected a true collaborative effort in which both participants and organizations appeared to be cognizant of their mutuality, and inextricably embedded such that the boundary between the institutional and individual identity was no longer clear. This is largely because the individual's contributions or ideas have become a part of the company itself, and are now available for use by other members of the organization. The multifunctionality of these messages can be seen in the following example: "Good Order, Can I share it with others as an example of what business is available in the government sector?"

Finally, intercoder reliability was assessed. The second coder initially examined 20% of the protocols and discussed several responses that were coded differently. A second and final set of messages was coded, and Cohen's kappa was .91, or within the acceptable range.

Table 3.1 displays results of this coding, along with examples of messages placed in each level.

Category	Description	Examples
0	No communication with co-workers	
1	Basic relational goals addressed; organization as incidental	<p>"So, once the day is done, wanna meet me at the bar for happy hour? Yea, I have a change of clothes in my rental."</p> <p>"Talking about having a pool party with fellow workers."</p>
2	Relational or task goals addressed; organization as contextual facilitator	
	Compliments and interest	"Hey I just called to let you know I heard your daughter on the radio....." said my co-worker."
	Help and information	"One of the girls, who is in the same position as I, called me and asked my advice on how to execute her promotions more effectively."
	General inclusion	"No real conversation, I was just included on something that was going on in the office."

Table 3.1. Inclusion Communication Category System ( $N = 87$ ) (Continued)

Table 3.1: Continued

3	Relational, task or identity goals addressed; organization as basis for communication	“The individual approached me asking my opinion on something and I responded, than he was like how would you handle this, I told him what I would do and he thanked me for taking the time in explaining it to him.”
	Obtains or provides job support	“My co-worker and I were discussing some training that I had been through that he was going to be going through a couple of days later. He and I had not talked for a few weeks and it felt good to reconnect with him about the coming training.”
		“I got a call from a peer with a question regarding policy coverage on a policy. We went through the policy and found the answer to his question. He was very grateful for the help and expressed that to me.”
4	Interlocutors mutually pursue either a relational, task or identity goal within the limits of one interaction. Organization as basis for interaction.	
	Mutual discussion or recognition of organization-relevant ideas	“We have been working closely together to plan our training sessions over the next several weeks.”
	Involvement in discussions and planning	“My opinion was requested regarding another agent's potential.”
	Person- or organizational-centered compliments	“You contribute heavily to the success of the team.”

Table 3.1: Inclusion Communication Category System ( $N = 87$ )

(Continued)



Table 3.1: Continued

5	Individual and organizational goals are intertwined. Organization as the basis for interaction.	“A coworker and myself had an opportunity to present an idea to the company that we felt would benefit the company as a whole. The idea was taken into consideration and as a result we were recognized for our ideas and effort.”
6	Individual and organizational goals are structurally and functionally embedded	“Conference call between me and 3 other managers that are in the office. They requested the call to get my input and recommendations before making a final decision and they included me in the final decision. I was asked for the positives and negatives of our decision. How it may impact out relationship with our partner (agent) etc.”
	Embedding through organizational-level recognition, collaboration	“Good Order, Can I share it with others as an example of what business is available in the government sector?”

*Note.* Eight participants did not reply.

Table 3.1. Inclusion Communication Category System ( $N = 87$ )

*Exclusion message task.* The general lead-in to the open-ended exclusion question stated: “Now, think about a communication/interaction you have had with a co-worker sometime during the last month or so in which you felt less like a part of your company (that is, you felt less connected and less included in your company) as a result of the interaction. This communication can have taken place through any media (phone, e-mail, text messaging, fax, etc.)”. As in the inclusion recall task, participants were asked to write down as much of the interaction as they could remember, using exact words of both interactants (themselves and other). Again, the PERSEUS program feature that allowed unlimited response space was used.

*Exclusion Message Coding Procedures.* Clark and Delia’s (1979) conception of complexity was used to parallel inclusion message codings, with multiple relational, task

and identity (personal and organizational) goals as a guide. Four levels of messages emerged from this analysis; these are displayed in Table 3.2. Cissna's (see Cissna & Sieburg, 1981) conception of disconfirmation was used to examine messages of indifference, disregard and disqualification as they functioned to fracture the unity of the individual and the organization, or to prevent the individual/organizational embeddedness from being instantiated. As in levels developed from inclusion messages, the levels of exclusion messages also reflect relative differences in individual goals and in the role of the organization.

Messages that created exclusion through bureaucratic error or through normatively careless behavior were placed at level one. These included messages that resulted in failed task or relational goals, but through simple oversight rather than deliberate behavior, with the organization as incidental. An example of messages at this level is: "We don't use that procedure anymore." Me: "No one told me."

Messages that created exclusion through personal disconfirmation practices that impeded task or relational goals were placed at level 2. Level 2 messages also reflected circumstances in which the organization failed to provide the context in which goal achievement could be facilitated, for example: "I called in to talk about an issue and was told how busy it was there and that my work would have to wait until things got under control at the main office." Messages at this level, then, functioned on both individual and organizational planes.

Level 3 included messages that impeded relational, task or identity goals, and the organization either facilitated the breakdown or failed to prevent impediments to goal achievement from occurring, as in this example: "Yes, the weekly conference

call. The ‘Boss’ in charge is not open to new ideas.” Messages at this level reflected an organizational context that did not solicit active participation by employees, thereby preventing involvement that might allow individuals to claim psychological or communicative ownership in the organization, or to pursue relational, task or identity goals.

Finally, level 4 was reserved for messages indicating that relational, task and identity goals were ignored or even actively rejected. At this level, messages also included an organizational context that was impermeable to employee involvement, as in this example: “Management has unilaterally dictated the new process without any input from the field level personnel.” Just as the highest level of inclusion represented a blurring of individual and organizational boundaries, the highest level of exclusion represented a forced demarcation between individual and organization, and failure to achieve relational, task or identity goals.

Reliability on these codings was assessed by two researchers independently examining responses. The second coder initially examined 20 % of the protocols; researchers discussed several variances in response codings, then agreed on placement. A second and final set of messages was coded, and Cohen’s kappa was .93.

Table 3.2 presents the exclusion coding system.

Category	Description	Examples
0	No communication with co-workers that weakens feelings of inclusion	<p>“I have not had any interactions where I feel less a part of the company.”</p> <p>“None, I love the autonomy of working from home. Our company encourages us to make our own decisions regarding pricing, orders, etc. We are treated great compared to office staff.”</p>

Table 3.2. Exclusion Communication Category System ( $N = 88$ )

(Continued)

Table 3.2: Continued

1	<p>Task or relational goals are impeded through bureaucratic error, or normatively careless behavior</p>	<p>"We don't use that procedure anymore." Me: "No one told me."</p> <p>"Hearing about things that people were doing together (going to lunch, etc.)."</p>
2	<p>Relational or task goals are impeded; organization provides no context for goal achievement</p> <p>One is not given basic work information, or is not included in personal relating.</p> <p>Experiences exclusion through indifference, disregard, or disconfirmation.</p>	<p>"I currently have a large customer that has a growing demand for a product from us (sic). I have sent several e-mails to management asking for them to clarify this point with supply chain and it is getting more and more difficult to get action."</p> <p>"Oftentimes I do not find out about those who are hired or fired. Home office is 2 hours and 122 miles away from me. Specifically, if I was "in office" when a recent firing occurred, I would have felt more connected than finding out over the phone.</p> <p>"While on funeral leave, I received voice mail from my manager inquiring when I would be back to work so that claims could be assigned to me."</p> <p>"I called in to talk about an issue and was told how busy it was there and that my work would have to wait until things got controlled at the main office."</p>
3	<p>Relational, task or identity goals are impeded; organization as facilitating or failing to prevent impediments</p> <p>Experiences exclusion through lack of support or implicit denial of the legitimacy of one's ideas or participation</p>	<p>"Co-worker called to discuss recent changes in company policy as it relates to brokers; he was dissatisfied with changes and wanted my opinion about the changes. I was also not pleased with changes announced. I felt that changes were made in a vacuum, then dished out."</p> <p>"Yes, the weekly conference call. The 'Boss' in charge is not open to new ideas."</p> <p>"You, as a rep, will do this interaction b/c it is in the best interest of the company. Questions will be answered but no reconsideration will be taken."</p> <p>"I was listening to my team relate what they were going to do after the meeting. They were discussing if they were all going to stay in town to eat. No one asked me if I was staying."</p>
4	<p>Relational, task and identity goals are ignored; organization as impermeable to employee involvement on task, relational or identity levels</p>	<p>"Manager discussing recent meeting and dictating to subordinates the new audit process. This audit affects each employee and their respective ratings and raises. Management has unilaterally dictated the new process without any input from the field level personnel."</p>

Experiences exclusion through explicit denial of one's legitimacy and separation from work participation, such that one's personal and task identity goals are rejected	"I received a call from another employee with his concerns regarding the current climate in our management and their seemingly lack of concern and understanding of the field claim representatives jobs. "(sic) management is expecting the same amount of work completed by both groups of field employees."
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*Note:* Nine participants did not reply.

Table 3.2. Exclusion Communication Category System ( $N = 88$ )

*Felt Inclusion.* The final measure of inclusion was felt inclusion, defined as the degree to which employees feel socially included with co-workers. Pearce and Randel's (2004) three-item inclusion measure was used to capture the construct. Scale items are: "I feel like an accepted part of a team," "I feel included in most activities at work," and "Sometimes I feel like an outsider." Participants responded using a five-point Likert format (*Strongly disagree* - *Strongly agree*). The last item was reverse scored, and scores were averaged to achieve an overall score. Scale reliability was acceptable ( $\alpha = .72$ ,  $M = 10.78$ ,  $SD = 3.04$ ).

#### *Social Support Tasks and Measures*

One general support measure and two specific support measures, ego and comforting support, were used to gauge participants' reported level and perceived availability of support.

*General Social Support Measure.* The General Social Support measure consisted of 14 items based on the work of Albrecht and her colleagues (Albrecht & Adelman, 1987; Albrecht, Burleson, & Goldsmith, 1994; Albrecht & Goldsmith, 2003; Albrecht & Hall, 1991; Albrecht & Halsey, 1991). This scale was used to assess the overall level of

verbal and nonverbal support that remote workers experience from their peers. Items tap particular behaviors that work to enhance personal control and reduce uncertainty.

Sample items include “My co-workers pitch in and help by handling responsibilities when needed,” and “My co-workers provide me with information and advice to help me solve problems.” Participants responded using a 7-point Likert format (*Strongly disagree - Strongly agree*). These items were averaged to form a measure of remote worker perception of support, with higher scores indicating higher levels of support. A varimax rotation factor analysis (eigenvalue > 1) resulted in a one-factor solution, accounting for 69.61% of the total variance. The measure showed high reliability ( $\alpha = .96$ ,  $M = 55.28$ ,  $SD = 19.45$ ).

*Ego and Comforting Support Scales.* The remaining two social support measures were subscales (four items each) from the Communication Functions Questionnaire (Burleson & Samter, 1990): the “Ego” subscale (e.g., “My co-workers make me believe in myself”) and the “Comforting” subscale (e.g., “My co-workers help me understand why some things hurt me or depress me so much.”) The Ego subscale is designed to tap perceptions of support related to the confidence one has in one’s own capabilities, whereas the comforting subscale is designed to measure the extent to which messages alleviate emotional distress. Participants used a 5-point response format which ranged from 1 (*Not important at all to me*) to 5 (*Very important to me*.) Responses to each subscale were averaged to form a measure of remote worker perception of level of support of each type. The Ego Support Scale was reliable ( $\alpha = .81$ ,  $M = 16.10$ ,  $SD = 3.88$ ), as was the Comforting Support Scale ( $\alpha = .93$ ,  $M = 11.84$ ,  $SD = 3.97$ ).

### *Overall Informal Communication Satisfaction*

Five questions related to satisfaction with all three types of informal communication were used to gauge overall informal communication satisfaction. Three of these items asked “How satisfied were you with this communication?” and appeared immediately following each of four open-ended informal communication and inclusion tasks. Responses to the question “How satisfied are you in general with your communication with co-workers?” were also used as were responses to the question “How satisfied are you in general with your informal communication with co-workers?” All five items were measured on a 7-point response format, from 1 (*Extremely dissatisfied*) to 7 (*Extremely satisfied*). Items were averaged to derive an overall communication satisfaction measure, with acceptable reliability ( $\alpha = .70$ ,  $M = 26.71$ ,  $SD = 5.02$ ). A varimax rotation factor analysis resulted in a single-component solution.

### *Outcome Tasks and Measures*

The three primary outcome variables examined in this study are organizational identification, organizational commitment and job satisfaction.

*Organizational Identification* (Cheney, 1983). This study used a 12-item modified version of Cheney’s (1983) organizational identification questionnaire (OIQ), which assesses employee identification using the components of membership, loyalty and similarity. These constructs are not analytically distinct, which allows for a unidimensional composite score. Sample items include: “I am very proud to be an employee of this organization” and “I feel very little loyalty to this organization.” Items are scored on a 7-point scale from (7) “very strong agreement”) to (1) “very strong disagreement” (*YES!* to *NO!*). Negatively-worded items are reverse-scored and scores are

averaged to form a measure of identification, with higher scores indicating higher levels of organizational identification. The OIQ has been shown to have consistently high reliability, with Cronbach's alpha of .94 reported by Cheney (1983). However, examinations of construct validity have been largely ignored (V. D. Miller, Allen, Casey, & Johnson, 2000). The items on the 12-item version appear in the Appendix. A varimax rotation factor analysis (eigenvalue > 1) resulted in a unidimensional scale with 69.42% of the variance explained. The measure also showed high reliability ( $\alpha = .96$ ,  $M = 62.34$ ,  $SD = 16.61$ ).

*Organizational Commitment* (Porter & Smith, 1970; Porter, Steers, Mowday & Boulian, 1974). Organizational commitment was measured using Mowday and Steers (1979) OCQ instrument, which is designed to assess an individual's involvement in, and attachment to, his/her work organization, and general intent to stay (Meyer & Allen, 1997; Mowday, 1999). Sample items include "I would accept almost any type of job assignment in order to keep working for this organization," and "There's not much to be gained by sticking with this organization indefinitely." The OCQ consists of 15 statements, and uses a 7-point Likert response format ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*.) Six negatively phrased items are reverse scored. Items scores were averaged and the mean was used to determine level of commitment, with higher scores indicating higher levels of commitment.

Mowday, Steers and Porter (1979) reported that the 15 items on the OCQ loaded on a single factor; however, these findings were not replicated, as a four factor solution was produced (principal components analysis, varimax rotation). Items loading primarily on only one or two factors were dropped, resulting in an eight-item measure. The items



that were dropped tended to be relatively extreme, e.g., “Deciding to work for this company was a definite mistake on my part”. Reliability improved considerably ( $\alpha = .90$ ,  $M = 42.31$ ,  $SD = 10.82$ ), and the resulting scale was unidimensional (eigenvalue  $> 1$ ) with 58.33% of the variance explained.

*Job Description Index* (JDI; Smith, Kendall & Hulin, 1969; Bowling Green State University, 1985). Originally developed by Smith, Kendall & Hulin (1969), the JDI measures job satisfaction using responses to brief words or phrases relative to basic work experience categories. One of the oldest and most tested measures of job satisfaction, the JDI is the property of Bowling Green State University and its JDI Research Group, under whose direction data has been collected and analyzed since 1985. Nationally normed, the JDI consists of subscales tapping satisfaction with work on present job, present pay, opportunities for promotion, supervision, and coworkers. In the early 1980s, the JDI was revised to include an overall measure of satisfaction called the Job in General (JIG) scale, and 11 items across four of the subscales were changed. Tests of the original and revised instruments supported the equivalence of both versions (Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002). In a meta-analysis including 152 studies, Kinicki, McKee-Ryan, Schriesheim and Carson (2002) established the construct validity of the JDI, with acceptable levels reliability, as well as convergent and discriminant validity.

The present study used the global measure of job satisfaction, the “Job in General” (JIG) scale, since it taps a general measure of job satisfaction. The scale directs participants as follows: “Think of your job in general. All in all, what is it like most of the time? For each of the following words or phrases, mark your response.” Sample items included the phrases “Undesirable,” “Better than most,” and

“Enjoyable”. Participants answered “yes,” “no,” or “can’t decide” on how well each of the provided phrases described their job. Responses (Y, ?, N) were scored 0, 1 and 3, then adapted for analysis based on whether the item was positively or negatively worded. For example, a Y response is a 3 for a positive item and a 0 for a negative item. Item scores were averaged to form the measure for remote worker job satisfaction, with higher scores indicating greater levels of satisfaction.

Missing values in the JIG scale are scored as zeros if there are less than four, as was done in the present study. Factor analysis of the JIG items with varimax rotation yielded two components, and reliability of the eight-item instrument was initially not acceptable. Items loading weakly on only one factor were dropped, resulting in an four-item measure. Three of the four items that were dropped had negative phrasing, e.g., “Poor” and “Undesirable”. A varimax rotation factor analysis on the remaining four items produced a one-factor solution (eigenvalue > 1) with 58.33% of the variance explained, and scale reliability was acceptable ( $\alpha = 0.84$ ,  $M = 9.65$ ,  $SD = 3.43$ ), with all factor loadings greater than .76.

#### *Co-worker Relationship Tasks and Measures*

Three constructs were used to gauge co-worker relationships: relationship satisfaction, liking and trust. All scales were modified for relevance in an organizational (versus interpersonal) context. The instructions preceding all three tasks were as follows: “The following questions ask you to evaluate the relationships you have with the co-worker with whom you have the most contact by circling the number corresponding to the scale provided for each question.”

*Relationship satisfaction.* Taken from Norton and Montgomery's (1983) Quality of Marriage Index (QMI), this instrument measures satisfaction with relational partners. The original scale was adapted for work relationships by substituting the word "relationship" for "marriage." The scale included five items, including "We have a good relationship," and "My relationship with this person is very stable." Participants responded using a 5-point Likert response format ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Responses were averaged to form the measure of remote worker relationship satisfaction, with higher scores indicating higher levels of relationship satisfaction. The scale showed high reliability ( $\alpha = .92$ ,  $M = 19.73$ ,  $SD = 3.45$ ).

*Trust.* The Dyadic Trust Scale (Larzelere & Huston, 1980) taps perceptions of others' motivations as well as benevolence using eight items adapted from several other instruments and tested, which has resulted in a reliability coefficient of .93 (Larzelere & Huston, 1980). The eight-item scale uses a 5-point Likert response format, from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Sample items included "This person is primarily interested in his (her) own welfare," and "This person is truly sincere in his (her) promises." Three items were reverse scored. Initially, reliability of the scale was low and a varimax rotation factor analysis resulted in a two-factor solution. Items loading lowest on the first component were deleted. Five items were retained, and averaged to obtain an overall score, with higher scores indicating greater levels of trust. The second factor analysis with varimax rotation resulted in a single factor solution (eigenvalue > 1), which accounted for 73.79% of the variance. This rotated solution resulted in a scale showing high reliability ( $\alpha = .90$ ,  $M = 19.18$ ,  $SD = 3.94$ ).

*Liking.* The Liking Scale (Rubin, 1973) measures liking for interactional partners with nine items. The instrument was adapted for workplace relationships by substituting the words “This person” for “My partner” and by dropping items pertaining to intimate relationships. The final scale consisted of five items, including “I think that this person is unusually well-adjusted,” and “I would highly recommend this person for a responsible job.” Participants responded using a 5-point Likert-type format, from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Responses were averaged. The scale was reliable ( $\alpha = .89$ ,  $M = 18.98$ ,  $SD = 3.57$ ), and a varimax rotation factor analysis (eigenvalue  $> 1$ ) produced a one-factor solution that explained 73.80% of the variance.

#### *Technology Efficacy and Effectiveness*

Two measures were used to assess participants’ perceptions of the technological and distal aspects of remote work: the Remote Work Self-Efficacy Scale and the Remote Work Effectiveness Scale.

*Remote work self-efficacy.* The Remote Work Self-efficacy Scale (RWSM) was adapted from Staples, Hulland and Higgins’ (1999) overall technology efficacy measure, and assesses the employee’s belief that he/she can carry out tasks, particularly those requiring the use of technology, in a remote environment. The instructions for this task read: “Working away from the central office requires particular skills, abilities and resources in order to do your job well. For each of the following, please rate the confidence you have in your judgment that you could perform the specific activity.” The response scale is preceded by the following statement: “To aid in performing my job, I could:” Participants rated the confidence they had in their judgment that they could

perform each specific activity. Nine of the original 16 items on the RWSM were used, with items dropped based on applicability and timeliness. For example, the item “Learn how to use a computer,” was deemed outdated and was omitted. Sample items included “Complete my daily priority tasks” and “Access appropriate staff readily.” A 9-point response format is used for the RWSM, from 1 (*Not at all confident*) to 9 (*Extremely confident*). Items are averaged to obtain an overall score, with higher scores reflecting greater technology efficacy. For the remote work efficacy scale, Staples et al. (1999) report internal consistency of .87 and a Cronbach’s alpha of .79. Reliability in the present study was acceptable ( $\alpha = .83$ ,  $M = 65.36$ ,  $SD = 10.40$ ).

*Remote Work Effectiveness (RWE; Staples et al., 1999).* The four-item Remote Work Effectiveness (RWE) scale taps remote workers’ perceptions of the viability and efficiency of remote work. The RWE scale includes items such as “It is difficult to do the job being remotely managed,” and “Working remotely is an efficient way to work.” A nine-point response format, from 1 (*Not at all confident*) to 9 (*Extremely confident*), was used. Two items on this scale were reverse scored; the other two were not. Items were averaged to form the RWE measure, with higher scores relating to better perceived remote work viability. The RWE showed acceptable reliability ( $\alpha = .86$ ,  $M = 17.52$ ,  $SD = 3.04$ ).

### Summary

A variety of methods and instruments will be employed in this study. The following summary restates each hypothesis and research question, and the instruments, measures, and analyses used to address them.

H<sub>1</sub>: Frequency of casual talk between remote workers and their central office colleagues is positively associated with a) organizational identification, b) organizational commitment and c) job satisfaction.

This hypothesis is examined with correlational analyses using participant responses indicating the frequency with which they engage in casual talk activities and topics, and the organizational identification (OID), organizational commitment (OCQ) , and job satisfaction measures (JIG).

H<sub>2</sub> Remote workers with higher levels of inclusion also report higher levels of a) organizational identification; b) organizational commitment; and c) job satisfaction.

This hypothesis is examined with correlational analysis using the level of expressed inclusion and the level of expressed exclusion derived from hierarchical coding schemes developed from the open-ended communication recall task, and the organizational identification, organizational commitment, and job satisfaction measures obtained from the OID, the OCQ and the JIG questionnaires.

H<sub>3</sub> Remote workers reporting higher levels of social support also report higher levels of a) organizational identification; b) organizational commitment; and c) job satisfaction.

This hypothesis is examined with correlational analyses using participant responses on the Ego and Comfort support subscales of the Communication Functions Questionnaire and the General Social Support Scale (Albrecht and colleagues), and the organizational identification, organizational commitment, and job satisfaction measures.

H<sub>4</sub> Remote workers' satisfaction with informal communication with their central office colleagues is positively associated with a) organizational identification, b) organizational commitment, and c) job satisfaction.

This hypothesis is examined with correlational analyses using the informal communication satisfaction measure (constructed based on participant responses to questions on satisfaction with informal communication) and the organizational identification, organizational commitment, and job satisfaction measures.

H<sub>5</sub>: Remote workers reporting a) greater liking for; b) greater trust in; and c) greater relational satisfaction with, co-workers with whom they most often informally communicate also report higher levels of organizational identification, organizational commitment, and job satisfaction.

This hypothesis is examined with correlational analyses using existing liking, trust and relationship satisfaction measures and the organizational identification, organizational commitment, and job satisfaction measures.

RQ<sub>1</sub>: What types of casual communication practices do remote workers use when interacting with their central office colleagues?

This research question is examined using reported frequencies from casual talk topics and activities lists provided on the participant questionnaire.

RQ<sub>2</sub>: What message types do central office peers use that result in remote workers feeling a) more included, and b) less included in the organization as a whole?

This research question is examined using participant responses to two open-ended communication recall tasks, from which two hierarchical coding schemes are developed.

RQ<sub>3a-c</sub>: What is the combined influence of remote employees' relationship quality, felt inclusion, casual talk, expressed inclusion and exclusion, informal communication satisfaction, and supportive communication with co-workers, on (a) organizational identification, (b) organizational commitment, and (c) job satisfaction?

This research question is examined with a simple regression analyses, using casual talk, expressed inclusion and exclusion, social support, and the organizational identification, organizational commitment, and job satisfaction measures obtained from the OID, the OCQ and the JIG questionnaires.

RQ<sub>4</sub>: Does relationship quality moderate the effect of informal communication on organizational identification, commitment and job satisfaction?

This research question is examined with a series of hierarchical multiple regression analyses, using casual talk, expressed inclusion and exclusion, and social support, and testing an interaction term for relationship quality with each type of informal communication.

RQ<sub>5</sub>: Does relationship quality mediate the effect of informal communication on organizational identification, organizational commitment, and job satisfaction?

This research question is examined with a regression analysis using a three-step process provided in Baron and Kenny (1986).

RQ<sub>6</sub>: Does felt inclusion moderate the effect of informal communication on organizational identification, organizational commitment, and job satisfaction?

This research question is examined with a series of hierarchical multiple regression analyses, using casual talk, expressed inclusion and exclusion, and social



support, and testing an interaction term for felt inclusion with each type of informal communication.

RQ7: Does felt inclusion mediate the effect of informal communication on organizational identification, organizational commitment, and job satisfaction?

This research question is examined with a regression analysis using a three-step process suggested in Baron and Kenny (1986).

## CHAPTER 4

### RESULTS

This chapter begins with descriptive statistics on the individuals and companies involved in the study. Intercorrelations among the organizational outcomes are discussed prior to the presentation of results of the quantitative and qualitative statistical analyses related to each research question and hypothesis. The findings related to the three types of informal communication are presented first. Intercorrelations among the informal communication measures and the organizational outcomes are presented next, followed by the findings related to the quality of co-worker relationships. Regressions examining the combined influence of informal communication, felt inclusion, and the quality of co-worker relationships on organizational outcomes are presented last.

#### *Participant and Company Demographics*

After eliminating incomplete responses and responses from people who did not meet the stated eligibility requirements, the sample consisted of 97 remote workers, 45% male and 51% female (4% did not report their sex; See Table 4.1). While 36% of participants fell into the 45-54 age range, 42% of the total sample was under the age of 45. The majority of the participants were white (74%), highly educated (47% college graduates), married (66%), and earning above-average incomes (55% over \$75/year).

Characteristic	<i>n</i>	%
Sex		
Male	42	43.3
Female	51	52.6
Age (years)		
<25	14	14.4
26-34	14	14.4
35-44	18	18.6
45-54	33	34.0
55-64	14	14.4
65-70	1	1.0
Race		
Hispanic	3	3.1
White	71	73.2
Indian	1	1.0
Native American	3	3.1
African American	5	5.2
Asian	4	4.1
Other	1	1.0
Highest education level completed		
High school graduate	8	8.2
Attended some college	21	21.6
Associates degree	5	5.2
Bachelors degree	47	48.5
Post-college graduate	13	13.4
Annual income (\$)		
Under 30k	12	12.4
30-49.9	13	13.4
50-74.9	14	14.4
75-99.9	22	22.7
100k+	31	32.0
Relational status		
Married	62	63.9
Single	18	18.6
Widowed	1	1.0
Separated or divorced	12	12.4

Table 4.1. Demographic Characteristics of Remote Work Participants ( $N = 97$ )

Table 4.2 presents the organizational type and characteristics represented by the sample. The participants' companies represented a range of industries, company types, degree of organizational formality, and size. Participants working for private, for-profit

companies represented the highest proportion of the sample (56.5%), and more than 70% indicated that their company's structure was either formal (50%) or very formal (23%). The companies' sizes were fairly evenly represented in terms of number of offices, with 40% working for companies with fewer than 25 office locations, and 34% working for companies with more than 500 offices. The majority of participants worked alone at their locations (75%) and for companies with more than 100 remote employees (56%).

Companies of all sizes were represented, but the highest concentration of participants was from companies with more than 500 offices and more than 500 remote employees (highest listed category). A subset of the data consisted of 30 remote workers from the same company, a large Midwestern insurance corporation. This subset will be examined later to determine whether any differences exist between it and the rest of the sample that may affect the results.

Overall, the sample represents an experienced group of remote workers from diverse companies, and conforms to a strict definition of remote work as constituting people performing work in an environment physically removed from co-workers.

Characteristic	<i>n</i>	%
Organization type		
Government	1	1.0
Public	24	24.7
Private, for-profit	55	56.7
Non-profit	4	4.1
Other	9	9.3

Table 4.2. Participants' Reported Organization Type and Characteristics (*N* = 97) (Continued)

Table 4.2: Continued

Organization formality		
Very formal	25	25.8
Formal	48	49.5
Informal	9	9.3
Very informal	12	12.4
# Offices	24	24.7
1-5	15	15.5
6-25	6	6.2
26-50	5	5.2
51-100	10	10.3
101-500	34	35.1
>500		
Organization Size		
# Total employees	19	19.6
<50	9	9.3
50-100	11	11.3
101-250	6	6.2
251-500	49	50.5
>500		
# Remote employees	9	9.3
1-5	12	12.4
6-25	11	11.3
26-50	10	10.3
51-100	28	28.9
101-500	25	25.8
>500		
# Employees this location	73	75.3
I work alone	4	4.1
2-3 others	6	6.2
4-10 others	11	11.3
>10		

Table 4.2. Participants' Reported Organization Type and Characteristics ( $N = 97$ )

Table 4.3 shows the length of employee time working for the current company, working remotely for the current company, and working remotely over their entire career. Experience working for the current company and working remotely was

relatively high, with 39% having worked five years or more as remote employees, and 39% having worked five years or more for their current companies. Slightly more than 30% of participants had previously worked remotely for a company other than their present employer.

Length of Time	Working Remotely <i>n</i> (%)	Working for this Company <i>n</i> (%)	Total Percent
< 6 months	8 (8.2)	5 (5.2)	5.2
6 mos – 1 yr	13 (13.4)	15 (15.5)	15.5
1-3 yrs	22 (22.7)	24 (24.7)	24.7
3-5 yrs	16 (16.5)	15 (15.5)	15.5
5-10 yrs	22 (22.7)	16 (16.5)	16.5
10-20 yrs	13 (13.4)	15 (15.5)	15.5
>20 yrs	3 (3.1)	7 (7.2)	7.2

Table 4.3. Length of Time Working Remotely (Career) and Length of Time Working for Current Company (*N* = 97)

*Demographic summary.* The sample represented a relatively diverse group in terms of age, income, and marital status. The participants reflected a variety of company types as well, and were also fairly experienced at both working and working remotely. More than 75% of the participants reported that their companies were structured and operated either *very formally* or *formally*.

### *Interrelationships among Organizational Outcomes*

Before analyzing data related to specific research questions and hypotheses, the interrelationships between organizational outcomes require some examination. Note that in all cases, tests of significance are two-tailed. Pearson correlations show that organizational identification and organizational commitment were highly correlated ( $r = .87, p < .001$ ), organizational identification and job satisfaction were correlated ( $r = .62, p < .001$ ), and organizational commitment and job satisfaction were correlated  $r = .66, p < .001$ ). As can be seen, and as expected, identification and commitment appear to be measuring similar constructs. However, there are three primary reasons for keeping these separate in the present study. First, this study uses a number of original measures which have not been analyzed together with any of the organizational outcomes. If these new measures perform differently in analyses using these various outcomes, it may shed light on the debate related to identification and commitment. Second, extensive, separate literatures on these outcomes exist. Finally, scholars have not yet agreed on an appropriate solution, as is described next.

Whether organizational identification and commitment measure the same phenomenon has been extensively argued (Cheney & Tompkins, 1987; Gautam, Van Dick, & Wagner, 2004; Pratt, 1998; Pratt & Foreman, 2000). While this data stipulates a case for combining the two measures, there is enough recent evidence to suggest that identification and commitment are related but distinct. For example, Gautam, VanDick, and Wagner (2004) tested a revised eight-item OIQ with 450 employees of five different organizations. Their confirmatory factor analysis showed that identification was distinct from four primary commitment concepts. Further, commitment is generally viewed as

attitudinal, whereas identification is viewed as a dynamic, contextually-based construct (Ashforth & Mael, 1989). Finally, Pratt and Foreman (2000) have demonstrated that commitment and identification develop based on different sources.

For all of these reasons, the constructs of organizational identification and commitment have been kept distinct for this study. This topic is further addressed in the discussion section.

The next section reports the results for each research question and hypothesis advanced. Casual talk is first examined for its associations with the outcomes of organizational identification, organizational commitment and job satisfaction.

### *Informal Communication and Organizational Outcomes*

#### *Casual Talk and Organizational Outcomes*

RQ<sub>1</sub> asked what types of casual talk activities remote workers use when interacting with their colleagues. To answer this question, the frequencies, ranges, and mean responses from the casual talk activities task were examined. Table 4.4 presents the means and standard deviations for the 34 casual talk items.

Activity	Mean	Standard Deviation
Listening to co-workers	3.62	1.66
Laughing with co-workers	3.41	1.71
Complimenting, or being complimented by, co-workers	3.36	1.52
Getting to know each other	3.24	1.50

Table 4.4. Mean Frequencies and Standard Deviations of Casual Talk Activities ( $N = 97$ ) (Continued)



Table 4.4: Continued

Learning about each other's ideas	3.18	1.49
Filling others in on what's going on in the company	3.18	1.46
Expressing similarities, or sharing things we have in common with co-workers	3.10	1.59
Catching up on personal news with co-workers	3.00	1.43
Small talk with co-workers	2.98	1.46
Joking around	2.93	1.42
Asking of, or giving a favor to, co-workers	2.86	1.41
Telling, or listening to, stories with co-workers	2.81	1.50
Recapping the day's events	2.77	1.50
Complaining with co-workers	2.72	1.51
Providing expertise or knowledge about non-work related things	2.69	1.35
Collaborating on personal projects, ideas with co-workers	2.55	1.56
Making plans with co-workers	2.47	1.52
Requesting expertise about non-work related things	2.43	1.32
Comforting, or being comforted by, co-workers	2.34	1.35
Reminiscing with co-workers	2.23	1.13
Teasing with co-workers	2.21	1.24
Giving or getting instruction about non-work topics	2.19	1.29
Gossiping	2.18	1.24
Fantasizing with co-workers about fun things	2.14	1.26
Providing, or listening to, reasons for some behavior	2.13	1.02
Asking about personal items my co-worker(s) previously shared	2.08	1.09
Apologizing, or receiving apologies	2.06	.96

(Continued)

Table 4.4: Continued

Responding to inquiries about personal items I previously shared	2.01	1.09
Bragging with co-workers	1.94	1.11
Persuading, or being persuaded by, co-workers about non-work topics	1.94	1.20
Sharing photos with co-workers	1.92	1.19
Criticizing or questioning a co-worker's decision, or being criticized or questioned by co-workers	1.90	.91
Resolving personal conflict(s) with co-workers	1.85	.92
Brownnosing with co-workers	1.37	.68

Scale 1 = *Not at all*; 2 = *Rarely*; 3 = *Occasionally*; 4 = *Fairly often*; 5 = *Often*; 6 = *Frequently*; 7 = *Most of the time*.

Table 4.4. Mean Frequencies and Standard Deviations of Casual Talk Activities ( $N = 97$ )

Of the 34 items, remote workers identified the activity of “listening to co-workers” as occurring most often, with 30% reporting listening to co-workers either *often, frequently* or *most of the time*. Remote workers engaged in nine other communication activities at least occasionally ( $M_s > 3.0$ ): laughing with co-workers, complimenting or being complimented, getting to know each other, learning about each other's ideas, filling other co-workers in on what's going on in the organization, expressing similarities, catching up on personal news, engaging in small talk, and joking around. Participants reported that they engaged, at least *fairly often*, in eight of these nine casual talk activities 30% to 46% of the time (small talk was the exception). Only a small percentage (10%) reported that they *never* engaged in listening, complimenting or filling

each other in on what's going on in the company in these activities. These frequently occurring activities cohered conceptually in that they appeared to reflect efforts to establish common ground. Activities such as getting to know each other and expressing similarities, for example, comprised communicative behaviors with clear implications for building mutual understanding.

Remote workers reported engaging in six other activities at least fairly often ( $M_s > 2.5$ ): asking or giving favors, telling or listening to stories, recapping events, complaining, providing non-work expertise and collaborating on personal projects and ideas. At least 50% reported engaging in each of these activities fairly often or more. Eleven communication activities were reported as being engaged in less often ( $M_s > 2.0$ ). These included items such as fantasizing, reminiscing and teasing.

Remote workers reported that they least often engaged in brownnosing, resolving conflict, criticizing, sharing photos, persuading, and bragging. At least 67% of the participants responded that they either rarely engaged in these activities or did not engage in them at all. There are at least three reasons these particular items may have been reported infrequently. First, some items were worded in confusing ways, even though the pilot test did not suggest this possibility. Second, some items represented discrete activities that could be engaged in for diverse reasons (e.g., sharing photos). Finally, several items represented behaviors that might be markers of functionally positive behaviors in academic contexts; in this organizational context, however, these same behaviors might be considered negative, such as brownnosing (Harwood & Giles, 1992).

Overall, the results indicated that remote workers did casually talk with their co-located peers. Listening, laughing, complimenting, getting to know each other, learning

about each other's ideas, filling each other in, and expressing similarities were engaged in most frequently by remote workers. To facilitate subsequent analyses, the casual talk activity items were subjected to a series of factor analyses, which were used to form two casual talk activity measures. The exploratory nature of these factor analyses make it possible to assume that the variables do represent qualitatively different first-order concepts. Hence, scale construction based on the results is appropriate (Gorsuch, 1974).

*Casual talk activity measure.* With the goal of reducing the number of variables, and detecting structural relationships between them, I conducted a common factor analysis, entering all of the casual talk items, using the maximum likelihood method of extraction, specifying eigenvalues  $> 1$  (Kaiser criterion), and oblique rotation with Kaiser normalization (Cattell, 1978). Factor analytic techniques have been actively discussed in recent years (Conway & Huffcutt, 2003; Fabrigar, Wegener, MacCallum, & Strahan, 1999). From these discussions have emerged a number of suggestions for detecting a simple factor structure for purposes similar to those needed here: use a common factor method of extraction, use a combination of techniques to detect the number of factors, use oblique rotation, report full information about the analysis, including inter-factor correlations, the sample to variable ratio, and variable to factor ratio. No fewer than four variables were used for a factor, and the factor-to-variable ratio of 1:4 was satisfied. With an  $n$  not less than 92 for any item, the sample to variable ratio exceeded the recommended 5:1. In the present case, the scree plot, loading values (less than .65), cross-loadings (difference less than .20), communalities (less than .70), and a priori theory were all used to eliminate variables and "trivial factors" (Gorsuch, 1974, p. 151).

These procedures initially resulted in a five-component solution, which accounted for 58.40% of the variance. The Kaiser-Meyer-Olkin measure of sampling adequacy was highly acceptable (.921), and Bartlett's test of sphericity was significant. The elimination procedures were then employed to eventually produce a two-factor structure consisting of 12 items.

The final rotated two-component solution accounted for 65.51% of the variance. The eigenvalue for the first component was 7.86, and 1.37 for the second, with the components correlated at  $r = .60$ . Table 4.5 displays the factor loadings on this final two-component solution.

Activity	1	2
Listening to co-workers	.92	
Complimenting	.88	
Expressing similarities	.89	
Laughing with co-workers	.91	
Learning about each other's ideas	.84	
Getting to know each other	.83	
Telling, or listening to, stories	.87	
Collaborating	.65	
Complaining		.77
Gossip		.91
Small talk		.81
Persuading or being persuaded		.80

Table 4.5. Rotated Component Matrix for Two-factor Solution

The first component included laughing, listening, getting to know one another, expressing similarities, learning about each other's ideas, collaborating, telling or listening to stories and complimenting one another. These eight items also clustered conceptually, in that they all represent communication that functions either to build common ground or to build relationships (Goldsmith and Baxter, 1996). The items were averaged to form a measure of building common ground ( $M = 22.29$ ,  $SD = 9.52$ ). Cronbach's alpha was .95, indicating high internal consistency. This measure will be referred to as "common ground" casual talk.

The second component consisted of four casual talk items: complaining, gossiping, small talk, and persuading. These four items clustered conceptually in that each one is suggestive of a distancing between interlocutors. Small talk, complaining and gossiping inherently assume a separation from the focal subject; persuasion also carries an assumption of separation in that a person would only need to be persuaded if his or her view differed from one's own. Items were averaged to form a second measure of casual talk ( $M = 9.80$ ,  $SD = 4.80$ ), with acceptable reliability ( $\alpha = .90$ ). This measure will be referred to as "out-grouping" casual talk.

*Casual talk frequency and organizational identification, commitment and job satisfaction.*  $H_1$  predicted that frequency of casual talk between remote workers and their central office peers would be positively associated with organizational identification, commitment and job satisfaction. To test these relationships, I computed Pearson correlations between both of the casual talk activities measures (common ground talk, out-grouping talk), and the three organizational outcome variables. Table 4.6 shows the results of this analysis.

Casual Talk Activity	Organizational Outcome		
	Identification	Commitment	Job Satisfaction
Common Ground Talk	.29**	.17	-.00
Out-grouping Talk	-.09	-.21*	-.27**

*Note.* \* $p < .05$ . \*\* $p < .001$ .

Table 4.6. Pearson Correlations of Casual Talk Activities Measures with Organizational Outcomes ( $N = 97$ )

H<sub>1</sub> was partially supported. Frequency of casual talk activities was associated, but inconsistently, with all three of the organizational outcomes. Although the magnitudes of association were somewhat weak, the results pointed to the existence of a relationship between organizational identification and the common ground measure of casual talk, and significant negative relationships between out-grouping talk and organizational commitment and between out-grouping talk and job satisfaction.

#### *Inclusion and Exclusion Message Practices and Organizational Outcomes*

*Inclusion messages.* RQ<sub>2</sub> asked what messages co-workers use that result in remote workers feeling more included in the organization. Eighty seven participants responded when asked to report a communication with a co-worker which made them feel more included in the company. The categories of inclusion messages are reported in Table 3.1, which presents the coding system used. This section begins with an examination of messages that resulted in remote workers feeling more included in their organization.

Participants reported that, when their basic relational goals were addressed, they felt more included. Personal and social relating, which included asking and being asked about one's family or personal life (e.g., "...he asked about how my quarter was going. Interested in my classes, etc."), engaging in friendly openings and closings (e.g., "Hi Chris: how is it going today? "It is cold here, how about there? I said, sure is cold"), or planning or being asked to participate in activities outside of work (e.g., "Hey do you want to come to the basketball game with us tonight?"), was reported by 6% of the participants as fostering inclusion. Many of these messages operated at the basic level of relational goal achievement, and the organization appeared to be simply the incidental context for the communication.

Complimenting, or being complimented, and general displays of interest, were also reported most often (19%) as a topic of informal communication that fostered feelings of inclusion in the company. Remote workers reported receiving praise related to one's work (e.g., "kudos to [location x] and [location y], at 86 and 87 percent respectively"), and receiving praise related to one's personal ability, characteristics or effort (e.g., "He also said that I was doing really well and that he wanted to know the secret to my success out there"). Compliments functioned in a number of ways, addressing individuals' task, relational or identity goals, and sometimes, a combination of these. Some compliments functioned in complex ways, such that the effect went beyond individual task, relational and identity goals, and made evident a deeper involvement with the organization, such that the organization itself served as facilitator of, or the reason for, the interaction.



Supportive communication related to work or task was reported by 15% of the participants as fostering inclusion. Messages included receiving or being offered support, (e.g., “He assured me that he and the other sales managers have gone through the same thing. He told me a story of how he felt he was walking through a dark room when he first started”), and providing or offering support to others (e.g., “A worker asked me if I would help her out with some overflow of work”). Most of the reported supportive messages related to task goals, and the organization functioned either to provide the context in which support took place, or to facilitate the support by virtue of organizational practices or processes.

Messages that reflected organizational involvement with the individual, such as discussions about the company’s direction, functioned to more closely bind individuals with organizations (12%). Many responses reflected involvement in basic work discussions, (e.g., “A group of us were together to talk about the direction of the company. Michael told us how the company was growing and about new opportunities in future for virtual people.”), as well as communication that indicated that one’s opinion or expertise was valued (e.g., “One of the girls, who is in the same position as I, called me and asked my advice on how to execute her promotions more effectively”). Similarly, learning that one’s expertise or ideas were employed for wider organizational benefit, was inclusionary (34%), as exemplified by this report: “Due to the exceptional profitability of my own territory, it was felt that I would be the best person to create this new budget.” In addition, having one’s ideas taken up by the organization fostered inclusion even when the remote worker was not (apparently) publicly named. Simply

receiving thanks and appreciation for one's work was also mentioned as a message resulting in feeling more included (e.g., "He wrote back thanking me.").

Finally, remote workers reported feeling included when they collaborated in producing joint solutions or products in planning future strategies or events (e.g., "We have been working closely together to plan our training sessions over the next several weeks."). Of the total responses, 7% were at this highest level. Evidence of collaborating could also be seen in reports of discussing mutual performance improvements by corroborating one another's needs, as in the following example: They requested the call to get my input and recommendations before making a final decision and they included me in the final decision. I was asked for the positives and negatives of our decision. How it may impact our relationship with our partner (agent) etc." Clear levels of multifunctionality and sophistication emerged in such messages of inclusion, which sometimes served to effectively blur the boundary between individual and organization.

*Inclusion message summary.* In general, when remote workers were acknowledged, either personally or professionally, they reported feeling more like a part of their companies. Task, relational and identity concerns were addressed by these messages in a number of ways. Remote workers felt included when they were involved in collaborative efforts, and when their contributions were taken up by the organization for broader use or benefit by the company as a whole. Inclusion messages varied in terms of the role played by the organization, i.e., organizations could clearly be seen as not involved, as involved by virtue of providing the context for interaction, or as involved as joint collaborator in the achievement of personal, task and identity goals.

*Exclusion messages.* RQ<sub>2</sub> also asked what messages co-workers use that result in remote workers feeling less included in the organization. Eighty eight participants responded when asked to report a communication with a co-worker which made them feel less included in the company. The categories of exclusion messages are reported in Table 3.2, which presents the coding system used. This section begins with an examination of messages that resulted in remote workers feeling less included in their organization.

Remote workers most often reported (34%) that messages of indifference and simple lack of acknowledgement made them feel less like a part of their organizations. This indifference was often a result of bureaucratic error, or the organization simply lacked the infrastructure or policies that would facilitate inclusion, with the result being impediments to the remote workers' relational or task goals. Other messages reflected a more deliberate oversight, as in this example: "When the email came out that due to a large number of claims reps in the state being in a commercial claims training class that I was going to be required to travel very far outside of my claims territory to cover other regions. I was never offered the opportunity to go to the class like other reps in my unit were."

Irrelevant, inappropriate or impersonal communication was also reported as leaving remote workers feeling less like a part of their companies (15%). Some of these messages reflected simple lack of thought, such as receiving mass-distributed e-mails reporting on activities in which remote workers were unable to participate. Others were distinctly impersonal, such as this example: "We receive e-mails from our large corporate headquarters—say 6-8/week—that rarely relate to anything our part of the company

is involved in. They are just a part of the large bureaucracy that goes with a very large organization. They could be promotion notices, human resource stuff, expansion plans, etc.” Similarly, another frequent type of exclusion message reflected ways in which remote workers are unable to participate by virtue of simply being remote, as in this example: “I don’t think it was anything that was said or not said, but daily in staff meetings leave me feeling less a part of the company. It is hard to hear the bantering that goes back and forth and to pick up on the tones of the conversation.”

A third communication practice relayed indifference through a lack of support or implicit denial of the legitimacy of one’s participation (25%). This included messages sent by remote workers requesting work help that were ignored; sometimes several messages on the same topic went unanswered. For example, “I currently have a large customer that has a growing demand for a product from us. I have closed a 5 year contract for an escalating volume of this product and have placed it in my forecast as required. There is a shortage in capacity and I continually get emails from Supply Chain on availability for X amount of pounds for this product. I have sent several emails to management asking for them to clarify this point with supply chain and it is getting more and more difficult to get action.” In such cases, the organization was not simply impeding goals through normative error, but failing to prevent known impediments to individuals’ achievement of task goals, which often affected personal and identity goals.

Just as being asked for one’s input or opinion made remote workers feel more like a part of their companies, not being asked to contribute made them feel less like a part of the company (8%), and often functioned to deter task, relational and identity goals (e.g., “Discussing sales performance by the sales staff with the owner via e-mail. My ‘take’ on

what he was saying is that our current YTD sales, which is our best in 5 years, was a fluke.”). Messages such as these excluded employees on individual as well as organizational levels, by impeding personal goals and rejecting the individual as a valued or contributing member of the organization. In such cases, organizations were not only unsupportive, but impermeable to remote employees on any level, and the individuals’ goals were rejected.

*Exclusion message summary.* Remote workers felt excluded from their companies when they experienced both explicit and implicit impediments to, disregard for, or rejection of, their task, relational or identity goals, when they received messages of indifference and lack of acknowledgment, when they did not receive a response to their own communication or requests, and when they were not asked to participate in work-related collaborations to which they could/should rightfully contribute. When their peers talked about social plans that they were not invited to join, remote workers reported feeling excluded. However, remote workers more often reported feeling excluded when conversations regarding work issues took place without them. The ability to contribute and the recognition that they make a valuable contribution were quite clearly important factors in fostering or failing to foster feelings of inclusion.

*Inclusion Constructs and Organizational Outcome Variables: H<sub>2</sub>*

H<sub>2</sub> predicted that higher levels of inclusion would be associated with higher levels of organizational identification, commitment, and job satisfaction. To test this hypothesis, Pearson correlations were conducted with the expressed inclusion and exclusion measures, and all three organizational outcome variables.

Inclusion-Exclusion Constructs	Organizational Outcomes			
	<i>N</i>	Identification	Commitment	Job Satisfaction
Expressed Inclusion	89	.29**	.29**	.13
Expressed Exclusion	89	-.32**	-.30**	.12*
Felt Inclusion	88	.44**	.31**	.22*

*Note.* # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ .

Table 4.7. Pearson Correlations of Inclusion-Exclusion Constructs with Organizational Outcomes

H<sub>2</sub> was supported. Expressed inclusion was positively associated with organizational identification and commitment at a weak level of magnitude, but was not significantly associated with job satisfaction. Expressed exclusion was significantly and negatively correlated with identification and commitment, and positively with job satisfaction, though at a weak level of magnitude. Felt inclusion was positively associated with organizational identification, and organizational commitment at moderate levels of magnitude, and with job satisfaction at a weak level of magnitude.

#### *Social Support and Organizational Outcomes*

H<sub>3</sub> predicted that higher levels of social support would be associated with higher levels of organizational identification, commitment, and job satisfaction. As will be recalled, three measures of support were included, one general measure and two measures of specific support skills. Pearson correlations between all three social support measures and the organizational outcomes are presented in Table 4.8.

Support Measures	Organizational Outcomes		
	Identification	Commitment	Job Satisfaction
Ego Support	.08	-.01	-.08
Comforting Support	.18#	.06	-.06
General Support	.38***	.27**	.08

*Note.* # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.8. Pearson Correlations of Social Support and Satisfaction Measures with Organizational Outcomes ( $N = 97$ )

As can be seen,  $H_3$  was partially supported. General social support was correlated with organizational identification at a moderate level of magnitude and with commitment at a weak level of magnitude but not with job satisfaction. The ego and comforting support subscales were not correlated with any of the three outcomes.

#### *Informal Communication Satisfaction and Organizational Outcomes*

$H_4$  predicted a positive association between informal communication satisfaction and the three organizational outcome variables. To test this hypothesis, I computed Pearson correlations between the informal communication satisfaction construct and organizational identification, commitment and job satisfaction, and  $H_4$  was fully supported (All  $Ns = 97$ ). Remote workers' satisfaction with their informal communication was positively associated with organizational identification at a moderate level of magnitude ( $r = .39, p < .001$ ), and with organizational commitment and job satisfaction at weaker levels of magnitude ( $rs = .29$  and  $.27$ , respectively,  $ps < .05$ ).

#### *Interrelations among Informal Communication Constructs*

To examine the interrelationships among the informal communication constructs, I computed a series of Pearson correlations that are displayed in Table 4.9.

1. Informal Communication Satisfaction	1								
2. Felt Inclusion	.60***	1							
3. Expressed Inclusion	.25**	.28**	1						
4. Expressed Exclusion	-.06	-.09	.09	1					
5. Common Ground	.37***	.54***	.39***	.02	1				
6. Out-group Talk	.06	.23*	.09	.12	.67***	1			
7. General social support	.59***	.60***	.34**	.08	.53***	.34**	1		
8. Ego support	.22*	.27**	.06**	.12	.35**	.32**	.53***	1	
9. Comfort support	.14	.33**	.05**	.15	.36***	.36***	.50***	.56***	1

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*Note.* # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Table 4.9. Pearson Correlations among Informal Communication Constructs ( $N = 89$ )

Pearson correlations between all informal communication variables indicated relationships between most of the constructs. Expressed exclusion was not correlated with any other communication variable; however, expressed inclusion was correlated with social support and common ground at moderate levels of magnitude. General social support and common ground talk correlated with all other variables except expressed exclusion.



*Co-worker Relationship Quality and Organizational Outcomes: H<sub>5a-c</sub>*

H<sub>5a-c</sub> predicted that remote workers with higher satisfaction, liking and trust of co-workers will report higher levels of organizational identification, commitment and job satisfaction. To test these hypotheses, a series of correlations was conducted, and results are displayed in Table 4.10.

Relationship Quality Measures	Organizational Outcomes		
	Identification	Commitment	Job Satisfaction
Relationship Satisfaction	.38***	.34**	.22*
Trust	.21*	.20#	.17
Liking	.47***	.47***	.24*

*Note.* # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.10. Pearson Correlations of Relationship Measures with Organizational Outcomes ( $N = 97$ )

H<sub>5a</sub>, that remote workers with higher liking of co-workers would report higher levels of organizational identification, commitment, and job satisfaction, was supported. Correlation analyses indicated moderate to strong positive relationships between liking and organizational identification, and between liking and organizational commitment and a positive but weaker association between liking and job satisfaction. H<sub>5b</sub>, that remote workers with greater trust of co-workers would report higher levels of organizational outcomes, was weakly supported, with a significant correlation between trust and identification, but the correlation only neared significance with commitment. H<sub>5c</sub>, that

remote workers with greater relationship satisfaction would also report higher levels of organizational identification, commitment, and job satisfaction, was fully supported. Relationship satisfaction weakly correlated with job satisfaction and moderately correlated with identification and commitment.

This examination of relationship states and organizational outcomes indicates a clear pattern of association, with relationship satisfaction, liking and trust all significantly related to organizational identification, and relationship satisfaction and liking associated with both organizational commitment and job satisfaction.

#### *Interrelationships among Relationship States*

Table 4.11 shows that all three relationship states are interrelated, with the strongest association between satisfaction and liking. These interrelationships were expected based on findings of past research (e.g., Stafford & Canary, 1991). To facilitate analyses focusing on informal communication constructs, only the liking variable was used to represent general relationship quality in subsequent analyses, since it was most strongly correlated with the other relationship states.

Variable	1	2	3
1. <i>Satisfaction</i>	1		
2. <i>Trust</i>	.30***	1	
3. <i>Liking</i>	.60***	.46***	1

*Note.* # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.11. Pearson Correlations among Relationship States ( $N = 97$ )

### *Data Subset*

Before moving to the regression section of this chapter, it was important to determine whether the subset of 30 remote workers from the same company was significantly different from the rest of the sample. For these analyses, I coded responses as either 1 (from this company) or 0 (not from this company). Then an independent sample *t*-test was conducted using these values and the grouping variable and entering all three organizational outcomes. *T*-tests revealed that participants from the same company were not significantly different from all other participants on organizational identification ( $\underline{M}s = 5.36$  vs.  $5.12$ ,  $t(95) = -.77$ ,  $p = .44$ ), commitment ( $\underline{M}s = 5.40$  vs.  $5.12$ ,  $t(95)$ ,  $p = .36$ ) and job satisfaction ( $\underline{M}s = 2.62$  vs.  $2.32$ ,  $t(95)$ ,  $p = .12$ ). The data subset was also compared to the larger data set on all informal communication, relationship state, and felt inclusion constructs, as well as on demographics of the sample, intent to stay and intent to continue working remotely. The only significant difference was that the subset indicated greater intention to stay with their present company than did the larger data set:  $F = 19.44$  (1, 91)  $p < .05$ .

### *Combined Influence of Informal Communication, Relationship Quality, and Felt Inclusion on Organizational Outcomes*

This last section consists of a series of regressions that examine the combined influence of informal communication, relationship quality, and felt inclusion on each of the organizational outcomes, organizational identification, organizational commitment and job satisfaction. Five research questions organized these regressions. One focused on the combined effect of all types of informal communication variables, relational quality, and felt inclusion on the organizational outcomes. The next set of four questions focused

on the specific nature of the relationship between the types of informal communication, liking and felt inclusion. This examination was intended to clarify whether liking and felt inclusion affected the strength of the relationship between informal communication and the organizational outcomes (moderator), or whether either variable actually accounted for the relationship between the predictors and the outcomes (mediators). Two more research questions focused on whether relational quality and felt inclusion moderated the relationships obtained between informal communication and the organizational outcomes. A final two questions focused on whether relational quality and felt inclusion mediated the relationships between informal communication and organizational outcomes. Before examining moderating and mediating effects, however, it is useful to examine the relationships between all of the predictor variables apart from the outcome variables to assess the degree of multicollinearity.

*Informal Communication, Co-Worker Relationship Quality, and Felt Inclusion*

*Co-worker relationship quality.* To examine the combined influence of informal communication on the quality of coworker relationships, a simple multiple regression was conducted on co-worker relationship quality, using liking as the dependent measure, as previously explained. The six types of informal communication were entered as the predictors: common ground, out-grouping, inclusion message level, exclusion message level, informal communication satisfaction, and general support. This regression was significant,  $F(6, 76) = 8.85, p < .001$ , and accounted for 38% of the variance in co-worker liking. The regression findings are presented in Table 4.12. Of the six communication constructs, three were significant predictors: general support ( $\beta = .43$ ),

inclusion message level ( $\beta = .27$ ), and exclusion message level ( $\beta = -.19$ ), with general support uniquely accounting for 16% of the variance (*semi-partial*  $r = .39$ ).

Predictors	Relationship Quality			Felt Inclusion		
	$\beta$	$R^2$	Adj $R^2$	$\beta$	$R^2$	Adj $R^2$
Model		.43	.38		.55	.52
Common ground talk	-.10			.27*		
Out-grouping talk	-.18			-.04		
Expressed Inclusion	.27*			.11		
Expressed Exclusion	-.19*			-.13		
Informal com sat	.16			.27*		
General support	.43*			.35*		

Note. Standardized regression coefficients are reported. \* $p < .05$ .

Table 4.12. Summary of Simple Multiple Regressions on Co-Worker Relationship Quality and Felt Inclusion ( $N = 84$ )

*Felt inclusion.* The combined influence of informal communication types was also examined on the degree of felt inclusion. The six types of informal communication were entered as predictors in a simple multiple regression, which was highly significant,  $F(6, 76) = 14.44, p < .001$ , accounting for 52% of the variance in felt inclusion. These regression findings are also presented in Table 4.12. Common ground ( $\beta = .27$ ), informal communication satisfaction ( $\beta = .27$ ), and general support ( $\beta = .35$ ) emerged as significant predictors, with general support uniquely accounting for 13% of the variance in felt inclusion (*semi-partial*  $r = .36$ ). Overall, 52% of the variance was accounted for in felt inclusion. These results point to the existence of a strong relationship between informal communication and the affective state of inclusion.

*Combined Influence of Informal Communication, Relationship Quality and Felt Inclusion*

*Combined influence of informal communication types on organizational*

*outcomes.* RQ<sub>3a-c</sub> asked about the combined influence of remote employees' casual talk, expressed inclusion and exclusion, and supportive communication with co-workers on organizational identification, organizational commitment, and job satisfaction. A similar set of procedures was employed for each simple multiple regression and analysis on each organizational outcome. Each organizational outcome was also considered separately, due to the differences in patterns of correlations. Tests for multicollinearity were conducted for each regression, and revealed that multicollinearity was not problematic (i.e., the variance inflation factors were less than 10 in each case, and tolerance coefficients were greater than .20). The five types of informal communication were entered as predictors. Table 4.13 presents the results.

Step	Var (s) entered	OID			OCQ			JSAT		
		$\beta$	$R^2$	$Adj$ $R^2$	$\beta$	$R^2$	$Adj$ $R^2$	$\beta$	$R^2$	$Adj$ $R^2$
1	Model		.38	.34		.34	.29		.18	.12
	Common ground	.25#			.18			.16		
	Out-group	-.29*			-.39**			-.41***		
	Expressed Inclusion	.21*			.24*			.14		
	Expressed Exclusion	-.32**			-.26*			-.11		
	Support	.31**			.25*			.14		

*Note.* Standardized regression coefficients are reported. OID = Organizational identification. OCQ = Organizational commitment. JSAT = Job satisfaction. # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.13. Summary of Regression Analyses for Informal Communication Predicting Organizational Identification, Commitment and Job Satisfaction ( $N = 77$ )

The first regression was significant,  $F(5, 71) = 8.82, p < .001$ , and accounted for 38% of the variance in organizational identification. All types of informal communication were significant or marginally significant predictors. The regression on organizational commitment was also significant,  $F(5, 71) = 7.23, p < .001$ , and accounted for 34% of the variance. All types of informal communication were significant predictors, except for common ground talk. The third regression on job satisfaction was also significant,  $F(5, 71) = 3.12, p < .05$ , and accounted for 18% of the variance, but only expressed exclusion emerged as a significant predictor. Hence, most of the types of informal communication predicted organizational identification and commitment, but not job satisfaction.

*The Moderating Role of Relational Quality and Felt Inclusion on Informal Communication and Organizational Outcomes*

A next series of regressions was conducted on organizational identification, commitment and job satisfaction to determine whether relationship quality and felt inclusion moderated the effects of informal communication, as addressed in RQ<sub>4</sub> and RQ<sub>6</sub>. In each regression, the relevant informal communication constructs, along with relationship quality and felt inclusion, were entered on the first step, with the relevant interaction terms entered on the second step. Due to the small sample, only one relationship state variable was included, as regressions with samples under 100 are not considered good candidates for many predictors (Montgomery & Peck, 1982). In this case, degree of co-worker liking was the relationship state variable that was included at step two, as it was the construct most strongly related to the organizational outcomes. Felt inclusion was also included as a potential moderator because a multifunctional goal

model (R. A. Clark & Delia, 1979) presupposes that, in addition to establishing relationships, interlocutors are simultaneously creating identity; hence, the psychological effect or state of inclusion is of as much interest as the relational construct.

Each of the three types of informal communication (casual talk, inclusion message types, and social support) was considered separately, as each has been theorized separately. Each organizational outcome was also considered separately. Relevant interaction terms were created by standardizing the variable and multiplying them; these were entered at Step 2 of each regression. If relational quality and felt inclusion are acting as moderators, they will produce significant interaction terms in the regressions.

Tests for multicollinearity were also conducted for each regression. None of the predictors were intercorrelated above .60 and the tolerance coefficients were greater than .20, indicating that multicollinearity was not problematic (Agresti & Finlay, 1997).

*Casual talk, informal communication satisfaction, potential moderators and organizational outcomes.* A first set of regressions was carried out on the two casual talk measures, common ground talk and out-grouping talk, along with informal communication satisfaction, liking and felt inclusion on the three organizational outcomes, organizational identification, organizational commitment, and job satisfaction. For each regression, common ground, out-grouping, and informal communication satisfaction were entered at Step 1, along with co-worker liking and felt inclusion. Informal communication satisfaction was included in this regression because it represents an overall assessment of satisfaction rather than a focused assessment of support or inclusion. Relevant interaction terms are entered at Step 2, and the results are presented in Table 4.14.



Step	Var (s) entered	OID			OCQ			JSAT		
		$\beta$	$R^2$	$Adj R^2$	$\beta$	$R^2$	$Adj R^2$	$\beta$	$R^2$	$Adj R^2$
1	Model		.35	.31		.34	.30		.21	.16
	Common ground	.26#			.25			.14		
	Out-grouping	-.28*			-.40**			-.45**		
	Inf com sat	.01			-.08			.08		
	Liking	.30**			.37***			.09		
	Felt Inclusion	.26*			.22#			.16		
2	Model		.40	.32						
	Felt inc x Common Ground	-.29*								

*Note.* Standardized regression coefficients are reported. OID = Organizational identification. OCQ = Organizational commitment. JSAT = Job satisfaction. # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.14. Summary of Hierarchical Multiple Regression Analyses for Casual Talk Variables Predicting Organizational Identification, Commitment and Job Satisfaction

( $N = 91$ )

The first analysis on organizational identification was significant at Step 1,  $F(5, 90) = 8.99$ ,  $p < .001$ , and accounted for 31% of the variance in organizational identification. Common ground was a marginally significant predictor, while out-grouping, felt inclusion and liking were significant predictors. Only one interaction term emerged as significant in Step 2; felt inclusion appears to moderate the effects of

common ground talk on organizational identification ( $\beta = -.29, p < .5$ ). Analysis of means shows that those with low levels of felt inclusion and low levels of common ground talk with co-workers were least likely to be identified with their organizations, while those with high levels of felt inclusion were more likely to be identified with their organizations, regardless of the amount of common ground talk they experienced with co-workers. The other interaction terms were not significant, so they are not displayed. Given that there were no significant interaction terms with co-worker liking, co-worker liking does not appear to moderate the effects of common ground and out-grouping talk on organizational identification.

The second analysis on organizational commitment was also significant,  $F(5, 90) = 10.83, p < .001$ , and accounted for 30% of the variance in organizational commitment. At Step 1, out-grouping talk and liking were significant predictors, and common ground and felt inclusion were marginally significant predictors. No interaction terms emerged as significant at Step 2, so it does not appear that co-worker liking and felt inclusion moderate the effects of casual talk on organizational commitment.

The third analysis on job satisfaction was also significant,  $F(5, 90) = 4.47, p < .001$ . Only out-grouping talk emerged as a negative significant predictor. No significant interaction terms emerged at Step 2, so it appears that co-worker liking and felt inclusion are not moderating the effects of casual talk on job satisfaction.

In summary, the regression model for organizational identification included common ground casual talk, out-grouping talk, co-worker liking and felt inclusion, and accounted for 31% of the variance. Out-grouping and co-worker liking emerged as significant predictors of organizational commitment, and accounted for 30% of the

variance. Only out-grouping predicted job satisfaction, and accounted for 16% of the variance overall. Liking and felt inclusion are not moderators of the effects of casual talk on organizational commitment or job satisfaction, and liking is not a moderator of identification. However, felt inclusion appears to moderate the effects of common ground talk on identification.

*Inclusion-relevant messages, potential moderators, and organizational outcomes.*

Using a similar set of procedures, a second set of regressions examined the combined effect of expressed inclusion and exclusion, co-worker liking, felt inclusion, and each of the organizational outcomes. Because the inclusion and exclusion message levels were not related to job satisfaction, no regression was conducted on this third organizational outcome. In each regression, inclusion and exclusion message level, along with liking and felt inclusion, were entered at Step 1, and relevant interaction terms were entered at Step 2. These regression findings appear in Table 4.15.

Step	Variable (s) entered	OID			OCQ				
		$\beta$	$R^2$	$Adj R^2$	$R^2_{change}$	$\beta$	$R^2$	$Adj R^2$	$R^2_{change}$
1	Model		.38	.35	.38		.21	.19	.21
	Inclusion	.16				.03			
	Exclusion	.26**				-.24*			
	Liking	.32**				.41***			
	Felt Inclusion	.18				.03			
	Model		.42	.37	.04		.41	.36	.05
	Inclusion	.17#				.18#			
	Exclusion	-.26**				-.22*			
	Liking	.34**				.44***			
	Felt Inclusion	.16				.02			
	Exclusion x Liking	.17#				.22*			

*Note.* Standardized regression coefficients are reported. OID = Organizational identification. OCQ = Organizational commitment. # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.15. Summary of Hierarchical Multiple Regression Analyses for Expressed Inclusion and Exclusion Predicting Organizational Outcomes ( $N = 83$ )

The first regression on organizational identification was significant at Step 1,  $F(4, 82) = 11.84, p < .001$ , and accounted for 35% of the variance in organizational identification. Exclusion message level and co-worker liking were predictors of organizational identification at Step 1. Of all of the interaction terms, the exclusion x liking interaction term emerged as marginally significant at Step 2; the revised equation using just this term is presented in Table 4.15. Analysis of the interaction term showed that those who experienced explicit forms of exclusion were least likely to feel identified

with their organizations when they also disliked their co-workers. Those who liked their co-workers and experienced less explicit forms of exclusion were most likely to feel more identified with their organizations.

The second regression on organizational commitment was also significant at Step 1,  $F(4, 82) = 10.95, p < .001$ , and accounted for 33% of the variance in organizational commitment. Again, exclusion message level and co-worker liking emerged as significant predictors at Step 1, while expressed inclusion was a marginally significant predictor. At Step 2, one interaction term emerged as significant; the revised equation appears in Table 4.15. Liking emerged as a moderator of exclusion on organizational commitment. Those who experienced explicit forms of exclusion were least likely to feel committed toward their organizations when they also disliked their co-workers, while those who liked their co-workers and experienced less explicit forms of exclusion were most likely to feel committed toward their organizations. The commitment level of those employees who liked their co-workers was not as affected by the experience of exclusion messages as was the commitment level of employees who disliked their co-workers.

In summary, inclusion and exclusion constructs predicted organizational outcomes, but when combined with liking and felt inclusion constructs, only expressed exclusion remained. Liking appeared to be a moderator of exclusion on organizational identification and commitment. Expressed inclusion and exclusion did not account for significant variance in job satisfaction.

*Support communication, potential moderators, and organizational outcomes.*

A third set of regressions was conducted on support communication and the organizational outcomes. Because support communication was correlated only with

organizational identification and commitment, only two regressions were conducted. Furthermore, only the general support measure was utilized in these two regressions, because the other two support measures were uncorrelated or poorly correlated with the organizational outcomes. As before, in each regression, general support, co-worker liking and felt inclusion were entered at Step 1, and the relevant interaction terms were entered at Step 2. The results of these analyses are presented in Table 4.16.

Step	Variable (s) entered	OID			OCQ		
		$\beta$	$R^2$	$Adj R^2$	$\beta$	$R^2$	$Adj R^2$
1	Model		.29	.27		.25	.23
	Gen support	.02			-.11		
	Liking	.34**			.45*		
	Felt inclusion	.29**			.20#		

*Note.* Standardized regression coefficients are reported. # $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 4.16. Summary of Hierarchical Multiple Regression Analyses for Social Support Predicting Organizational Identification and Commitment ( $N = 97$ )

The regression on organizational identification was significant at Step 1,  $F(3, 96) = 9.79, p < .001$ . General support was not a significant predictor but both liking and felt inclusion were significant predictors of organizational identification, accounting for 10% and 7%, respectively (*semi-partial rs* = .33 and .27). Together the three variables accounted for 27% of the variance in organizational identification. None of the interaction terms were significant, so felt inclusion and liking did not moderate the effect of general support on organizational identification.

The second regression on organizational commitment was also significant,  $F(3, 96) = 10.41, p < .001$ . Only liking emerged as a significant predictor of organizational commitment at Step 2, although felt inclusion was marginally a significant predictor ( $p < .08$ ). Together the constructs accounted for 23% of the variance in organizational commitment. None of the interaction terms were significant at Step 2; co-worker liking and felt inclusion appear not to moderate the relationship between support and organizational commitment.

*Summary of combined influence of informal communication and moderator effects on organizational outcomes.* Informal communication accounted for variance beyond relationship quality and felt inclusion. Together, common ground, out-grouping, informal communication satisfaction, liking and felt inclusion accounted for 31% of the variance in organizational identification, 30% of the variance in commitment, and 16% of the variance in job satisfaction. Expressed inclusion, exclusion, and liking accounted for 35% of the variance in identification and 33% of the variance in commitment. General support, liking and felt inclusion together accounted for 14% of the variance in identification and 23% of the variance in commitment.

Tests for moderating effects of relationship quality and felt inclusion show that only felt inclusion moderates the effects of common ground on organizational identification. Those who engage in more common ground talk are most likely to feel more identified with their organizations when they feel most included. Liking moderates the effects of exclusion, such that those who experienced explicit forms of exclusion were least likely to feel identified with their organizations when they also disliked their co-workers. Those who liked their co-workers and experienced less explicit forms of

exclusion were most likely to feel more identified with their organizations. Liking and felt inclusion do not moderate the effects of general support on any of the outcomes.

*Mediation Tests for Co-worker Liking and Felt Inclusion on Organizational Outcomes*

RQ<sub>5</sub> and RQ<sub>7</sub> asked whether relationship quality and felt inclusion, respectively, mediated the effects of informal communication on the organizational outcomes.

Relationship quality and felt inclusion could be viewed as mediators of the effects of informal communication on organizational outcomes if they account (at least partially) for the relation between the predictor (informal communication) and the organizational outcomes. Three regressions were conducted for each of the informal communication variables, using liking and felt inclusion as potential mediators. First, the potential mediator (liking, then felt inclusion) was regressed on each of the informal communication variables. Second, each of the organizational outcomes was regressed on the informal communication variables. Finally, each of the outcome variables was regressed on the informal communication variables with and without the potential mediators. According to Baron and Kenny (1986), the initial tests of mediation require (a) that the independent variable has an effect on the potential mediator in the first regression, (b) that the independent variable exhibits an effect on the dependent variable in the second regression, and (c) that the potential mediator affects the dependent variable. If all of the above conditions hold, the third equation will show a lesser effect of the independent variable on the dependent variable. If the independent variable has no effect when controlling for the mediator, perfect mediation has occurred (Baron & Kenny, 1986).



*Casual talk, mediation tests, and organizational outcomes.* Given the overall weak (or no) correlations between the types of informal communication and job satisfaction, the mediation tests focused only on organizational identification and commitment. Prior regressions satisfied the initial tests for mediation as they showed that (a) casual talk predicted co-worker liking and felt inclusion; (b) casual talk predicted the organizational outcomes of identification and commitment; and (c) liking and felt inclusion predicted the organizational outcomes.

A first set of simple multiple regressions was conducted to determine the extent to which co-worker liking and felt inclusion mediated the effects of casual talk on organizational identification. When co-worker liking and felt inclusion were added to the equation for organizational identification, the predictor of common ground was reduced from a significant to a marginally significant predictor. ( $\beta$ s changed = .41,  $p < .01$  to .26,  $p < .10$ ), but out-grouping talk was not significantly reduced ( $\beta$ s reduced -.33 to -.29, both  $p < .05$ ). Informal communication satisfaction was significantly reduced in magnitude ( $\beta$ s changed from = .26,  $p < .05$ , to .08, *ns*). Hence, it appears that co-worker liking and felt inclusion mediated the effects of common ground and informal communication satisfaction on organizational identification. When the mediators of liking and felt inclusion were considered separately, felt inclusion was largely responsible for reducing the effects of common ground talk on organizational identification ( $\beta$  s changed from .36 to .25), and liking was key in reducing the effects of informal communication satisfaction on organizational identification ( $\beta$  s changed from .26 to .11).

Co-worker liking and felt inclusion were also examined as mediators of casual talk on organizational commitment. When co-worker liking and felt inclusion were added

to the equation, common ground was reduced to a marginally significant predictor ( $\beta$ s reduced .39,  $p < .01$ , to .25,  $p < .10$ ), and informal communication satisfaction was reduced from a marginally significant predictor to a nonsignificant predictor ( $\beta$ s reduced .18,  $p < .10$ , to -.08, *ns*). Out-grouping talk was not substantially reduced ( $\beta$ s reduced -.45 to -.40, both  $p < .01$ ). Hence, similar to findings on organizational identification, it appears that co-worker liking and felt inclusion mediated the effects of common ground and informal communication satisfaction on organizational commitment; however, co-worker liking and felt inclusion did not substantially mediate the effects of out-grouping talk on organizational commitment.

*Expressed inclusion, expressed exclusion, potential mediators, and organizational outcomes.* A second set of mediator regressions was conducted with the organizational outcomes and expressed inclusion and exclusion, with and without the potential mediators of liking for co-workers and felt inclusion. When liking for co-workers and felt inclusion were added to the equation on organizational identification, the effect of expressed exclusion was somewhat reduced ( $\beta$ s reduced = -.35 to -.26,  $p < .01$ ), and expressed inclusion was no longer a significant predictor ( $\beta$ s reduced = .36,  $p < .01$ , to .16 *ns*). Hence, co-worker liking and felt inclusion appear to partially mediate the effects of expressed inclusion on organizational identification. When these mediators were considered separately, liking was particularly responsible for reducing the effects of exclusion messages on organizational identification ( $\beta$ s reduced .35 to .26), while felt inclusion was key in reducing the effects of inclusion messages on organizational identification ( $\beta$ s reduced .36 to .20).

A similar analysis was conducted on organizational commitment; when the potential mediators were added to the regression, the effect of expressed exclusion on organizational commitment was significantly reduced ( $\beta$ s reduced =  $-.33, p < .01$ , to  $-.24, p < .05$ ), as was the effect of expressed inclusion ( $\beta$ s reduced =  $.35, p < .01$ , to  $.18, p < .10$ ). Co-worker liking and felt inclusion appear to partially mediate the effects of both expressed inclusion and exclusion on organizational commitment.

*Support, potential mediators, and organizational outcomes.* A final set of regressions was conducted on organizational identification and commitment and general social support, with and without the potential mediators of co-worker liking and felt inclusion. When the mediators were added to the regression on organizational identification, the regression coefficient for general support was reduced to a nonsignificant predictor ( $\beta$ s =  $.38, p < .001$ , to  $.02, ns$ ). When considered separately, liking and felt inclusion reduced general support equally ( $\beta$ s reduced  $.18$  and  $.17$ , respectively) with the addition of felt inclusion and liking, respectively). Similarly, when co-worker liking and felt inclusion were added to the regression on organizational commitment, the regression coefficient for general support was reduced to a nonsignificant predictor ( $\beta$ s reduced =  $.27, p < .01$ , to  $-.11, ns$ ). Hence, it appears that co-worker liking and felt inclusion mediate the effects of general support on organizational identification and commitment.

### Results Summary

In general, results supported a number of relationships between informal communication variables and organizational identification, organizational commitment and job satisfaction. First, frequency of informal communication between remote workers

and their home office colleagues is positively associated with each of the three outcomes. The specific communication activities engaged in most frequently reflected behaviors that function to build understanding (e.g., learning about each other's ideas). From the subset of informal communication activities used to construct a measure of common ground, tests showed that common ground communication was significantly correlated with organizational identification, but not with commitment or job satisfaction. Conversely, the informal talk activities that clustered based on out-grouping communication behaviors were negatively correlated with organizational commitment and job satisfaction. General satisfaction with informal communication and felt inclusion were significantly and positively associated with all three outcomes.

When messages of inclusion and exclusion were examined, definite themes emerged to form a hierarchical coding system. Messages reflecting casual talk cohered at the most basic coding level, messages suggestive of support cohered in a middle level, and messages functioning to recognize and legitimate one's membership (identification) cohered at the highest level. Messages of exclusion paralleled findings related to inclusion messages. Expressed inclusion positively correlated with identification and commitment while expressed exclusion correlated negatively with the organizational outcomes.

General support was positively correlated with organizational identification and commitment, but the two support subscales were not. Relationship satisfaction, trust and liking positively correlated with identification; relationship satisfaction and liking correlated with commitment and job satisfaction.

Regressions that examined the combined influence of these constructs showed that informal communication accounted for variance beyond relationship quality and felt inclusion, and that the effects of out-grouping talk were negative. Together, common ground, out-grouping, informal communication satisfaction, liking and felt inclusion accounted for 31% of the variance in organizational identification, 30% of the variance in commitment, and 16% of the variance in job satisfaction. Expressed inclusion, exclusion, and liking accounted for 35% of the variance in identification and 33% of the variance in commitment. General support, liking and felt inclusion together accounted for 14% of the variance in identification and 23% of the variance in commitment.

The effects of casual talk, support and expressed inclusion and exclusion on the organizational outcomes were attenuated in specific ways. Liking moderated the effects of exclusion on identification and commitment, but did not moderate the effects of casual talk, support or expressed inclusion or exclusion on any outcomes. Felt inclusion moderated the effects of common ground talk on organizational identification.

Liking and felt inclusion also mediated the effects of common ground talk and informal communication satisfaction on organizational identification and commitment. Common ground talk and informal communication satisfaction affect these two outcomes only when one is interacting with liked others and when one feels included in the organization. Liking and felt inclusion partially mediated the effects of expressed inclusion and exclusion on commitment. Finally, liking and felt inclusion mediated the effects of general support on organizational identification and commitment. Similar to common ground talk and informal communication satisfaction, general support

influences identification and commitment when one is interacting with liked others and when one feels included in the organization.

## CHAPTER 5

### DISCUSSION

The findings from this study provide clear evidence that informal communication accomplishes not only individual goals, but organizational goals as well. A number of scholars have eloquently argued for this constitutive nature of communication and organizations (Cheney, 1983b; Giddens, 1991; Goffman, 1959; Weick, 1983), but specific, message-level evidence was not previously available in either remote or co-located contexts. Hence, this examination provides support for both the structuration theory and the general constructivist framework that informed it. All three types of informal communication—casual talk, inclusion and social support—support the conceptualization of organizations as constitutive of talk; all three are related to organizational identification, commitment and job satisfaction in ways that recognize the duality of individual and organizational behavior.

This chapter discusses the findings related to informal communication in general, and for each type of informal communication studied: casual talk, inclusion and social support. This is followed by a discussion on theoretical contributions. Limitations are then addressed, and theoretical and practical implications are discussed. Finally, suggestions for future research are described.

### *General Findings on Informal Communication Frequency and Satisfaction*

Remote workers who more often informally communicate, and who are more satisfied with their informal communication, are more strongly identified with their organizations, more committed and more satisfied with their jobs. Liking and felt inclusion, however, mediated the effect of informal communication on organizational identification and commitment. This directly suggests that liking for one's interactional partner, in fact, explains the relationship between informal communication satisfaction and these organizational outcomes. That one likes the person with whom they are interacting and is satisfied with interaction makes intuitive sense. Mediators are most often used in the social sciences to explain how an external event becomes psychologically significant (Baron & Kenny, 1986); informal communication satisfaction (as measured in this study) may be capturing a primarily affective state rather than a behavioral one. In the purest mediator interpretation, liking explains how or why informal communication satisfaction influences organizational identification and commitment. However, path analysis would be necessary to establish causality, and many other variables could be affecting the outcome.

The findings on communication frequency were expected given prior research, and adds to research findings in the co-located setting that link frequency of contact with others with isolation (Durkheim; Elsdon, 2003), familiarity with colleagues (Tschan, Semmer, & Inversin, 2004), and adjustment of geographically transferred individuals (Kramer, Brewer, & Hanna, 1996). Together, these findings suggest that frequency of contact may play an important role in the overall experience of remote workers.



The specific frequencies on the talk activities provided in this study appear to be low, but several explanations are plausible. First, remote and co-located workers are paid to work, not to talk casually, and this knowledge is likely to encourage under-reporting of frequencies. Second, some research (Reinsch, 1997) suggests that remote workers are sensitive to their co-located peers' perceptions of them as slacking off because they are not as closely supervised; this may also encourage lower reported frequencies. Importantly, the findings also show that mere frequency of contact is not the same as quality. In keeping with Morgan & Symon's (2002) findings, remote workers often negatively referred to receiving impersonal e-mails or memos that had nothing to do with them or with their part of the company.

#### *Findings on Casual Talk*

The findings on casual talk point to a relationship between common ground and out-grouping types of informal communication, and organizational outcomes, but it is somewhat complex. Initial analyses showed that casual talk that functioned to build common ground correlated positively with identification, and casual talk that functioned in a more polarizing way (out-grouping) correlated negatively with commitment and job satisfaction. In addition, tests for combined influence provided further evidence for a connection between these constructs: together, common ground, out-grouping, informal communication satisfaction, liking and felt inclusion accounted for 31% of the variance in identification, and common ground, out-grouping, and liking for co-workers accounted for 30% of the variance in commitment, suggest that both of these constructs are, indeed, instantiated through interaction with liked co-workers.

However, further analyses suggested other influences. First, felt inclusion moderated the effects of common ground talk on organizational identification, i.e., felt inclusion affected the zero-order correlation between common ground talk and identification. This suggests that the two variables are distinct but have additive effects; when one feels included, the effects of common ground talk on identification are stronger. However, tests for mediation showed that felt inclusion and liking mediated the effect of common ground talk on identification and commitment. As pointed out in Baron & Kenny (1986), the strategic functions of moderators and mediators may vary widely, such that an analysis that begins by examining moderator effects may end up examining mediator effects, or the analysis could go in the reverse direction from mediator to moderator. The mediator interpretation is that common ground talk and informal communication satisfaction affected organizational identification and commitment *when* one is interacting with liked others and *when* one feels included in the organization. Hence, it is not clear precisely how these variables operate together. When examining the open-ended responses for casual talk activities, casual talk appeared to serve important functions on individual and organizational levels. For example, the casual talk that remote workers reported related to work issues at least as often as it related to personal issues alone, and often reflected a desire to perform the job well.

Regardless of moderating or mediating effects, the findings attest to the power of casual talk in a number of ways. First, as Labov has argued, casual (small) talk signals a form of engagement; the finding that casual talk items that functioned to build common ground were positively correlated with organizational identification supports the

contention that informal interaction may be directly related to the discursive concept of identity (Dutton & Dukerich, 1991).

Suggestive of a shared historical context, and often referencing the expectation of future interaction, these common ground communicative behaviors may, in fact, be quite important to the creation and maintenance of an organizational identity. At a minimum, communication that functions to build common ground should work to ameliorate isolation, as Vega and Brennan (2000) have suggested. Casual talk items that might be perceived as creating in-groups (or functioning as markers of outcasting) were similarly associated with commitment and job satisfaction in negative ways. Hence, the tendency to dismiss and even discourage “water cooler” talk as unimportant, or as detracting from getting the work done, is clearly not a wise management strategy; Tracy and Naughton (2001) have even suggested that small talk should be treated as a necessary element of institutional success at any level. At a minimum, these remote workers appeared to make an effort to create something as basic as the norms of greeting and small talk that co-located peers share.

Perhaps the seeming superficiality of some casual talk reflects a finding that mirrors Duck’s (1986) work on friends and acquaintances, in which he found that superficial talk was the primary form of talk between both. Hence, casual talk in the workplace likely serves the same binding function as superficial talk among friends.

#### *Findings on Inclusion and Exclusion*

Expressed inclusion positively correlated with identification and commitment while expressed exclusion correlated negatively with the organizational outcomes. These effects were also attenuated in specific ways. Liking moderated the effects of exclusion

on identification and commitment. Liking also partially mediated the effects of exclusion on commitment. Finally, liking and felt inclusion partially mediated the effects of expressed inclusion and exclusion on commitment. A possible explanation for a predictor serving both moderator and mediator functions has already been provided. Partial mediation may also suggest that other variables are affecting the results.

The findings from analyses of open-ended responses help clarify the role of expressed inclusion and exclusion. The patterns that emerged in the things people said that functioned to either exclude others or help them feel that they are a part of the organization, reflected a dual individual-organizational process, as well as differences in message complexity. Analyses showed that the deeper levels of identification were happening at the higher levels of message sophistication, in which individuals experienced greater embeddedness in their organizations through specific messages. Mutual collaboration and joint moves resulted in a blurring of boundaries such that individual and organization became almost inextricably bound. When individuals learned that their ideas were taken up by the organization, they felt more included, and this action would seem to logically impart a sense of ownership. In this way, the organization is defined and shaped by the individual as well, and the structural concept of duality is enacted, in the sense that Weick (1983) has described it. Felt inclusion also emerged as a consistent predictor of all three outcomes. The results found with the inclusion/exclusion constructs that were created from responses helped clarify the role of particular communication messages and strategies that the felt inclusion measure misses.

Just as specific messages created linkages, generalized connections and temporality were important to participants as well. Some participants simply reported

routine conversations that mentioned prior knowledge and intentions for future interaction. Hence, one's history with the other or expectation of future interaction sometimes defined the underlying message, not the exchange itself, as this example suggests: "You know how to get in the house. Curly will be in the laundry room, so she won't bother you." Future interaction expectations were also taken to be inclusive: "Let me know how the calls go."

Negative talk also served a binding function. Many participants reported messages of complaint or commiseration as resulting in feelings of inclusion. They appeared to overlook the problem in light of the feeling it gave them to share an understanding: "We were talking about how our supervisors basically don't do anything so what we do in a typical day is important (sic) because no one is watching to make sure we don't make mistakes." This seemingly counterintuitive finding may actually suggest that sharing complaints builds common ground and provides a reason for future communication. Complaining may also lead to solutions to problems, and/or better ways to work. Some participants added qualifiers to their complaints, e.g., "I like the job but..." possibly suggesting that complaints may be motivated by a desire to improve some aspect of work. The relative frequency of complaints indicating a desire to improve one's performance or capabilities bears this out.

The measure of expressed inclusion developed from the data was also positively correlated with organizational identification and commitment, and nearly correlated with job satisfaction. This finding substantiated the validity of the measure. The expressed exclusion measure was similarly validated, as it correlated negatively with identification and commitment.

Messages of exclusion reflected clear hindrances to individuals' relational, task or identity goals, and served to repel any possible claims on belonging. Disenfranchisement, rather than embeddedness, was the clear result. Remote workers were quite sensitive to nuances of marginalization and to offhanded responses which encouraged a general feeling of being minimized. Just as inclusion messages functioned to fulfill relational, task or identity goals through such practices as confirming remote workers' contributions and seeking remote workers' collaboration on work challenges, non-inclusion messages functioned to hinder relational, task or identity goals through practices that denied the legitimacy of the remote workers' contributions or value to the social collective.

The overall experience of being marginalized was apparent in some remote workers' reports, and the resulting feeling of exclusion was almost palpable. Participants often reported not only the actual interaction but went on to explain how it made them feel, and why, in detail; sometimes, they also reported their own later response. Intensity was also apparent in participants' use of more dramatic types of punctuation when reporting messages that made them feel less included, than when reporting either inclusionary or informal conversations. Bold type, capital letters, and exclamation points were common, such that illocutionary force was as much a part of their reports as was the message.

Perhaps most importantly, this analysis of inclusion and exclusion messages provides direct support for the conceptualization of identification as a discursive construct. Scholars have argued that organizational identification is instantiated in talk, but no direct support was available. These results add new evidence for the important role that informal communication plays, in both co-located and remote contexts.

Drawing from Scott, Corman and Cheney (1998) and Larkey and Morrell (1995), Morgan (2004) pointedly argues that a “language of identification” has not been adequately considered; yet that language, she says, is “at the core of identity formation and expression,” (p. 363). The results of this study provide the foundation for such a language, as suggested by organizational members themselves.

#### *Supportive communication*

General support was positively correlated with organizational identification and commitment, but the two support subscales were not. Liking and felt inclusion mediated the effects of general support on organizational identification and commitment. Similar to common ground talk and informal communication satisfaction, general support influences identification and commitment when one is interacting with liked others and when one feels included in the organization.

The findings on social support add evidence to the findings of Weisenfeld et al. (2001), which showed a significant main effect of perceived support on organizational identification among remote workers. The best-fitting regression model for general support in this study accounted for a full 27% of the variance in organizational identification (along with liking and felt inclusion), and 23% of the variance in commitment. Clearly, support plays an important role in these outcomes.

Results also extend these findings in revealing that both providing and being asked for support are equally important. This is reflected in the interactions remote workers reported as helping them feel more included. For example, remote workers did not perceive that extra work involved with a request for support was an issue; rather, the simple act of being deliberately sought out appeared to outweigh any

personal effort which may have been required. Similarly, it was not the *being helped* so much as being told that someone *would be available* to help that carried authority in terms of feeling included.

Researchers who have also addressed social support among work friends have shown that workplace friendships are an important source of social support (Sias & Cahill, 1998), but that proximity and shared socializing characterize these relationships. These results add evidence that interacting with liked others at work influences the effect of support on levels of identification and commitment; whether proximal or not.

General support functioned differently than did specific types of support in this study. One reason the general measure of support was associated with outcome variables, and the ego and comforting subscales were not, may be found in the specificity of the subscales compared to the general support scale. Another possibility is that the general scale and the subscales' response formats were different. The response formats on the subscales may not have tapped into the use of specific support messages as well as did the general support scale. Still, general support is a factor in remote employees' identification with, and commitment to, their organizations, and may take on more importance in the absence of nonverbal support

### *Theoretical Implications*

The organization is a community in which people act and to which people belong. Members of the same organization often cognitively organize their experiences within the company in similar ways, based on shared activities and experiences. As Clark (1996) has argued, the coordination essential to shared meaning is achieved for any two people to the extent that they have managed to build common ground, i.e., it is "the sum of their



mutual knowledge, mutual beliefs, and mutual suppositions at the moment,” (p. 327). In the remote context, the social means for such coordination are fundamentally altered. This provides an opportunity to examine how messages function to build the common ground necessary to simultaneously get the work done and achieve interpersonal goals. Hence, the messages reported by participants clearly support the fundamental assumptions of constructivism.

Both simple coordination and complex negotiation of meaning are necessary tasks in the workplace. These results show that informal communication accomplishes these multiple goals, on both individual and institutional levels, as Clark and Delia (1979) have argued. For example, messages of inclusion reflected both tasks for which instrumental support was appropriate (e.g., explaining how to complete a reporting form), and more complex tasks which required considerable negotiation of meaning.

The themes reflected in inclusion coding categories that were developed from responses add to the body of work on message design. As suggested by Saeki and O’Keefe’s (1994) work on refusal and rejection messages, focusing on inclusion themes (vs. global types) has practical as well as theoretical advantages. Theoretically, in this case, themes afford a more precise understanding of what constitutes inclusion, by avoiding telling people how they should feel in favor of asking them what messages created the feeling. Practically, theme analysis builds contextual understanding of what constitutes inclusion regardless of an individual’s need for inclusion or affiliation.

Finally, these results provide a direct test of the fundamental assumptions of structuration theory. The research program of Cheney and colleagues has clearly explicated the role of communication and identification; however, these studies were

not designed to examine specific communication practices through which identification is instantiated.

### *Limitations*

There are several limitations to this research. One limitation is the study's reliance on self-report methods. Self report measures are subject to bias, however, Scott and Stephens argue that identification studies lend themselves to such data. Self-report research designs have also been defended for allowing retrospective sensemaking (Duck & Miell, 1986). Complex interactions that produce particular feelings, such as those elicited in this study, may particularly benefit from the reflection that the passage of time allows.

Another limitation is that relational context is only superficially explored. The history of individual relationships with co-workers – and the extent to which relationships with their co-located colleagues is important to them – could be included in future studies to add more contextualizing information. Including relational history in the analysis as a co-variate may provide additional insight, although some respondents volunteered information in open-ended responses (Several respondents indicated that they had no interaction with co-workers, or that they did not care to have such interaction; the format of the survey did not force qualifying responses in these cases).

A third limitation relates to potential multicollinearity. The Norton measure of relational satisfaction included one item that paralleled an item on the commitment questionnaire: "I feel like a part of a team with this person." The face validity of this item has been questioned in interpersonal research (L. Stafford, personal communication, December 5, 2006); face validity is further threatened by its inclusion on an additional

measure used in this study. In addition, the construct validity of the Organizational Identification Questionnaire and the Organizational Commitment Questionnaire are still questionable, as previously discussed.

Finally, the notion that identification with an organization is important to, and desired by, employees is implicit in this study simply because it is not addressed. Future research should ask participants to make this preference explicit and then compare the findings. In addition, it would be useful to include co-located employees as well as remote employees, to allow for comparison on key outcomes.

#### *Extrapolation of Findings to Larger Organizational Issues*

One compelling reason for studying how employees come to feel included in their organizations, and to understand the process of identification, is that the global shift toward distributed workforces, team networks, and other more loosely coupled organizational configurations continue to replace co-located, tightly structured, traditional companies. These newer forms of organizing simultaneously rely on communication in critical ways and challenge the processes by which organizational identification is thought to be instantiated; the need to find ways to successfully incorporate distal workers into the fabric of their organizations is growing along with it.

These potential disconnections with larger social groups that technology and current social trends promote, will only be exacerbated by continual modifications of the way companies do business, unless collective and individual awareness of the accompanying issues takes place. Shotter and Cunliffe (2003) have called for “moral interdependence”; in the remote context, this would suggest that remote workers (and co-located workers) take on the moral requirement of “making available communicative

opportunities” for their fellow remote workers and for their co-located peers. Far from resulting in a constraining uniformity, as argued by critical scholars, this reflexive awareness allows individuals within organizations to influence the definition of the organization itself.

In a more explicit application, Tretheway (2001) has suggested that virtual environments may promote expertise in the use of resources, an idea that suggests a heightened level of engagement in important organizational processes. Working to understand even such micro-level issues as the negotiation of norms in a relatively new context encourages mindful communication practices. A culture of understanding and connection will not be possible without it, in any context.

#### *Practical Application of Findings*

Results suggest a number of useful applications for managers, companies, remote employees, and co-located employees. First, it is clearly important to determine and create awareness of basic interactional norms in the remote context, and to establish taken-for-granted routines. If people interpret messages and responses based on norms of the social context (DeSanctis & Monge, 1998) then the simple act of establishing norms assumes an even greater importance. These results point to the need for explicit definitions of norms in the remote context, for both remote workers and for central office employees, since most employees are not aware of the negotiated nature of norms, or, even, of the importance of norms in developing understanding. Training on how to both negotiate and utilize norms, either in interpersonal or task-related interactions, would help connect distal employees to their co-located colleagues and to their organizations.

Similarly, it is not likely that many organizations explicitly value an understanding of how common ground develops. Researchers are obligated to help organizational leaders understand that as individuals act, their activities take on meaning (Engestrom, 1999; Leont'ev, 2002) discourse takes on meaning, and organization is enacted (Shotter & Cunliffe, 2003; Weick, 1983). It is important to explain to practitioners that it is in this way that organizational cultures are created and maintained, as opposed to “handed down” in formal patterns. Thus, organizations may try to effect a certain culture, image, or identification, but it is the employees who accept or reject it (Monge & Contractor, 2001; Monge & Eisenberg, 1987). Organizational leaders who embrace this idea must be willing to relinquish some of the control they perceive that they hold. In the absence of rituals and organizational traditions—and the interaction through which they are manifest as shared—the coordination of meaning becomes a challenge that begins with mindfulness. Even research on communication in the traditional organizational structure tends not to focus on the joint achievement of goals. As a result, the particular social practices necessary for obtaining the knowledge needed to achieve understanding are not well understood. Accordingly, organizational leaders might provide communicative strategies to all employees that promote regular checks for understanding.

Similarly, it is important for organizations to build specific awareness of collective membership. Hence, one of the first tasks remote employees and their organizations should tackle is to establish the mutual belief that they both belong to these communities; collective memberships depend on individual awareness of one’s connections, which in turn depend on social interaction (Hardy, Lawrence &

Grant, 2005).

A second application suggested by these findings is in training managers to clarify goals, relationships and responsibilities for both remote and co-located employees. In addition to establishing and making explicit the norms for social conduct for both co-located and remote employees, managers can learn how to clarify goals, relationships and responsibilities. They can develop a dynamic infrastructure that provides guidelines for establishing procedures for different kinds of formal and informal communication events, such as the performance review and conflict resolution. For example, remote workers' messages of exclusion clearly indicated that receiving a supervisor's e-mail instructing them to go on line to view and accept a performance review was an inappropriate and damaging way to handle this procedure. This infrastructure should also include a system that rewards managers for maintaining their availability to co-workers, a culture that supports co-located employees' support of their remote colleagues, and clarification of the role of remote workers as employees, not contractors. .

Third, company leaders should learn how to create an infrastructure that encourages interaction. Morrison (2004) found that even the basic perception of more opportunities for informal workplace relationships was directly related to job satisfaction. Providing regular opportunities for remote workers to interact with central office colleagues is also important to maintaining more than a "fragile and temporal trust" that characterizes virtual teams (Jarvenpaa & Leidner, 1999).

One specific structural suggestion is to hold regular e-gatherings. Monthly (for example) e-gatherings would provide a way for remote employees to establish and build common ground with their co-located colleagues. The different needs for identification

and the various definitions of it, should be determined for each individual employee; individualized communication programs are not practical, but practical efforts can be made by managers and supervisors to accommodate their remote employees. Because contributing to the organization in meaningful ways is important to employees, the suggestions of both remote and co-located employees that are taken up by the organization for broader use should be published (or otherwise communicated) for all organizational members.

In addition to facilitating identification and satisfaction among remote and co-located employees by encouraging and providing opportunities for casual chat with one another, managers can find creative ways to provide visual cues that remote employees miss. Such cues as creating on-line desktops for all employees that include personal pictures, sayings and knickknacks that reflect their personalities could ameliorate isolation and create common ground, as Vega and Brennan (2003) suggested. Tanis and Postmes (2003) found that even minimal cues, such as photos, help reduce ambiguity and foster a more positive impression when the person with whom one is interacting is unknown to them. Similarly, finding ways to establish shared routines among remote employees and their co-located colleagues would provide a source for understanding and connection, as Feldman and Rafaelli (2002) have shown in the co-located context. Finally, DuCharme and Martin (2000) have suggested that providing support should be a structured part of work roles in the co-located context, a suggestion applicable to remote workers as well.

Managers should also be trained to recognize that information needs vary between remote and co-located employees. First, these findings suggest that telework may

represent a distinct sociocultural context, similar to those linked to inclusion in Larkey's (1996) work on group membership and group differences. If this contention holds, then communication in the remote context should not automatically be equated with communication in the co-located context. Second, findings from other studies provide evidence for various information needs. Rosenfeld, Richman and May (2004) showed that field and office personnel differed in their need to receive certain kinds of information and in the relationship of perceived information adequacy to job satisfaction. Specifically, office personnel reported greater need for routine information and less need for overall corporate performance information than did field personnel. Rosenfeld et al. speculated that field personnel may perceive that their performance is more directly tied to the overall performance of the organization, and that when combined with physical separation, this higher perceived importance may lead them to conclude that information received about the current and future direction of the organization is insufficient.

Finally, leaders can work to make important organizational values the frame for workers' experience, as suggested by Hylmo and Buzzanell (2002). They contend that such values can situate people squarely within the organization's identity. Results of this study provide clear evidence that differentiating between individual and organizational goals (or values) creates a false dichotomy. When organizations "take up" employee ideas and recognize them for it, the individual and the organizational boundaries become blurred, such that organizations and individuals identify with one another in a uniquely collaborative way. Recognizing and using employee contributions, and making this known to other employees, would not only communicate a key organizational value, but it would serve a powerful binding function as well.



### *Future Direction and Research Plans*

The remote context offers an ideal setting for studying constructs such as identification as dynamic processes instantiated in talk because it represents a non-traditional organizational form. These results point to a number of areas in which future research in this context would be important, including contextualization cues for relationship development, clarification of distinct organizational outcomes and the role of informal communication in their instantiation, negotiation of norms, rituals and traditions in non-traditional contexts, and the role informal communication plays in building social capital in remote settings.

First, knowledge about the specific conditions that smooth the progress of relationship development and maintenance will be needed to guide practitioners in providing specific contextual information that may facilitate co-worker relationships. This contextual information helps build understanding and decrease the time necessary to establish conversational mutuality, as suggested by DeSanctis and Monge (1999). These informal relationships are clearly an important site for developing connections among all employees.

Second, future research should take up the question of construct validity that has plagued identification and commitment scholars. Given that the content validity of the OIQ was examined through interviews with employees who were asked a series of questions to determine what they thought identifying with the organization meant (Miller et al., 2000), it seems that a fruitful place to begin untangling constructs might be extensive field research using a grounded theoretical approach. If employees themselves are not able to define a meaningful difference between organizational identification and

organizational commitment, then perhaps there isn't one. At a minimum, the dramatic changes in organizational structures and processes since the 1980s suggest that notions of identification and commitment may be considerably different today. Additionally, this study's finding that specific inclusion messages were associated with identification, but not with commitment or job satisfaction, draws attention to the issue of what each of these constructs specifically measure, and whether they measure different things. Importantly, this finding of difference between inclusion and the organizational outcomes suggests that the concept of inclusion, as developed based on actual messages, provides a way to "get at" identification as distinct from commitment and job satisfaction.

Future research with remote workers should also continue to probe the recursive nature of identification. Critical researchers have conceptualized identification as benefiting organizations over individuals. According to this line of thought, organizations work to embed a desired sense of the organization that serves as unobtrusive control (Eisenberg & Goodall, 1993; L. Putnam & Fairhurst, 2001). Putnam and Fairhurst (2001) report that organizations facilitate desired identification--and thus unobtrusive control--using a number of strategies, such as written manuals (including, e.g., explanations of particular rules, expectations or norms) the use of "we" to encourage solidarity in identification, and naming events to engender feelings of group exclusivity. However, these results provide evidence that the direction of influence goes both ways

The connection between isolation and cultural strength should also be studied in concert with informal communication. Cultural issues are clearly related to issues of isolation and the context of telework, as Gainey, Kelley and Hill (1999) have argued, and culture, like identification, is instantiated in communication. Newcomb (1990) attributed

the perception of an environment (culture) as facilitating innovation and creativity to resource sharing and role interdependence; informal communication in the remote context would illuminate these processes as well.

More research is needed to uncover the messages involved in creating and negotiating norms, rituals and traditions, in both the co-located and the remote settings. Using Goffman (1959), future research should ask the question of specifically what are the contextualization cues that help determine information given as well as given off, that contribute to particular message features of language and expression (Schiffrin, 1994). If these cues are taken up as constructs, they will become implicit expectations and beliefs about behaviors pertaining to people and events or situations (H. Clark, 1996). In the absence of face-to-face cues, norms, rituals and traditions--and the interaction through which they are manifest as shared--the coordination of meaning becomes a different and more complex challenge.

Finally, it will be important to examine the specific role of informal communication in fostering community and in creating and building social capital (R. D. Putnam, 2000). Social capital has been described as a function of social structure and position, accessible only with reference to that structure (Burt, 1992; Granovetter, 1985; Pfeffer & Salancik, 1978). Thus, the social capital emerging from individual connections both constructs, and is constructed by, interaction in particular contexts (structures), which assists in getting the job done, in building overall organizational value (Knoke, 1999; Raider & Burt, 1996), and in improving organizational performance (Lesser, 2001). Little is known about the messages that accomplish this in any context.

## *Conclusion*

Remote work is continuing to grow and expand as companies become more confident in the viability of these unique arrangements. While scholars continue to look for ways people and organizations can be more effective, we must take care not to confuse everyday talk with unimportant talk, and to avoid the disenfranchisement of individuals from the larger social collectives to which they belong. It is hoped that this research will help underscore the importance of mundane, routine, everyday talk in fostering connection among people and a sense of belonging to a group.

The results provide evidence for the existence of links between informal communication and organizational identification, commitment and job satisfaction. More importantly, the argument that organizations are dialogic constructions is given a basis in actual and specific communication behaviors.

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APPENDIX A

QUESTIONNAIRE

## CONSENT FOR PARTICIPATION IN SOCIAL AND BEHAVIORAL RESEARCH

I consent to my participation in research being conducted by PhD student Martha Fay and Dr. Susan Kline of The Ohio State University. I understand that it is not possible to guarantee anonymity in electronic communication, but that researchers will make every effort to keep my responses confidential. I also understand that the only information researchers may provide to my company with regard to this study is a general summary report on the results, not individual responses.

The investigators have explained the purpose of the study, the procedures that will be followed, and the amount of time it will take. I understand the possible benefits, if any, of my participation. I know that I can choose not to participate without penalty to me. If I agree to participate, I can withdraw from the study at any time, and there will be no penalty.

I have had a chance to ask questions and to obtain answers to my questions. I can contact the investigators at (614)793-2140 or (614)292-0464. If I have questions about my rights as a research participant, I can call the Office of Research Risks Protection at (614) 688-4792.

I have read and agree to the above and provide my consent by checking the box below.

☐ I provide my consent to this study.

**Please note:** It is not possible to save a portion of your responses and come back to the questionnaire later. Once you begin the questionnaire, it is important that you finish it and submit it by clicking on the box marked "Complete the Survey".

### PART I: COMMUNICATION RECALL

In the process of working full time, people often develop feelings of connection and inclusion with their organizations or companies and about their roles as members of these organizations or companies. One way such feelings can be developed or intensified, either positively or negatively, is through communicating with others at the same company. **Think about a communication you have had with a co-worker (peer with equal authority at the same company) sometime during the last month or so in which you felt *more* like a part of your company as a result of the interaction.** This communication can have taken place through any media (phone, e-mail, face-to-face, text messaging, fax, etc.)

**In the space below, please write down as much of this communication/interaction as you can remember, using the exact words exchanged or written. Include both what you said (or wrote) and what they said (or wrote), or only what one party said or wrote if only one person was involved in this communication.** (If what was *not* said, *not* written or *not* done is a part of this communication, please describe, e.g., a co-worker did not take advantage of an opportunity to remind you of a past mistake or did not tell you something to avoid hurting your feelings. Report on the content of the communication anyway).

*Communication that helped me to feel more included in this company/organization*

This is what was said (or written) to the best of my memory:

SPACE

Now, please answer the following questions about this particular communication. What activity or task were you involved in at the time of this interaction? Is there any other information that would help us better understand the situation?

SPACE

Was there anything that happened, or was anything said or written, by you or the other person **prior to this interaction** that may have affected this communication?

SPACE

Who initiated this communication?

- ☐ I initiated it.
- ☐ The other person initiated it.
- ☐ A third party initiated it. (Please indicate this third party's relationship to you.) \_\_\_\_\_

I feel that I know this person (check one):

☐Extremely well      ☐Somewhat well      ☐Not very well      ☐Not at all well

This communication took place by:

- ☐ Cell phone
- ☐ Land line
- ☐ E-mail
- ☐ Fax
- ☐ Instant messaging
- ☐ Teleconference
- ☐ Groupware

- ☐ Web simulcast
- ☐ Face-to-face
- ☐ Text messaging
- ☐ Chat room
- ☐ Webcam
- ☐ Written correspondence (regular mail)
- ☐ Other

Using the scales provided, indicate your experience with this communication for each item by checking the number corresponding to your selected response.

How satisfied were you with this communication?

☐1    ☐2    ☐3    ☐4    ☐5    ☐6    ☐7

Extremely dissatisfied                      Extremely satisfied

How comfortable were you with this communication?

□1    □2    □3    □4    □5    □6    □7

Extremely uncomfortable                      Extremely comfortable

How desirable was this communication for you?

□1   □2   □3   □4   □5   □6   □7

Extremely undesirable                      Extremely desirable

**Now, think about a communication/interaction you have had with a co-worker sometime during the last month or so in which you felt less like a part of your company** (that is, you felt less connected and less included in your company) **as a result of the interaction.** This communication can have taken place through any media (phone, e-mail, text messaging, fax, etc.).

**In the space below, please write down as much of this communication as you can remember, using the exact words exchanged. Include both what you said (or wrote) and what they said (or wrote), or only what one party said or wrote if only one person was involved in this communication.** (If what was *not said, not written or not done* is a part of this communication, please describe, e.g. getting no response to an e-mail.)

*Communication that resulted in my feeling of being less included in this company*

This is what was said or written to the best of my memory:

SPACE

Now, please answer the following questions about this particular communication. What activity or task were you involved in at the time of this communication? Is there any other information that would help us better understand the situation?

# SPACE

Was there anything that happened, or was anything said or written, by you or the other person **prior to this communication** that may have affected this interaction?

# SPACE

## Who initiated this communication?

- ☐ I initiated it.
- ☐ The other person initiated it.
- ☐ A third party initiated it. (Please indicate this third party's relationship to you.) \_\_\_\_\_

I feel that I know this person (check one):

- ☐ Extremely well      ☐ Somewhat well      ☐ Not very well      ☐ Not at all

This communication took place by:

- ☐ Cell phone
- ☐ Land line
- ☐ E-mail
- ☐ Fax
- ☐ Instant messaging
- ☐ Teleconference
- ☐ Groupware
- ☐ Web simulcast
- ☐ Face-to-face
- ☐ Text messaging
- ☐ Chat room
- ☐ Webcam
- ☐ Written correspondence (regular mail)
- ☐ Other

Using the scales provided, indicate your experience with this communication for each item by checking the number corresponding to your selected response.

How satisfied were you with this communication?

- 1    □2    □3    □4    □5    □6    □7
- Extremely dissatisfied                      Extremely satisfied

How comfortable were you with this communication?

- ☐1    ☐2    ☐3    ☐4    ☐5    ☐6    ☐7
- Extremely uncomfortable                      Extremely comfortable

How desirable was this communication for you?

□1    □2    □3    □4    □5    □6    □7

Extremely undesirable Extremely desirable

## PART II: INFORMAL COMMUNICATION

Much communication, or interaction, at work consists of simply chatting, small talk or “shooting the breeze” with other members of the company/organization. This type of informal communication can range from casual talk (e.g., simple greetings, a shared joke) and routine catching up or gossip (“Wait until I tell you what Joe did...”), to communicating meaning in other ways, such as by either responding quickly or not at all to an e-mail or by tone of voice. This informal kind of communication, or interaction, while seemingly insignificant, can play an important role in organizations.

**Think about how you communicate informally with co-workers** (peers who have no authority over one another) at the same company, but **who are located either at the central office or at another remote location**. This communication can have taken place through any media (phone, e-mail, text messaging, face-to-face, fax, etc). First, think about which location you consider to be your company's central office and why, and define it in the space provided.

I would define my organization's central office as:

SPACE

Now, think about two recent communications you had at work that were of the informal type described above. **Try to recall as much detail as possible about both of these two recent informal communications and recreate what was said or written** in the spaces provided. Then respond to the questions that follow each one. **Your responses will remain confidential and will not be reported back to your organization.**

## Informal communication #1

This is exactly what was said (or written) to the best of my memory, by either myself, the other person or both of us:

SPACE

Now, please answer the following questions as they relate to the communication you reported above using the scales provided.

How typical (or ordinary) was this communication for you? (Check one of the following.)

□1   □2   □3   □4   □5   □6   □7   Typical

How did you feel as a result of this communication?

☐1    ☐2    ☐3    ☐4    ☐5    ☐6    ☐7  
Less like a part of the company      More like a part of the company

What activity or task were you involved in at the time of this communication?  
(Leave blank if the message you reported was left by you or for you by audio recording, fax or other means that doesn't involve an immediate response by you or the other person.)

SPACE

When did this communication take place?  
(Leave blank if the message you reported was left by you or for you by audio recording, fax or other means that doesn't involve an immediate response by you or the other person.)

☐ Morning      ☐ Afternoon      ☐ Evening

Approximately how long did this communication last?  
(Leave blank if the message you reported was left by you or for you by audio recording, fax or other means that doesn't involve an immediate response by you or the other person.)

SPACE

I feel that I know the person with whom the communication took place (choose one):

☐ Extremely well      ☐ Somewhat well      ☐ Not very well  
☐ Not at all well

This communication took place by (check all that apply):

- ☐ Cell phone
- ☐ Land line
- ☐ E-mail
- ☐ Fax
- ☐ Instant messaging
- ☐ Teleconference
- ☐ Groupware
- ☐ Web simulcast
- ☐ Face-to-face
- ☐ Text messaging
- ☐ Chat room
- ☐ Webcam
- ☐ Written correspondence (regular mail)
- ☐ Other



How satisfied were you with this communication?

☐ 1    ☐ 2    ☐ 3    ☐ 4    ☐ 5    ☐ 6    ☐ 7

Extremely dissatisfied                      Extremely satisfied

How comfortable were you with this communication?

□1   □2   □3   □4   □5   □6   □7

Extremely uncomfortable                      Extremely comfortable

How desirable was this communication for you?

☐ 1    ☐ 2    ☐ 3    ☐ 4    ☐ 5    ☐ 6    ☐ 7

Extremely undesirable                      Extremely desirable

## Informal communication #2

**Now think about a second informal communication you have had with a co-worker** located at the central office or in another remote location that also consisted of this casual talk or “shooting the breeze,” such as sharing jokes or greetings. This communication can also have taken place through any media (phone, e-mail, text messaging, face-to-face, fax, etc). **Try to recall as much detail as possible about this second recent informal communication and recreate what was said or written** below. Then respond to the questions that follow. **Your responses will remain confidential and will not be reported back to your organization.**

## Communication #2

This is exactly what was said (or written) to the best of my memory by either myself, the other person, or both of us :

SPACE

Now, please answer the following questions as they relate to the communication you reported above using the scales provided.

How typical (or ordinary) was this communication for you? (Check one of the following.)

□1   □2   □3   □4   □5   □6   □7  
Atypical   Typical

How did you feel as a result of this communication?

☐ 1    ☐ 2    ☐ 3    ☐ 4    ☐ 5    ☐ 6    ☐ 7  
 Less like a part of the company    More like a part of the company

What activity or task were you involved in at the time of this communication?  
(Leave blank if the message you reported was left by you or for you by audio recording, fax or other means that doesn't involve an immediate response by you or the other person.)

SPACE

When did this communication take place?  
(Leave blank if the message you reported was left by you or for you by audio recording, fax or other means that doesn't involve an immediate response by you or the other person.)

☐ Morning

☐ Afternoon

☐ Evening

Approximately how long did this communication last?  
(Leave blank if the message you reported was left by you or for you by audio recording, fax or other means that doesn't involve an immediate response by you or the other person.)

SPACE

I feel that I know the person with whom the communication took place (choose one):

☐ Extremely well

☐ Somewhat well

☐ Not very well

☐ Not at all well

This communication took place by (check all that apply):

☐ Cell phone

☐ Land line

☐ E-mail

☐ Fax

☐ Instant messaging

☐ Teleconference

☐ Groupware

☐ Web simulcast

☐ Face-to-face

☐ Text messaging

☐ Chat room

☐ Webcam

☐ Written correspondence (regular mail)

☐ Other

How satisfied were you with this communication?

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ 7

Extremely dissatisfied

Extremely satisfied



How much of this time would you say is engaged in informal communication, such as small talk or casual chatting, that is not work-related?

- ☐ None
- ☐ Less than 15%
- ☐ Between 15 and 25%
- ☐ Between 26 and 50%
- ☐ Over 50%

Which media do you most often use to communicate with co-workers (check all that apply)?:

- ☐ Cell phone
- ☐ Land line
- ☐ E-mail
- ☐ Fax
- ☐ Instant messaging
- ☐ Teleconference
- ☐ Groupware
- ☐ Web simulcast
- ☐ Face-to-face
- ☐ Text messaging
- ☐ Chat room
- ☐ Webcam
- ☐ Written correspondence (regular mail)
- ☐ Other

#### **PART IV: INFORMAL INTERACTION/COMMUNICATION**

During the course of a typical day, co-workers interact with each other in any number of ways about all kinds of things. In the remote setting, routinely communicating, or interacting, with co-workers may or may not differ from the ways people who are working together in the same physical space interact with each other. We are interested in understanding routine communication behaviors in the context of the remote setting.

In this section, we are interested only in your **informal communication with co-workers**, that is, the interactions you have with co-workers that are not specifically job- or task-related. For co-workers located in the same central office, such communication might take place, for example, at the water cooler, in the coffee break room or when passing each other in the hall. **Think about how you interact with co-workers (peers who have no authority over one another) at your company during the course of the day.** Then answer the questions that follow, keeping in mind that **your responses will remain confidential**, and will in no way be made available to your organization.

To what extent do you engage in the following types and topics of communication with co-workers at the central office and/or other remote workers? (Choose the

appropriate response, from "1" being *not at all* to "7" being *most of the time* for each item. Use the key below for a definition of each choice.)

- 1 Not at all = Never  
2 Rarely = Once a month or less  
3 Occasionally = Once a week or less  
4 Fairly Often = 2-3 times per week  
5 Often = 4-8 times per week  
6 Frequently = 9-15 times per week  
7 Most of the time = More than 15 times per week

**Types of communication I engage in with my co-workers:**

## Catching up on personal news with co-workers

1□ 2□ 3□ 4□ 5□ 6□ 7□  
Not at all Constantly

## Gossiping with co-workers

## Recapping the day's events with co-workers

## Joking around with co-workers

## Getting to know each other

### Reminiscing with co-workers

## Complaining with co-workers

Asking of, or giving a favor to, co-workers

## Making plans with co-workers

Persuading, or being persuaded by, co-workers about non-work topics

Giving or getting instruction about non-work topics to/from co-workers

### Small talk with co-workers

## Laughing with co-workers

Filling other co-workers in on what's going on in the organization

Complimenting, or being complimented by, co-workers

## Fantasizing with co-workers about fun things

Bragging with co-workers

Apologizing to, or receiving apologies from, co-workers

Resolving personal conflict(s) with co-workers

Providing, or listening to, reasons for some behavior with co-workers

Criticizing or questioning a co-worker's decision, or being criticized or questioned by co-workers

Brownnosing with co-workers

Sharing photos with co-workers

Teasing with co-workers

Listening to co-workers

Expressing similarities, or sharing things we have in common, with co-workers

Providing expertise or knowledge about non work-related things with co-workers

Requesting expertise or knowledge about non work-related things with co-workers

Asking about personal items my co-worker(s) previously shared

Responding to inquiries about personal items I previously shared with co-workers

Learning about each other's ideas

Collaborating (on personal projects, ideas) with co-workers

Comforting, or being comforted by, co-workers

Telling, or listening to, stories with co-workers

Any other **type** of communication? SPACE

How frequently do you communicate with co-workers about the type of communication you indicated?

SPACE

## Conversational Topics

For each of the following, indicate how frequently you communicate **about particular topics** with co-workers.

1□ 2□ 3□ 4□ 5□ 6□ 7□  
Not at all Constantly

## Talking about current events with co-workers

## Talking about politics with co-workers

## Talking about religion with co-workers

## Talking with co-workers about television shows

## Talking with co-workers about money problems

## Talking with co-workers about retirement

Talking with co-workers about each others' immediate families

Talking with co-workers about each others' extended families (grandparents, aunts, uncles, cousins)

Talking with co-workers about each other's relational partners/spouses

## Talking with co-workers about each others' child(ren)

### Talking with co-workers about each others' friends

### Talking with co-workers about each others' neighborhoods

## Talking with co-workers about sex

### Talking with co-workers about each others' interests

## Talking with co-workers about personal problems

### Talking with co-workers about sports

Any other **topics** of communication?

SPACE

Extremely dissatisfied      Extremely satisfied

☐ 1    ☐ 2    ☐ 3    ☐ 4    ☐ 5    ☐ 6    ☐ 7

Extremely uncomfortable                      Extremely comfortable

□1    □2    □3    □4    □5    □6    □7

Extremely undesirable                      Extremely desirable

☐ None      ☐ 1 – 5      ☐ 6 – 10      ☐ 11 – 15  
☐ More than 15

☐ None      ☐ 1 – 5      ☐ 6 – 10      ☐ 11 – 15  
☐ More than 15

☐ None      ☐ 1 – 5      ☐ 6 – 10      ☐ 11 – 15  
☐ More than 15

☐ None                      ☐ 1 – 5                      ☐ 6 – 10                      ☐ 11 – 15

☐ More than 15

☐None      ☐1 – 5      ☐6 – 10      ☐11 – 15  
☐More than 15





My co-workers take a personal interest in me.

I feel appreciated by my co-workers.

My co-workers are friendly to me.

In the next section, please indicate **how important you feel it is for peers to possess each of the following skills, or to be able to provide these skills**, using the scale provided.

(SCALE APPEARS WITH EACH)

My co-workers make me strive to be the very best person I can be.

☐ ☐ ☐ ☐ ☐  
Not important at all to me Very important to me

My co-workers make me believe in myself.

My co-workers make me feel like I can achieve my personal goals.

My co-workers make me feel like my ideas about things are interesting or worthwhile.

My co-workers really help me work through my emotions when I'm feeling depressed about something.

My co-workers help me understand why some things hurt or depress me so much.

My co-workers can really cheer me up when I'm feeling down or upset.  
My co-workers almost always make me feel better when I'm hurt or depressed about something.

Please rate your overall agreement with each of the following statements by checking the number corresponding to your choice, using the scale provided, with "1" being *strongly disagree* and "5" being *strongly agree*.

I feel like an accepted part of a team.

☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5  
Strongly disagree Strongly agree

I feel included in most activities at work.

☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5  
Strongly disagree Strongly agree

Sometimes I feel like an outsider.

☒ 1    ☐ 2    ☐ 3    ☐ 4    ☐ 5

Strongly disagree                      Strongly agree

Think of your role as a member of this company/organization. For each item below, select the answer that best represents your belief about or attitude toward your organization as a whole. Please respond to all items. The alternative responses are:

*YES!* I agree *very strongly* with the statement.

yes I agree with the statement.

no I disagree with the statement.

*NO!* I disagree *very strongly* with the statement.

(SCALE APPEARS AFTER EACH STATEMENT)

I am very proud to be an employee of this company.

I often describe myself to others by saying I work for this company” or “I am from this company."

We at this company are different from others in similar companies.

I talk up this company to my friends as a great company to work for.

I am willing to put in a great deal of effort beyond that normally expected in order to help this company be successful.

I become irritated when I hear others outside of this company criticize the company.

I have warm feelings toward this company as a place to work.

I would be quite willing to spend the rest of my career/life with this company.

I feel that this company cares about me.

The record of this company is an example of what dedicated people can achieve.

I have a lot in common with others employed by this company.

I find it difficult to agree with this company's policies.

My association with this company is only a small part of who I am.

I like to tell others about projects that this company is working on.

I find that my values and the values of this company are very similar.

I feel very little loyalty to this company.

I would describe this company as a large “family” in which most members feel a sense of belonging.

I find it easy to identify with this company.

I really care about the fate of this company.

Think of the work you do at present. How well does each of the following words or phrases describe your work? Choose:

(SCALE APPEARS WITH EACH)

[Job Satisfaction Questionnaire]

1 for "Yes" if it describes your work

2 for "No" if it does not describe it

3 for "?" if you cannot decide

Satisfying

Gives sense of accomplishment

Challenging

Dull

Uninteresting

Think of the majority of people that you work with now or the people you meet in connection with your work. How well does each of the following words or phrases describe these people? SAME Y/N/? SCALE

Boring

Helpful

Responsible

Intelligent

Lazy

Think of your job in general. All in all, what is it like most of the time? For each of the following words or phrases, mark your response.  
(SCALE AS ABOVE)

Good

Undesirable

Better than most

Disagreeable  
Makes me content

Excellent

Enjoyable

Poor

Listed below are a series of statements that represent possible feelings that individuals might have about the company or organization for which they work. With respect to your own feelings about your organization, please indicate the degree of your agreement or disagreement with each statement by checking the

[Organizational Commitment Questionnaire]

☐1    ☐2    ☐3    ☐4    ☐5    ☐6    ☐7  
Strongly disagree                      Strongly agree

Deciding to work for this organization was a definite mistake on my part.

## PART VI: WORKPLACE RELATIONSHIPS

In the following section, please respond to each item, **thinking of the co-worker** (peer with equal authority at the same company) **with whom you interact most frequently** by marking the number on the scale provided that corresponds to your response. Scale rankings are from 1 - 5, with “1” being *strongly disagree* and “5” being *strongly agree*.

(SCALE APPEARS AFTER EACH)

[Trust and Liking Scales]

This person is primarily interested in his (her) own welfare.

☐1

☐2

☐3

☐4

☐5

Strongly disagree

Strongly agree

There are times when this person cannot be trusted.

This person is perfectly honest and truthful with me.

I feel that I can trust this person completely.

This person is truly sincere in his (her) promises.

I feel that this person does not show me enough consideration.

This person treats me fairly and justly.

I feel that this person can be counted on to help me.

I think that this person is unusually well-adjusted.

I would highly recommend this person for a responsible job.

I have great confidence in this person's good judgment.

I think that this person is one of those people who quickly wins respect.

I think that this person is receptive to new ideas.

The following questions ask you to evaluate the relationships you have with **the co-worker with whom you have the most contact** by circling the number corresponding to the scale provided for each question; rankings are from 1-5, with “1” being *strongly disagree* and “5” being *strongly agree*.

(SCALE APPEARS AFTER EACH)

[Relationship Satisfaction Scale]

We have a good relationship.

☐1

☐2

☐3

☐4

☐5

Strongly disagree

Strongly agree

My relationship with this person is very stable.

Our relationship is strong.

My relationship with this person makes me very happy.

I really feel like a part of a team with this person.

I would be very comfortable telling this person about a new idea I have for the company.

This person is generally supportive of new ideas.

This person is generally responsive to new ideas.

I have a high degree of happiness, everything considered, in this relationship.

## **PART VII: WORK CHARACTERISTICS**

Working away from the central office requires particular skills, abilities and resources in order to do your job well. For each of the following, please rate the confidence you have in your judgment that you could perform the specific activity, from 1 - 9, with "1" being *not at all confident*, and "9" being *extremely confident*. SCALE APPEARS AFTER EACH.

[Efficacy Scale]

### **To aid in performing my job, I could:**

Set objectives that align with the organization's goals.

☐1

☐2

☐3

☐4

☐5

☐6

☐7

☐8

☐9

Not at all confident

Extremely confident

Prioritize tasks to use my time effectively.

Complete my daily priority tasks.

Get a response from my manager to a request for advice or help within the time requested.

Locate my manager and contact him/her immediately.

Know which of my co-workers to go to for specific information.



Access appropriate staff readily.

Organize my office equipment, desk and papers effectively.

Access information needed to perform my job in an efficient manner.

Please use the scale provided for the next series of questions, marking a number from "1" (strongly disagree) to "5" (strongly agree) for each one to indicate your level of agreement with the statement.

(SCALE APPEARS AFTER EACH)

Working remotely is not a productive way to work.

☐1 ☐2

☐3

☐4

☐5

Strongly disagree

Strongly agree

It is difficult to do the job being remotely managed.

Working remotely is an efficient way to work.

Working remotely is an effective way to work.

### **General Attitudes About People**

Please answer the following questions with regard to people in general (**including those outside of the work context**):

[Global Trust Scale]

Generally speaking, would you say that people can be trusted or that you can't be too careful in dealing with people (check one)?

- ☐ People can almost always be trusted
- ☐ People can usually be trusted.
- ☐ You usually can't be too careful in dealing with people
- ☐ Can't choose

Do you think most people can be trusted?

- ☐ Yes
- ☐ No
- ☐ Don't know

Do you think of yourself as a trusting person? Are you...

- ☐ Very trusting
- ☐ Somewhat trusting
- ☐ Somewhat distrusting
- ☐ Don't know

## **PART VIII: GENERAL WORK FEATURES & EXPERIENCE**

The next section focuses on several general aspects of the company/organization and your work experience. Please respond to each of the following questions as completely as possible. **All responses will remain completely confidential.**

How long have you worked for this company?

- ☐ Less than 6 months
- ☐ 6 months to 1 year
- ☐ 1-3 years
- ☐ 3-5 years
- ☐ 5-10 years
- ☐ 10-20 years
- ☐ More than 20 years

How long have you worked as a remote worker?

- ☐ Less than 6 months
- ☐ 6 months to 1 year
- ☐ 1-3 years
- ☐ 3-5 years
- ☐ 5-10 years
- ☐ 10-20 years
- ☐ More than 20 years

Have you worked as a remote worker for another company?

- ☐ Yes. How long? \_\_\_\_\_
- ☐ No.

How was your decision made to work remotely?

- ☐ I chose to work remotely.
- ☐ My employer decided that I would work remotely.
- ☐ The decision to work remotely was made jointly by me and my employer.
- ☐ Other (please indicate) \_\_\_\_\_

In terms of formality, how would you characterize this company (select one)?

- ☐ Roles are carefully defined, labor is divided into narrowly categorized tasks, and most activities are governed by rules and procedures.
- ☐ Roles are defined, but there is some task crossover, and most activities are governed by rules and procedures which may be changed in some circumstances.
- ☐ Roles are rather loosely defined, tasks are often modified and redefined, and few rules and procedures are in place.
- ☐ Roles, tasks, rules and procedures are dynamic and changing; this company/organization adapts based on ever-changing conditions, environments and needs.

What type of work is this organization engaged in?

---

What is your routine for each of these major parts of the day?

- ☐ Morning \_\_\_\_\_
- ☐ Afternoon \_\_\_\_\_
- ☐ Evening (if applicable) \_\_\_\_\_

What are your primary job responsibilities?

---

Please complete the following sentences:

Challenging parts of *my work with this organization* are:

---

Challenging aspects of *working away from the home office* are:

---

Working for this organization is like:

---

Working away from the central office of this organization is like:

---

Which of the following groups do you identify with **most often** (check one)?

- ☐ My profession
- ☐ My company or organization
- ☐ My work group
- ☐ My client(s)
- ☐ My organization's management
- ☐ My suppliers/subcontractors
- ☐ Other \_\_\_\_\_

Approximately how many people does this organization employ (full- and part-time, all locations)?

- ☐ Fewer than 50
- ☐ 50-100
- ☐ 101-250
- ☐ 251-500
- ☐ More than 500

How many people work with you at your location (full- and part-time)?

- ☐ I work alone at this location

- ☐ 2-3 (including myself)
- ☐ 4-10 (including myself)
- ☐ More than ten. How many? \_\_\_\_\_

What type of organization/company is this?

- ☐ Government
- ☐ Public (publicly traded)
- ☐ Private, for-profit
- ☐ Non-profit
- ☐ Other \_\_\_\_\_

Approximately how many separate offices or remote locations does this organization/company have?

- ☐ 1-5      ☐ 6-15      ☐ 16-30      ☐ 31-50      ☐ 51-100
- ☐ More than 100. Approximately how many? \_\_\_\_\_

Approximately how many remote employees does this organization/company employ?

- ☐ 1-5      ☐ 6-25      ☐ 26-50      ☐ 51-100      ☐ 101-500
- ☐ More than 500. Approximately how many? \_\_\_\_\_

Is your communication at work monitored by the company?

- ☐ Yes. In what way? \_\_\_\_\_
- ☐ No

Which of the following best represents the highest level of education that you have completed?

- ☐ Some high school or less
- ☐ High school graduate
- ☐ Attended some college
- ☐ Associates degree
- ☐ Bachelors degree
- ☐ Post-college graduate

What is your sex?

- ☐ Male      ☐ Female

What is your age (years)?

- ☐ Under 25      ☐ 26 – 34      ☐ 35 – 44      ☐ 45 – 54      ☐ 55 – 64
- ☐ 65 - 70      ☐ 71 +

Which of the following best describes your total household income before taxes last year?

- ☐ Under \$30,000
- ☐ \$30,000 - \$49,999
- ☐ \$50,000 - \$74,999

- ☐ \$75,000 - \$99,999
- ☐ \$100,000 +

What is your marital status?

- ☐ Married
- ☐ Single, never married
- ☐ Widowed
- ☐ Separated or divorced

How many people share your living space?

- ☐ I live alone
- ☐ I live with one other person
- ☐ I live with two other people
- ☐ I live with three other people
- ☐ I live with more than three other people

What is your race? (Check all that apply):

- ☐ Latino
- ☐ Hispanic
- ☐ White (non-Hispanic)
- ☐ Indian
- ☐ Native American
- ☐ African-American
- ☐ Asian
- Other \_\_\_\_\_

How many days of work did you miss in the last 12 months (other than vacation time)?

\_\_\_\_\_

Do you plan to stay with this company?

- ☐ Yes
- ☐ No
- ☐ Don't know

Do you plan to continue working remotely (either with this organization or with another one)?

- ☐ Yes
- ☐ No
- ☐ Don't know

Be sure to click on the "Complete the Survey" box!

**THANK YOU!!!**

## APPENDIX B

## PROTOCOLS

### ***Participant Letter to Direct Business Contact***

#### **Your input is extremely valuable.**

Thank you for participating in this study about virtual or remote employees and communication. With more than 15 years of experience as a remote employee, I am personally interested in this growing way of doing business and understand the challenges and rewards associated with it from my own perspective. However, I am interested in the experiences and perspectives of other remote workers, and am building on this line of research for my dissertation. I know how many demands you have on your time, and wish to acknowledge my gratitude for your help; please be aware of how important your contribution is to this important endeavor.

This research focuses on the interactions which take place between remote employees (full time employees working in a location other than the home office at least three days per week) and their co-workers. For purposes of this study, I am interested in co-workers who are peers, in the sense that neither person has authority over the other.

The questionnaire can be accessed by clicking on the address link below. Please be as honest and open in your answers as possible. **Your responses to this questionnaire are completely confidential and will remain anonymous.** This is an agreed-upon condition of the study; if this agreement is not satisfactory to a participating business, the study will be terminated and the researchers will destroy all responses.

There are no right or wrong answers to these questions. They are designed to illuminate communication practices associated with how employees identify with their organizations and work groups, not whether or not certain practices are good or bad. The questionnaire should take approximately one hour to complete. You may withdraw from the study or omit answers to any questions at any time without penalty.

As a way of expressing appreciation for your assistance and time, I am offering four \$50.00 cash prizes, with winners determined by random drawing. To enter your name in the drawing, simply send a separate e-mail, indicating your name and contact information, to: faystudy@yahoo.com; please put the word "THANKS" in the subject line. Winners will be notified using the information you provide in your e-mail.

Your role in this research is both important and appreciated. By choosing to participate, you are helping to move forward research on effective organizational practices, especially as it relates to employees who work away from the main offices of their companies.

*Thank you very much!*

Dr. Susan Kline  
Principal Investigator

Martha Fay  
Co-investigator

3016 Derby Hall/OSU  
(614)292-0464  
kline.48@osu.edu

3016 Derby Hall/OSU  
(614)292-2756  
[fay.35@osu.edu](mailto:fay.35@osu.edu)

## Recruitment Script for Company Representatives

### 1. Introduction

Technology has enabled organizations to adopt a number of different remote or telework arrangements. Benefits accrue to organizations in the form of access to otherwise unavailable talent, lower overhead costs and wider geographic representation. Benefits to employees include more flexible work arrangements, reduced costs associated with commuting and greater autonomy and independence. These benefits have been studied and are widely accepted. However, relatively little is known about the effects that changed interaction patterns may have on how remote employees identify with their organizations even though feelings of isolation have been clearly associated with this working arrangement. Extensive research links strong organizational identification with outcomes of direct interest to companies, such as reduced turnover and increased productivity. Therefore, this research focuses on the role of communication between home office and remote workers in developing or strengthening their identification with organizations.

### 2. Project Process

This research involves administration of one questionnaire to participating remote employees by e-mail). Anonymity can not be guaranteed for electronic communication. However, COMPANY NAME must agree that participant names and individual responses will not be made available to the company and that the integrity of results depends on their agreement not to monitor individual responses. Respondents must be assured that efforts will be made to keep their responses confidential in each stage of data collection. It is estimated that questionnaires will require just over one hour for each participant to complete.

### 3. Value to COMPANY NAME

The primary value to COMPANY NAME of participating in this research is the enhanced knowledge of remote employees' interaction needs, particularly as they relate to the aggregate strength of their identification with COMPANY NAME. Data (anonymous) most likely to be of particular interest includes:

- \*Stated levels of identification and commitment to COMPANY NAME
- \*Self-reported levels of absenteeism over the past 12 months
- \*Specific communication practices that enhance or detract from remote employee identification with COMPANY NAME
- \*Stated levels of job satisfaction of remote employees



4. Requirements from COMPANY NAME

The cost of this research is limited to employee time, estimated at 70 minutes x the number of respondents actually completing the survey. Additionally, COMPANY NAME understands and agrees that, while electronic communication can not be guaranteed to be confidential, individual responses will not be made available to them or to anyone else. Researchers will provide only aggregate results. Finally, COMPANY NAME is willing to allow employees to use their companies' computers to complete the questionnaire.

Consent Documentation

Date

To Whom It May Concern:

I have spoken with Ohio State PhD student Martha Fay about the research on remote employees and their interaction practices with regard to organizational identification. I understand that she will be asking remote employees from Company Name to complete an on-line questionnaire that will take approximately one hour to complete, and I consent to the voluntary participation by remote employees of Company Name. My company is willing to allow participating employees to use work computers if necessary.

NAME/CONTACT INFORMATION