WORK GROUP IDENTIFICATION AND COMMUNICATION COMPETENCE

IN THE USE OF E-MAIL

A Thesis
Submitted to the Graduate Faculty
of the
North Dakota State University
of Agriculture and Applied Science

By
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In Partial Fulfillment
for the Degree of
MASTER OF SCIENCE

Major Department:
Communication

May 2014

Fargo, North Dakota
Title

WORK GROUP IDENTIFICATION AND COMMUNICATION COMPETENCE IN THE USE OF E-MAIL

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MASTER OF SCIENCE

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ABSTRACT

The purpose of the current study is to examine how individuals’ work group identification influences their perceptions of e-mail use in organizations based on social identity theory. This research investigated 211 participants using an online questionnaire to report participant perception of communicator competence in hypothetical e-mails, in regard to high-flaming/low-flaming messages and from an ingroup/outgroup member. Independent sample t-tests and multiple regression analysis were adopted.

Participants perceived a higher level of conversational effectiveness in an e-mail with a low-flaming message from an ingroup member. Work group identification, sex, and age predicted perceived communication competence in an e-mail with a low-flaming message from an ingroup member, while work group identification (only for conversational appropriateness) and sex negatively predicted perceived communication competence in an e-mail with a high-flaming message from an outgroup member. This empirical research contributes to the development of innovative approaches to workplace e-mail communication studies.
ACKNOWLEDGEMENTS

Thanks to many people’s support, my immature thoughts have turned into a fine compilation of my two years’ efforts. First, I extend my deepest appreciation to my advisor and committee chair Dr. Stephenson J. Beck. No matter how unrealistic my ideas were, he has never discouraged my interests but taught me how to make it happen with his great patience. He came up with many ways for my passion to survive without giving up professional quality. His high expectations improved my work as a scholar. His support went beyond my academic work and also helped me to realize my goal. I faced several hardships during this master’s program and could give up pursuing my academic career without his exceptional support. He effectively organized my difficulties, put me back to the right track, and led me to the great achievement, doctoral studies. With this proud work, I can finally proceed to the next step.

My committee members, Dr. Amy O’Connor, Dr. Nan Yu, and Dr. Sukumarakurup "Kumar" Krishnakumar, brought their unique expertise and complemented this project. Dr. O’Connor inspired me in her course to explore work group identification as the main theme of this project. Her close attention refined my conceptualization and writing. Dr. Yu’s straight and uncompromising questions always stimulated me to logically approach my subject and enhance methodological reliability and validity. Dr. Kumar, as an organizational behavior specialist, offered full support whenever I sought and his distinctive perspective expanded my exploration.

Moreover, I extend my gratitude to my friends and family. Especially the members of the Department of Communication, I never would have made this accomplishment without all your kindness and help. Thanks to my family, I can keep pursuing my dream without worry. Lastly, my special thanks and love go to my husband Tomotoshi Ito, who has never doubted my success without any ground and always wishes my happiness first.
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CHAPTER 1. INTRODUCTION

E-mail is one of the most popular communication tools in workplace settings, though it can also be a great nuisance for many employees. People in the workplace can often be frustrated by many problems: lack of formality, flaming messages, unclear expressions, no response, and so on. These e-mail problems can be the result of various task or personal issues held by the sender. People in organizations may significantly improve effectiveness in their e-mail communication if they could know certain patterns and tendencies that may cause miscommunication in e-mail.

Today, the use of e-mail plays a significant and central role in workplace communication; e-mail has rapidly become an extensively used medium in organizations, and substantial information is processed by this communication technology (Ishii, 2004, 2005; Skovholt & Svennevig, 2006; Stephens, Cowan, & House, 2008). Workplace e-mail has become commonplace over the past 20 years, and understanding how the use of e-mail influences employees’ communicative behaviors may be meaningful and valuable, especially for people who expect to take advantage of the medium to effectively communicate their business endeavors.

Some scholars studied how the use of e-mail influences communication behaviors. Easton and Bommelje (2011) studied how the absence of a requested e-mail response is interpreted. The researchers suggested that the non-verbal cues may invite negative consequences that implicate power, respect, and trust that are key factors affecting the organizational process. Zhu and White (2009) emphasized the significance of learning and teaching the use of business e-mail. From business practitioners’ perspectives, the scholars identified the five genre forms of business e-mail based on genre competence and situated
learning: work-related, concrete, specific, descriptive, and correct forms. Zhu and White also suggested seven stages for enhancing learners’ business e-mail generic competence. Both of these studies indicated the practicability and significance of e-mail communication in organizational settings.

Much of the past research on workplace e-mail behaviors has focused on media richness theory developed by Daft and Lengel (1986; Daft, Lengel, & Trevino, 1987). The scholars defined information richness as “the ability of information to change understanding within a time interval” (Daft & Lengel, 1986, p. 560), and argued that the information richness is a factor to reduce equivocality. For example, face-to-face is one of the richest media, while e-mail is relatively low in media richness. Media richness theory has been widely applied to the field in organizational communication, especially for communication technology, and the theory suggests appropriateness of a medium is based on message richness. However, most studies applying media richness theory to e-mail communication in organizational contexts examine the sender’s selection of media and do not indicate other factors that influence communicative behaviors in e-mail creation, which is the interest of the current researcher.

Social identity theory may serve as an alternative theoretical framework for investigating the factors that influence e-mail creation. Social identity theory (Tajfel & Turner, 1986) examines the influences of communication between and across groups, but overall intergroup perspectives in organizational contexts are still underdeveloped (Paulsen, Graham, Jones, Callan, & Gallois, 2008). Among the limited empirical research, studies by Lauring (2008) and Suzuki (1998) are especially appreciated as successful applications of the social identity approach to organizational contexts. The intergroup perspective especially fits some issues that today’s organizations are urgently facing, including organizational change (Chreim, 2002; Lewis &
Seibold, 1998) especially mergers and acquisitions (e.g., Jetten, O’Brien, & Trindall, 2002; Terry, 2001; Terry, Carey, & Callan, 2001; Terry & O’Brien, 2001; van Knippenberg & van Leeuwen, 2001), temporary staff (Chattopadhyay & George, 2001; Garsten, 2003), cross-functional teams (e.g., Lovelace, Shapiro, & Weingart, 2001), and boundary spanning (Bartel, 2001; Cross, Van, & Louis, 2000; Yan & Louis, 1999). These contexts tend to make social identity salient in inter-organizational or intra-organizational relationships.

Ashforth and Johnson (2001) applied social identity perspective to organizational settings and explained that organizational identification is perceived as a multi-dimensional concept consisting of multiple identities at different organizational levels. The multiple identities consist of various group memberships, including the ones in the higher level (e.g. organization as a whole), the middle level (e.g. division), and the lower level (e.g. work group) in terms of the formal organizational structure. However, the units are not always embedded in the said level depending on the structure, form, and size of the organization, which contains blur cross-unit boundaries that sometimes produce overlapping or an exceptional unit beyond the formal organizational structure (e.g. friendship). When an individual has multiple identifications based on the formal organizational structure, identifications with lower level subunits tend to be more salient than identification with the organization as a whole. Work group identification is one of an individual’s nested identities with a subunit in the lower level of the organizational structure. Subgroup identities tend to be salient and encourage ingroup members to behave favorably with each other (Ashforth & Mael, 1989). The salience of individuals’ work group identifications may significantly influence their perceived communication effectiveness and assessment of message appropriateness, and the examination of workplace communication in the use of e-mails seems to be an appropriate extension of social identity theory.
The purpose of this study is to examine individuals’ assessment of workplace e-mails, particularly the way work group identification may influence perceptions of conversational effectiveness and appropriateness. This proposal will frame work group identification based on social identity theory in organizational contexts and review studies on e-mail in the workplace. Discussion of the research method will follow.
CHAPTER 2. LITERATURE REVIEW

Social Identity Perspective in Organizations

Social identities are fundamental constructs in organizations and play a critical role for individuals’ attitudes and behavior. Tajfel and Turner (1986) developed social identity theory, which suggests “self-concept is comprised of a personal identity, encompassing idiosyncratic characteristics such as abilities and interests, and a social identity, encompassing salient group classifications” (Mael & Ashforth, 1992, p. 104). Social identity theory is a theoretical framework successfully applied to studies on organizational identification, and involves the classification of ingroups and outgroups based on foci which may include organizational membership, gender, and age cohort. The current research will employ social identity theory as a theoretical framework, and the next section will describe antecedents and consequences of social identification in the organizational setting to develop fundamental assumptions in this research.

Antecedents and consequences of social identification. Ashforth and Mael (1989) applied social identity theory to reframe the concept of organizational identification with a focus on the antecedents and consequences of social identification. In their seminal piece, they argue that potential antecedents of social identification include ingroup favoritism, group distinctiveness and prestige, outgroup salience, and group formation factors. As a result, three consequences of these antecedents include: 1) social identification leads to activities that are consistent with the identity and support the institutions embodying the identity; 2) stereotypical perceptions of self and others and outcomes that traditionally are associated with group formation; and 3) social identification reinforces the antecedents of identification.

Based on these antecedents and consequences, it can be argued that social identity can and will influence workplace communication. For example, according to Grice, Gallois, Jones,
Paulsen, and Callan (2006), individuals’ group membership influences perceived communication effectiveness; employees prefer information from ingroup members than from outgroup members, because they perceive ingroup members as being more favorable (Grice, Gallois, Jones, Paulsen, & Callan, 2006). Additionally, criticism from ingroup members is received more favorably than from outgroup members. Also, individuals’ ingroup identity may also influence their assessment of message appropriateness. Therefore, the current researcher assumes that group members may apply norms of ingroup communicative behaviors to determine the appropriateness of the messages they receive. For example, the expected degree of formality in messages may be different between ingroup members and outgroup members: individuals may expect higher formality in messages from outgroup members, while accepting less formal messages from ingroup members. The association between group membership and communication appropriateness will be discussed later.

**Work Group Identification in Organizations**

Individuals can identify themselves with several groups at different levels in organizations, and Ashforth and Johnson (2001) conceptualized these multiple identities in organizations using social identity theory. An employee can identify himself/herself with the organization as a whole (organizational identification), internal groups embedded in the organization (multiple identities), and the most immediate group in the lower order of the organizational structure (work group identification) as shown in Figure 1. For example, a division and organization as a whole is considered as higher-order identities compared with work group and task forces as lower-level identities. These dimensions of individual identification can also differentiate ingroups and outgroups at different organizational levels. The next section will begin with description of organizational identification, followed by explanation of multiple
identities. Furthermore, the concept of multiple identities will be narrowed to the work group identification, which is the interest of the current researcher.

Figure 1. *Multiple Identities in the Organization*

**Organizational identification.** Organizational identification is regarded as a perceptual and cognitive construct from the social identity perspective (Tajfel & Turner, 1986). Mael and Ashforth (1992) defined organizational identification as “the perception of oneness with or belongingness to an organization, where the individual defines him or herself in terms of the organization(s) in which he or she is a member” (p. 104).

Cheney (1983b) took a rhetorical approach to explore identification in organizations, specifically investigating the individual-organization relationship. In his investigations, Cheney discussed identification strategies and tactics in organizational communication based on Burkean identification and discusses how the strategies influence the development of identification in organizations. The scholar conducted message analysis using the common ground technique and grouped identification strategies under six categories: (1) expression of concern for the
individual; (2) recognition of individual contributions; (3) espousal of shared values; (4) advocacy of benefits and activities; (5) praise by outsiders; and (6) “testimonials” by employees. Cheney also identified two types of identification strategies: identification through antithesis, and the assumed or transcendent “we.” Cheney (1983a) also conducted research to examine the process of organizational identification in a corporation, with a focus on the relationship between organizational identification and decision making. Cheney argues that identification is a continually changing process over time.

Organizational identification is closely associated with other constructs including organizational commitment, member support and loyalty, satisfaction, internalization, and professional identification (Bartels, Peters, de Jong, Pruyn, & Marjolijn van, 2010; Russo, 1998), but organizational identification is not completely interchangeable with these constructs. Mael and Ashforth (1992) critique confusion of organizational identification with other constructs including internalization, organizational commitment, and professional and occupational identification. Cheney and Tompkins (1987) argue that organizational identification and commitment are interdependent yet distinctive, and describe identification as the “substance” of action-patterns and commitment as the consequential “form.” While organizational identification refers to individuals’ identification with the entire organization, social identity theory also provides a useful approach to explain multiple identifications in organizations.

**Multiple identities.** Ashforth and Johnson (2001) applied social identity theory to explain the complexity of multiple identities in organizations. Identities are perceived from two dimensions that may interact to develop personal identities: cross-cutting identities and nested identities. *Cross-cutting identities* are attached to formal (e.g., task forces) and informal (e.g., friendship, family, demographics) social categories, while nested identities are based on formal
organizational structures. Cross-cutting identities are relatively salient similarly to lower order identities, though the salience of cross-cutting identities easily shifts between formal cross-cutting identities and nested identities, as well as between informal and formal cross-cutting identities.

Nested identities vary in different organizational levels from lower order identities (e.g., work group) to higher order identities (e.g., division, organization). Nested identities consist of three dimensions that are mutually reinforcing: inclusive/exclusive, abstract/concrete, and distal/proximal. Higher level identities are relatively inclusive, abstract, and distal (indirect), while lower level identities are more exclusive, concrete, and proximal (direct). Ashforth and Johnson (2001) claimed the salience of lower order identities that “will generally be more subjectively important and situationally relevant, that is more salient, than higher order identities” (p. 35). The salience of lower order identities derives from: 1) its nature as the individual’s primary group; 2) higher homogeneity and task-interdependency; 3) balancing conflicting needs for assimilation with and differentiation from others; and 4) organic structures of organizations. Salience shifts between nested identities are relatively easy, based on transition scripts, generalization of identification, and overlap in identities.

Among nested identities, studies revealed consistent findings that work group identification is stronger than organizational identification (Ashforth & Johnson, 2001; Tajfel & Turner, 1986), while mixed findings were found on the association between occupational identification and organizational identification. Tajfel and Turner (1986) claimed that lower order identifications tend to be more salient than organizational identification when an individual identifies with multiple groups in the organization. Therefore, the salience of work group identification is regarded as a fundamental assumption in the current study. Perspectives of
multiple identities are varied, though multiple identities may be simultaneously salient to some extent and become holistic, which develops complex personal identities. Based on the perception of multiple identities in the organizational setting, the next section will further discuss one of the nested identities: work group identification.

**Work group identification.** Individuals’ social identities in organizations consist of multiple identities based on organizational levels. Work group identification is one of the representative nested identities in the lower order of the organizational structure (Ashforth & Johnson, 2001). Descriptions of work groups vary among studies (Conrad & Poole, 2005; Bartels, Pruyn, DeJong, & Jonstra, 2007; Riketta & Van Dick, 2005; Van Dick, Wagner, Stellmacher, & Christ, 2004; Van Knippenberg, & Van Schie, 2000; Montebello, 1994), but some factors are seen in common: size, structure, practice, and level in the organization. Also, work group and work team are terms that are interchangeably used, though the two terms are slightly different in some psychological and cultural aspects (Cheney, Christensen, Zorn, & Ganesh, 2004; Conrad & Poole, 2005; Robbins & Judge, 2008).

For the current study, work group identification is defined as membership identified with a subunit at the lowest level in the formal organizational structure, which consists of a smaller number of people who engage in daily activities in closer proximity than in higher-level units. Specifically, the lowest unit described in the formal job title is considered a work group. As work group identity serves as one of social identities, it differentiates ingroup and outgroup memberships within the organization; employees perceive their work group members as ingroups, while other people who are not the group members as outgroups.
Individuals’ work group identification indicates salient ingroup membership compared with other identities in organizations. As Ashforth and Johnson (2001) and Tajfel and Turner (1986) claimed that the lower order identifications are stronger than organizational identification, studies consistently confirmed that work group identification tends to be more salient than the higher order identification (division, organization, etc.). Riketta and Van Dick (2005) and Dick, Knippenberg, Kerschreiter, Hertel, and Wieseke (2008) confirmed a strong association between work group membership and job satisfaction. Riketta and Van Dick (2005) conducted a meta-analysis to compare the strength and correlations between work group attachment and organizational attachment. The researchers tested hypotheses on the direction and relative strength of the relationships of work group attachment and organizational attachment with focus specific outcomes (e.g. satisfaction, extra-role behavior, climate, intent to leave). The findings indicated that work group attachment is stronger than organizational attachment.

Two studies indicated the association between work group identification and other variables: communication climate, job satisfaction, and organizational citizenship behavior. Bartels, Pruyn, DeJong, and Jonstra (2007) addressed the influence of communication climate and perceived external prestige on employees’ identification with various organizational levels: at work group level, department level, and business unit level in a regional police organization. The results of the questionnaire survey show that communication climate has positive correlations with identification at the various organizational levels, and communication climate has the strongest correlation with work group identification. Also, job satisfaction positively relates to both organizational and, especially, work group identification. Dick, Knippenberg, Kerschreiter, Hertel, and Wieseke (2008) examined interactive effects of work group identification and organizational identification. The researchers predicted that identifications are
strongly associated with employee job satisfaction and organizational citizenship behavior when work group identification and organizational identification are high. The findings showed one type of identification influences the other.

Although several studies dealt with work group identification, researchers mainly measured the degree of its salience or the association with other variables. The current study attempts to expand on this by measuring the effect of work group identification on other variables. The next section will discuss communication competence consisting of perceived conversational effectiveness and appropriateness as the dependent variables.

**Communication Competency**

Communication competence was first conceptualized by Spitzberg and Cupach (1984). Initially, six constructs contributed to conceptualizing competence: fundamental competence, social skills/competence, interpersonal competence, linguistic competence, communication competence, and relational competence. The constructs belong to two categories: Fundamental competence, social competence, and interpersonal competence are outcome-focused, while linguistic competence and communication competence are message-focused. The scholars developed the notion of relational competence as a hybrid approach by combining the categories; objectives of communication are fulfilled through interaction appropriate to the interpersonal context.

Spitzberg and Cupach (1984) also developed a model of relational competence as a framework of competence in communication. The relational competence model is based on assumptions including the perception of conversational appropriateness and effectiveness as two fundamental properties. Appropriateness involves social sanctions, characteristics (verbal context, relational context, and environmental context), and logical consistency (congruency
with norms and rules). *Effectiveness* is conceptualized as “the achievement of interactant goals or objectives, or as the satisfaction of interactant needs, desires, or intentions” (p. 102). Appropriate behavior complies with the situational and relational rules in the context, while effective behavior adapts to or solves problematic situations and achieves intended or desirable results through interpersonal communication. The scholars suggest that perception of communication competence requires the balancing of both conversational appropriateness and effectiveness because a communicator’s behavior can be appropriate while it is not effective, and vice versa.

**Theoretical Frameworks on E-mail in the Workplace**

Scholarship in the field of workplace e-mails has conventionally applied *media richness theory* (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987), and e-mail is considered as a lean medium from the media richness perspective. Several researchers (e.g., Easton & Bommelje, 2011; Ishii, 2005; Carlson & Zmud, 1999) demonstrated the usefulness of the media richness model in studies on workplace e-mail, but the current researcher considers the theoretical framework has a certain limitation and explores the contribution of social identity theory as an alternative to media richness theory. This section describes media richness theory which has been the traditional theory applied to the field of e-mail in organizations, its limitations, and the potential of social identity theory as an alternative theoretical framework.

A media richness approach exclusively focuses on media selection in the organizational structures and systems. Daft and Lengel (1986) identify two forces to explain how managers’ communicative behaviors are influenced in information processing: uncertainty and equivocality. Uncertainty is defined as the absence of information, and the amount of information determines the level of uncertainty. Equivocality means ambiguity, “the existence of multiple and conflicting interpretations about an organizational situation” (Daft & Lengel, 1986, p. 556),
which confuses organizational decision making. Daft, Lengel, and Trevion (1987) adopted the concept of equivocality in an empirical study and developed the media richness model. They assumed that organizations are systems with equivocality, in which interdependent individuals interact in a highly complex manner. The richness of each medium was evaluated from four dimensions: feedback, multiple cues, language variety, and personal focus. The findings show that media varies in capacity to convey information cues; managers prefer rich media for ambiguous communications, while they prefer media low in richness for unequivocal communications. Managers’ media selection and their performance ratings were also examined and the findings reveal that high performing managers are more sensitive to media than low performing managers.

However, the media richness approach certainly has limitations in terms of its application to e-mail communication. Some scholars adopt different approaches with a focus on unique e-mail functions, such as carbon copying function and greetings/closings (Skovholt & Svennevig, 2006; Stephens, Cowan, & Houser, 2011; Waldvogel; 2007). As the studies indicate, alternative approaches to media richness theory are still emerging and have opportunities for further exploration. E-mail is widely used as a primary communication medium for versatile purposes, from simple routines to complex negotiations, regardless of its media leanness. The reason may be that e-mail enables users to control dissemination of information through unique e-mail functions. However, it is also true that e-mail causes many miscommunications that are not observed in other media. Neglect of the media leanness may be one of the causes, but other factors may also influence the e-mail communication process, specifically how messages are adapted to accomplish various purposes (Kellermann, 1992).
As an alternative theoretical framework to media richness theory, the present study adopted social identity theory. The motive for the application of social identity theory derived from high potential of the theory application to organizational contexts and consistent findings of the salience of lower order identities as discussed above. To the best of the researcher’s knowledge, the only study applying social identity perspective to the use of e-mail in the organizational context is by Stephens, Cowan, and Houser (2008). The scholars introduced a unique approach to e-mail communication based on the social identity model of deindividuation effects. The scholars explored organizational e-mail norms and interpersonal familiarity that influence superiors’ and subordinates’ attitude toward variables including the message, source credibility, and willingness to comply with requests. A two (norm-incongruent and norm-congruent e-mails) by two (high and low familiarities) experimental design was developed in order to examine adherence to organizational norms and interpersonal familiarity. The results indicated that organizational e-mail norms influenced all the variables, and interpersonal familiarity only influenced a compliance variable while showing differences in perceptions between superiors and subordinates. Although this study shows a partial application of the social identity perspective, it demonstrated the potential to apply the theory to studies on e-mail communication in organizations.

This literature review explored an alternative approach to study e-mail communication. Though media richness theory has been a leading theoretical framework in the field, some researchers pointed out its limitation and suggested alternative approaches. The current project uses social identity theory to propose that work group identification may be an alternative framework to studying workplace e-mail. Also, literature suggests associations between social identification and communication competence: ingroup favoritism and effectiveness (Grice,
Gallois, Jones, Paulsen, & Callan, 2006) and congruence with group norms and appropriateness (Abrams, Hogg, Hinkle, & Otten, 2005). Therefore, social identity approach is considered to be more suitable for this research than media richness approach, on the assumption that ingroup and outgroup memberships may predict perceptions of communication competence from the dimensions of conversational effectiveness and appropriateness.

This research will examine how individuals’ work group identifications influence their perception of communication competence in e-mail interactions. The current researcher hypothesizes that participants perceive the different level of conversational effectiveness and appropriateness between ingroup members and outgroup members in two messages with different levels of framing. Drawn from literature, the following hypotheses and research question are posed:

H1: Employees will perceive a higher level of effectiveness in an e-mail from ingroup members than from outgroup members in a low-flaming message.

H2: Employees will perceive a higher level of effectiveness in an e-mail from ingroup members than from outgroup members in a high-flaming message.

H3: Employees will perceive a higher level of appropriateness in an e-mail from ingroup members than from outgroup members in a low-flaming message.

H4: Employees will perceive a higher level of appropriateness in an e-mail from ingroup members than from outgroup members in a high-flaming message.

In order to explore the current researcher’s fundamental interest in factors that influence individuals’ behaviors in e-mail communications, the following research question was posed to examine effects of work group identification and demographics on perceived conversational effectiveness and appropriateness:
RQ: Which factors (work group identification, sex, and age) will predict perceptions of conversational effectiveness and appropriateness of e-mails in a workplace?
CHAPTER 3. METHOD

This study examined how work group identification influences employees’ assessment of workplace e-mails. Participants responded to an online questionnaire consisting of four sections: demographic information, description of work group, work group identification scale, and measure of the perceived conversational effectiveness and appropriateness of hypothetical e-mails. For the current study, the work group as a unit of measure was defined as a section, subdivision, or department in the formal organizational structure, or in other words, the smallest group to which participants belonged.

Participants

Participants were recruited on a voluntary basis from college employees and students in a large Midwestern university and their referrals aged 18 and older. The study involved 211 subjects (mean age = 35.89 years; range = 18-66 years), consisting of 151 females (71.56%) and 60 males (28.44%); 87.62% were Caucasian, .48% were African-American, .48% were Hispanic, 9.05% were Asian or Pacific-Islander, and 2.38% were other. Of the participants, 182 respondents (85.45%) have worked in a job that requires email correspondence more than one year, while thirty-one respondents (14.55%) did not satisfy the condition to participate in the survey.

Snowball sampling was adopted to collect data from people who have more than one year of work experience that required them to use individual e-mail accounts for communicating with other employees in the same organization. Snowball sampling is an appropriate technique for studies examining similar participants in same conditions who are hard to recruit (Keyton, 2006). The researcher mentions that the technique is also useful for data collection via the researcher’s personal network and asking participants to help find other participants. First, participants 18 and
older were recruited through online channels (e.g., Facebook) if they meet the work experience criteria. Then, in addition to answering questions, the participants were also encouraged to forward the survey link to others who also satisfied the study criteria, including friends, acquaintances, family, and coworkers.

**Measures**

The online questionnaire included four sections: (1) four demographic questions (sex, age, race/ethnicity, and length of work experience using an e-mail account for intraorganizational communication); (2) three items regarding the participant’s work group (number of members, members’ sex, and length of the participant’s membership); (3) 12 items of the work group identification measure; and (4) 20 items for measuring perceived appropriateness and 20 items for effectiveness of hypothetical e-mails (Appendix).

In addition to the data collection, Sections 2 and 3 contributed to priming the participant’s work group identification in order to make the hypothetical contexts in Section 4 reflect actual workplace experiences. Section 2 asked questions about an actual work group that the participant belongs to and helped him/her to assume a hypothetical work group mentioned in the later sections as if it is his/her actual one. Instructions given in Section 3 also conditioned the following hypothetical emails as if they are from the participant’s actual ingroup members or his/her actual outgroup members.

**Work group identification.** The current researcher tried to develop a concept of work group identification within participants by leading them to internally identify their work group based on the organizational structure, which will allow them to respond to the succeeding questions as if they feel they were asked about their work group. For Section 2, the subject was asked to respond to the items on the questionnaire in order to measure work group identification.
Section 2 of the questionnaire asked participants to answer three questions about their work group, including (1) the number of members, (2) members’ sex, and (3) length of the individual participant’s membership.

The scale in Section 3 established a baseline of participants’ general levels of work group identification. The 12-item instrument was developed with modified items of measures of organizational identification by Dick, Knippenberg, Kerschreiter, Hertel, and Wieseke (2008). With this instrument, participants’ level of identification with their work group was assessed on a scale of seven Likert-type options: (1) strongly disagree, (2) moderately disagree, (3) slightly disagree, (4) undecided, (5) slightly agree, (6) moderately agree, and (7) strongly agree. The reliability analysis of this scale displayed satisfactory internal consistency; Cronbach’s alpha was .85.

**Conversational appropriateness and effectiveness scales.** Section 4 of the questionnaire consisted of two components: hypothetical emails and the perceived conversational appropriateness and effectiveness measure. The first component of the questionnaire included two hypothetical e-mails from either ingroup or outgroup coworkers for participants to assess in terms of perceived appropriateness and effectiveness. The two e-mails were selected from Turnage’s (2007) 20 e-mail messages that indicated common e-mail conversations in workplace settings. The current researcher considered Turnage’s (2008) concept of flaming may influence participants’ perception of conversational effectiveness and appropriateness in e-mails. In order to reflect workplace contexts in the formal organizational structure, 2 task-based messages that Turnage developed were adopted for the hypothetical e-mail development: one of the two messages indicated a high level of flaming, the other, a low level of flaming. The low-flaming message “Hi, everyone. I need to get an update from you on each of your funded projects ASAP.
What I’m looking for is any progress you can report on the projects. We’re working on the annual report and we want to be able to include this information. Thanks!” shows minimum flaming tone. The high-flaming message “Now how in the hell would I know that if nobody tells me?? GEEZ!:0” contains all capital letters, many question marks, and an emoticon. The varied degrees of flaming could trigger individuals’ different perceptions toward ingroup members and outgroup members depending on their use of formality, nonverbal cues (e.g. emoticon), emotional expressions (e.g. upper case letters), and salutations (e.g. hi, thanks). The purpose for employing this experimental design was to manipulate the independent variables of ingroup interaction and outgroup interaction. The only difference between the two groups in this experimental design was whether or not the e-mails came from a member of an ingroup or outgroup. The two group patterns were randomly presented to participants.

The second component was developed to measure perceived appropriateness and effectiveness of hypothetical e-mails from ingroup members and outgroup members, using Canary and Spitzberg’s (1987) conversational appropriateness and effectiveness scales. In addition to conceptualization of the relational competence, the scholars developed the model in a variety of measurements. Spitzberg and Phelps (1982) originally developed the measurement with 26 semantic items, and Spitzberg and Canary (1985) modified the measurement to be a Likert-type scale with 40 items: 20 items for appropriateness and 20 items for effectiveness. Canary and Spitzberg (1987) further revised the instrument based on three factors: effectiveness, specific appropriateness, and general appropriateness. The current research employed the modified items of Canary and Spitzberg’s (1987) conversational appropriateness and effectiveness scales, based on the assumption that individuals’ social identifications may influence perceptions of e-mail communication effectiveness and appropriateness. Twenty items
were selected from the 40 items based on their appropriateness for workplace contexts and the Canary and Spitzberg’s factor analysis.

Therefore, all participants responded to the identical set of 2 hypothetical e-mails that had same 20 items with which to measure perceived appropriateness and effectiveness. However, participant group A saw the 2 emails as if they were from ingroup members while participant group B saw them as if they were from outgroup members. Responses to the Likert-type scales consisted of the following: (1) strongly disagree, (2) moderately disagree, (3) slightly disagree, (4) undecided, (5) slightly agree, (6) moderately agree, and (7) strongly agree. The questionnaire is found in the Appendix. Analysis of this scale displayed satisfactory internal consistency; Cronbach’s alphas were .80 for effectiveness and .79 for appropriateness.

**Procedures**

The questionnaire was created on the research software Qualtrics. Participants accessed the questionnaire via the link distributed through online channels (e.g. listserv, course Blackboard, Facebook). If recipients of the questionnaire link did not satisfy work experience conditions, they are not qualified as the participant but could forward the survey link to those who fulfilled the criteria. Short instructions on how to answer questions were given in the beginning of each section. Instructions of Section 4 primed the context as if the hypothetical emails were sent from employees of the participants’ current organization. All participants were treated in accordance with conditions provided by the university’s institutional review board (IRB). Once the IRB approved the study, data was collected and kept secure.

**Data Analysis**

Collected data was quantitatively analyzed for the research question and hypotheses: H1 and H2) independent-samples *t* tests on perceived conversational appropriateness and
effectiveness of hypothetical e-mails; and RQ) multiple regression analyses on demographic factors (sex and age), the work group identification measure, and the Conversational Appropriateness and Effectiveness Scales.
CHAPTER 4. RESULTS

Four independent sample t-tests were conducted to evaluate the four hypotheses. H1 predicted that employees in an ingroup condition would report a higher level of effectiveness in an e-mail than those in an outgroup condition in a low-flaming context, and H2 did in a high-flaming context. H3 predicted that employees in an ingroup condition would report a higher level of appropriateness in an e-mail than those in an outgroup condition in a low-flaming context, and H4 did in a high-flaming context. The results of the analyses are presented in Table 1.

H1: Employees will Perceive a Higher Level of Effectiveness in an E-mail from Ingroup Members than from Outgroup Members in a Low-flaming Message.

The first independent sample t-test on effectiveness supported H1. The test in an e-mail with a low-flaming message was significant, $t(131) = 1.99, p < .05$. Participants in the ingroup condition ($M = 4.82; SD = 1.14$) perceived a higher level of effectiveness in an e-mail than those in the outgroup condition ($M = 4.40; SD = 1.27$). The 95% confidence interval for the difference in means ranged from .003 to .83.

H2: Employees will Perceive a Higher Level of Effectiveness in an E-mail from Ingroup Members than from Outgroup Members in a High-flaming Message.

The second independent sample t-test on effectiveness did not support H2, as the test was not significant, $t(127) = -1.25, p = .21$. In an e-mail with a high-flaming message, participants in the ingroup condition indicated the level of effectiveness, $M = 2.07, SD = .83$, and those in the outgroup condition did, $M = 2.30, SD = 1.23$. The 95% confidence interval for the difference in means ranged from -.60 to .13.
H3: Employees will Perceive a Higher Level of Appropriateness in an E-mail from Ingroup Members than from Outgroup Members in a Low-flaming Message.

Two independent sample t-tests on appropriateness did not support H3 or H4. The significance level of the test in an e-mail with a low-flaming message was slightly above the threshold, $t(131) = 1.92, p = .06$. Participants in the ingroup condition indicated the level of appropriateness, $M = 5.39, SD = 1.16$, and those in the outgroup condition did, $M = 4.97, SD = 1.38$. The 95% confidence interval for the difference in means ranged from -.01 to .86.

H4: Employees will Perceive a Higher Level of Appropriateness in an E-mail from Ingroup Members than from Outgroup Members in a High-flaming Message.

The test in an e-mail with a high-flaming message was also not significant, $t(127) = -.51, p = .61$. The ingroup condition perceived the level of appropriateness, $M = 1.94, SD = .82$, and those in the outgroup condition did, $M = 2.02, SD = 1.10$. The 95% confidence interval for the difference in means ranged from -.42 to .25.
Table 1. Perceived Conversational Effectiveness and Appropriateness Means (SDs) for an E-mail with a Low-flaming Message and an E-mail with a High-flaming Message

<table>
<thead>
<tr>
<th>Variable</th>
<th>Condition</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-flaming</td>
<td>Ingroup</td>
<td>66</td>
<td>4.82</td>
<td>1.14</td>
<td>1.99</td>
<td>.05*</td>
</tr>
<tr>
<td>/Effectiveness</td>
<td>Outgroup</td>
<td>67</td>
<td>4.40</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-flaming</td>
<td>Ingroup</td>
<td>64</td>
<td>2.07</td>
<td>.83</td>
<td>-1.25</td>
<td>.21</td>
</tr>
<tr>
<td>/Effectiveness</td>
<td>Outgroup</td>
<td>65</td>
<td>2.30</td>
<td>1.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-flaming</td>
<td>Ingroup</td>
<td>66</td>
<td>5.39</td>
<td>1.16</td>
<td>1.92</td>
<td>.06</td>
</tr>
<tr>
<td>/Appropriateness</td>
<td>Outgroup</td>
<td>67</td>
<td>4.97</td>
<td>1.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-flaming</td>
<td>Ingroup</td>
<td>64</td>
<td>1.94</td>
<td>.82</td>
<td>-.51</td>
<td>.61</td>
</tr>
<tr>
<td>/Appropriateness</td>
<td>Outgroup</td>
<td>65</td>
<td>2.02</td>
<td>1.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .05.

RQ: Which Factors (Work Group Identification, Sex, and Age) will Predict Perceptions of Conversational Effectiveness and Appropriateness of E-mails in a Workplace?

Multiple regression analyses were conducted to predict perceptions of conversational effectiveness and appropriateness of e-mails in a workplace. Analyses examined work group identification, sex, and age as predictors. Sex was coded into male = 1 and female = 2, and age values were from raw data collected by an open-ended question “How old are you?” and ranged from 18 to 66 years old. Eight criterion variables were based on the e-mail sender’s group membership (ingroup and outgroup), the e-mail message type (low-flaming and high-flaming), and the degree of effectiveness and appropriateness.

In terms of an e-mail with a low-flaming message from an ingroup member, work group identification, sex, and age accounted for a significant portion of the variance in perceived effectiveness, $F (3, 64) = 2.79$, Adjusted $R^2 = .07$, $p < .05$, and perceived appropriateness, $F (3,$
Perceived conversational effectiveness and appropriateness was positively predicted by age, $\beta = .32, p < .01$ (effectiveness) and $\beta = .31, p < .01$ (appropriateness). However, perceived conversational effectiveness and appropriateness was not predicted by work group identification, $\beta = .08, p = .50$ (effectiveness) and $\beta = .20, p = .09$ (appropriateness). In addition, sex did not predict them, $\beta = -.04, p = .72$ (effectiveness) and $\beta = .02, p = .87$ (appropriateness). The older participants were the higher level of conversational effectiveness and appropriateness they tended to perceive in an e-mail with a low-flaming message from ingroup members.

Table 2. Predictors of Perceived Conversational Effectiveness and Appropriateness of an E-mail with a Low-flaming Message from an Ingroup Member

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$ (Effectiveness)</th>
<th>$\beta$ (Appropriateness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work group identification</td>
<td>.08</td>
<td>.20</td>
</tr>
<tr>
<td>Sex</td>
<td>-.04</td>
<td>.02</td>
</tr>
<tr>
<td>Age</td>
<td>.32*</td>
<td>.31*</td>
</tr>
</tbody>
</table>

Note. $N = 68$. Adjusted $R^2$(Effectiveness) = .07, Adjusted $R^2$(Appropriateness) = .13, *$p < .05$.

Also, regarding an e-mail with a high-flaming message from an outgroup member, the predictors also accounted for a significant portion of the variance in perceived effectiveness, $F(3, 61) = 8.69$, Adjusted $R^2 = .27, p < .001$, and perceived appropriateness, $F(3, 61) = 11.09$, Adjusted $R^2 = .32, p < .001$. The results of the analyses are presented in Table 3. Perceived conversational effectiveness and appropriateness were negatively predicted by work group identification for appropriateness ($\beta = -.26, p < .05$) but not for effectiveness ($\beta = -.18, p = .10$). Sex negatively predicted perceived effectiveness ($\beta = -.44, p < .001$) and appropriateness ($\beta = -$
.47, p < .001). However, age did not predict perceived effectiveness (β = -.14, p = .20) or for appropriateness (β = -.10, p = .33). The more participants identified themselves with their work group, the lower level of appropriateness they tended to perceive in an email with a high-flaming message from ingroup members. Also, females tended to perceive the lower level of effectiveness and appropriateness in an email with a high-flaming message from ingroup members than males.

Table 3. Predictors of Perceived Conversational Effectiveness and Appropriateness of an E-mail with a High-flaming Message from an Outgroup Member

<table>
<thead>
<tr>
<th>Variable</th>
<th>β (Effectiveness)</th>
<th>β (Appropriateness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work group identification</td>
<td>-.18</td>
<td>-.26*</td>
</tr>
<tr>
<td>Sex</td>
<td>-.44***</td>
<td>-.47***</td>
</tr>
<tr>
<td>Age</td>
<td>-.14</td>
<td>-.10</td>
</tr>
</tbody>
</table>

Note. N = 65. Adjusted $R^2$ (Effectiveness) = .27, Adjusted $R^2$ (Appropriateness) = .32, *p < .05; ***p < .001.
The three predictors did not reveal significant findings in perceived effectiveness, \( F(3, 60) = 2.04, \text{Adjusted } R^2 = .05, p = .12 \) and appropriateness \( F(3, 60) = 1.14, \text{Adjusted } R^2 = .01, p = .34 \) of an e-mail with a high-flaming message from an ingroup member; nor perceived effectiveness \( F(3, 63) = .54, \text{Adjusted } R^2 = -02, p = .66 \) and appropriateness \( F(3, 63) = .24, \text{Adjusted } R^2 = -.04, p = .87 \) of an e-mail with a low-flaming message from an outgroup member.
CHAPTER 5. DISCUSSION

The findings from this study were mixed in their support for social identity theory. Participants distinguished their perceived effectiveness in a workplace e-mail with a low-flaming message between ingroup and outgroup members, which was consistent with social identity theory. Work group identification, age, and sex predicted perceived communication competence. These results suggested the salience of work group identification and the ingroup favoritism that social identity theory explains, but also indicated a possibility of the reverse effect against the ingroup favoritism in a high flaming message. This section will start with the explanation of general findings with a focus on the association between communication competence and work group identification in workplace e-mails and will point out the inconsistency with literature. Discussion about work group identification, age, and sex as predictors of communication competence will follow. Furthermore, the application of social identity theory to the workplace e-mail will be revisited by interpreting the inconsistent tendency of ingroup favoritism based on deviance within groups. Limitations of the current research methods and possibilities of future studies will follow. Finally, this research will make suggestions for business practitioners in regard to their practices of intraorganizational e-mail communication.

Communication Competence and Work Group Identification in E-mail Communication

The major findings were that e-mail sender’s work group membership differentiated employees’ perceptions of effectiveness as a component of communication competence in the received e-mails. Employees perceived a statistically higher level of effectiveness in an e-mail from ingroup members than from outgroup members in a low-flaming message. The same tendency was observed for the perceived level of appropriateness in an e-mail with a low-flaming message, though the results were slightly below the cutoff point of the statistical
significance. The findings suggested the salience of work group identification that differentiates between ingroup and outgroup memberships, and influenced workplace communication, as Ashforth and Mael (1989) argued.

In terms of an e-mail with a high-flaming message, the findings did not support the hypotheses 2 and 4 that employees will perceive higher levels of conversational effectiveness and appropriateness in an e-mail from ingroup members than from outgroup members, and the tendencies observed suggest the necessity for further examination. The ingroup favoritism observed in the low-flaming context was generally consistent with research by Grice, Gallois, Jones, Paulsen, and Callan (2006), but a high-flaming context indicated the tendency of the effect of ingroup favoritism in the opposite direction, though the results were not statistically significant. The mixed findings are to be further discussed in the later section from the social identity perspective.

**Predictors of Communication Competence in Workplace E-mail**

The findings revealed several factors that predicted perceived conversational effectiveness and appropriateness in workplace e-mail. The current study identified three influential factors: work group identification, age, and sex.

First, participants with a higher level of work group identification perceived an e-mail with a high-flaming message from outgroup members as less appropriate. Individuals who highly identify themselves with their work group may have a lower level of tolerance of a negative behavior indicated by a high-flaming message than those with a lower level of work group identification, which intensified their perception of inappropriateness in the high-flaming message. This outcome is also consistent with an antecedent of social identity theory (Ashforth & Mael, 1989); employees whose work group identification is more salient distinguish outgroup
membership more clearly than those with a lower level of work group identification.

Participants’ age ranging from 18 to 66 also predicted the perceived conversational effectiveness and appropriateness in an e-mail with a low-flaming message from ingroup members. As the t-tests revealed, a low-flaming message highlighted ingroup favoritism and made employees perceive the received e-mail as more effective if it is from an ingroup member. Older individuals have a more formal upbringing and may have a higher level of expectation, in terms of effective and appropriate behaviors accepted in workplace settings. Older individuals are also supposed to be more familiar with not only workplace e-mail communication but also formal interpersonal relationships in general, so they responded to a low-flaming message indicating the formal context more sensitively than younger ones. Additionally, priming the concept of work group identification was a strong challenge for the survey development in the current study, and some survey participants, especially younger ones, might not have a proper understanding of the concept. Older participants in the current study may come up with clearer ideas of their work group than younger ones, based on their actual experiences in their work group, which enabled older ones to indicate clearer tendency. Older employees may tend to have accumulated more work experiences than younger ones, which could make them have a more solid perception of work group memberships and emphasized differences in their perceptions between ingroup and outgroup members.

Moreover, female participants perceived an e-mail with a high-flaming message from outgroup members to be significantly less effective and appropriate than male employees. The biological sex differences in interaction style have been noted by Holmes (1995) and she discussed the different uses of language and interaction patterns associated with different cultures between female and male. Females tend to talk for the development of personal
relationships but males did more as a means to exchange information. Women are more concerned with connectedness and involvement, while males are with autonomy and detachment. Holmes’ descriptions suggest the females’ propensity to exhibit more sensitivity to relational factors than males. Thus, female participants in the current study may have interpreted the high-flaming context more negatively than males as the violation of relational norms. Findings of this study indicated that females, more so than males, may feel a stronger resistance to and be offended by a high-flaming message.

Social Identity Theory and Work Group Identification in E-mail

Participants in this research differentiated their perceived effectiveness in received e-mails between ingroups and outgroups in the low-flaming context, which supports the salience of group classifications that social identity theory suggests (Ashforth & Mael, 1989). This study indicated interesting findings because it still showed a certain tendency to differentiate ingroups from outgroups, but the direction of favoritism in the high-flaming context might be opposite to what social identity theory suggests depending on the context; employees’ perception of ingroup conversational effectiveness and appropriateness is relatively lower than the outgroup ones if the e-mail contains a high-flaming message, although the results were not statistically supported. The ingroup favoritism observed was generally in a direction consistent with Grice, Gallois, Jones, Paulsen, and Callan’s (2006) findings in terms of the low-flaming context, albeit not significant. However, the current research also showed the inconsistent effect of ingroup favoritism in the high-flaming context that are worthy of attention, which suggested the possibility that the highly salient ingroupness may also backfire on intragroup communication. As the researchers found, the negativity from ingroups is supposed to be mitigated based on the ingroup favoritism, compared with the one from outgroups. However, the predisposition showed
a reversed effect in a high-framing context: participants in this study indicated the tendency to perceive an e-mail from ingroups less competent than the one from outgroups.

A concept of deviance within groups (Hogg & Tindale, 2005) may explain the inconsistent effect of the ingroup favoritism derived from the salience of work group identifications. Deviant ingroup members are not prototypical, likable, or trusted compared with prototypical members. Abrams, Randsley de Moura, Hutchison, and Viki, (2005) also explained that deviant group members may impede group entitativity to achieve and “challenges to the group’s ethos may be met with strong criticism and even overt hostility” (p. 163). Participants may have perceived the high-flaming message in the hypothetical e-mail to be beyond the acceptable level of group norms and a threat to the group’s ethos, which might result in their relatively lower evaluation of the ingroups’ flaming e-mail than outgroups’ one, though the tendency was not statistically supported.

The tendency observed in the high flaming context is consistent with Abrams, Marques, Bown, and Henson’s (2000) study. The researchers examined the favorability to pro-norm, normative, and anti-norm group members based on group membership and revealed the inverse pattern of perceived deviances between ingroups and outgroups. The pro-norm deviant ingroup member and normative member were evaluated more positively than the anti-norm deviant, while the pro-norm ingroup member and anti-norm outgroup deviant were evaluated equally positive. The degree of the perceived negativity differed among ingroups and outgroups even if both parties are anti-norm deviants and their behaviors are identical, which agrees with the current research findings. The social identity approach contributed to explain the findings of this study on work group identification and suggested the possibility of further application of the theoretical framework as the novelty of literature suggests.
Limitations and Future Studies

This study examined e-mail interactions in workplace settings and its focus on the specific context may stimulate further applications in studies to come. The measure using hypothetical e-mails is one of the major contributions of this research, which established innovative approach for data collection to examine work group identification. In its nature, work group identification is supposed to emerge from individuals’ experience in the specific context and is not to be created in fictional settings, but the current research developed a method to collect data in the hypothetical context. Data collected from employees of multiple organizations is also more generalizable than the one collected by a conventional method that examines employees in a single organization. The priming process in Section 2 succeeded to manipulate the independent variable of work group identification in the questionnaire. The instrument design allowed the researcher to divide participants’ responses into perceptions toward ingroup members and the ones toward outgroup members based on their primed work group identification. As this research could differentiate participants’ responses into certain patterns to some extent, regardless of the use of hypothetical contexts, contribution of the priming section design may be recognized.

However, this researcher also admits to some failure in the priming process, as collected data shows the participants’ inability to understand the concept of the work group. For example, some participants reported an abnormally large number of people in their work group (e.g. 72, 100), which indicated their misunderstanding of the group level and the researcher believes that the questionnaire design may have mislead them. Those participants obviously thought of a higher order unit such as a department or division and did not think of the lowest order unit that the researcher expected them to think of. Although the use of hypothetical e-mails is a major
limitation of the current research design to examine individuals' work group identification, this researcher’s unique approach that preconditioned the participants’ work group identification may compensate for the artificiality of the e-mail scenarios and also compensate for the methodological weakness that was derived from the use of hypothetical contexts. Future studies may conduct a manipulation check to confirm the validity of the priming process.

Furthermore, this research demonstrated the reliability of the measure using hypothetical e-mails. The instrument design enables researchers to conduct empirical research on employees’ identification and collect highly generalizable data, without the limitation of accessibility to a single organization. However, the variability of size and structure of participants’ organizations is a weakness of this study, which consequently might influence their interpretation of work group. Perception of work group is contingent upon participants’ circumstances. For example, some participants may work for large corporations with multiple organizational levels, while others for small companies with no hierarchical levels except the management and employees. The latter participants may have answered the survey on the assumption that their work group is identical with all of the employees with a limited exception (e.g. the management). In this case, the participants indicate their perceptions of external entities that demonstrate interorganizational interactions, not intraorganizational interactions, which the current researcher is interested in. Therefore, there is the possibility that some participants reported their perceptions of different processes to interact with the external parties, from the internal processes, that current researchers intended to observe. For future studies, a more specific description of work group may vet participants who do not belong to organizations that do not have intraorganizational processes. The methodological weakness in the research design may be mitigated in follow-up
studies by examining employees in a single organization. Future studies may further examine the relationships among factors and reveal the significant effects.

Another contribution of this study is the conceptualization of work group identification. Although the concept has drawn attention from researchers (Paulsen, Graham, Jones, Callan, & Gallois, 2005), empirical studies on work group identification is highly limited. Researchers who are interested in conducting empirical studies on work group identification may appreciate the current researcher’s approach that conceptualized work group identification with a focus on organizational levels in the formal structure and the specific definition of the concept developed for this research. This research may offer an approach to conceptualize work group identification that has not been fully established yet.

In terms of factors that influenced the perceived conversational effectiveness and appropriateness, the variance of messages may reveal interesting effects (e.g. varied lengths of messages, positive content vs. negative content, task-based vs. non-task based) in future studies. In fact, the difference in email types (a high-flaming message and low-flaming message) was initially not assumed to influence the participants’ responses but the findings indicated some patterns that are worth further examination. Likewise, sex difference was significant findings and worth expanding the exploration in future studies.

The use of online channels for accessing participants is also noteworthy. Participants were recruited via several channels including staff listserv of the college, course Blackboard, and Facebook. Especially, the use of staff listserv for participant recruiting was a unique technique that this study adopted and a majority of the data was collected from the channel. Although this study required very specific participants in terms of their work experience conditions, the listserv demonstrated its usefulness for participant recruiting by enabling the current researcher to access
the large number of target participants in a short period of time. The researcher could access
participants in a wide variety of positions at the college, although using the channel has a certain
weakness in terms of sample homogeneity based on the context. The combination of the listserv
and other channels may have lowered the limitation and increased the diversity of the data.
Future studies may also combine the listserv channel with other methods (e.g., research sample
pools, public recruiting) as needed.

**Practical Implications**

The findings of the current study call business practitioners’ attention to effects of work
group identification in workplace e-mails, which can affect any individual at any organizational
level. Group memberships exist in any level and direction within the organization: horizontally
(e.g. unit, function, office, location) and vertically (e.g. superior-subordinate, management-labor).
E-mail is a communication tool that most people in the workplace frequently use and they belong
to any of work groups regardless of their positions. However, they may not necessarily take the
recipient’s group membership into consideration in their internal e-mail interaction. The effect of
group membership is a kind of micro-process in workplace e-mail communication that many
people may have never even considered and the process is not necessarily routine for them,
though this research demonstrated that the group membership does have influence.

The findings revealed the positive effect of ingroup membership on the perceived
conversational effectiveness only if the email contains a low-flaming message. Business
practitioners may pay attention to the recipient’s group membership in workplace e-mail
communication, especially when their message contains flaming cues. For intragroup e-mail
communication, the business practitioners may expect the recipient’s favoritism toward
him/herself and aim to increase their communication competence by taking advantage of some
informality expressed in flaming messages. It is natural that people can easily rely on their
closeness to an ingroup member and make light of the effect of group membership, but their
neglect of the salient ingroupness may invite unexpectedly negative responses from the recipient
and damage their relationship.

In addition to the recipients’ work group membership, their age and sex are also the
subject of extra attention in workplace e-mail as the current research findings suggest. E-mail
intrinsically bears equivocality as media richness theory suggests (Daft & Lengel, 1986; Daft,
Lengel, & Trevino, 1987), and extra attention may be required to convey messages to ingroup
recipients depending on their age and sex. These research findings did not support that the
ingroup recipient may perceive the message more competently than the one from an outgroup
member except the perceived effectiveness in the low-flaming context, which calls for caution of
people in the workplace to their intragroup e-mail communication.
CHAPTER 6. CONCLUSION

The current research explored how work group identification of people in the workplace influence perceived communication competence in received e-mails from the social identity perspective. Specifically, the degree of perceived conversational effectiveness and appropriateness was compared between the emails from ingroup senders and the ones from outgroup senders, while using the two different types of emails: a high-flaming message and low-flaming message.

Work group identification, sex, and age are also examined to see if they influence the perception of conversational effectiveness and appropriateness. This study generally supported the salience of group memberships that social identity theory suggests. Participants tended to perceive an email from the ingroup more effective and appropriate than the one from the outgroup if the message is low-flaming, while the propensity is reversed if the message is high-flaming.

The current study suggested innovative approaches and research methods with a focus on work group identification from the social identity perspective. In spite of the significant role of e-mail in the modern workplace, theoretical frameworks applied to the context are limited. The mixed findings of this study suggests the complexity of work group identification and may expand the possibilities of further studies using the social identity approach and encourage people in the workplace to pay extra attention to their intraorganizational interactions via e-mail. The effect of work group identification discussed in this study is a micro process but is worthy of note, in consideration of the massive amount of the e-mail interactions and the significance of the role that e-mail plays in the workplace. This study may stimulate scholars to pay attention to workplace e-mail process and further application of social identity theory in this context.
REFERENCES


doi:10.1177/0893318998121003


APPENDIX. SURVEY QUESTIONNAIRE

Section 1: Demographics
Tell us about yourself.

What is your sex?
Male    Female

How old are you?
_________ Age in years

What is your race/ethnicity?
Caucasian
African-American
Hispanic
Native American
Asian or Pacific-Islander
Other

This survey will ask questions about your perception of e-mail communication based on your experience in the workplace.

Have you worked in a job that requires you to have an email account for correspondence? How long have you/did you work in this job?
  o  Have not worked in a job that requires email correspondence
  o  Less than one year
  o  More than one year

(The participant qualifies to proceed to section 2 only when he/she has more than one year work experience that required he/she to use individual e-mail account for communicating with other employees in the same organization.)
Section 2: Descriptions of Work Group

Please think of a work group that you belong to. It may be helpful to imagine their faces/names or to think about your last meeting or encounter. After considering these workgroup members, please complete the following items.

Work group means the smallest subunit described in your formal job title.

How many people (including yourself) are in your work group?

________ People

How many males and females (including yourself) are in your work group?

________ Males

________ Females

How long have you been in the work group?

________ Years

________ Months
Section 3: Measure of Work Group Identification

Complete the following items about perception of your work group.

*Work group* means the smallest subunit described in your formal job title.

Use the following scale and indicate the degree of your feelings.
Scale: 1 = Strongly disagree, 2 = Moderately disagree, 3 = Slightly disagree, 4 = Undecided, 5 = Slightly agree, 6 = Moderately agree, 7 = Strongly agree

1. I identify myself as a member of my work group.
2. Being a member of my work group reflects my personality well.
3. I like to work for my work group.
4. I think reluctantly of my work group (recoded).
5. Sometimes I rather don’t say that I’m a member of my work group (recoded).
6. I am actively involved in my work group.
7. When someone criticizes my work group, it feels like a personal insult.
8. When I talk about my work group, I usually say ‘we’ rather than ‘they.’
9. I am interested in what others think of the work group I work for.
10. I view my work group’s successes as my successes.
11. When someone praises my work group, it feels like a personal compliment.
12. If a story in the media criticized my work group, I would feel embarrassed.
Section 4: Conversational Appropriateness and Effectiveness
Complete the following items about fictional e-mails involving employees of your current organization. Please pretend or act as if these emails were from members of
(For experimental group A: ingroup) YOUR WORK GROUP.
(For experimental group B: outgroup) a DIFFERENT WORK GROUP.

(For experimental group A: ingroup)
*YOUR WORK GROUP* means the smallest subunit described in your formal job title.
(For experimental group B: outgroup)
*DIFFERENT WORK GROUP* means any other group than your work group as the smallest subunit described in your formal job title. The different work group and your work group are in the similar hierarchical level.

Use the following scale and indicate the degree of your feelings.
Scale: 1 = Strongly disagree, 2 = Moderately disagree, 3 = Slightly disagree, 4 = Undecided, 5 = Slightly agree, 6 = Moderately agree, 7 = Strongly agree
(Experimental Group A: ingroup)

Complete the following items as if these emails were sent from employees in YOUR WORK GROUP. [scenario: task basis x low flaming]

From: XXXXXXX
Sent: Tuesday, March 22, 2010 11:35 AM
To: YYYYYYY
Subject: feedback

Hi, everyone. I need to get an update from you on each of your funded projects ASAP. What I’m looking for is any progress you can report on the projects. We’re working on the annual report and we want to be able to include this information.
Thanks!

Use the following scale to indicate your feelings.
Scale: 1 = Strongly disagree, 2 = Moderately disagree, 3 = Slightly disagree, 4 = Undecided, 5 = Slightly agree, 6 = Moderately agree, 7 = Strongly agree

1. S/he said several things that seemed out of place in the e-mail. (R)
2. S/he was a smooth conversationalist.
3. Everything s/he said was appropriate.
4. Her/his e-mail was very suitable to the situation.
5. Her/his communication was very proper.
6. S/he said some things that should not have been said. (R)
7. None of her/his remarks were embarrassing to me.
8. The things s/he spoke about were all in good taste as far as I’m concerned.
9. Some of her/his remarks were simply improper. (R)
10. At least one of her/his remarks was rude. (R)
11. The email was very beneficial.
12. It was a useless e-mail. (R)
13. S/he was effective in the e-mail.
14. The email was unsuccessful. (R)
15. It was an advantageous e-mail.
16. S/he was an ineffective conversationalist. (R)
17. It was a rewarding e-mail.
18. I found the e-mail to be very useful and helpful.
19. S/he lost control of the direction of the e-mail. (R)
20. The e-mail was very unrewarding. (R)
Complete the following items as if these emails were sent from employees in YOUR WORK GROUP [scenario: task basis x high flaming]

From: XXXXXXX
Sent: Tuesday, March 22, 2010 11:35 AM
To: YYYYYYY
Subject: feedback

Now how in the hell would I know that if nobody tells me??? GEEZ!:0

Use the following scale to indicate your feelings.
Scale: 1 = Strongly disagree, 2 = Moderately disagree, 3 = Slightly disagree, 4 = Undecided, 5 = Slightly agree, 6 = Moderately agree, 7 = Strongly agree)

1. S/he said several things that seemed out of place in the e-mail. (R)
2. S/he was a smooth conversationalist.
3. Everything s/he said was appropriate.
4. Her/his e-mail was very suitable to the situation.
5. Her/his communication was very proper.
6. S/he said some things that should not have been said. (R)
7. None of her/his remarks were embarrassing to me.
8. The things s/he spoke about were all in good taste as far as I’m concerned.
9. Some of her/his remarks were simply improper. (R)
10. At least one of her/his remarks was rude. (R)
11. The email was very beneficial.
12. It was a useless e-mail. (R)
13. S/he was effective in the e-mail.
14. The email was unsuccessful. (R)
15. It was an advantageous e-mail.
16. S/he was an ineffective conversationalist. (R)
17. It was a rewarding e-mail.
18. I found the e-mail to be very useful and helpful.
19. S/he lost control of the direction of the e-mail. (R)
20. The e-mail was very unrewarding. (R)
(Experimental Group B: outgroup)

Complete the following items as if these emails were sent from employees in a DIFFERENT WORK GROUP. [scenario: task basis x low flaming]

From: XXXXXXX
Sent: Tuesday, March 22, 2010 11:35 AM
To: YYYYYYY
Subject: feedback

Hi, everyone. I need to get an update from you on each of your funded projects ASAP. What I’m looking for is any progress you can report on the projects. We’re working on the annual report and we want to be able to include this information. Thanks!

Use the following scale to indicate your feelings.
Scale: 1 = Strongly disagree, 2 = Moderately disagree, 3 = Slightly disagree, 4 = Undecided, 5 = Slightly agree, 6 = Moderately agree, 7 = Strongly agree

1. S/he said several things that seemed out of place in the e-mail. (R)
2. S/he was a smooth conversationalist.
3. Everything s/he said was appropriate.
4. Her/his e-mail was very suitable to the situation.
5. Her/his communication was very proper.
6. S/he said some things that should not have been said. (R)
7. None of her/his remarks were embarrassing to me.
8. The things s/he spoke about were all in good taste as far as I’m concerned.
9. Some of her/his remarks were simply improper. (R)
10. At least one of her/his remarks was rude. (R)
11. The email was very beneficial.
12. It was a useless e-mail. (R)
13. S/he was effective in the e-mail.
14. The email was unsuccessful. (R)
15. It was an advantageous e-mail.
16. S/he was an ineffective conversationalist. (R)
17. It was a rewarding e-mail.
18. I found the e-mail to be very useful and helpful.
19. S/he lost control of the direction of the e-mail. (R)
20. The e-mail was very unrewarding. (R)
Complete the following items as if these emails were sent from employees in a DIFFERENT WORK GROUP [scenario: task basis x high flaming]

From: XXXXXXX
Sent: Tuesday, March 22, 2010 11:35 AM
To: YYYYYYY
Subject: feedback

Now how in the hell would I know that if nobody tells me??? GEEZ!:0

Use the following scale to indicate your feelings.
Scale: 1 = Strongly disagree, 2 = Moderately disagree, 3 = Slightly disagree, 4 = Undecided, 5 = Slightly agree, 6 = Moderately agree, 7 = Strongly agree)

1. S/he said several things that seemed out of place in the e-mail. (R)
2. S/he was a smooth conversationalist.
3. Everything s/he said was appropriate.
4. Her/his e-mail was very suitable to the situation.
5. Her/his communication was very proper.
6. S/he said some things that should not have been said. (R)
7. None of her/his remarks were embarrassing to me.
8. The things s/he spoke about were all in good taste as far as I’m concerned.
9. Some of her/his remarks were simply improper. (R)
10. At least one of her/his remarks was rude. (R)
11. The email was very beneficial.
12. It was a useless e-mail. (R)
13. S/he was effective in the e-mail.
14. The email was unsuccessful. (R)
15. It was an advantageous e-mail.
16. S/he was an ineffective conversationalist. (R)
17. It was a rewarding e-mail.
18. I found the e-mail to be very useful and helpful.
19. S/he lost control of the direction of the e-mail. (R)
20. The e-mail was very unrewarding. (R)