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Organization-Based Self-Esteem, Media Preferences, and Informal Communication

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Abstract

New information technologies such as the Internet and electronic mailing systems have significantly increased the number of communication media available at work. The present study explores the effect of Organization-Based Self-Esteem (OBSE) on employees' use of informal networks, especially their media preference for informal communication. Analysis of data from 342 employees reveals a significantly negative relationship between OBSE and employees' frequency of informal communication. Additional analyses indicate that high OBSE employees prefer traditional media for informal communication while low OBSE employees prefer electronic media. Moreover, low OBSE employees showed a more positive attitude toward rich electronic media for informal communication than did high OBSE employees. High OBSE employees preferred rich traditional media. Implications of these findings for organizations are discussed.

Informal communication is a prevalent activity in our places of work (Kraut, Fish, Root, & Chalfonte, 1990). According to Tushman and Nadler (1978), informal communication refers to spontaneous, interactive and rich communication activity taking place through organizational communication networks. Since the Hawthorne studies in the 1920s which showed the significant effects of informal social interactions on workers' productivity (Miller, 1995), organizational researchers have paid closer attention to informal communication in the workplace. Past research indicates that informal communication creates and maintains organizational culture (Johnson, Donohue, Atkin, & Johnson, 1994), serves as basis for social processes which underlie group maintenance, and explains various organizational behaviors better than formal communication networks (Monge & Contractor, 2001).

In today's organization, new communication technologies are used not only for job-related tasks but also for more informal interactions (Jackson, et al., 2003). Research shows that virtual communication encourages the flow of information in organizations outside formally authorized channels and hierarchies (William, 1998), and virtual channels such as e-mail allow individuals to convey some emotional, social, and contextual content (Walther, 1995; Zaremba, 1996). Still, the role of virtual informal communication in organizations, especially via new electronic media, has not received much investigative attention (Dickson, 1996).

Some research in this domain suggests that individuals' media preferences (informal or formal, virtual or face-to-face) have implications for the efficiency of communication and also address the psychological needs and fears of the media users (Jackson et al., 2003). This study views individuals' media preferences as influenced by (at least partially) personality factors. That is, media preferences may be driven by needs for affiliation, control, and self-protection which are partly determined by personality dispositions. Many current theoretical models of

media preferences (e.g. Media Richness Theory, Daft & Lengel, 1986) consider situational contexts (e.g., the content and purpose of communication) but do not investigate individual personality dispositions as key motivators for media preferences (e.g. Alexander, Penley, & Jernigan, 1991; Trevino, Lengel, Gerloff, & Muir, 1990; Rice, Chang, & Torobin, 1992; Scott, & Timmerman, 2005). One personality attribute that seems particularly relevant to organizational members' media preferences is Organization-Based Self-Esteem (OBSE). OBSE is the core of beliefs that employees form about themselves from roles within an organizational context. OBSE has strong implications for work-related motivation, attitudes, and behaviors (Brutus, Ruderman, Ohlott, & McCauley, 2000).

This study examined the effect of OBSE on employees' use propensity of informal networks, especially their media preferences for informal communication at work. Investigating the relationship between OBSE and media preferences for informal communication provides a foundation for better understanding how different communication channels meet individuals' needs, and whether increased informal communication enhances feelings of value and worth. The paper begins with an overview of the research on informal communication and its importance in supporting social functions in organizations. Next media richness theory is reviewed as a theoretical framework, and research on organization-based self-esteem is reviewed. Third, hypotheses are posited, and the methods utilized to collect and analyze data are explained. Finally the results are reported and implications for informal communication in organizations are discussed.

Informal Communication in Organizations

In an organizational setting, formal and informal communication networks coexist (Monge & Contractor, 2001). Formal communication networks typically reflect the formal

organizational structure or organizational chart, which refers to the organizational hierarchy, the officially sanctioned incentive schemes, or the routinized procedures (Abell, 1996). Formal communication networks in today's office can be defined as work-related communication networks based on official task assignments. Communication in this type of network takes place primarily between supervisor and subordinate or among work group members for giving or receiving tasks, exchanging information on ongoing projects, or coordinating activities (Ishii, 2003).

Compared to formal communication, informal communication networks are naturally occurring communication networks, also called "emergent networks" (Monge & Contractor, 2001). The essence of these informal communication systems is that they lack pre-specification and do not follow the organizational chart (Johnson et al., 1994). Informal communication supports organizational and group coordination through meetings or conversations, especially under conditions of uncertainty when formal communication fails in the face of novel or unplanned events (Daft & Lengel, 1986).

Formal and informal communication serves different organizational goals. Formal communication is most commonly used to realize task or production goals, and informal communication, based on personal friendships among coworkers, is crucial for supporting the social functions of groups (Haythornthwaite, Wellman & Mantei, 1995). So informal communication allows groups to achieve (at least) two social goals (McGrath, 1984). The first goal is to recruit and socialize members, and keep them happy enough so that they want to maintain membership. The second social goal is to support the needs of individual group members so that they feel satisfied with their work, their relationships, and their membership in the group. Much research in social psychology suggests that relatively unstructured and

informal communication is at the basis of social processes which underlie group maintenance and member support (e.g., Festinger, Schacter & Back, 1950).

In the past, much informal communication in organizations occurred face-to-face. But today, there are many media choices available to organizational members for this type of communication. Besides traditional channels such as face-to-face conversations, written letters, or telephone, more recently developed tools such as electronic mailing systems, IRC chat, bulletin boards, or video conferencing systems are also available media choices (Wood & Smith, 2005). How individuals select channels to accomplish particular communicative purposes, and the impact of new information processing technologies on the interaction process, has received considerable research attention in recent years (Johnson, 1993).

Communication Media Preferences

Media Richness Theory

Preferences for communication media have been included in various descriptive and prescriptive models (e.g., Carlson & Zmud, 1999; Daft & Lengel, 1986). Perhaps the most prominent approach to understanding media preferences is the media richness theory (MRT; Daft & Lengel, 1986; Daft, Lengel & Treviño, 1987). Consistent with a general information processing view of organizations, MRT asserts that the main goal of communication is to reduce equivocality (e.g., by providing additional information) and ambiguity (e.g., by providing decision algorithms). The theory states further that the efficiency of communication is largely determined by the relative match between the requirements of a certain communication task or goal, and the specific functional features (richness) of the communication media used.

MRT involves a framework for assessing different functionalities of communication media. The key characteristic in this framework is richness. Richness refers to the “ability of

information to change understanding within a time interval” (Daft & Lengel 1986, p.560). Face-to-face communication is considered to be of the highest richness level because multiple channels (visual, auditory, etc.) are available, immediate feedback by both sender and receiver is possible, and the amount of information transferable is high. On the contrary, virtual communication channels such as e-mail and bulletin boards are “leaner” media because of the limited amount of cues and transferable information, and the lack of immediate feedback (Hertel, Schroer, Batinic & Naumann, 2006). According to MRT, it is not richness per se that determines media effectiveness and media choice, but the relative match between richness and the specific requirements of a certain communication task (i.e., ambiguity and equivocality).

Although the theory provides a general framework for assessing differences between media and tasks, it has been criticized for being too rationalistic and too simplistic (Dennis & Kinney, 1998). MRT has generally been supported when tested on traditional media, such as face-to-face communication, telephone, and memos (e.g., Lengel & Daft, 1988; Russ, Daft, & Lengel, 1990). However, inconsistent empirical findings have resulted from the introduction of new media, such as electronic mail and voice mail (Fulk & Ryu, 1990). These inconsistencies have encouraged a reconsideration of the descriptive and predictive validity of MRT for new media.

Consequently a broader set of predictor variables has been added to research models attempting to explain media selection behaviors. Among the approaches taken have been efforts to more systematically examine the task characteristics that motivate communication behaviors (Rice, 1992), the availability of communication media (Trevino, Daft & Lengel, 1990), prior media experience and expertise in media use (Carlson & Zmud, 1999), norms and rules within larger organizational contexts (Venkatesh & Davis, 2000), the symbolic meaning of media

(Irmer & Bordia, 2003), and social influences (Fulk, 1993; Schmitz & Fulk, 1991). Although these studies all incorporate some consideration of individuals' active evaluation of social information, (i.e., complying with organizational norms for media use), this study posits that in addition to potential moderators originating from the situational context, personality factors and related motives might be considered important moderators as well.

Personality Traits and Media Preferences

The assumption here is that the relative level of uncertainty of a given communication situation is not only determined by external factors, but also by (internal) dispositions of the individuals experiencing the insecurity and equivocality (Hertel et al., 2006). Consequently, the selection of a medium may be (at least partially) driven by the psychological needs of the users (Jackson et al., 2003). Such psychological factors include needs for affiliation (i.e., direct and close contact with communication partners) or needs for control and self-protection during the communication process. These factors are at least partly determined by personality dispositions.

Surprisingly, only a few empirical studies have addressed personality factors in the context of new communication media (Jackson et al., 2003), and few have explored personality factors as determinants of people's communication media preferences (e.g. Alexander, Penley, & Jernigan, 1991; Trevino, Lengel, Gerloff, & Muir, 1990; Rice, Chang, & Torobin, 1992; Scott, & Timmerman, 2005). Joinson (2004) examined media choices made by high and low self-esteem Internet users. He concluded that low self-esteem internet users showed greater preference for e-mail over face-to-face communication in various hypothetical scenarios. Moreover, low odds of success led to an increase in preference for e-mail, at least in some of the scenarios. These results are somewhat limited for this investigation because they cannot be directly applied to organizational contexts which may shape different task-related forms of self-esteem (Brockner,

1988). In addition, the study focused primarily on the differentiation between email and FtF communication, and did not investigate individuals' choices of other new virtual media which might involve more complicated media characteristics.

The present study addresses these issues by investigating organization-based self-esteem and its relationship to organizational members' choices of media with different richness levels. In the next sections, the concept of organization-based self-esteem (OBSE) is defined, and its connections to media choices, specifically informal communication media preferences, are explored.

Organization-Based Self Esteem, Informal Communication, and Media Preferences

Organization-Based self-Esteem

Some research suggests that personality characteristics exert relatively little influence on workplace behaviors because of the importance of situational factors in organizational contexts (Pierce, Gardner, Cummings & Dunham, 1989), one personality attribute that predictably and consistently enhances understanding of organizational behavior is self-esteem. Coopersmith (1976) defined self-esteem as the degree to which people perceive themselves to be capable, significant, and worthy. He also identified global self-esteem as the overall evaluation of the personal worth that people make and maintain with regard to themselves. Pierce et al. (1989) extended this definition by suggesting that the beliefs that employees form about themselves, based on their roles within an organizational context, have strong implications for their work-related motivation, attitudes, and behaviors. Pierce et al. introduced a new concept of organization-based self-esteem (OBSE) to reflect this personal belief. OBSE is supposed to indicate "the degree to which organizational members believe that they can satisfy their needs by participating in roles within the context of an organization" (p. 625). In short, it is "the

degree to which an individual believes him or herself to be capable, significant, and worthy as an organizational member” (p. 593).

According to Payne (2007), OBSE focuses on one’s feeling of worth in specific roles within specific contexts, and it describes the feelings of worth or value employees feel within their workplace. This is separate from global self-esteem which is the overall evaluation and affective orientation toward the self, stemming from an accumulation of an individual's involvement in several different life arenas. Since it is possible for an individual to have differing self-perceptions and evaluations from one arena to the next (Pierce & Gardner, 2004), OBSE is considered distinct from global self-esteem.

Pierce et al. (1989) showed that OBSE constitutes a better predictor of organization-related behaviors and attitudes than global self-esteem. They attribute this result to the fact that the antecedents of OBSE are structural, interpersonal, and design factors within specific organizations, and to some extent controllable at the organization level. According to Carson, Lanford and Roe (1997), members’ OBSE may be negatively affected by structural factors such as a mechanistic form, interpersonal factors such as lack of managerial consideration, and design factors such as the creation of positions that induce role conflict and ambiguity. Other indicators, such as environmental instability and lack of an articulated strategy and mission, are also known to decrease members’ OBSE. Conversely, improved managerial respect, rich informal communication, and increased willingness to communicate can enhance employees’ OBSE or feelings of value and worth. Pierce et al. (1989) confirmed that managerial respect, organizational structures, job complexity, and stability are determinants of OBSE. They also maintain that OBSE significantly influences intrinsic motivation, job performance, organizational citizenship, commitment, satisfaction, and other organization-related behaviors

and attitudes.

The relationship between levels of OBSE and employees' communication behaviors has also been investigated but not extensively. Payne (2007) examined the role of OBSE in employee dissent communication and found that employees with high levels of OBSE are likely to communicate dissent upward in their organizations, and are more likely to feel capable of impacting their workplaces and more committed to communicate their dissent to supervisors. Most of the research in this area (e.g., Payne, 2007; MacIntyre, 1994) investigates the impact of OBSE on employees' formal communication and pays less attention to informal communication processes. Hence this study investigates the relationship between OBSE and informal communication behaviors.

OBSE and Informal Communication

Informal communication plays an important role in achieving social and interpersonal goals in organizations. Since self-esteem can be a gauge (or sociometer) of the quality of interpersonal relationships (Leary & Downs, 1995), a relationship between OBSE and employees' informal communication behaviors seems likely. For example, MacIntyre (1994) found that employees with low OBSE are less willing to communicate if there is a great threat of receiving negative feedback. Payne (2007) notes that employees with low OBSE prefer to receive rather than provide information, and are generally uncomfortable about expressing themselves. In addition, Joinson (2004) argues that media choice is motivated by self-protection needs. Individuals with high self-esteem tend to adopt a self-enhancement interpersonal strategy, and those with low self-esteem tend to adopt a self-protection strategy in communication situations. Hence it seems likely that individuals with low levels of OBSE, who are often uncomfortable expressing themselves, will seek to protect themselves from possible negative

responses in formal information exchanges and instead seek out more informal channels.

Other research on OBSE and formal communication factors (e.g. role ambiguity, managerial respect etc.) provides some evidence for positing a connection between OBSE and informal communication as well. Norton (1975) found that a person who views a stimulus as a source of psychological discomfort or threat is more intolerant of ambiguity. Consistent with Norton's finding, Brockner's behavioral plasticity theory (1988) posits that people with low self-esteem are more behaviorally plastic (reactive) than those with high self-esteem. Thus low self-esteem individuals experience more uncertainty about the correctness of their thoughts, feelings, and behaviors and have higher level of intolerance of ambiguity. Phillips et al (1983) found out that to reduce this ambiguity and anxiety, employees will seek out as much information as possible. Thus, employees with low levels of OBSE would be more likely to supplement their formally received messages with information from informal networks. Moreover, since employees with high levels of OBSE would find the information they receive to be less ambiguous (Ishii, 2003), they would likely feel less need to rely on informal channels.

Based on both previous research findings and Brockner's behavioral plasticity theory (1988), a relationship between employees' OBSE and propensity toward use of an informal communication network can be posited. Our assumption is that employees low in OBSE will more frequently participate in informal communication, while those high in OBSE will participate less frequently in informal communication. To test the relationship between OBSE and frequency of informal communication, the following hypothesis is set out:

H1: The level of OBSE will be negatively related to the frequency of informal communication.

OBSE and Media Preference

As tools for expediting communication and information flows, electronic media may operate somewhat differently from face-to-face interaction. Even though researchers have found that e-mail communication encourages the flow of information in organizations outside formally authorized channels and hierarchies (William, 1998), electronic connectivity is not always the same as offline connectivity. The electronic communicative relationship does not always function in the same way as a real world relationship (Hopkins & Thomas, 2002)

Employees with high levels of OBSE believe they are capable, significant, and worthy as organizational members, and are confident, open, and trusting (Capron, Massart, & Nauelleau, 1999). Because of these perceptions, high OBSE individuals' relationships with coworkers are more likely to be perceived as open and personal. In contrast, individuals with lower self-esteem are motivated by the desire to minimize discomfort experienced in their environment. Compared to traditional media where all communicators are clearly identified, some of the characteristics of electronic media, such as partial anonymity, may be seen as more appropriate for people with low self-esteem, allowing them to adopt self-protection strategy when they are not comfortable. The following hypotheses are posted:

H2: Employees with high levels of OBSE will be more likely to communicate informally via traditional media and employees with low levels of OBSE will be more likely to communicate informally via electronic media.

Previous studies in this domain have typically focused on email as a representative for electronic communication channels and compared email to face-to-face interaction (e.g., Joinson, 2004). However today a much wider range of virtual communication tools are used in

organizations that can be differentiated according to their richness and interactive characteristics. For example, instant messenger is a richer and more interactive channel than email because it provides immediate feedback. Video chatting has both FtF and virtual communication characteristics so it has greater richness than text chatting. As Joinson demonstrates, email actually represents the least interactive virtual channel because senders and receivers are not copresent and it is asynchronous. In addition, email allows the user considerable control over self-presentation, as well as the pace and content of an interaction.

Since communication via richer channels involves increased intensity of interpersonal contact, and a higher possibility of negative emotions and experienced stress, it is likely that employees with low levels of OBSE will feel more comfortable choosing media of lower richness levels. From a needs-oriented perspective, individuals with high OBSE should enjoy higher levels of stimulation and prefer rich communication media that enable direct and immediate contact with others. Hence the following hypotheses are posted:

- H3a: Employees with high levels of OBSE are more likely to communicate informally via rich traditional media than employees with low level of OBSE.
- H3b: Employees with high levels of OBSE are more likely to communicate informally via rich electronic media than employees with low level of OBSE.

Methods

Sample

Data were collected from 342 full-time employees representing a variety of different job functions. As summarized in Table 1, the sample was 46% male ($n = 157$) and 54% female ($n = 185$) ranging in age from 17 to 75 (mean = 37). Thirty eight percent of the respondents were from supervisory positions, while the remaining 62% were not. The average tenure of

respondents in their career was 8 years.

Procedures

Undergraduates enrolled in a business communication course at a medium-sized midwestern U.S. university assisted with data collection as part of a class assignment (and for extra credit). Each student was asked to locate relevant participants using personal, familial, professional, or other contacts. Upon approaching potential participants, students described the nature of the study and directed the participants to a website containing the questionnaire. Each participant read the consent form and project description, and filled out the survey online.

The online survey consisted of a section for providing the participant's name and contact information, a measure of Organization-Based Self-Esteem (described below), reports of frequency of communication for both formal and informal communication, and demographics. A random 5% sample of participants was contacted via email to verify their participation in the survey. All of the respondents confirmed their participation.

Measures

Organization-based self-esteem. OBSE was measured with a 10-item scale from Pierce et al. (1989) (see Appendix). Responses were recorded using a five point Likert-type scale that ranged from "strongly agree" to "strongly disagree." The instructions asked respondents to think about their relationship with their employing organization and to indicate the degree to which they believe each statement. Example items include, "I COUNT around here" and "There is FAITH IN ME around here". The study also incorporated several other measures for OBSE from previous research which examined the antecedents and consequences of OBSE. These included measures of managerial respect, organizational commitment, job satisfaction, organizational satisfaction, and internal work motivation. A five-point, Likert-type scale

(ranging from “strongly disagree” to “strongly agree”) was provided for responses.

Formal/Informal communication. For the purposes of this study, concrete definitions of both formal and informal communication were provided in the online survey (Johnson et al., 1994). Formal communication was defined in the following way:

Formal communication messages are messages that organizational members pass across hierarchical channels. The source of the initial information is frequently a person in a position of power or authority. Formal communication information includes all different types of organizational issues. These issues can be related to organization specific policies or procedures or even to the company picnic. However, all formal communication transmissions are organizationally relevant. Formal communication messages are transmitted to a set of people that you are supposed to communicate with to accomplish work-related tasks. You are expected to communicate with these people to fulfill some degree of accountability to your organization and/or your position.

Informal communication was defined as:

For the purpose of this study, informal communication consists of messages that are not necessarily based on one’s hierarchical position and need not be directly related to organization-specific functioning. For example, imagine a situation where two coworkers engage in a conversation about a mutual third coworker who frequently plays golf with their supervisor. The interaction between these two coworkers would constitute informal communication. The transmission is informal because the content of the messages is of an interpersonal nature and not relevant to organizational policy and/or procedure. Further, neither party involved is “obligated” to take action in this situation. There is no inherent degree of accountability present. The parties are not obligated by the organization to have

a conversation or take any action to complete a job task/accomplish a work goal.

The frequency of informal communication was taken as an indicator of the engagement level of employees in informal communication and was measured by respondents' self-report of daily communication. With the above definitions in mind, the respondents were asked to estimate average percentage of time spent on formal/informal communication, and asked about their media experiences in both types of communication situations at work.

Media experience. Media experience was captured by asking participants to evaluate their frequency of, and preference for, use of ten communication media in two types of scenarios: formal and informal communication situations. *Media usage frequency* was measured by asking respondents, in a typical day, how frequently they use each of the ten media for formal/ informal communication. Since participants may have different interpretation of "times of usage" and different total communication frequencies, ratio measures were calculated for data analysis. The ratio of traditional or electronic media use was calculated by dividing use frequency of all traditional or electronic media by use frequency of all media. The ratio of each of the ten media use frequencies to the total communication frequencies was also calculated for further analysis. *Media preference* (an assessment of an attitudinal predisposition toward a medium) was measured by asking if the participants could use the particular type of medium effectively/with comfort. Five-point scales were used (1 [least] to 5 [most]) to measure media preferences.

Media richness. Ten communication media were evaluated in this study. With the exception of instant messenger and electronic message boards (Internet forums), the remaining eight communication media examined in this study are commonly used in most organizations: face-to-face interaction, landline telephone, handwritten notes, formal letters (mail, FedEx, etc.),

fax, email, mobile telephones, and mobile text messaging. Communication media were further categorized into A (traditional communication media) or B (electronic communication media) categories. The A category included the first five media on the list, and the B category included instant messenger, electronic message board, email, and mobile text messaging. In this study, we aimed to identify not only the combined score differences in A and B category usage, but also individual score differences for preferences of media with different richness levels within each of the categories. Media richness was operationalized for the purpose of data analysis using Daft and Lengel's (1986) four criteria of media richness. The criteria are (a) the availability of instant feedback; (b) the capacity of the medium to transmit multiple cues such as body language, voice tone, and inflection; (c) the use of natural language; and (d) the personal focus of the medium. In the A category we rated formal letters, fax, and handwritten notes as lean traditional media, and landline telephone and face-to-face interaction as rich traditional media. In the B category we rated electronic message boards, email, and mobile text messaging as lean electronic media, and mobile telephone and instant messenger as rich electronic media.

Results

Hypothesis 1 predicted a relationship between employees' organization-based self-esteem and their frequency of informal communication. The data indicated a significant negative relationship, $r(340) = -.15, p < .05$, between employees' OBSE and frequency of informal communication. Hence the lower the OBSE levels of employees, the more frequently they participated in informal communication. Similarly, the higher the OBSE levels, the less these employees participated in informal communication in their organizations. Thus, Hypothesis 1 was supported.

To test Hypothesis 2 and 3, OBSE scores were divided into high and low classifications by

rank ordering total scores and grouping the lowest quartile scores as low, and the highest quartile scores as high. Hypothesis 2 predicted that employees with high levels of OBSE would be more likely to communicate informally via traditional media, while employees with low levels of OBSE would be more likely to communicate informally via electronic media. As indicated in Table 2, independent-sample t-tests revealed significant differences in both preference variables and frequency variables. High OBSE employees had a significantly higher rate of informal communication via traditional media, $t(158) = -2.28, p < .05$, than low OBSE employees, and low OBSE employees had a significantly higher rate of informal communication via electronic media, $t(158) = 2.28, p < .05$, than high OBSE employees. Employees with low levels of OBSE rated electronic media for informal communication significantly higher, $t(158) = 2.71, p < .05$, than employees with high levels of OBSE. There was no significant differences, $t = -1.85, p > .05$, between general attitudes towards traditional media for informal communication between the two subgroups. Hypothesis 2 was generally supported.

H3a predicted that employees with high levels of OBSE are more likely to communicate informally via rich traditional media than employees with low levels of OBSE. As indicated in Table 2, a t-test was used to test the effects of the level of OBSE on preferences for rich traditional media, and it revealed a significant difference, $t(158) = -2.43, p < .05$, between the high OBSE group and the low OBSE group. On average, high OBSE participants displayed more positive attitudes towards rich traditional media than low OBSE participants. There was no significant difference between the high OBSE group and the low OBSE group in terms of frequency of usage of rich traditional media for informal communication, $t(158) = -1.03, p > .05$. Thus, Hypothesis 3a received mixed support.

Hypothesis 3b predicted that employees with high levels of OBSE were more likely to communicate informally via rich electronic media than employees with low levels of OBSE. Interestingly, low OBSE employees demonstrated a significantly more positive attitude, $t(158) = 2.28, p < .05$, towards rich electronic media for informal communication than the high OBSE group (see Table 2). There was no significant difference, $t(158) = .50, p > .05$, between the low OBSE group and the high OBSE group for the ratio frequency usage of rich electronic media for informal communication. Thus hypothesis 3b was not supported.

As displayed in Table 3, among all the traditional media, high OBSE employees preferred face-to-face informal communication significantly more than low OBSE employees, $t(158) = -2.63, p < .01$. Among all the electronic media, low OBSE employees preferred instant messaging for informal communication significantly more than high OBSE employees, $t(158) = 2.87, p < .01$.

Discussion

Findings

The present study identified the influence of one personality factor, organization-based self-esteem, on employees' propensity to use informal networks. Three conclusions are warranted from these data. First, there was a significantly negative relationship between OBSE and employees' frequency of informal communication, suggesting that the higher the OBSE of an employee, the less they participate in informal communication in the organization. In addition, findings showed that employees with high levels of OBSE prefer communicating informally via traditional media, while employees with low levels of OBSE prefer to communicate informally via electronic media. Finally, results indicated that the low OBSE group had a more positive attitude towards rich electronic media for informal communication

than the high OBSE group. In the next section, the implications of these findings are explored, and directions for future research are posited.

Implications of Findings

OBSE and frequency of informal communication. The results of this investigation reveal that employees with low levels of OBSE are more frequently involved in informal communication than employees with high level of OBSE. This result may extend Phillips et al's (1983) study, which reported that employees with low job satisfaction were more likely to use informal communication networks, by suggesting that OBSE might mediate that relationship. This finding may also lend credence to behavioral plasticity theory's (Brockner, 1988) contention that one attribute of low self-esteem individuals is that they actively seek out more information about their environment, while high self-esteem individuals react to external cues with a lower intensity. Due to low level of uncertainty tolerance, individuals with low levels of OBSE might feel a need to find out what is "really going on" in the organization, and thus would be more likely to supplement their formally received equivocal messages with information from the informal network (Phillips, 1983). Employees with low OBSE levels may depend upon the informal network to fulfill more of their information needs, or even actively seek communication outside of the formal system to remove ambiguity or uncertainty about the organization.

Informal communication by group members with low levels of OBSE could potentially have both positive (e.g., team building) and negative effects on individual and organizational outcomes. Increased frequency of informal communication among low-OBSE employees may be crucial for supporting the social and task functions of this group. However, it is possible that low OBSE employees use the informal network to share negative views about their job

environment with colleagues. Even though much informal grapevine information is accurate, a small amount of inaccuracy in this information could cause organizational problems (Crampton et al., 1998). Thus, increased frequency of informal communication has the potential to both increase cohesion, but also increase complaining, grumbling, and expressions of dissatisfaction.

OBSE and media types. The second conclusion is that employees with high levels of OBSE communicate informally more via traditional media and have less positive attitudes towards electronic media, while employees with low levels of OBSE communicate informally more via electronic media and have more positive attitudes towards electronic media. This finding suggests that electronic media can facilitate informal communication among coworkers, and potentially lead to improved interpersonal relationships. This finding supports Walther's (1992) social information processing theory (SIP), which posited that electronic media could be used to establish strong bonds between communicators. Even though communication via electronic media is often viewed as filtering out the necessary cues for relational communication, the results of this study suggest that, at least for certain users, electronic media may also allow message senders and receivers to generate communication leading to a cycle of increasing affinity and closeness (Walther, 1996).

Additionally, the finding that different employees with different levels of OBSE have different preference for traditional and electronic media, is important. Specifically, traditional media such as telephone and face-to-face were evaluated more highly by high OBSE employees' for informal communication exchanges, while electronic media such as email, instant messenger, and electronic message boards, appear to be more effective in facilitating low OBSE employees' informal communication. Since traditional media are most often used to transmit formal communication and high OBSE employees evaluate traditional media as important for

informal communication as well, there may be a high degree of overlap between formal and informal networks for high OBSE people. Conversely, less overlap between formal and informal networks for low OBSE employees seems probable.

The difference in preferences for traditional or electronic media between high and low OBSE groups could also be attributed to different symbolic meanings of traditional and electronic media. According to the dual capacity model (Sitkin, Sutcliffe, & Barrios-Choplin, 1992), a medium's role-based capacity (referred to as its symbol carrying capacity), is also crucial in explaining individuals' media selection. Since, generally speaking, traditional media are perceived symbolically to have more source credibility than electronic media (Johnson, Donohue, Atkin, & Johnson, 1994), they are likely to be viewed as qualitatively better by high OBSE employees who value credibility and trustworthiness within organizations. Conversely low OBSE employees who focus more on self protection needs, may value the potential for greater avoidance of accountability that accompanies use of electronic media.

OBSE and richness of medium. The third set of findings suggested that high OBSE employees prefer rich traditional media more than employees with low levels of OBSE. But, the results also revealed that employees with low levels of OBSE prefer rich electronic media more than employees with high OBSE, which was contradictory to the hypothesized relationship. That is, it was expected that employees with low levels of OBSE would be more comfortable choosing media of lower richness levels (either traditional or electronic media) to maintain a self-protection interpersonal strategy, but interestingly the results demonstrated the opposite relationship.

This conclusion lends credence to the cost minimization theory (Reinsch, 1990), which posits that media choice is in part an attempt to reduce perceived personal costs. According to

Reinsch (1990), if a communication task involves relationships, the relevance of relationship disruption costs is high. Consequently, for communication tasks that are significant or that involve complex relational issues, rich media--media that protect against impact discrepancy and relationship disruption--should be less costly than lean media. In this study, since informal communication often involves the social exchange of relationship-based information, from a minimization perspective, rich media would be viewed as less risky than lean media by communicators. Hence it appears that low OBSE employees prefer electronic media for informal communication, but of these media, they most like the richer channels. This may allow them to meet both self-protection needs (electronic media) and informal relational needs (rich channels). Individuals with high OBSE, on the other hand, are likely to enjoy more stimulation and prefer communication media that enable direct and immediate contact with others. Hence their preference is rich traditional media.

Finally, the findings also indicated that face-to-face interaction was the most preferred informal communication media for high OBSE employees, while popular venues for informal communication for low OBSE employees included email, instant messaging, and electronic message boards. Hence managers today must view such CMC media not as just a tool for recreation, but also as a tool for enhancing employee productivity, fostering team-building efforts and enabling cost-effective and speedy informal communication. Moreover, the ability of IM and electronic message boards to support informal, spontaneous, and opportunistic communication should make them particularly suitable for geographically distributed teams.

Limitations and Directions for Future Research

A few limitations of this study should be noted when interpreting the findings. First, the research reported here may suffer from the common-method bias because all of the data is from

responses to survey questionnaires without observations of actual channel choices. Second, the classification system for categorizing rich and lean media is based primarily upon the classification system offered by MRT (Daft & Lengel, 1986). For example, in this study, email is categorized as a lean electronic medium, while some theories (e.g. channel expansion theory, Carlson & Zmud, 1994) posit that email might be perceived as a rich media by organizational members under certain circumstances. An alternative approach would be to triangulate the MRT classification with subjective evaluations from participants to see if people perceive the media in the same way as they as it is portrayed by MRT (Daft & Lengel, 1986).

In addition to efforts to address the methodological limitations described above, this investigation points to three future lines of inquiry. First, the conclusions suggest a relationship between employees' levels of organization-based self-esteem and informal communication frequency such that employees with low OBSE level communicate informally more frequently than employees with high OBSE. This relationship bears further examination. Answers to such questions as how OBSE levels influence employees' dependency on informal communication, their desire to communicate informally, and their rewards for such usage, would provide a richer picture of this communicative practice.

Second, results implied that employees with low OBSE maintained a relatively active (e.g. more communication frequency) and rich (e.g. preference for rich electronic media) informal network. This implication suggests the following questions: To what extent does this active, rich informal organizational network overlap informal networks on the team level? What kind of positive or negative impact does this network have on maintaining organizational social and learning goals? Examining the role of the informal network in the broader communicative practices of organizational members would help us better understand its functions and effects.

Third, it would be interesting to examine the role of time in the evolution of the different forms of communication media. As Walther (1995) suggested, there is an interaction of time and medium on formality, and formality of FtF and CMC media may decrease after many message exchanges. So longitudinal research on the relationship between employees' personality factors and perceived media preferences for both formal and informal communication might be helpful for capturing the social dynamics of media use.

Conclusion

The present study explored the effect of Organization-Based Self-Esteem (OBSE) on employees' use of informal networks, especially their media preferences for informal communication. Analysis of data showed a significant negative relationship between levels of OBSE and frequency of informal communication. In addition, results indicated that high OBSE employees preferred traditional media for informal communication while low OBSE employees preferred electronic media. Moreover, low OBSE employees showed a more positive attitude toward rich electronic media for informal communication than did high OBSE employees who preferred rich traditional media.

These findings suggest an important role for electronic informal communication in organizations, and provide fodder for investigating additional personality factors that mediate media preferences and selection processes. Increasingly it is clear that organizational members' choice processes are rich and complex. It is only through continued examination of a variety of factors that we may finally unravel the puzzle that underlies these communicative practices.

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Table 1 Organization and Respondent Demographics

Demographic variables	Mean	SD
Age	37.03	13.65
Tenure	8.36	9.04
Supervisory status (percentage)		Yes: .38 No: .62
Sex (percentage)		Female: .54 Male: .46

TABLE 2 Mean Scores on Attitude and Frequency Variables for Low and High Organization-Based Self-Esteem Groups and t Scores for Independent t Tests

	Low OBSE	High OBSE	t Score
Measures			
tradratio	.45	.53	- 2.28*
elecratio	.56	.47	2.28*
richtradratio	8.46	8.75	- 1.03
richelecratio	3.97	3.66	.50
tradatt	19.06	20.16	- 1.85
richtradatt	4.26	4.51	- 2.43*
elecatt	20.10	15.88	2.71
richelecatt	4.00	3.43	2.18*

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

Note: tradratio = ratio of use frequency of all traditional media; elecratio = ratio of use frequency of all electronic media; richtradratio = ratio of use frequency of rich traditional media; richelecratio = ratio of use frequency of rich electronic media; tradatt = general attitude towards all traditional media; richtradatt = general attitude towards rich traditional ratio; elecatt = general attitude towards all electronic media; richelecatt = general attitude towards rich electronic media

$N = 342$ for each test.

TABLE 3 Mean Scores on Attitude Variables of Specific Media Use for Low and High Organization-Based Self-Esteem Groups and Scores for Independent t Tests

	Low OBSE	High OBSE	t Score
Measures			
Delivery services	3.58	3.01	- 1.13
Handwritten notes	3.80	3.96	- .98
Fax	3.33	3.55	- 1.12
Landline telephone	4.11	4.37	- 1.90
Mobile telephone	4.40	4.17	.86
Face-to-face	4.37	4.65	- 2.63**
Email	4.33	4.19	.97
Electronic message	3.21	2.94	1.47
board			
Mobile text	3.60	3.32	1.14
messaging			
Instant messaging	3.58	3.01	2.87**
* $p < .05$ ** $p < .01$			