THE BUSINESS COMMUNICATOR AS PRESENCE ALLOCATOR

Multicommunicating, Equivocality, and Status at Work

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Conceptualizing the contemporary business communicator as a presence allocator, *this article introduces the concept of multicommunicating and reports two exploratory studies. The authors used qualitative and quantitative data to explore factors that influence multicommunicating behavior, an increasingly common form of polychronic behavior and multitasking. The analysis builds on the concepts of social presence and media richness to describe the contemporary worker as seeking to economize in the allocation of personal presence across multiple, interleaved interactions. In the authors' exploratory qualitative study, they identified message equivocality and interlocutor status as two factors that seem to encourage (or discourage) multicommunicating. In the quantitative study (a 2 × 2 posttest design), the authors evaluated two hypotheses, confirming that equivocality and status influence the perceived likelihood of multicommunicating. The discussion section includes several suggestions for future research.*

Keywords: *multicommunicating; equivocality; status; presence; polychronicity; multitasking; instant message; chat*

Our ability to communicate at any time in any place with anyone is increasing our opportunities for interaction. Using e-mail, instant messaging, and cell phones, a manager's ability to stay engaged within the workplace is greater than ever before. In fact, multitasking has become synonymous with the communication technology–infused workplace of today. Basex, an

information technology research firm, surveyed 1,000 office workers from top management on down and found that 55% of those surveyed opened e-mails immediately or shortly after they arrived, regardless of what they were working on (Wallis & Steptoe, 2006). A 2005 survey of Americans aged 8 to 18 years by the Kaiser Family Foundation found that the younger generation is packing more media use within a day then ever before through media multitasking (Cole, Steptoe, & Dale, 2006), suggesting that the trend toward using media to do more in shorter spans of time will continue. A specific form of multitasking involves engaging in multiple conversations at any one time: multicommunicating. With the advent of new communication technologies, employees frequently participate in multiple, simultaneous, one-on-one interactions at work (Cameron & Webster, 2005; Turner & Tinsley, 2002).

By juggling the current array of media choices, an individual can cycle among several chat conversations while opening an e-mail and responding to his or her boss on a pager. An individual can even initiate some of these interactions, using pauses between typing turns in an interaction with Person A to type a message to Person B. Furthermore, interruptions seem more likely in the virtual space of chat than in a face-to-face environment (cf. Fish, Kraut, Root, & Rice, 1993). When each participant cannot observe the other conversations taking place, multicommunicating may even be facilitated. This new pattern of communication suggests that being virtually present with more people by staying involved in more ongoing communications may be a new goal of business communicators. In fact, our earlier research suggests that multicommunicating may even be a norm for communication within some organizations that value the potential efficiencies created by accomplishing more than one interaction task within a certain span of time (Turner, Grube, Tinsley, Lee, & O'Pell, 2006). In that earlier study, we found that employees who followed organizational norms in their use of instant messaging and e-mail were awarded higher performance evaluations from their supervisors. Moreover, a number of individuals in the study cited the importance of using communication technology to multicommunicate. This study built on that research to better understand what multicommunicating means and to understand what factors might promote it.

To explore these issues systematically, we have organized this article as follows: First, we describe multicommunicating, relating it to the concept of polychronicity (Bluedorn, 2002; Hall, 1966, 1983) and to the workplace practice of multitasking (Damos, 1991; Waller, 1997). Next, we articulate a theoretical foundation for our work, noting the concepts of social presence (Short, Williams, & Christie, 1976), media richness (Daft & Lengel, 1984, 1986), and

economizing (Frederick, 1992). Previous media choice research has focused on the selection of a medium to use in a single interaction (e.g., matching a rich medium to an equivocal message). We focus on those occasions when a person may use a lean medium to multicommunicate with two or more persons. Third, we report an exploratory, qualitative study of 20 experienced multicommunicators at one organization. Next, we discuss a quantitative study, reporting our hypotheses, methods, and results. Finally, we discuss the results of both studies and their implications for future research.

POLYCHRONICITY, MULTITASKING, AND MULTICOMMUNICATING

Polychronicity describes the behavior of engaging in more than one activity at the same time or treating unplanned interruptions as equal to planned activities (Bluedorn, 2002; Bluedorn, Kallaith, Strube, & Martin, 1999; Bluedorn, Kaufman, & Lane, 1992). The notion of polychronicity appears to have been developed initially by Hall (1959, pp. 177-80, 1966, pp. 173-174, 1983) who argued that some cultures (e.g., Mediterranean and southern European) were more polychronic, whereas others (e.g., northern European) were more monochronic. In subsequent research, time orientation was used to explain individual differences in both consumer and organizational behavior (Bluedorn, 2002; Conte & Jacobs, 2003; Kaufman, Lane, & Linquist, 1991; Kaufman-Scarborough & Linquist, 2003).

Polychronic behavior at work, typically termed multitasking, appears increasingly common today (Davenport & Beck, 2002; Zhang, Goonetilleke, Plocher, & Liang, 2005). Multicommunicating, a specific form of multitasking (Bluedorn, 2002, pp. 70, 75), seems to be increasing as well. We attribute the increase in multicommunicating to media such as chat (Perey, 2004) and e-mail that allow communicators to compartmentalize interactions (i.e., interact with two people, neither of whom has access to the other conversation) and to regulate pace (e.g., by delaying a response to one person while responding to another). A new technology can influence the way in which workers understand and use time (Orlikowski & Yates, 2002) and, in the case of chat, seems to be changing the ways in which people communicate (Cameron & Webster, 2005; Turner & Tinsley, 2002).

Multicommunicating should be distinguished from other forms of multitasking, because communication is interactive, requiring a person to monitor and to adapt to others while observing appropriate standards of etiquette. Each interaction has both content and relationship dimensions (Watzlawick, Beavin, & Jackson, 1967), requiring a communicator to manage multiple

dimensions simultaneously. For example, a person might experience significant cognitive load while both manipulating a spreadsheet database and composing a memorandum report before a deadline. However, the pace at which the person interrogates the database is controlled by the person, who need not worry about the impression that he or she is making on the database by framing inquiries skillfully or awkwardly or by taking an occasional break. Nor must the person be concerned that the tone of the resulting report is not yet exactly right. Until the deadline arrives, there is time to revise for both content and presentation. But a person interacting with another person receives information at a pace determined by the other person. In face-to-face communication, for example, one is expected to begin speaking almost as soon as one's conversation partner stops, so one does not have time for extensive revision. Although chat interaction provides some flexibility of pace (one of the factors that supports multicommunicating), a chat interaction remains an interaction, and one is expected to respond in a timely manner. Furthermore, while interacting with another person, whether face to face or by chat, one is likely to give recurring attention to the impression that he or she is likely making with each question or comment.

Capella (1994) noted that "conversations are a complex mixture of . . . events that are simultaneous and sequential in time" (p. 381). For example, producing an utterance requires a person to (a) assess the situation by inferring the causes of another's actions; (b) form intentions with regard to instrumental, relational, and identity objectives; (c) build behavioral programs of intended actions; (d) enact the behavioral plans; (e) monitor the outcomes of one's behavior; and (f) repeat the preceding processes in light of outcomes (Burleson & Planalp, 2000, p. 222).

Given the complexity of communication, one might ask how a person can participate simultaneously in more than one conversation. However, we agree with Greene (2000) that "our current modes of . . . theorizing about message-production processes convey a sense of the phenomenon that is too . . . uni-planar" (p. 139). In contrast, Greene argued that "the processes that give rise to message-relevant specifications are fast—blazingly fast" (p. 140); "I'm suggesting a characterization of messages and message-encoding processes in which mental states and entities are seen to be evanescent, fast, shifting, and parallel" (p. 144).

Greene's (2000) concept of message production processes helps us see how persons can participate in multiple conversations. Other views imply (if they do not explicitly state) that a communicator moves through a series of steps in order, giving each step complete attention for a measurable period of time. But in the "fast, flexible, and adaptive" system described by Greene

(p. 153), steps may be processed in parallel and can be completed in blazingly fast surges that allow a communicator to nearly simultaneously engage in other activities, including other interactions (see also Bergen, Grimes, & Potter, 2005).

Theoretical Foundations

A large body of literature has focused on issues surrounding a communicator's choice of medium for conducting a particular interaction (Fulk & Boyd, 1991). We focus on a related issue: how a communicator's choice of medium may allow him or her to allocate presence and attention to second or additional conversation partners.

With the continuing development of communication technologies (Johansen, Valee, & Spangler, 1979), scholars have developed a number of theoretical explanations of media choice (Fulk & Boyd, 1991). One of the earliest important conceptualizations of media characteristics focused on social presence, the degree to which a medium conveys the physical presence of the participants and provides cues necessary to develop interpersonal relationships (Short et al., 1976). The more cues available to participants, the more presence. In social presence theory, face-to-face communication provides the greatest degree of presence, followed by videoconferencing, audio conferencing, and then text. Communication is effective when the medium provides enough social presence for the task at hand. Therefore, more complex tasks, such as resolving a conflict or engaging in a negotiation, require media with higher levels of social presence.

Another theory that explores the cues available with different media types is media richness (Daft & Lengel, 1984, 1986; Trevino, Lengel, & Daft, 1987). Richness is assessed as a combination of feedback speed, the naturalness of language, the number of types of cues, and the personalization of messages. Richness is described as an attribute of a medium that makes the channel more or less effective for addressing equivocal (ambiguous) issues. Although a richer channel such as face to face is seen as necessary to respond effectively in equivocal situations, a leaner channel such as an impersonal, mass-distribution memorandum may be more appropriate for a less equivocal message.

Equivocality refers to the existence of multiple and conflicting interpretations of an issue. These interpretations are subjective and open to potential disagreement. To resolve equivocality, individuals must engage in a dialogue that exposes these different interpretations so that a resolution can be reached. For example, two managers who are experiencing a

conflict over the criteria to consider for a new hire may elect to use a richer medium to resolve the issue.

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Media richness theory has been criticized for focusing too narrowly on the objective attributes of channels and the assumption that communicators choose a channel on a purely rational basis (e.g., Fulk & Steinfield, 1990). Additional perspectives have suggested that media choice is not always a rational choice but rather is influenced by the context. Two of these perspectives include the social influence model (Fulk, 1993; Fulk, Schmitz, & Steinfield, 1990) and the symbolic interactionist perspective (Trevino, Daft, & Lengel, 1990).

The social influence model posits that perceptions of media characteristics are in part socially constructed and that the selection of a medium frequently reflects social forces in addition to attributes of the medium. Starting with the investigation of work group norms, (Fulk, 1993; Fulk, Steinfield, Schmitz, & Power, 1987), researchers have explored the impact of social relationships on media use, suggesting that communication technology is socially constructed and embedded within the fabric of the organization (DeSanctis & Poole, 1994; Fulk, 1993; Orlikowski, Yates, Okamura, & Fujimoto, 1995).

The social interactionist perspective offers the additional insight that the choice of a medium constitutes a message. Trevino et al. (1990) argued that organizations and work groups develop meanings associated with certain words, actions, events, and media so that using a particular medium conveys information. For example, putting something in writing could indicate commitment, and meeting face to face could indicate the value placed on the person's relationship (Trevino et al., 1990).

A body of literature continues to build on and modify the insights of media choice researchers (e.g., Barry & Fulmer, 2004; Carlson & Zmud, 1999; Kraut, Rice, Cool, & Fish, 1998; Vickery, Droge, Stank, Goldsby, & Markland, 2004). We draw on the research to help us understand multicommunicating behavior. Specifically, we call attention to an emphasis

on efficiency implicit in media richness theory and argue that the desire for efficiency encourages multicommunicating to the extent that the degree of equivocality allows a communicator to divide his or her attention among multiple conversations (Crosson, 2000a, 2000b; Gergen, 2002). However, as posited by social influence and symbolic interactionism, we assume that factors other than the objective features of media (e.g., status) will at least partially drive the decision to multicommunicate.

The values of the workplace typically serve to encourage or even exaggerate a tendency to economize. Frederick (1992) argued that business organizations manifest fundamental values and reward those employees who adopt them. He identified the most pervasive of such values in business organizations as "economizing" and described it as encouraging "prudent actions that produce a net excess of outputs from a given amount of resources" (p. 288). Multicommunicating appears to have the effect of enhancing the outputs available from one resource, employee time.

Do the theories of social presence and media richness include the notion of efficiency seeking? Yes, but the concept is more explicit in the richness literature than in the social presence literature. Short et al. (1976, p. 65) argued that persons perceive each medium as providing a certain degree of social presence and that individuals avoid a medium that provides too little social presence for the task at hand. Furthermore, Short et al. regarded the use of a medium with excess social presence as inefficient, suggesting, at least implicitly, that communicators could (or should or would) substitute audio conferencing or videoconferencing for face-to-face communication when the task allowed (pp. 157-166).

In richness theory, the argument for matching medium richness to message equivocality became explicit. Communicators were expected to avoid both media that were too lean and media that were too rich for a given interaction (e.g., Russ, Daft, & Lengel, 1990, p. 156). The notion that the choice of an unnecessarily rich medium (e.g., a face-to-face meeting to impart a routine message) may provide "unnecessary, surplus meaning" that can "overcomplicate the communication" (Daft, Lengel, & Trevino, 1987, p. 359) reflects an assumption that, at least in a workplace setting, both senders and receivers expect messages to be communicated efficiently (cf. Fulk & Boyd, 1991, p. 413; Reinsch & Beswick, 1990).

Qualitative Study

To better understand multicommunicating and decisions leading up to it, the first author interviewed 20 individuals at a large, high-tech organization at which we had observed frequent examples of multicommunicating. The

interviews were collected as part of a larger study of communication technology use at the site. Ten of the interviewees were male and 10 were female; they were selected (on the basis of a preliminary survey that was part of the larger study) to include both positive and negative attitudes toward multicommunicating. The interviews were conducted in a room away from the participants' work areas to prevent interruptions and lasted between 45 and 90 minutes. The interviews were semistructured to provide some consistency while allowing participants to raise issues as appropriate. The interview protocol included questions about media use, criteria used to determine media use and multicommunicating, norms for communication within the organization, and the managing of multiple conversations at one time. Interview participants came from the operations and interactive marketing areas of the finance department of the organization. Their positions included financial analysts, sales support, and project management.

Each interview began with a description of multicommunicating. The interviewer then asked, "Have you ever engaged in this behavior" and followed up on the interviewee's responses. All of the interviews were audiotaped, transcribed, and checked for accuracy by the interviewer. The interviews were read by both authors and analyzed with QSR N6 software to identify themes. Simple frequency counts were computed, and the interview texts were coded by paragraph (multiple codes could be assigned to each paragraph) for content analysis.

The responses confirmed that multicommunication occurred very frequently: Every interviewee indicated that it was a common practice in the organization. And although some interviewees felt that other people sometimes tried to juggle too many interactions and became ineffective, the interviewees regarded multicommunicating as an efficient use of an individual's time. One respondent stated, "I like to do it because it allows me to accomplish a lot of things in a short amount of time." Another said, "At the end of the day, I feel like I have accomplished a lot of tasks." Most interviewees said they could easily handle at least four simultaneous chat interactions. One woman told us, "At one time I had thirteen on my screen. And I was talking to all of them. . . . And when I counted them, it scared me. . . . It was like multiple topics. . . . A lot of times you have multiple topics going on."

As shown in Table 1, a thematic analysis identified 17 themes in individuals' explanations of their decisions to multicommunicate. The most frequently occurring theme was topic complexity (Table 1, Theme 1). We used the term *complexity* to describe this theme because that was the word many of the interviewees used. Seeming to struggle for a way to describe

the situation, they used words such as *confusing*, *complicated*, and *complex* and phrases such as "you are unsure." Not one person used the term *equivocal* or even *ambiguous*. However, in their own descriptions, they mirrored the definition of *equivocal* by suggesting multiple interpretations for a single event or issue. Although we did not ask them specifically if they were referring to equivocal situations and provide them with a description of equivocality, their comments suggested that the criteria for determining complexity for them involved multiple interpretations of an issue.

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Other themes (e.g., Themes 8 and 16) also reflected sensitivity to topic as an important decision factor. Another frequent theme was status (Table 1, Theme 5); other themes (e.g., Themes 2, 4, and 12) also indicated sensitivity to organizational and social factors. These interviews helped us better understand the experiences of multicommunicators and pointed to issue complexity and status or rank within an organization (D'Ambra, Rice, & O'Connor, 1998) as two potentially influential decisions factors.

Responses addressing the complexity of message topics included the comment that "if you really don't understand something or you want somebody to explain something to you then obviously you'd give them a [telephone] call and focus [exclusively] on that." Another respondent commented as follows:

> If it's a complicated issue or a complex issue . . . I'm going to focus on it like one-on-one kind of thing, one in sequence. If it's just somebody asking me "hey are you going to this meeting or where's this meeting located" or something really insignificant then I could have multiple . . . [interactions] going on.

Still another explained,

> I have one client that whenever I have a submission from them I have to concentrate on just them because it is so confusing and you know their

Table 1.   Content Analysis of Interview Responses

	Frequency	
Theme	*Text Units*	*Number of Interviewees*
1. Complexity of the issue	430	16
2. Relationship building	444	14
3. Channel properties	315	14
4. Presence	496	13
5. Status	185	13
6. Bundling of messages	136	13
7. Efficiency	221	12
8. Salience of issue	166	12
9. Recording characteristic	164	11
10. Privacy	122	9
11. Addictive nature	66	6
12. Personality factors	48	4
13. Comfort with the technology	31	4
14. Escalation	21	3
15. Control	39	2
16. Miscommunication concerns	22	2
17. Incentives	14	1

submissions are so complex so I have to say "ok I need to dedicate two hours of my day to this and I won't be able to take any . . . [other chat messages]."

Specific responses that touched on the issue of organizational rank or status included the remark that "if it is a senior vice president [who telephones or sends a chat inquiry], you gotta believe everything else stops. You just focus on him." Another respondent said, "[If] . . . it is at a[n] executive level or something . . . definitely I'm going to focus on it [alone]." Another respondent explained that status was relevant in downward (as well as upward) communication as follows:

If it's somebody that works for me and I go talk to them, then you know, to be honest, I'm their boss I have priority and you [they] need to pay attention to that. I just say, "I need to talk about this" and then they stop what they're doing and we talk. If it's an equal . . . then I'm pretty tolerant of [multicommunicating].

Overall, the interview responses confirmed some of our observations about multicommunicating at this particular organization while deepening our understanding and suggesting additional questions. As a further exploratory step, we undertook a follow-up quantitative study.

Quantitative Study

To test some of our ideas more rigorously, we designed a simple 2×2 posttest-only experiment to test for the effects of equivocality and status. As a step toward increased validity (recognizing that our interviewees were all part of a single organizational culture), we chose to collect data from a different sample of respondents.

THEORETICAL RATIONALE AND HYPOTHESES

The media choice literature has focused on the selection of a medium for a single message (e.g., Daft & Lengel, 1984, 1986; Short et al., 1976). We extend the analysis to include the practice of multicommunicating. The decision to handle a routine information exchange with a lean medium has the effect of using an individual's communicative resources economically, holding some of them in reserve. Furthermore, when a person has access to media that facilitate multicommunicating (by compartmentalizing interactions and providing some control of pace), the decision to use a lean medium makes it possible to allocate the unengaged resources to a second or even a third interaction. In the process of allocating resources efficiently, a communicator functions as a *presence allocator*, parsing out his or her presence (Gergen, 2002) among multiple interactions.

Being a presence allocator means that an individual can survey the available communication technologies, choose a medium that provides the right cues for each interaction, and divide his or her presence among two or more interlocutors. On the basis of the richness theory analyses that less equivocal message content can be communicated with leaner media (leaner media that make multicommunicating possible) and that communicators should economize, allocating their presence across multiple interactions when possible, we developed the following hypothesis:

> *Hypothesis 1:* Manipulation of the equivocality of a message will affect the perceived likelihood of multicommunicating; greater equivocality will discourage multicommunicating.

As noted by a number of scholars (e.g., Fulk et al., 1990), media choice is not simply a matter of rationally evaluating media attributes and requirements. In fact, a symbolic interactionist perspective of multicommunicating suggests that an individual must consider the norms associated with conversation within the workplace (Trevino et al., 1990).

In the current case, we propose that communicators will be less likely to multicommunicate when interacting with a more highly ranked person. One explanation for this behavior would be self-presentation (Goffman, 1959; chap. 6; Schlenker, 1980; Spitzberg, 1994). Communicators seek to make good impressions when interacting with persons of higher organizational status (Fletcher, 1990; Kacmar & Carlson, 1999, p. 1295; Leary & Kowalski, 1990), and they may signal their positive regard for the higher status persons by engaging in "careful listening" and by showing high levels of "eye contact" (Schneider, 1981, pp. 26, 27). Alternately, communicators may demonstrate careful listening and eye contact to allow higher ranked persons the greater control of "the floor" to which they are entitled by status.

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Although status can take several forms and possess several dimensions, our focus is on the objective rank within an organization of one's communication partner (omitting, for the present, awareness of that partner's media preferences and the level of familiarity between the two persons; see, e.g., Zmud, Lind, & Young, 1990). Status of this sort is determined primarily by job assignment and is an important influence on workplace behavior (Simon, 1997, pp. 179, 182-185), playing a large role in the development and the texture of workplace relationships (Gabarro, 1990, Gabarro & Kotter, 1980; Marks, 1994; Zorn, 1995). Consequently, the direction of communication (e.g., upward rather than horizontal) affects individuals' perceptions of communication channels (D'Ambra et al., 1998).

Status may also be an important factor in another facet of self-presentation, that is, communication errors and associated "error costs" (Marschak, 1968; Reinsch & Beswick, 1990, p. 803). Because a human being has a limited capacity to process information (Luck & Vogel, 2001, p. 124; Miller, 1978), communicators are prone to occasional errors (e.g., misstatement, misinterpretation) and choose among the available media in

part to avoid errors (Reinsch & Beswick, 1990). Because errors can have more severe consequences when communicating with a superior (Simon, 1997, pp. 101-102) than with a peer, error costs provide another reason (besides signals of attention and respect) to avoid multicommunicating with a superior. This line of thinking led us to an additional prediction:

> *Hypothesis 2:* The status (rank) of one's communication partner will affect the perceived likelihood of multicommunicating; higher interlocutor status will discourage multicommunicating.

METHODS

To test our hypotheses, we collected data from young professionals who had recently left jobs to begin an MBA program. We asked them to complete questionnaires outside of class and did not give extra credit for participation.

We distributed questionnaires to 259 persons and received complete data from 250 of them. Sixty percent of the respondents were citizens of the United States; other respondents came from 39 other countries. All but 3 of the respondents had 2 or more years of corporate work experience in a wide variety of positions and industries; the other three (JD and MBA students) had at least two summers of full-time experience. (None of the individuals had been employed at the organization at which we conducted our qualitative interviews.) Overall, the respondents averaged more than 5 years of work experience ($M = 5.10$ years, $SD = 2.37$ years). The majority (67%) were male and ranged in age from 23 to 37 years ($M = 28.22$ years, $SD = 2.50$ years).

We assessed the perceived likelihood of multicommunicating by asking for responses to four brief vignettes selected from previous research (Rice, D'Ambra, & More, 1998). The vignettes had been designed (p. 14) to describe situations ranging from higher levels of equivocality (e.g., "You want to organize political support") to lower ones (e.g., "You want to schedule a department meeting"). We selected these four vignettes because two of them were among the highest and two among the lowest in equivocality, and they also described a respondent's conversation partner by rank, although rank was not a primary focus of the original study (Rice et al., 1998). One of the high-equivocality vignettes and one of the low-equivocality vignettes described the communication partner as "superior" in rank; the other two vignettes described the communication partner as a "colleague" (Rice et al., 1998). These procedures created a

Table 2.   Experimental Vignettes

M	SD	*Vignette*
1.80	1.28	You need to discuss a problem in your department with your superior (higher equivocality, superior status).
2.64	1.77	You wish to organize political support from your colleagues for an idea that you have (higher equivocality, colleague status).
2.48	1.46	You need to respond to a question by a superior concerning a variation in a budgeted-versus-actual expenses report (lower equivocality, superior status).
3.34	1.46	You need to respond to a question from a colleague concerning a variation in a budgeted-versus-actual expenses report (lower equivocality, colleague status).

Note: Mean scores are on a scale from 1 (no likelihood of multicommunicating) to 7 (higher likelihood of multicommunicating).

completely crossed, 2×2 manipulation of information equivocality (higher vs. lower) and of rank of communication partner (superior vs. colleague). See Table 2 for a description of the four vignettes.

We asked participants to respond to each of the four vignettes (interspersed among seven additional vignettes that served as masking) on a scale ranging from 1 to 7. After a brief introduction and definition, the instructions specified that the respondent should indicate the extent to which (within each specific vignette) he or she would think it necessary to focus exclusively on one communication task (1) versus multiple communication tasks (7). The questionnaire explicitly labeled the end points (and only those points) on the continuum, identifying 1 as meaning *I need to focus on this message alone* (little or no multicommunicating) and 7 as meaning *I could be engaged in multiple conversations while communicating this message* (engaged in multicommunicating).

Using SPSS software, we evaluated the hypotheses with a $2 \times 2 \times 2$ repeated-measures (Type 3 sum of squares) analysis of variance. Following the advice of Levine and Hullett (2002), we calculated values for η^2 rather than relying on software output. Because our data were collected within a single questionnaire, we tested for common methods variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Using factor analysis, we extracted an unrotated general factor and tested our hypotheses with and without the general factor as a covariate (Podsakoff et al., 2003). The results showed no evidence that common methods variance affected our results (i.e., there was

Table 3.   Analysis of Covariance: Multicommunicating in Four Vignettes

Source of Variance	Sum of Squares	df	Mean Square	F Ratio	η^2
Within subjects					
Equivocality	117.65	1	117.65	60.76*	.09
Error	482.10	249	1.94		
Status	182.33	1	182.33	146.25*	.13
Error	310.42	249	1.25		
Equivocality × Status	0.01	1	0.01	0.01	
Error	276.74	249	1.11		
Total (within)	1,369.27				
Between subjects					
Intercept	6,568.97	1	6,568.97	1,678.61*	.85
Error	1,180.78	249	4.74		
Total (between)	7,749.75				

*$p < .05$.

no decrease of η^2 values when the covariate was added to the model), so we report tests without the general factor.

RESULTS

An analysis of variance yielded the results shown in Table 3. The impact of equivocality was statistically significant ($F = 60.76$, $p < .01$, $\eta^2 = .09$). Inspection of cell means (Table 2) indicated that respondents were less likely to multicommunicate under conditions of higher equivocality ($M = 1.80, 2.64$) than under conditions of lower equivocality ($M = 2.48, 3.34$). These results support the first hypothesis. Equivocality accounted for approximately 9% of within-subjects variance.

The impact of status (rank) was also statistically significant ($F = 146.25$, $p < .01$, $\eta^2 = .13$). Cell means (Table 2) showed that a respondent was less prone to describe multicommunicating as likely when his or her partner was described as superior ($M = 1.80, 2.48$) than when the partner was described as a colleague ($M = 2.64, 3.34$). These results support the second hypothesis. Status (rank) accounted for 13% of within-subjects variance. The interaction between equivocality and status was not statistically significant.

DISCUSSION

The qualitative results confirmed that multicommunicating occurs frequently in at least some workplaces. Those results also pointed to message complexity, interlocutor status, and several other issues as decision factors. Our quantitative results indicate that both message equivocality (closely related to "complexity" in the qualitative study) and interlocutor rank (related to comments about status and authority in the qualitative study) influence a person's decision to multicommunicate.

The qualitative results also indicate that several varieties of multicommunicating occur. In some circumstances, an individual multicommunicates by choice, having initiated multiple interactions. In other circumstances, an individual receives messages from multiple persons and feels that he or she must respond to all of them simultaneously. Perhaps more significant is what could be termed a distinction between *quantitative* and *qualitative* multicommunicating. In quantitative multicommunicating, a central interlocutor interacts with multiple individuals, but all of the conversations relate to a single topic or theme. In qualitative multicommunicating, a central interlocutor carries on conversations about differing topics with persons from different reference groups and, potentially, persons who require him or her to carry various social roles (e.g., supervisor, subordinate, colleague, friend, parent) and enact different genres (Yates, Orlikowski, & Okamura, 1999).

> Our quantitative results indicate that both message equivocality (closely related to "complexity" in the qualitative study) and interlocutor rank (related to comments about status and authority in the qualitative study) influence a person's decision to multicommunicate.

Furthermore, the qualitative data suggest that the concept of multicommunicating may provide a fresh perspective from which to examine, at the macroscopic level (Spitzberg, 1994, p. 30), the important and contested concept of communicative competence (Bostrom, 1984; Hargie, 1997; Monge, Bachman, Dillard, & Eisenberg, 1982; Parks, 1994; Wiemann, Takai, Ota, &

Wiemann, 1997). Multicommunicating behavior calls attention to a new communication pattern that emphasizes the speed (Greene, 2000), complexity (Burleson & Planalp, 2000), and limitations (Miller, 1978) of human information processing. It may also provide another example that subverts the traditional ideology of competent communication (Spitzberg, 1994, p. 33). Our understandings of the concept of multicommunicating, and the comments of our interviewees, suggest that, at least in some circumstances, intermittent attention, divided consciousness (Gergen, 2002), and lower levels of empathy (Spitzberg, 1994, pp. 34-35) may constitute highly competent communication. However, competence must be assessed by both communicators. Competent presence allocation may require that all communicators involved are satisfied with the presence they received. The next question to consider might concern whether it is important for all communicators to know how much presence they received.

The quantitative results supported the experimental hypotheses. Describing the situation as more (or less) equivocal and describing the interlocutor as higher (or equal) in rank significantly affected a respondent's reported likelihood of multicommunicating. The perceived likelihood of multicommunicating within a situation was higher when equivocality was lower or rank was equal than when equivocality was higher or rank was superior, respectively. The results are also consistent with the argument that although richness concepts appear to have predictive power (Hypothesis 1), other factors (e.g., the rank of one's interlocutor in Hypothesis 2) identified by social influence and symbolic interactionist scholars (e.g., Fulk et al., 1990; Trevino et al., 1990) also affect media choice decisions.

Taken together, our two exploratory studies help clarify our understanding of a new type of business interaction, the use of media to multicommunicate. Furthermore, the results suggest that business communicators can and do intentionally allocate their personal attention across a number of ongoing, interleaved conversations. The contemporary business communicator is, therefore, revealed as a presence allocator.

LIMITATIONS

These studies have several limitations. For example, we relied on brief vignettes (rather than richer and, perhaps, more realistic stimuli) as experimental manipulations in the quantitative study, and on perceptions of anticipated likely behavior (rather than actual media choice) as a dependent variable. Furthermore, the current quantitative study did not directly measure

the hypothesized intervening variables. This is most apparent with regard to the effects of status, for which several factors—including impression management, authority control, and error costs—could explain the observed effect. Thus, the results point toward a link between variables but do not allow a confident description of the causal mechanism.

SUGGESTIONS FOR FUTURE RESEARCH

Besides overcoming the limitations of the current studies, several additional research questions emerge from our analysis thus far. These include the following: (a) Do individuals differ in their willingness to multicommunicate, and if so, why? (b) To what degree (if at all) is a person capable of multicommunicating effectively? and (c) what are the personal consequences of multicommunicating?

Some people may be more open than others to multicommunicating. Indeed, the interviewees in our qualitative study, although admitting that they multicommunicated frequently, also expressed a range of feelings about the practice. Bluedorn (2002) grounded his work on polychronicity in the work of Edward Hall (1983, chap. 3), suggesting that one's preference for multicommunicating and multitasking might be cultural. A different etiology is implicit in the work of Walter Ong, who argued that humans tend to internalize technologies and thereby learn to use their mental abilities in new ways (Ong, 1992). This analysis suggests that the time-sharing computer, with its apparently simultaneous engagement in multiple processes (Ong, 1981, p. 91), may have provided a model for human multicommunicating. Alternately, multicommunicating could be learned from fellow workers, who establish norms for workplace communication (Yates et al., 1999), including, for example, how one should use chat software. Thus the extent to which individuals vary in their preferences and feelings about multicommunicating (as distinct from their behavior), and the reasons for such differences, if any, are open questions.

Also, it seems likely that some people will be more adept than others at multicommunicating but that all persons will have an upper limit (e.g., the 13 chat interactions mentioned by one interviewee) beyond which performance will deteriorate. Our interviewees said that multicommunicating can produce positive effects (e.g., rapidly integrating information from diverse sources, developing creative solutions to problems, and participating in interactions without becoming inaccessible to one's supervisor). If they are right—and that remains to be tested (see, e.g., Rice, 1992)—there must certainly be

an upper limit to the number of simultaneous interactions that a person can manage successfully. Future research could develop theoretical understandings of the limits of human communication processing ability by drawing, for example, on living systems theory (Miller, 1978) and what is known about the architecture of the human nervous system (Bergen et al., 2005; Chun & Potter, 2001) and by exploring empirical questions concerning those limits.

Finally, what are the effects of multicommunicating on individuals? Although several of our respondents suggested an "addictive quality" (Table 1, Theme 11) to multicommunicating or noted the risk of miscommunication (Table 1, Theme 16) they felt, on balance, that multicommunicating was a very good thing. Several said that multicommunicating was helping them succeed and earn promotions. But multicommunicating appears to have a number of consequences, including rapid shifts between social roles (Asforth, Kreiner, & Fugate, 2000), that strike us as potentially stressful. Several scholars (Gergen, 2000, p. 1; Stivers, 2004, chap. 2) have noted the rapid pace of contemporary work and pointed to potential pathological consequences. We believe that communication scholars should assess the effects—both short and long term, both obvious and subtle—of this new communication phenomenon.

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