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MULTICOMMUNICATION

Maarit Valo

Summary

Multicommunication means interacting with several people separately but at the same time.

Usually multicommunication refers to parallel conversations enabled by communication technologies. The essential element is interactivity: in multicommunication, several mutual, two-way interactions are managed between people. A few adjacent concepts related to multicommunication have also been used in the literature, including multitasking, media or electronic multitasking, polychronicity, and polychronic communication.

Research interest in multicommunication is growing. Whereas the nascent phases of multicommunication research were largely concerned with observing the manifestation and characteristics of the multicommunication phenomenon, defining the concept of multicommunication, and differentiating multicommunication from similar concepts, contemporary research has spread out in many directions. Three main topics can be distinguished in multicommunication research: motivators of multicommunication, management of multicommunication, and consequences of multicommunication. The research contexts for multicommunication to date have been predominantly limited to working life. Very few studies have actually focused on family communication, contacts between friends, or other contexts involving communication in private life.

For their preferred methods in empirical multicommunication research, most scholars to date have used surveys, interviews, diaries, critical incidents, and other self-reports, as well as laboratory experiments. Researchers are beginning to learn quite a bit about the motivators and consequences of multicommunication, as described by employees in the workplace.

Multicommunication research would thus benefit from the observation and analysis of natural communication found in actual contexts, settings, and relationships.

Keywords: Communication technology, electronic multitasking, instant messaging, interpersonal communication, media multitasking, multicommunication, multitasking polychronicity, polychronic communication, team communication

Multicommunication and Related Phenomena

Multicommunication means interacting with several people separately but at the same time. People may engage in multiple simultaneous face-to-face conversations: for example, when talking about different topics with two workmates in a shared office space or when having separate exchanges with various family members. However, these multiple face-to-face conversations tend to either wither away or blend together into one. Therefore, multicommunication usually refers to parallel conversations enabled by communication technologies. For example, during a face-to-face meeting at work or during a gathering with family or friends, text messaging may be used to interact with people who are not present.

During virtual collaboration or team meetings, multicommunication might take place when a participant has a simultaneous dyadic chat with another member on the same digital platform, or when participants interact with people who are not involved in the group meeting.

In the current research literature, multicommunication refers to multiple simultaneous interactions that may be conducted face-to-face or through the use of various technologies (and often both). The essential element is interactivity: in multicommunication, several mutual, two-way interactions are managed between individuals. Research interest in multicommunication is growing. Several adjacent concepts related to multicommunication have also been used in the literature, including multitasking, media or electronic multitasking, polychronicity, and polychronic communication. This chapter provides an overview of these concepts and their connections to multicommunication.

Multitasking

The origins of multicommunication are primarily found in multitasking; indeed, the terms *multicommunication* and *multitasking* are still often used interchangeably. Multitasking usually means multiple simultaneous actions, activities, tasks, or behaviors that someone is engaged in, but the research topics and perspectives on the subject are quite varied. Although the idea of multitasking has a long history in research, the concept was not widely used in the early days. Cognitive processes during multitasking in particular have long been a popular research area. For example, König, Bühner, and Mürling (2005) mentioned a study by E. Neil McQueen on the distribution of attention from as early as 1917.

As a term, *multitasking* was first introduced in the field of computer science, more specifically in computer programming (Koolstra, 2008). In that connection, multitasking means the same as multiprogramming and multiprocessing, that is, performing multiple tasks, programs, or processes simultaneously with a computer (Nagel, 1990). From the world of information technology, the term then made the leap to human behavior.

In the cognitive viewpoint, multitasking refers to the cognitive processes of several tasks that overlap in time (Poljac, Kiesel, Koch, & Müller, 2018). Engaging in easy or routine behaviors such as walking and talking simultaneously is not considered multitasking. Instead, multitasking requires that a combination of information-processing activities be undertaken. Because the human capacity to process information is limited, multitasking may lead to information becoming lost. (Koolstra, 2008.) In terms of skills and abilities, multitasking can be defined as "the ability to handle the demands of multiple tasks simultaneously" (Lee & Taatgen, 2002). Multitaskers generally switch from one task to another, which is often included in definitions of multitasking. For example, König et al. (2005, p. 244) refer to Delbridge's (2000, p. 1) explanation that multitasking is the ability to accomplish "multiple task goals in the same general time period by engaging in frequent switches between individual tasks."

Kenyon (2010), who performed a literature review and a qualitative survey on the concept of multitasking, defined the term as "people's participation in more than one activity at a time" (p. 43). She found that a multitude of definitions and analysis methods had been applied, depending on culture, discipline, and research paradigm as well as on the contexts, situations, participants, and activities that were studied. For example, numerous unsolved questions have been asked on the conceptualization of activity, behavior, and simultaneity, as well as the measurement of time or time blocks. Kenyon (2010) ended by stating that the measurement and quantification of multitasking behaviors have often been insufficient. The field also has a need for a better understanding of the meanings and experiences of multitaskers.

Naturally, multitasking can also involve communication. To give an example, multitasking may consist of driving a car, monitoring a navigation device, and talking to passengers at the same time. During service encounters, to give another example, multitasking may involve attending to a customer by speaking while continuing with a complicated task of some kind. One of the The

tasks or activities in multitasking can be communicative while the others are not.

Multicommunication, however, as defined and used in this article, involves only communication, that is, multiple real-time interactions—face-to-face or technology-mediated—that overlap in a specified time frame.

Media Multitasking or Electronic Multitasking

Because multitasking today often involves media usage, these words are frequently combined into *media multitasking*. A largely corresponding term is *electronic multitasking; computer-based multitasking* has also been used. Media multitasking indicates either the use of one technological device along with other activities, or the use of multiple devices at the same time. Accordingly, media multitasking can be defined as "doing two tasks simultaneously, one of which involves media use" (Lang & Chrzan, 2015, p. 100), or "using two or more media simultaneously" (Koolstra, 2008). The former refers to any task combined with media usage, whereas the latter might comprise, for example, watching a movie and searching for relevant information about the movie on the Web. Lang and Chrzan (2015) performed a literature review on media multitasking and found that "simultaneous use" generally meant "either two tasks being completed concurrently, or switching from one task to another in rapid succession" (p. 101).

Media multitasking or electronic multitasking can certainly include communication. Electronic multitasking may be defined as the "use of one or more communication technology devices during a FtF [face-to-face] or mixed-mode meeting" (Stephens & Davis, 2009, p. 66). Both watching television while also talking to someone, and switching between reading by oneself and instant messaging with someone, could be defined as media multitasking.

Research shows that media multitasking is increasing, especially among young people (Pea et al., 2012; Wang & Tchernev, 2012); this increase has also been noted in working life. Within the public discourse, media multitasking is often seen and discussed as a negative phenomenon. Researchers have indeed found that it can distract concentration, decrease communication involvement, harm performance, and weaken cognitive processes (see Lang & Chrzan, 2015; Nguyen & Fussell, 2016; Ophir, Nass, & Wagner, 2009; Wang, Irwin, Cooper, & Srivastava, 2015; Wang & Tchernev, 2012). Although media multitasking seems to involve cognitive and performative costs, people often find multitasking to be rewarding, and they use multitasking to satisfy habitual and emotional needs, such as for entertainment and relaxation (Wang & Tchernev, 2012). In meetings, computer-based multitasking can be distracting (because it induces diversion from the joint goal) while also being compliant, as such multitasking may be related to the objectives of the meeting (Benbunan-Fich & Truman, 2009).

Media multitasking is a multifaceted phenomenon. Media-multitasking studies have focused on a wide variety of multitasking behaviors, tasks, and contexts (Wang et al., 2015). In order to construct a framework for synthesizing such studies, Wang et al. (2015) identified the basic cognitive dimensions of media-multitasking behaviors. Their framework shows that under the concept of media multitasking, research has included both cognitively less demanding phenomena (such as background radio or television) as well as more demanding and relevant interactive tasks, such as instant messaging, phone conversations, and emailing.

Media multitasking may (but does not usually) involve interaction with another person. More often, managing simultaneous interactions with other people is called *multicommunication*. In the present article, studies on media or electronic multitasking are reviewed only if all the activities they examine are interactive and involve other people. For example, because watching television and reading the news off a mobile phone do not constitute two-way interaction, those

activities combined with face-to-face conversation (for example) do not qualify as multicommunication.

Polychronicity and Polychronic Communication

Polychronicity refers to the behavior, habit, or preference of engaging simultaneously in two or more activities. The concept stems from the anthropologist Edward T. Hall's theoretical reflections on the use of time across cultures. Hall (1959) defined *monochronism* as "doing one thing at a time" and maintained that "American culture is characteristically monochronic" (p. 178). In his later texts on culturally specific features and cross-cultural differences, Hall (1983; Hall & Hall, 1987) elaborated on his ideas and included the notion of polychronic time in his culture-related thinking. *Polychronic time* means "being involved with many things at once" (Hall & Hall, 1987, p. 16). In his view, people from polychronic cultures are inclined or prefer to attend to many simultaneous things or deal with several concurrent tasks. (For the development of the concept of polychronicity in Hall's texts, see Bluedorn, 2002, pp. 51, 58; König & Waller, 2010.)

Many scholars have since adapted the idea of polychronicity into workplace contexts. For example, Bluedorn, Kalliath, Strube, and Martin (1999) proposed that polychronicity is not only a cultural feature but also a value in working life that is held by individuals, groups, or whole organizations. When defined as a value, polychronicity is the belief that being simultaneously engaged in two or more activities, tasks, or assignments is the best way to accomplish them (Bluedorn, 2002; Bluedorn et al., 1999). Hence, polychronicity can also be regarded as a component of organizational culture or even as a collective norm in the workplace.

Critical reviews (König & Waller, 2010; Poposki & Oswald, 2010) of the research literature on polychronicity have shown that the research encompasses miscellaneous studies, often with dissimilar definitions and differing measures. These divergent constructs of polychronicity make it difficult to compare and interpret the findings. Polychronicity may refer both to the preference for multitasking and to the actual multitasking behavior itself. Polychronicity as a culture-level concept has also become problematic: the role of culture as an antecedent or predictor of polychronicity seems to be highly questionable. Only limited empirical evidence supports such a role for polychronicity in cultures. It appears that rather than examining polychronicity as a cultural, cross-cultural, or intercultural variable, polychronicity can best be seen as an individual preference for multitasking (Anders, 2016; Bluedorn et al., 1999; Mohammed & Harrison, 2013; Poposki & Oswald, 2010; Turner & Reinsch, 2007). The preference may be related to personality, personal work habits, or group or organizational norms, for example.

In the early 2000s, Turner and Tinsley (2002) introduced the concept of polychronicity to communication research by incorporating polychronicity into communication. This introduction resulted in *polychronic communication*, which they defined as the "managing of multiple conversations at once within a given time period" (p. 4). Cameron and Webster (2005), who examined instant messaging in the workplace, also used the term *polychronic communication*. For a while, the terms *polychronic communication* and *multicommunication* existed concomitantly in research articles. Although the terms have the same meaning and have been used interchangeably in the literature, *multicommunication* soon gained in popularity and is more common today.

Defining and Describing Multicommunication

The first mentions of multicommunication that used that label emerged in the research literature around 2005. These mentions were related to workplace communication, especially to business communication (Reinsch & Turner, 2006; Reinsch, Turner, & Tinsley, 2008; Turner et al., 2006; Turner & Reinsch, 2007). Reinsch and Turner (2006, p. 340), who described the effects of communication technology on the practices of business communicators in the workplace, mentioned a phenomenon "that has been termed multicommunicating." Even before that time, Reinsch and Turner used the word *multicommunication* in their conference papers as an alternative to polychronic communication (Reinsch et al., 2005; Turner & Tinsley, 2002).

Reinsch and Turner (2006, p. 343) described changes in business communication behavior, one of which includes multicommunication: "some business communicators multicommunicate, using technologies such as chat software (sometimes supplemented by telephone and face-to-face communication) to participate in multiple, overlapping one-to-one interactions." They implied that multicommunication may be a problem, as it requires fast-paced interaction with fewer possibilities of contemplating or proofreading messages (p. 346). Reinsch and Turner (2006) also urged researchers to study this new phenomenon of multicommunication. Later, in their 2008 article, Reinsch et al. introduced the term explicitly: "We call this practice 'multicommunicating'... which we define as engaging in two or more overlapping, synchronous conversations" (p. 391; see also Jackson, 2007).

The earliest definitions of multicommunication typically related the notion to the adjacent phenomena introduced above. Multicommunication was often described as a specific form of polychronic behavior or multitasking (Stephens & Davis, 2009; Turner & Reinsch, 2007). From early on, researchers attributed multicommunication to the establishment of new forms of communication technology in working life. Researchers provided practical examples from the workplace: for example, multicommunication may involve instant messaging or chat interactions

with various people (Reinsch & Turner, 2006; Turner & Reinsch, 2010); instant messaging plus email (Turner & Reinsch, 2007); face-to-face speech, videoconferencing, or chats plus email (Reinsch et al., 2008); or phone plus email or text messaging during a business meeting (Turner & Reinsch, 2010). Later, researchers used social media to provide practical examples of simultaneous interactions: for instance, chat plus tweeting on Twitter (Carvalho, Francisco, & Relvas, 2015).

Researchers have also made explicit distinctions between multicommunication and other forms of interaction that are not considered multicommunication (Cameron & Webster, 2013; Reinsch et al., 2008). Sequential conversations, either face-to-face or via technology, may be closely concatenated but do not overlap, whereas multicommunication means simultaneous overlapping conversations. Simultaneous or parallel face-to-face conversations usually blend and become a group conversation, but multicommunication by means of technology involves at least two separate conversations where the partners may or may not be aware of the other conversation (but nonetheless have no access to the other conversation's messages). Group communication implies shared communicative space, either face-to-face or virtual, with a common conversational thread, whereas multicommunicators interact with other people; keep the conversations separate; and often change their topic, goal, and social role when switching between conversations.

Researchers also found it necessary to clearly differentiate multicommunication from multitasking (Jackson, 2007; Reinsch et al., 2008; Turner & Reinsch, 2007, 2010, 2011).

Multicommunication is not a general form of "tasking," but communication between people.

Multicommunicators need to have their current partners in mind. Multicommunicators have to manage several interactions and attend to each while acting competently in maintaining topic relevance, coordinating, turn-taking, responding in a timely manner, monitoring and adapting to

their partners, observing appropriate standards of communication behavior, and managing the impressions their partners and those around them will form on the basis of their performance.

Multicommunication is a complicated activity, composed of several mutual ongoing interactions.

Successful multicommunication requires at least some social (either face-to-face or virtual) presence in each of these interactions.

Because multicommunication refers to interactions between the multicommunicator and multiple partners, multicommunicators have to split their attention between the partners.

Multicommunication means juggling people and conversations (Cameron & Webster, 2011, 2013.) Multicommunication includes parallel interactions, yet all the interactions are not necessarily synchronous or done in real time. Although synchronous interaction generally means that participants can communicate with one another at the same time, viewing synchronicity as a continuum from asynchronicity to full synchronicity, rather than a dichotomy (Reinsch et al., 2008, p. 392), indeed helps in defining multicommunication. In the research literature, asynchronous communication, such as composing or answering email, is usually qualified as one of the interactions included in multicommunication, even though such communication involves delayed responses.

Baralou and Tsoukas (2015) extended the idea of synchronicity by adopting the concept of *polysynchronicity*. For example, among team members who use versatile communication technology, interaction is polysynchronous, meaning that multiple different forms and degrees of synchronicity are covered in their communication. In addition to email and chat, polysynchronous teams use teleconferencing (audio and video) and collaborative software. In this way, the possibilities for multicommunication become strengthened.

Based on Baralou and Tsoukas's (2015) concept, Anders (2016) argued that polysynchronicity was parallel to polychronicity (defined earlier in this article as the behavior, habit, or preference of engaging simultaneously in two or more activities). As stated by Anders (2016), polysynchronicity characterizes a preference for variability and dynamic scaling of communication synchronicity, especially on team communication platforms. These platforms provide diversified tools for multicommunication.

According to a survey of young U.S. professionals, the most typical multicommunicative behavior involves combining phone communication (phone or conference calls) with textual exchanges via email or text messaging (Turner & Reinsch, 2010). Some overlap does exist between email "conversations" and phone conversations, thus qualifying the combination as a form of multicommunication. Without the element of overlapping in time, the activity would merely mean switching quickly between tasks and managing them sequentially (Cameron & Webster, 2013, p. 354). Conversations also overlap when people use instant messaging during face-to-face or teleconference meetings to converse privately and invisibly with attendees of the same meeting or with one or more people outside the meeting. Instant messaging for this purpose has also been called *invisible whispering*, *silent interactivity* (Dennis, Rennecker, & Hansen, 2010), and *hidden dialogicality* (Baralou & Tsoukas, 2015).

With the intention of developing multicommunication theory, several researchers have introduced concepts and terms for various aspects or elements of the phenomenon. The person who is managing multiple conversations at the same time with his or her *communication* partners is the *focal individual*. Conversations may then be either partner- or *focal-initiated* conversations. If a conversation is initiated by the partner, then the focal individual is first having one conversation with someone, and then a second partner initiates a new conversation simultaneously with the focal individual. (Cameron & Webster, 2011, 2013.) Simultaneous

conversations in multicommunication may also be differentiated between *self-initiated* and *interruption-initiated* conversations (Cameron, Webster, Barki, & Ortiz de Guinea, 2016).

Dyadic multicommunication is carried out in several dyadic (i.e., one-on-one) conversations (Cameron et al., 2016), whereas in *meeting multicommunication*, people are engaged both in a meeting and in one or more technology-mediated secondary conversations (Cameron, Barki, Ortiz de Guinea, Coulon, & Moshki, 2018). Networked multicommunication takes place when people engage in multiple conversations with others who are also multicommunicating at the same time (Cameron et al., 2016). Quantitative multicommunication refers to interactions by a central interlocutor with multiple people, and all interactions relate to the same topic.
Qualitative multicommunication includes various topics or themes and is conducted with people from different contexts, which may require the central interlocutor to change between various social roles. (Turner & Reinsch, 2007.)

In addition, the *intensity of multicommunication* may be identified by certain contributing factors (Reinsch et al., 2008; Cameron & Webster, 2013). For example, the experience of multicommunication may be intense if the open interactions are frequent and fast paced; the multicommunicator's social roles are numerous and segmented; and the interactions are on frequently changing and possibly challenging topics.

Finally, *singular communicating* is the opposite of multicommunicating (Erhardt & Gibbs, 2014). Although employees may be inclined to multicommunicate to appear engaged, managers may enforce concentration during meetings, limit multicommunication, and promote singular communicating among staff members.

Multicommunication Research Topics

Whereas the nascent phases of multicommunication research were largely concerned with observing the manifestation and characteristics of the multicommunication phenomenon, defining the concept of multicommunication, and differentiating multicommunication from similar concepts, contemporary research has spread out in many directions. Although the main focus is still on working life and workplace contexts (Stephens & Pantoja, 2016), a few studies have also been conducted in the context of private life, mainly in terms of family communication and among friends.

The term *multicommunication* is in regular use in the present research literature. The present chapter will also review > This article also reviews studies on polychronic communication and media multitasking, provided that they factually address multicommunication. Studies that use uncommon terms for multicommunication, such as invisible whispering (Dennis et al., 2010), hidden/silent interactivity, or hidden dialogicality (Baralou & Tsoukas, 2015), are also included.

Three main topics can be distinguished in multicommunication research: motivators of multicommunication, management of multicommunication, and consequences of multicommunication. These topics are examined in the following sections.

Motivators of Multicommunication

Why do people multicommunicate? Five main categories of motivators of multicommunication can be identified in the research literature: (a) being available and reaching others, (b) seeking and providing information, (c) impression management, (d) workplace and organizational culture, and (e) individual motivators. Each category is described in turn here.

Being Available and Reaching Others

Being available or reaching people are naturally among people's main reasons for multicommunicating. Being available is the "state of readiness to engage in multicommunication" (Stephens, 2012). Many employees are habitually engaged in multicommunication, either in an initiating or a reacting role. They also want to be reachable in meetings and to be able to exchange messages with outsiders. Participating in parallel meetings (Stephens, 2012) or subgroup meetings (Dennis et al., 2010) are also typical motivators of multicommunication. Attending two meetings, usually one physical and one virtual, may feel advantageous and is generally justified on the grounds of time pressures (Erhardt & Gibbs, 2014). A special type of multicommunication has been termed *queue jumping* (Cameron & Webster, 2005). This occurs when one person is having a face-to-face conversation with another, and a line of other people are waiting to speak with the first person. A third person then uses instant messaging to jump discreetly ahead in the queue and gets the first person's attention.

In workplace meetings, getting in contact with people is a reason for extra-meeting activities, such as having additional conversations besides the meeting conversation (Dennis et al., 2010). Employees want to get involved in commenting on or joking about the meeting they are attending (Stephens, 2017), or they want to vent or complain about the meeting or other attendees (Cameron et al., 2018). Students may have the same motivator when engaging in multicommunication during class (Stephens & Pantoja, 2016). Often students want to remain available while attending the class. Their multicommunication may be associated with seeking and experiencing stimulation and distraction; this behavior, in turn, may be linked to amotivation. Other students, by contrast, are motivated and participate actively in class but may still multicommunicate during class.

Multicommunication may be a sign of "perpetual connectivity," the frequent or even constant wish for being connected to particular other people and being contactable by them (Stafford & Hillyer, 2012). Modern communication technology provides increased possibilities to interact synchronously with several other people at the same time.

Seeking and Providing Information

The need for additional information within dyadic interactions or group meetings is often a cause for multicommunication. Initiating a new conversation in order to obtain and provide information for a conversation that is already in progress is called *conversational leveraging* (Cameron & Webster, 2005, 2013; Rennecker & Godwin, 2005). In a face-to-face meeting, seeking new information usually happens via phone calls or other communication technology. Although conversation partners may not deem all situations acceptable for multicommunication, this type of multicommunication is often considered acceptable, provided that the need for new information is commonly recognized by all those involved, or if the multicommunicator clearly explains the need (Cameron & Webster, 2011).

Multicommunication that is used to seek and provide information may create a "front stage" and a "back stage" among work teams. These are originally Erving Goffman's (1959) concepts; he also used the phrases "front region" and "back region". Dennis et al. (2010) applied these terms in their examination of team processes in collective decision-making. When study participants used instant messaging simultaneously during face-to-face, telephone, and technology-mediated team meetings, the authors found that those who took part in back-stage conversations could, by multicommunicating, exert influence on the processes executed on the front stage. This practice of "invisible whispering" spans the boundaries of team decision-making. By its ability to

exchange messages and keep both stages informed, multicommunication in this case served the function of influencing. Instant messaging from and to a meeting can also serve the functions of creating knowledge, seeking clarification, seeking and providing social and task support, and giving and getting advice, among other functions (Baralou & Tsoukas, 2015; Dennis et al., 2010; Stephens, 2012).

In addition to Goffman's (1959) notion of stages, some of Mikhail Bakhtin's (1984) ideas have also been applied in research on multicommunication for informative purposes between the back stage and the front stage. For example, Bakhtin's idea of hidden dialogicality (which he used in discussing "intramental" or imaginary dialogue in prose) can be taken literally: to virtual team members, communication technology affords the possibility of moving between front and back regions, and these dialogues can truly be hidden and private (Baralou & Tsoukas, 2015). Chat conversations allow employees to bring information, advice, and support from the back region to the shared front region without revealing the back-region participants or their messages.

The potential of multicommunication—especially in private conversations between individual team members in face-to-face meetings without the rest of the team knowing—can be both positive and influential. If the team has become divided into a majority and a minority in terms of opinions, then the mere opportunity for and presence of discreet simultaneous conversations between team members can decrease the sense of power among the majority opinion holders. Then, once they feel less powerful, they might be more motivated to discuss the minority's viewpoints. The possibility of private conversations can increase the majority's motivation to seek additional information, to listen to dissenting members, and to ask their opinions and arguments. (Swaab, Phillips, & Schaerer, 2016.) Thus, multicommunication can have positive effects on group decision-making.

Gaining additional information is often necessary in situations where problems and risks related to communication are discerned and encountered in the workplace. Employees who perceive possible communication problems may adapt to these increased demands by using technological devices both sequentially and concurrently (Lee, Watson-Manheim, & Chudoba, 2014). Communication technology affords various ways of representing information. For example, visual and audio information may be needed to manage problems in information acquisition and to strengthen decision-making and other crucial processes at work. In Lee et al.'s study (2014), employees also reported that they sought social interaction by multicommunication to manage challenging situations.

Impression Management

Employees may be motivated to multicommunicate out of a desire to create or maintain the favorable impressions of being efficient and engaged in several meetings at the same time. For example, team members often have various sets of impression-management tactics, many of which comprise multicommunication. In project teams, subordinates in particular often try to multicommunicate in order to display their full engagement and to make a positive impression on their managers (Erhardt & Gibbs, 2014). Managers may resist this behavior, however, and disapprove of their subordinates' multicommunication. According to Erhardt and Gibbs (2014), managers noted their subordinates' lack of focus during virtual team meetings. They also encouraged employees to fully pay attention during face-to-face meetings and commented on the disturbance caused by communication technology.

Nevertheless, employees have reported that they do not multicommunicate in dyadic conversations with their managers. When employees communicate with their managers, they usually choose not to begin a second conversation with someone else. (Turner & Reinsch, 2007.)

The norms related to interpersonal communication and impression management warn people not to multicommunicate in dyadic communication, especially with someone with higher status and authority. Conversely, when the manager is multicommunicating while having a conversation with an employee, that behavior may be considered acceptable (Turner & Reinsch, 2007, 2011). The privilege to engage in multicommunication comes with authority.

Organizational Culture and Workplace Norms

From the communication viewpoint, *culture* in an organization consists of patterns, recursive behaviors, and meanings of human action, especially communicative practices, expectations, and norms (see Eisenberg & Riley, 2001). Researchers have found that polychronicity—the extent to which employees prefer to be engaged in two or more tasks or events at the same time—and polychronic values may be a fundamental dimension of organizational culture (Bluedorn et al., 1999). By the same token, multicommunication has been shown to be part of organizational or workplace culture.

A prevalent organizational culture may include norms for frequent multicommunication—either limiting and even precluding norms, or justifying norms—in the whole organization (Reinsch et al., 2008). In many workplaces, simultaneous email use and instant messaging, for instance, may be a solicited communication behavior. Multicommunication can reflect efficiency goals and may be exemplified and inspired by a supervisor's behavior (Turner et al., 2006).

Organizational norms can be effective predictors for multicommunication behavior. In the workplace people differ from one another in their electronic (or media) multitasking preferences. Yet those who observe others engaging in electronic multitasking in face-to-face meetings and find the behavior acceptable tend to increase their own multitasking. But organizational norms

that favor multitasking are the most powerful predictors, and they go beyond individual-level predictors. (Stephens & Davis, 2009.) Although Stephen's and Davis's (2009) study addressed not only multicommunication but also more broadly electronic multitasking (i.e., using electronic devices in meetings for extraneous activities), their study represents a clear example of strong organizational norms.

Individual Motivators

Although not everyone is engaged in or even approves of multicommunication (either at work or in private life), people do, of course, have individual differences in their preferences for and attitudes about multicommunication. For example, employees differ from one another in terms of their experience in using communication technology. Those who have a great deal of experience with technology in the workplace are more likely to bring their laptops and gadgets and to multitask electronically during face-to-face meetings. Electronic multitasking tends to contain at least some elements of multicommunication. Employees who feel communicatively overloaded—they perceive themselves as being too busy from having too many meetings, for example—typically do not report engaging in more multicommunication than others (Stephens & Davis, 2009). Communication demands in the workplace per se do not appear to necessarily drive people to multicommunicate. Some people multicommunicate, and some do not.

One extreme found in individual motivators to engage in multicommunication is the problematic use of mobile phones. Based on self-reported data, Seo, Kim, and David's study (2015) discovered that an excessive dependence on one's mobile phone can be a major motivator of multicommunication during face-to-face conversations among family and friends (2015). Their study even found that those with symptoms of adult attention deficit/hyperactivity disorder (ADHD) may be inclined to addictive mobile phone usage, which in turn is linked to frequent

multicommunicating. The authors did not find a direct link between ADHD and multicommunication, but the connection seems to be mediated by problematic mobile phone use. Their study also revealed that a strong need for belonging and social reassurance was a driving force behind people always desiring to have their mobile phones on (and, as a consequence, behind the habit of multicommunicating). The authors, who were aware of the negative light their study on addictive mobile phone usage would likely cast on multicommunication, also pointed out the obvious advantages of multicommunication. Such communication may well be a good way to fulfill the need to be connected with people.

Managing Multicommunication

How do people multicommunicate? Five perspectives on managing multicommunication can be identified in the research literature: (a) compartmentalization, (b) flexibility of tempo, (c) communication environment, (d) task and topic, and (e) multicommunication skills. Each perspective is described in turn below.

Compartmentalization

By *compartmentalization*, Reinsch et al. (2008, p. 396) mean "the extent to which a medium restricts the concurrent availability of communicative cues from an interaction to only those participating in the interaction." Because multicommunicators should be able to focus on multiple overlapping conversations without confusion or offending their communication partners (who may or may not be aware of the other conversations), the best technology in this respect allows full compartmentalization, where interactions are managed as if they were taking place in discrete compartments. For example, two concurrent chat interactions would be completely

compartmentalized; two simultaneous phone conversations, partially compartmentalized; and two overlapping face-to-face conversations, not at all compartmentalized. The authors regard compartmentalization as one of the most important enablers of multicommunication.

Full compartmentalization creates a space for people to interact with one another. The main criterion of compartmentalization is the availability or unavailability of cues from one interaction to the other. If a multicommunicator chooses a suitable communication device, then all verbal and nonverbal cues can be hidden and remain only within one interaction (Turner & Reinsch, 2010, 2011). But depending on the multicommunicator, device, situation, and task, interactions can always become intertwined, thus leading to mistakes or confusion.

Flexibility of Tempo

Already in the early days of research on multicommunication and related phenomena, scholars were pondering the time perspective of the topic (see Bluedorn et al., 1999; Turner & Reinsch, 2007). Are the multiple interactions found in multicommunication really simultaneous, overlapping, and managed at the same time? Multicommunication is not the same as multitasking, as noted earlier in this article. Multitasking—for example, driving a car and having a conversation—can be literally simultaneous. But because multicommunication involves two or more mutual interactions, multicommunicators need to divide their attention among all of the interactions. This division of attention is cognitively demanding and cannot literally happen simultaneously. Rather, the person's attention is switched between two or more interactions within a certain time frame (Cameron et al., 2016). Pauses between taking turns in a face-to-face or technology-mediated conversation thus allow the multicommunicator to manage another conversation.

Compartmentalization is possible because certain communication technologies allow for delayed reactions, pauses between turns, and postponed feedback in the flow of conversation. Reinsch et al. (2008) call this *flexibility of tempo*, which describes "the extent to which a participant may delay a response (allow a gap of silence) without giving offense or disrupting the interaction" (p. 396). Some forms of technology-mediated communication allow such gaps naturally, even though they are considered synchronous. For example, reasonable delays in instant messaging are acceptable. Face-to-face conversations, whether live or mediated, do not allow for this flexibility of tempo (Turner & Reinsch, 2010, 2011). With technology permitting an adaptable pace of communication flow, compartmentalization—and therefore the coordination of multicommunication—becomes possible.

Communication Environment

Thus far, research on multicommunication has primarily concentrated on meetings, either face-to-face or virtual, where participants engage in multicommunication by having a parallel conversation by means of instant messaging, text messaging, or email. Often any secondary conversations are hidden. As Anders (2016) has noted, Reinsch et al. (2008) did not include multicommunication conducted in virtual group communication in their seminal studies on multicommunication; instead, they focused on conversations between individuals.

Communication in a group that is coherent and has a common goal is often more challenging than unstructured meetings or dyadic conversations. For multicommunication purposes, virtual teams are a relatively difficult environment.

Virtual teams often communicate via Internet-based team communication platforms. Such platforms allow for verbal and nonverbal, synchronous and asynchronous, audial and visual, and spoken and written interaction. They usually feature a diverse set of teaming functions: audio

and video real-time meetings, group discussions, sharing and working on documents, instant messaging, and recording and archiving. Communication affordances within team platforms call for multicommunication.

Anders (2016) analyzed blog posts that reported on the organizational uses and personal experiences of team platforms. The findings showed that team platforms enabled extensive multicommunication and that the intensity of the multicommunication was based on the possibility of having an unlimited number of contributions for any given conversation. In the study, the author found compartmentalization to be a crucial element in people's allocation and balancing of attention when multicommunicating. The platform users achieved compartmentalization by choosing suitable communication channels, by flexibly scaling the amount of synchronicity, and by forming areas for different topics, groups, and projects to make the switching of their attention smooth. In the study, platform users reported on beneficial possibilities for involvement and participation.

The concept of polysynchronicity was introduced earlier in this article. Polysynchronous interaction includes various forms and degrees of synchronicity (Anders, 2016). Virtual, technology-mediated teamwork conducted on teaming platforms is highly polysynchronous. As can be expected, such a communication environment is also complex and demanding.

Task and Topic

Communication tasks and topics are relevant in deciding whether to multicommunicate. Higher task "equivocality" tends to discourage multicommunication (Turner & Reinsch, 2007). In this context, equivocality refers to topics that are open to subjective and conflicting interpretations or potential disagreement. In Turner and Reinsch's study (2007), interviewees reported that

complex, confusing, or complicated issues were best approached and focused on in situations without multicommunication, as in multicommunication the risk of miscommunication increases. In a follow-up survey in the same study (Turner & Reinsch, 2007), participants responded to descriptions of interactions where both the level of message equivocality and the status of communication partner varied. In addition to task equivocality, the partner's higher authority also tends to reduce multicommunication. A superior status is a supplementary factor in cognitively demanding communication situations.

Whether multicommunication is successful in tasks involving profound deliberation can depend on the chosen communication technology. In David, Xu, Srivastava, and Kim's study (2013), college students participated in various mediated interpersonal interactions in collaborative tasks, including instant messaging with one partner, having two instant messaging conversations at the same time, and having an instant-messaging-plus-phone conversation at the same time. The multicommunication tasks were aimed either at rapid solutions or divergent thinking, and the participants deemed them to be highly demanding. They preferred instant messaging for tasks that required fewer and shorter exchanges of messages, whereas they preferred phone conversations for tasks that involved much discussion.

Whether or not the topics of concurrent conversations are related—in face-to-face or virtual meetings, for example, or in parallel conversations via instant messaging—can affect the efficient management of multicommunication in the workplace. This notion is referred to as *topic relatedness* (Cameron et al., 2018). The concept is equal to *qualitative multicommunication* (Turner & Reinsch, 2007), introduced earlier in this article. The findings on the effects of topic relatedness are somewhat contradictory. Some research suggests that multicommunication on the same or a similar project or task can be relatively manageable because such communication is cognitively less taxing than having conversations on several different topics (Cameron &

Webster, 2011, 2013). But in Cameron et al.'s study (2018) based on data from an online survey, the authors found that, as reported by the respondents, multicommunication on different topics in a meeting and in a parallel conversation with an outsider neither required onerous cognitive resources nor led to significant process losses in either conversation.

Multicommunication Skills

Multitasking is often thought of as an essential requirement at work. Various changes have taken place in working life, one of which is an increase in the tempo of working. Hence multitasking has become a key element in job performance (Poposki & Oswald, 2010). The same applies to multicommunication, which can be thought of as a set of skills that are necessary in the workplace (Gimenez, 2014; Lee et al., 2014; Reinsch et al., 2008; Schulze & Krumm, 2017; Turner & Reinsch, 2010); these skills can and should be developed.

An understanding of the phenomenon of multicommunication is often emphasized as a foundation of multicommunication skills. Multicommunicators should be able to understand the complexity of the communication task at hand, the characteristics of the communication technology they will use, and the perceptions and needs of their communication partners.

Communication is a mutual interpersonal process, and multicommunication can be perceived as offensive if not managed discreetly. When writing an email while participating in a meeting, for example, one should be able to "pretend to listen" (Turner & Reinsch, 2010, p. 283). A multicommunicator needs to recognize the various degrees of sensitivity that different audiences expect and different tasks require (Reinsch et al., 2008).

Multicommunication can be thought of as an array of strategic skills. Multicommunication calls for strategic thought, for example, in deciding whether to multicommunicate and how to engage

in parallel interactions (Turner & Reinsch, 2010). Often the decisions both about sending messages and about their content, tone, and emphasis have to be made quickly (Reinsch et al., 2008). Multicommunicators need to construct social presence to secure the attention of their conversation partners (Turner & Foss, 2018). According to Gimenez's study (2014), multicommunicators need to make strategic decisions about (a) thematic threading (connecting communication tasks on the same topic), (b) presence allocation (dividing their presence among communication partners and interactions), (c) media packaging (combining suitable communication technologies), and (d) audience profiling (grouping diverse partners or audiences by their needs). In teamwork carried out on versatile virtual team platforms, for example, media packaging (the third item) would include knowledge about when to use a technological device, when technology should be used sequentially or concurrently, and when to engage in synchronous or asynchronous multicommunication (Lee et al., 2014; Schulze & Krumm, 2017).

Strategic multicommunication is both mindful and planned (Cameron et al., 2016). In dyadic multicommunication mindfulness means, for example, engaging selectively in conversations with similar topics, favoring self-initiated interactions, avoiding rudeness by starting parallel conversations only with those who are known to have positive attitudes toward multicommunication, and focusing only on one conversation when providing feedback or directions to employees or subordinates.

Consequences of Multicommunication

What are the consequences of multicommunication? Three types of consequences of multicommunication can be identified in the literature, each of which is discussed here: (a) attention and performance, (b) efficiency and effectiveness, and (c) relational consequences.

Attention and Performance

When multicommunicating, people are prone to underperformance both in conversation and in interactive tasks. Juggling two conversations at once often decreases people's concentration on both, causes errors and confusion, and increases the need for repetition and clarification (Cameron & Webster, 2013). Multicommunication may necessitate additional conversations—for example, explanations to resolve miscommunication caused by messages sent to the wrong people (Cameron et al., 2016). When Turner and Reinsch (2010) asked about unsuccessful multicommunication episodes, their respondents spoke of a variety of reasons why multicommunication failed, including mixing the first conversation with the second, losing information, making mistakes either in content or the process of conversation, and directing messages to unintended people.

Research suggests that multicommunication on similar topics causes fewer problems to people's performance than multicommunication on dissimilar topics. This is especially the case in dyadic situations, where people engage in two separate conversations with different people (Cameron & Webster, 2013). In meetings, however, Cameron et al. (2018) found that different topics did not necessarily lead to process losses, either in the meeting or in the second conversation. The authors assumed that in dyadic multicommunication, people need to pay constant attention to both conversation partners. In meetings, the pressure of intense concentration is not particularly strong, and multicommunication is not as cognitively demanding as it is in dyads; so conversational topics can be dissimilar without the communicators suffering substantial losses.

Succeeding in having two interactions simultaneously and keeping one's attention properly focused may depend on the motivators of multicommunication discussed earlier. Instant

messaging as "silent whispering" between the front stage (i.e., a virtual team meeting where decisions are made) and the back stage can help participants to stay engaged in the team meeting if the second conversation is aimed at directing the meeting, providing task support, or seeking clarification. Conversely, if the second conversation is about managing extra-meeting activities, then the participants' attention will be more distracted. (Dennis et al., 2010.)

Self-initiated and interruption-initiated multicommunication may differ in their effects on performance (Cameron & Webster, 2013; Cameron et al., 2016). Multicommunication that is caused by someone interrupting the initial conversation appears to be more harmful to performance than self-initiated multicommunication. Compared to interruption-initiated multicommunication, managing self-initiated concurrent interactions may involve more goal-directedness and planning, thus meaning that interactions remain in control.

Efficiency and Productivity

A primary motivation for multicommunication can be the appeal of being more efficient at work. Organizational norms in the workplace for job efficiency and productivity may encourage employees to be constantly available, respond immediately to interruptive messages, or tolerate having divided attention (Reinsch et al., 2008). In such organizations, employees can begin to perceive parallel interactions as being efficient and desirable, and thus adopt the habit of multicommunicating.

Efficiency may be described as performing in the best possible manner with the least waste of time and effort. Efficiency can increase when communication technologies (such as email, phone, and instant messaging) are packaged in a way that allows employees to communicate in parallel conversations to save time (Gimenez, 2014). When multicommunicating, most

employees prefer tools that give them the possibility of dividing their attention among several interactions and achieving compartmentalization (Gimenez, 2014; Reinsch et al., 2008; Turner & Reinsch, 2010). Compartmentalization and flexibility of tempo are key elements in successful multicommunication and hence also in seeking efficiency (Reinsch et al., 2008).

Planned multicommunication can provide efficiency to meetings. For example, decision-making in meetings has been reported to be more efficient when the front stage of a current meeting is combined with instant messaging from the back stage (Dennis et al., 2010). Through invisible whispering from back-stage conversations, participants in Dennis et al.'s study (2010) were able to acquire information and advice in real time. The decision process was faster and more efficient, as no follow-up meetings were needed. Efficiency achieved by multicommunication can very well be intermediated by feelings of satisfaction (Dennis et al., 2010). For example, if participants in meetings value the possibility of asking and acquiring information and clarification through secondary conversations, and if multicommunication is managed successfully, then such procedures may contribute to work satisfaction, and people will perceive them as being efficient.

Self-initiatedness in multicommunication may be a major contributor to regarding multicommunication as efficient. Multicommunication that is perceived as producing efficiency is likely not interruption initiated, although there might be exceptions. Researchers have found that feeling interrupted at work by online messages, for example, is often detrimental to one's work processes (Addas & Pinsonneault, 2015; Sonnentag, Reinecke, Mata, & Vorderer, 2017). But responding to incoming online messages, even when they interrupt the work process, may increase the general sense of task accomplishment and goal achievement (Sonnentag et al., 2017). Provided that interruptive online messages align with the overall goals of work, then

responding to such messages is not necessarily distracting. By analogy, interruption-initiated multicommunication might also be perceived as producing efficiency at work.

Multicommunication can obviously be counterproductive and even stressful as well (Anders, 2016; Dennis et al., 2010; Reinsch et al., 2008; Turner & Reinsch, 2007), thus leading to cognitive overload and decreases in efficiency. Polysynchronous virtual contexts such as teaming platforms afford versatile multicommunication possibilities for sharing knowledge, collaborative work, and internal and external team communication. They offer variable numbers of interactions and conversation partners as well as levels of engagement, sharedness, presence, attendance, synchronicity, and compartmentalization. At the same time they produce enormous amounts of information and can contribute to cognitive overload and declining productivity (Anders, 2016).

Relational Consequences

More than three-quarters of American business professionals feel that in formal meetings it is rarely if ever acceptable to make or answer a call, write, and send text messages or emails, or check one's incoming text messages or emails (Washington, Okoro, & Cardon, 2014). During an informal lunch meeting, writing and sending emails or text messages and answering phone calls would rarely if ever be appropriate, according to two-thirds of the respondents (Washington et al., 2014). According to the survey, however, younger professionals were more accepting of phone usage compared to professionals over 40. Both in formal and informal meetings, a majority of younger employees consider emailing and text messaging appropriate. Men are also more accepting than women: text messaging, emailing, and answering phone calls was nearly twice as acceptable among men than among women in the same survey. Professionals with higher incomes are in turn less accepting of phone usage in meetings. The authors suggested that

the results reflect different norms of civility among employees of different status, age, and gender groups.

Multicommunication is likely to change interaction dynamics and break conventional norms of interaction (Stafford & Hillyer, 2012). Unfortunately, only few studies to date have addressed the actual interaction behavior found in multicommunication. Researchers have focused instead on perceptions and impressions evoked by the behavior of communicators who engage in a second, parallel interaction.

Text messaging during face-to-face interaction is a typical form of multicommunication. Responding to a text message when having a face-to-face conversation may evoke feelings of exclusion, incivility, or rudeness within the face-to-face partner. In a study based on survey data (Maginnis, 2011), respondents perceived texting in the presence of others to be inappropriate. Partners who ignored interrupting text messages were seen as more attentive and polite by their face-to-face partners than those who reacted to messages. But acknowledging an interruptive text message with a relevant verbal explanation to the face-to-face partner was associated with more attentive, polite, and appropriate behavior than trying to covertly deal with the incoming message. Offering an explanation for reacting to a parallel message involved the face-to-face partner in multicommunication and therefore was viewed positively. Interestingly, the respondents also considered *not* answering a text message to be rude behavior toward the sender of the message, even though the respondents knew that the message would interrupt their own face-to-face conversations with the receiver of the message. The survey revealed several relational norms for both text messaging and multicommunication.

Self-initiated text messaging during face-to-face conversations leads to more negative impressions in terms of politeness and attentiveness than responding to incoming messages, as

Vanden Abeele, Antheunis, and Schouten (2016) found in their study using laboratory experiments. When a face-to-face partner responded to a text message during conversation, the quality of the conversation was also evaluated as poorer by the other participant. The phone user temporarily withdraws from the face-to-face conversation in these cases, and this behavior causes disruptions to the conversational flow. The authors of the study also concluded that people would obviously consider making voice calls during a face-to-face conversation to be even worse behavior than text messaging.

When someone is engaged in multicommunication, the overall perceptions of the person's incivility, rudeness, and incompetence tend to increase (Cameron & Webster, 2011). But the impressions depend on the context, situation, and communication goal as well as the relationship of the participants. In face-to-face conversations, several factors influence the impressions that partners form of conversation partners who use their mobile phones for another conversation (Cameron & Webster, 2011). Some of the factors that reduce unfavorable evaluations include the quality of the multicommunicator's behavior and his or her openness to providing an acceptable reason for the multicommunication.

Future Topics for Multicommunication Research

Multicommunication researchers have so far concentrated on face-to-face or technology-mediated meetings in the workplace, their focus being on emailing, instant messaging, and text messaging as ways of managing parallel conversations with those who are attending the same meeting or with outsiders. Although meetings usually involve a group of people, researchers have mostly looked at dyadic communication between two people at a time. Other studies have examined the multicommunication found on virtual team platforms. Scholars have generally

relied on quantitative surveys as their preferred research method, although they have also used qualitative interviews as well as diaries and other journaling methods. Still, the findings from multicommunication research have largely been based on self-reported behavior.

Multicommunication research would benefit from new topics and fresh viewpoints as well as alternative study designs, which are addressed in this chapter > article.

The research contexts for multicommunication to date have been predominantly limited to working life. Very few studies have actually focused on family communication, contacts between friends, or other contexts involving communication in private life. For example, researchers have not explored which multicommunication motivator norms prevail in situations other than workplace meetings and encounters. The same applies to other multicommunication motivators (such as being available and reaching others) as well as to preferences and habits in managing multicommunication and to relational consequences. Researchers have primarily studied these matters in the work context.

Multicommunication is certainly a kind of behavior that exerts a strong influence on the interaction dynamics between all parties. Researchers must look more closely into the interplay between speaking, listening, writing, and reading behaviors—and the interplay between verbal, nonverbal, vocal, and visual elements—within multicommunication behavior. Most studies have arisen from the scrutiny of various separate kinds of communication technology devices and services rather than from conversation partners and the actual messages those partners create and interpret in multicommunication. It is, after all, the combinations of synchronous and asynchronous interaction flows that multicommunicators try to manage successfully. Researchers should move on from using technology-centered approaches to using interaction-centered perspectives. The challenge found in multicommunication is not the management of time, but of interactions.

Using a focus on interaction dynamics, whether in working or private life, researchers of multicommunication need to address the following themes, among others. First, what kind of cognitive, affective, and behavioral interaction skills are required, and how can they be successfully combined in interpersonal multicommunication actions? (For communication skills, see Greene [2016].) Second, how do people create, interpret, coordinate, and manage meanings when engaged in multicommunication? (For the theory of coordinated management of meaning, see Pearce and Cronen [1980].) Third, how are multicommunication practices such as turn and topic management negotiated into agreed-upon rules, either implicitly or explicitly? (For rulesbased theories, see Berger [2005].) Fourth, how are multicommunication practices formed into interactive patterns and structures in interpersonal relationships or groups and teams? (For structuration theories, see Poole and McPhee [2005].) Fifth, message-production theories such as action assembly theory (Greene, 2016) and goals-plans-action theory (Dillard, 2014) could also provide solid ground for the study of multicommunication from the viewpoint of interaction dynamics. These interactive perspectives on communication would shed light on the behaviors and attitudes that are pertinent to competent and successful multicommunication both in the workplace and in private life.

The interaction-centered approach to multicommunication suggests (or even urges) the incorporation of various interpersonal processes into the study of multicommunication.

Processes and theories such as communication accommodation (Dragojevic, Gasiorek, & Giles, 2016), interaction adaptation (Burgoon, Stern, & Dillman, 1995), the managing of person-centeredness (Berger, 2005), and facework (Samp, 2016) could offer fruitful topics in multicommunication research. The planning and achieving of people's communication goals, whether relational or task-related, can also provide rewarding topics, based on theories related to communication plans and goals (Berger, 2016a, 2016b). Issues of dominance, status, and

interpersonal power also come into play when prioritizing and controlling multiple concurrent conversations.

Group communication—both face-to-face and technology-mediated—is demanding in terms of multicommunication. How do group members integrate multicommunicating into group practices and norms? In what ways do groups adapt the multicommunication practices and resources provided by communication technology into their tasks and goals? (For the adaptive structuration theory, see Poole and McPhee [2005].) How does multicommunicating—especially invisible or silent whispering—contribute to the reinforcement of fault lines and subgroups? (For group fault lines, see Thatcher and Patel [2012].)

Researchers have yet to shed much light on multicommunication in virtual teaming. A review by Shen, Lyytinen, and Yoo (2015) on time-related phenomena in technology-mediated teams revealed that researchers have not paid proper attention to the multiple, parallel, and intertwining activities and interactions that take place in virtual teams. As Anders (2016) has noted, authors of multicommunication studies have mostly ignored parallel conversations hosted by communication technology. Anders (2016) found that team-communication platforms afford the flexible alteration of media modality and synchronicity. He noted that one of the most important questions for future researchers should be how a balance between the benefits and drawbacks of multicommunication can be reached in teaming platforms. Research on virtual teaming should also address the actual multicommunication behaviors found on digital platforms. How are interactive team processes and tasks managed competently on platforms when all or some of the team members multicommunicate? What kinds of interaction behaviors make multicommunication on platforms competent and thus productive?

For their preferred methods in empirical multicommunication research, most scholars to date have used surveys, interviews, diaries, critical incidents, and other self-reports, as well as laboratory experiments (see Stephens, 2017). Researchers are beginning to learn quite a bit about the motivators and consequences of multicommunication, as described by employees in the workplace. To a certain extent, however, the data from self-reports provides researchers with secondary information only. If the research objective is to understand interaction dynamics in managing multicommunication in actual situations, then self-reports will not provide reliable data. Multicommunication research would thus benefit from the observation and analysis of natural communication found in actual contexts, settings, and relationships. Gimenez's (2014) "shadowing" method employs structured observations of multicommunication practices at regular intervals. Video and audio recordings, as well as saving interaction data directly on digital collaboration platforms, allow researchers to access real-life communication events for observation and analysis. Genuine, naturally occurring data gathered in natural settings with minimal intrusion by researchers would provide an unmodified picture of the reality of multicommunication (see Olbertz-Siitonen, Siitonen, & Valo, 2014). Innovative research designs with new ways of recording the authentic data of multicommunication will help to understand this complex and ever-increasing communication behavior.

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