Multicommunicating and The Future of Work

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ABSTRACT

Multicommunicating, the practice of using technology to carry on multiple near-simultaneous conversations, has been studied for almost two decades, but much of the research has focused on in-person meetings. This practice has new meaning in light of the COVID-19 Pandemic as more people are working remotely—many new to this practice—and teams are looking for ways to be more productive. This position statement paper establishes why multicommunicating is an important concept for the growing prevalence of remote work and the future of work. In addition to reviewing the relevant research, this paper answers some key questions around this practice including sites of multicommunicating, why people engage in this practice, and typical outcomes. We conclude by describing current implications that invite research to further understand how this practice could and should be studied, now and in the future.

Author Keywords

multicommunicating, virtual teams, remote work, multitasking, attention, work, meetings

1. Introduction

Teams across the globe have been moving toward remote work for the last two decades in response to companies having different project teams with members located in disparate parts of the world [12]. Yet during the COVID-19 Pandemic, essentially all knowledge workers left their offices and moved home to conduct their work remotely, something new for well over half of those employees. Now, with many more people being asked to work remotely, and the increasing prevalence of videoconferencing, it is increasingly crucial to examine how this new army of remote workers is actually accomplishing work.

One practice often observed with remote workers is called multicommunicating, defined as using technology to participate in more than one conversation simultaneously, or near simultaneously [23]. This concept grew from a host of studies conducted in the early 2000s that explored what happens when people simultaneously use many different information and communication technologies (ICTs) to communicate. Early research on multicommunicating in workplace environments either focused on a single communication tool with features that facilitated multicommunicating—like instant messenger [21,40]—or addressed how people combined multiple ICTs to accomplish communication tasks [4,30,35]. At the time, organizations were becoming more global and many turned to virtual teams to manage the collaboration needs of their globally dispersed workforce [40].

This position statement argues that the rapid global shift to virtual work and distributed teams resulting from the COVID-19 crisis warrants additional interest in and exploration of multicommunicating. We begin this

position statement by further describing multicommunicating. While much of the prior work on this practice has examined in-person meeting behaviors, we focus here on studies more relevant to pervasive remote work. Finally, we conclude by developing a set of implications and research ideas around multicommunicating that can help us explore what will be the future of work.

2. Relevant Body of Work: Defining Multicommunicating.

Reinsch and colleagues' theoretical work on multicommunicating provides a definition and propositions around this practice [23]. Key to their definitions is an understanding of the simultaneity and synchronicity of conversations that occur through technology. They carefully differentiate multi-communicating from multitasking because, they argue that conversing is more difficult than simply doing multiple tasks [23]. Multicommunicating is also different from doing activities in a sequence; scholars examining these behaviors have studied task switching, self-interruptions, and using ICTs successively [18,19,26,30].

In defining multicommunicating, the authors also propose eight propositions, that they later update in their 2019 work [21]. Three of these propositions are especially relevant in the current effort: the intensity of multicommunicating, ICT characteristics, and norms of multcommunicating.

2.1. Intensity Matters. Multicommunicating can vary in its intensity. There are five conditions that raise the intensity of multicommunicating, thus making it more difficult to accomplish successfully. First, intensity increases when there is a larger number of interactions with others. This could occur if someone is using the chat function during an online meeting and they need to respond to several different people. Next, intensity increases when the pace of the interactions is faster. For instance, multicommunicating during a video conversation can be more intense than during an email exchange, since synchronous video conversations often involve quicker responses. Third, when interactions concern a large number of topics, intensity rises. Chats on videoconferences can often switch topics several times as it takes people some time to compose related messages. Fourth, discussing cognitively complex topics increases intensity. Multiple simultaneous discussions of a multi-faceted merger are more difficult than those regarding implementing a new policy. Finally, intensity increases when the number of social roles—e.g., friend, worker, mother—is larger, and the roles are distinct. This is highly relevant when employees are asked to work from home and they have no separation between work and family. Multicommunicating is more intense as people quickly shift from employee to parent, or from supervisor to colleague.

2.2. ICT Characteristics Matter. Multicommunicating is easier when using certain ICTs. In their revised Proposition 2, Reinsch and Turner [22] drew upon the empirical work of Cameron and Webster [7] to explain that messages sent through certain media can be reviewed and delayed before responding, hidden from others, and/or can be easier to use. Furthermore, advanced expertise using specific ICTs can change an individual's perception of the intensity of their multicommunicating practices. This suggests, in part, why people learning how to use new video platforms for communicating while working remotely during the COVID-19 Pandemic likely found multicommunicating difficult.

2.3. Norms Matter. There are some social situations where norms may limit or make

multicommunicating inappropriate. This is what empirical research on multi-communicating has demonstrated, but realize that most of this research has focused on interactions in person [2,6,7,9,32,34]. When studying in-person activities, research has found that multicommunicating norms vary between specific technologies like laptops and mobile phones [9]. Furthermore, understanding organizational ICT-use norms is important because they can affect how managers evaluate their subordinate's work [9].

However, people often *think* they understand the norms, but in reality, they misread the situation. In her study of meetings in an advertising firm, Stephens [32] explains that senior managers thought multicommunicating was acceptable during their meetings, even expected, because they were always so busy. However, the vice president of the firm thought that multicommunicating was disrespectful. The teams kept violating the vice president's expectations because he never clearly articulated his view or formalized norms to guide his employees' actions.

3. Sites for Multicommunicating

3.1. Meetings
The vast majority of studies addressing multicommunicating have focused on meetings. Meetings can be defined as three or more people gathering to consider issues of concern related to how a group functions [27]. It is not surprising that so much of the multicommunicating research has been situated in a meeting context because they are a core component of organizational life [25,27]. Meetings are also a common way that teams communicate, and they occur in both face-to-face and mediated contexts.
The early work defining practices that eventually became multicommunicating (e.g.,

invisible whispering, electronic multitasking, parallel meeting participant) often involved technologies that made it easier to multicommunicate because people were not co-located, and they were regularly in meetings. For example, instant messaging (IM) was an often-studied technology tool [11,24,40], and during those studies people were not sharing screens very often during meetings. Instead, people were multicommunicating behind the scenes, so while no one *saw* this behavior, they often knew it happening [40].

Participation levels and types vary in meetings and so do people's degrees of multicommunicating. There are three types of participation related to multicommunicating: non-participation, partial participation, and full participation [8]. Some individuals feel the technological constraints of video meetings make full engagement more difficult [17]. People who are only partially attending are those who "'listen with one ear' without being fully engaged in the meeting, [multicommunicate] most often because they are multi-tasking and working on other things such as checking email during the meeting" [8, p. 24].

3.2. Intact Teams and Decision Making
While many published multicommunicating studies examined meeting contexts, there are several empirical studies that used intact teams in their research. Research on teams is especially relevant for the increasing amount of remote work experienced during COVID-19 because their findings map well onto features of videoconferencing and collaborative platforms. For instance, individual can start private chats and deactivat video so they can covertly open new screens to check email during a meeting
One of the most robust studies was conducted by Dennis and his colleagues where they explored the use of multiple ICTs, with a focus

on instant messenger (IM) [11,24]. They called the practice of using IM, along with other communication tools, invisible whispering because IM offered users a backchannel of communication that could co-exist with a main synchronous communication channel. They examined outcome variables like team member relations, effectiveness of collaborative decision making, and meeting participation.

These scholars found different ways that invisible whispering affected decision making. When people *directed the meeting, provided task support*, and *sought clarification,* their decision making was enhanced, but when they *participated in subgroup meetings* and *managed extra-meeting activities,* their decision making often suffered.

3.3. Multicommunicating scale development.

Extending this qualitative work, Stephens [31] relied on the dimensions of invisible whispering [11,24] to develop a scale to measure the different subgenres of multicommunicating. She found four of the subgenres to be unique: Understanding (a combination of *seeking clarification* and *providing task support*), Influencing (*directing the meeting*), Social Support (*providing social support*) and Parallel Meetings (*participating in subgroup meetings*). In addition, she identified a fifth factor, not originally included in Dennis and colleagues'[11,24] work, that she called *being available*, a reflection of the feeling that people wanted to be within reach of others and available to multicommunicate even during meetings. The value of including this fifth factor was further supported in Turner & Foss's theoretical work on attentional social presence [35], as well as in recent work on affordances of mobile communication technologies [32]. The notion of being always on is also highly relevant during COVID-19

and will be further discussed in Current Implications.

4. Why Do People Multicommunicate?

The literature suggests two main reasons, most relevant for remote work, that people multicommunicate: people feel pressure to be "always on," and there are legitimate and perceived benefits to multicommunicating.

People's availability and responsiveness to mediated conversations has become central to their identity as workers. People multicommunicate because there are many opportunities, and quite often other people expect responses regardless of what else they may be doing [32]. This phenomenon, known as being "always on" [3], is not always healthy for workers. In his analysis of team communication technologies, Anders' [1] found that constantly using these platforms generates expectations of team members being always on, even during vacations, and only sometimes are there organizational policies regulate their use.

Some people engage in multicommunicating because it is, at times, an efficient practice. Studies have found that multicommunicating can increase efficiency in collaborative decision making [11,41]. These studies have found their study participants needed fewer follow-up meetings because they combined their backchannel communication with their current meeting, allowing them to exchange information in real time, gather information from outside sources, and make faster decisions. While their study participants generally reported higher levels of decision-making effectiveness, Dennis et al. also mention that these practices can lead to poorer quality decisions [11]. Specifically, there can be a rush to closure, people can anchor themselves in a position and not budge, and

these practices can create excessive cognitive load.

A final consideration related to efficiency is the *perception* that people are being more productive when they are multicommunicating. Some people can feel a sense of accomplishment completing tasks like sending messages or responding to requests, and they can do that while engaged in other conversations [38]. However, others may perceive a loss of productivity when trying to use additional technologies during a meeting [14].

5. Variables that often Change Perceptions of Multicommunicating

Over the past two decades of research on multicommunicating, the most commonly studied variable that can influence multicommunicating is polychronicity, a preference for being engaged in two tasks at the same time [5]. Many scholars have studied polychronicity as an individual preference [10,33,42]. In general, studies find that people who are more polychronic also rate multicommunicating and multitasking behaviors more positively [10,33,42]. Specifically, they rate them as less rude, more communal, and they think of people engaged in these behaviors as more competent [10].

People who multicommunicate can either be engaged in behaviors that are on-task or off-task. The existing literature that has experimentally compared these behaviors has mixed findings. In studies of intact teams, multicommunicating with on-task behaviors is seen as relevant, and is therefore less rude, with the communicators viewed as more competent and more friendly [10]. However, another study whose teams were not intact failed to replicate these findings [20].

Age and gender also appear to influence perceptions of multicommunicating. Washington and colleagues found that younger professionals are more accepting of mobile phone use and women were far less accepting of mobile phone use during informal meetings [39].

There are some people who are given permission and expected to multicommunicate. One example is a crisis communicator, who is never without a phone, and when a call arrives she must take it because it could be a reporter or breaking news [32]. In addition, there are many jobs that range from front line positions, to high level executive jobs that require varying degrees of multicommunicating [32]. One important aspect of jobs requiring multicommunicating is that the majority of the communication-driven tasks are interrelated so there can be cohesiveness between the multiple tasks and conversational partners.

Finally, the different tasks teams work on can impact the frequency and perception of multicommunicating. One study of teams provides insight into these differences, that are quite relevant for remote work. It found that some teams experience heightened intensity when they have additional communication partners collaborating using a platform that makes conversations visible. Yet other groups found their multicommunicating enabled generative turn-taking where people took turns addressing one another's questions based on their availability or expertise [1]. Essentially, responsibility was distributed, thus facilitating more responsive communication and more efficient work.

6. Outcomes of Multicommunicating

As multicommunicating is widely practiced, it is not without its benefits and drawbacks. Earlier, we presented evidence that several outcomes of multicommunicating—including

efficiency, productivity, and decision-making—can be either positive or negative. Additionally, negative judgement outcomes can result when people interact with technology in ways that violate multicommunicating or cultural norms.

Perceived incivility is the most studied outcome of multicommunicating. This practice can pull people away from their conversations with others, which can lead to people interpreting their behavior as rude or unproductive. Perceptions of incivility depend on who initiated the conversation, whether the conversations being juggled produce useful outcomes, if individual performance suffers while multicommunicating, whether multicommunicating increases someone's accessibility, and the degree of transparency and awareness exhibited while multicommunicating [8]. For example, if people are hiding the fact they are multicommunicating and the other person is certain of this, it is viewed more negatively.

The two most significant predictors of incivility are the focal individual's performance and accessibility. Additionally, if people perceive multicommunicating to interfere with the quality of their interactions with a person, it can be viewed negatively. In teams, perceptions of incivility related to multicommunicating can cause conflict within teams. For instance, if multicommunicating during an online meeting leads to inattentiveness or errors, other meeting attendees may scorn the multicommunicating individual [37,40].

7. Current Implications
While researchers have made some strides in understanding the nuances of multicommunicating, there are many opportunities for future research. With the current pandemic generating

recommendations for people to work remotely, there is a growing need for research to better understand multicommunicating in this new context.

To establish some directions for this line of research, we have grouped these opportunities into four categories: exploring experience, the perceptions vs. performance outcomes, policies around multicommunicating, and the future of work.

7.1. Exploring Experience
Now is an ideal time to explore how people learn to be more competent with their multicommunicating because there are many people who are learning new online platforms and experimenting with new practices. Especially relevant to this line of research is a better understanding of how multicommunicating might play a role in the fatigue people feel after attending multiple online video meetings. Past multicommunicating research would suggest this is an intense environment [23], and recent publications have made solid arguments for why fatigue may occur [13], but as of yet, there is no empirical evidence to support these claims. Another meaningful area to research is to extend the line of work on functional attention on video and explore these differences between experienced and new remote workers [16]. As the current pandemic is forcing organizations to overwhelmingly rely on videoconferencing, these are important lines of research that can also help people new to remote work become more productive and healthy.

7.2. Perceptions vs. Performance Outcomes
There is also evidence that asking participants to report their feelings toward a person who is multicommunicating, or their perceptions of rudeness, may not truly capture their actual views of these behaviors [10]. One example of this is found in Stephens' account, mentioned

earlier in this paper, of a vice president who judged his employees harshly for multicommunicating, but never actually verbalized his disdain [32]. With the growing prevalence of online meetings, it will be important to learn if teams are discussing norms, and if those shape online multicommunicating behaviors.

7.3. Policies around Multicommunicating

For the past 15 years, companies have struggled to restrict what they see as disruptive multicommunicating and multitasking behaviors. Some companies who have viewed multicommunicating as disruptive behavior have banned laptops and mobile phones during in-person meetings [8]. But to our knowledge, no studies have explored policies established around staying focused during online meetings and activities. The working arrangements during COVID-19 could provide an ideal testbed for these policies, especially with many employees being new to remote work. While formal policies may be overkill for some organizations, others may have meeting-specific rules or have teams openly discuss how they want to handle multicommunicating and multitasking.

7.4. Future of Work

A final implication that could result from focusing on multicommunicating during online activities is that these studies could inform the future of work. Necessitated in part by pandemic-related physical distancing, the landscape of jobs and work is changing at unprecedented speed. This is enabled by advances in communication technologies, and new conceptions of work and workplaces— e.g., the rapid expansion of the number of people working from home [29]. Emerging technologies such as artificial intelligence (AI), robotic teammates, and the Internet of Things (IOT) might deepen the complexity of multicommunicating behaviors, and could function to help people be more engaged at home than at a physical work place. Specifically, these technology advancements could increase the number of conversational partners people have—e.g., chatbots, and possibly elicit confusion around humans, robots, and AI at work.

Thus far, there have been no studies, to our knowledge, that have explored these human-technology communication relationships and how multicommunicating is facilitated, or possibly even practiced, in a new environment. More research is needed to understand how employees engage in multicommunicating behaviors while interacting with AI and other human coworkers.

8. Conclusion

In this work, we focused on the concept of multicommunicating because it is highly relevant during COVID-19 as more employees work remotely. While the construct, and its precursors, have been around for twenty years, the literature is still relatively young and fragmented, and lacks a focus around online activities. Here we have built on the existing work to identify four key areas for future research. Whether studying how people new to remote work learn the norms around multicommunicating, addressing the gap in how to assess performance outcomes, exploring how policies can achieve desired behaviors, or studying multicommunicating with chatbots, the future is bright. So, join an online meeting, try to hide that you are checking your email, and respond to your child's text. Then think about the opportunities we have to study these behaviors and contribute to the future of work.

9. Acknowledgements

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