

COMMENTARY

Remote communication amid the coronavirus pandemic: Optimizing interpersonal dynamics and team performance

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As mentioned by Rudolph et al. (2021), there has been a rapid transition to remote work for many employees during the COVID-19 pandemic. This transition has also generated increased interest in virtual teamwork, as many teams are expected to continue their collaborative work virtually, perhaps for the first time. That means that many employees have had to learn and implement remote-work technologies with little notice. This large-scale shift has created a variety of critical communication challenges, which have the potential to lead to decrements in both employee and team performance. Fortunately, existing research can help address these challenges, and in the current paper, we extend Rudolph and colleagues' discussion on virtual teamwork by highlighting how COVID-19 has disrupted teamwork, briefly reviewing theory and evidence from both organizational psychology and human factors concerning team communication in a virtual context and offering evidence-based recommendations for optimizing remote communication and team performance during the coronavirus pandemic.

Understanding how COVID-19 pandemic has influenced team structures

Since the COVID-19 outbreak, many teams and groups have been restructured in a variety of different ways. For example, many medical professionals who are not working on the COVID-19 frontlines have transitioned to telemedicine and are communicating with the rest of their patients' care teams remotely, engineering teams are building and testing prototypes asynchronously, and professors have shifted to virtual lectures and lab meetings. Additionally, teams are dynamic as projects, patients, and clients often change, presenting unique challenges, particularly during the COVID-19 pandemic. That is, many teams have dissolved during COVID-19, and new ones have formed, often with some team members never having met each other face to face before. Moreover, nearly every industry has witnessed layoffs, furloughs, and other unfortunate personnel decisions as a result of the economic fallout of the pandemic (Voytko, 2020). Such rampant reductions in personnel have resulted in shifting team dynamics, as workers who were once there simply no longer are, and remaining team members may question the longevity or stability of the team. As a result, in addition to the challenges that virtual teams often face in general, it is also important to take into consideration the unique challenges that the COVID-19 pandemic presents.

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How remote work changes team communication and outcomes

Researchers have theorized about and empirically measured the effects of communication modality, specifically face-to-face interaction in comparison with various forms of computer-mediated communication (CMC), on interpersonal dynamics and performance (e.g., Cascio, 2000; Cordery & Soo, 2008; Driskell et al., 2003; Marlow et al., 2017). For example, one of the main concerns regarding the sudden shift to remote work is *technology overload* (Karr-Wisniewski & Lu, 2010). Technology overload occurs in three primary ways: information overload (i.e., a greater amount of information is presented than can be processed), communication overload (i.e., others demand excessive communication, causing work interruptions), and system feature overload (i.e., technology is unnecessarily complex; Karr-Wisniewski & Lu, 2010). Previous research has found that when using virtual interfaces, teams' communication frequency increases but efficiency decreases (compared with using face-to-face communication; DeSanctis & Monge, 2006). When adjusting to virtual communication, team members may not yet be able to distinguish between relevant and irrelevant communication. As such, there may be a greater amount of unnecessary shared information among new remote teams, resulting in cognitive overload and decreasing performance (Marlow et al., 2017).

In addition, media richness theory (Daft & Lengel, 1986; Walther, 2011) suggests that different types of CMC reduce nonverbal cues (e.g., facial expressions, eye contact, body language) to varying degrees. Fewer nonverbal cues are particularly detrimental when teams are completing complex tasks, for which richer media is better (Daft & Lengel, 1986). Richer virtual media, including video communication such as Zoom or Skype, provides more robust information by facilitating immediate feedback and more interpersonal cues (e.g., vocal inflection, gestures). At the other end of the spectrum, leaner (i.e., less rich) media includes written text communication such as email or instant messaging (Dennis & Kinney, 1998). When teams are initially adapting to remote communication and fewer nonverbal cues, there may be increased potential for *miscommunication*. For example, team members often demonstrate confirmation or denial via nonverbal gestures, such as a head nod (Kraut et al., 1982; Yngve, 1970); in virtual meetings, these gestures may be less clear, and in other forms of CMC (e.g., email), they may not be present at all. As a result, it may be more difficult to discern whether messages are received and understood, and team communication processes may be impaired (Cramton, 2001; Gibson & Cohen, 2003; Hertel et al., 2005).

In addition to potential miscommunication, new virtual teams often engage in fewer casual conversations and experience more delayed response times among team members, which can negatively affect team *trust and cohesion* (Driskell et al., 2003; Gibson & Cohen, 2003; Greenberg et al., 2007; Marlow et al., 2017). This decreased level of connectedness among virtual teams can negatively affect not only team members' work engagement but also *team cognition and collective efficacy* (Cordery & Soo, 2008; Griffith & Neale, 2001; Kanawattanachai & Yoo, 2007). Team cognition refers to shared information and knowledge structures among team members, and collective efficacy refers to a team's beliefs surrounding its capability to perform effectively. Both are strongly related to more effective *team processes and performance* (DeChurch & Mesmer-Magnus, 2010; Gully et al., 2002). As a result, it is clear that the shift to remote work can pose multiple challenges to new virtual teams; however, there are multiple strategies that team members and managers can use to improve their virtual team experiences.

Recommendations for remote communication in teams

First, it is important to *select the appropriate communication media* (e.g., video, phone, email, instant messaging) based on task type (Beauregard et al., 2019). For simple tasks and when faster responses are necessary, instant messaging (e.g., Slack, Skype chat) can reduce interruptions and thereby increase productivity, as it allows users to engage in brief but frequent interactions

(Garrett & Danziger, 2007). For complex tasks that require greater collaboration and information sharing, however, managers should encourage video-based communication instead of text-based communication, as video is a richer form of media that allows employees to feel more present, satisfied, and engaged at work (Rogelberg, 2020; Turetken *et al.*, 2011).

In addition, when sending messages to the team, both managers and team members should work to be *concise, clear, and specific* in their wording. This will help garner greater attentional focus but require minimal processing to reduce cognitive load (Human Factors and Ergonomics Society, 2020). Timelines, roles, and expectations should be clearly outlined to reduce ambiguity and miscommunication. Team managers can also improve trust and compliance in virtual teams by *maintaining a positive tone in messages and serving as an example for any behaviors they are requesting of the team* (e.g., having their video turned on during virtual meetings, limiting work communications to traditional work hours, demonstrating compassion and understanding toward team members).

Creating effective and engaging virtual meetings is challenging; however, teams can improve the quality of these interactions by implementing techniques from meeting management research. To minimize technology overload and ensure effective use of time, meeting hosts should *only send invitations to the appropriate people and clarify the roles of all meeting attendees* (i.e., introduce everyone and provide expectations around each person's responsibilities; Malhotra *et al.*, 2007). During the meeting, to set norms surrounding virtual interactions and decrease ambiguity, hosts should *use attendees' names and call on them individually* (Malhotra *et al.*, 2007). To improve team cohesion, hosts can *set aside time at the beginning of each meeting for more casual conversation* and for team members to strengthen interpersonal relationships (Cascio, 2000). Hosts can also improve collaboration by *encouraging members to silently brainstorm for several minutes and write their ideas in a working document before discussing as a larger group* (Kremer & Rogelberg, 2020). Silent, prolonged deliberation facilitates creativity and participation, encouraging more introverted individuals to engage and creating space for unique perspectives to be discussed (Kremer & Rogelberg, 2020; Stasser & Titus, 1985). *Splitting larger group meetings into smaller "breakout" sessions or polling meeting members for anonymous feedback* (using the functionality built into popular video platforms like Zoom) also encourages contributions without the high stakes of a large group setting (Kremer & Rogelberg, 2020). Last, to foster inclusion and engagement, hosts should *record the meeting or distribute meeting notes to nonessential personnel* and allow them to attend in the future if they choose (Rogelberg, 2020).

Creating a successful telework environment may also be a function of effective leadership, as managers must adapt quickly to the challenges that come with virtual teams (e.g., communication issues, decreased engagement, professional isolation; Cascio, 2000; Offstein *et al.*, 2010). Team managers should *establish high-quality, frequent communication* with their team members in addition to *offering emotional and instrumental support* (Golden *et al.*, 2008). Managers should ask for what their employees may need to help facilitate their work (e.g., equipment/technology, social support) and encourage them to ask questions and clarify any potential misunderstandings that may have come up from virtual communication. In addition, many employees are also likely dealing with shifts in their lives outside of work due to the pandemic (e.g., full-time care for other family members), so managers should *provide employees with flexibility and discretion over their telework*. For example, employees should be able to schedule their work hours around the needs of their children. This increased autonomy enables employees to respond to job and life demands more effectively while continuing to meet work-related goals (Harpaz, 2002).

Conclusion

Given the sudden shift of many employees to remote work that has resulted from the COVID-19 outbreak, the current crisis serves as a novel context in which to study and improve virtual team

processes. Using primarily CMC can be a challenge; however, prior research in organizational psychology and human factors can inform remote communication best practices and guide teams through these rapid adjustments. By creating greater awareness of how to leverage remote communication effectively, decrease technology overload, and improve trust and cohesion, organizational leaders can optimize interpersonal dynamics and ultimately improve team performance during these challenging times.

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