

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

ELSEVIER

Contents lists available at ScienceDirect

## Computers in Human Behavior

journal homepage: www.elsevier.com/locate/comphumbeh





# Employees' perceptions of relational communication in full-time remote work in the public sector

Rasa Jämsen<sup>a,\*</sup>, Anu Sivunen<sup>b</sup>, Kirsimarja Blomqvist<sup>c</sup>

- a University of Jyväskylä, Department of Language and Communication Studies, B.O.Box 35, FI-40014, University of Jyväskylä, Finland
- <sup>b</sup> University of Jyväskylä, Department of Language and Communication Studies, Finland
- <sup>c</sup> LUT University School of Business and Management, Finland

## ARTICLE INFO

Keywords:
COVID-19
Communication technology
Relational communication
Remote work
Technology-mediated communication
Work relationships

#### ABSTRACT

The global COVID-19 pandemic has led to numerous changes in society. This paper aims to understand how the abrupt transfer to remote work is reflected in employees' perceptions of relational communication at their work. Our research question is as follows: What kinds of perceptions and profiles regarding relational communication can be found among full-time remote workers? A sample of 1, 091 Finnish public sector employees with virtually no previous experience in remote work completed an open-ended survey during the first wave of the pandemic. The findings present 17 aspects of relational communication that the respondents mentioned as having changed because of moving to remote work. These aspects divide the respondents into three groups: those who found remote work as a challenge for relational communication, those who found it as an opportunity for relational communication, and those whose perceptions were ambivalent. The respondents' individual characteristics are presented alongside their perceptions. The results reflect the diversity of relational communication in organizations, highlighting its importance to well-being and coping. The practical implications of the study reflect the typical time and place of relational communication in traditional organizing, offering insights into how to develop a culture that enables relational communication in remotely working organizations.

## 1. Introduction

Remote work and its consequences have been under study for several decades. Questions about remote workers' perceived isolation (Cooper & Kurland, 2002; Golden et al., 2008), satisfaction (Fonner & Roloff, 2010), and identification with their organization (Wiesenfeld et al., 2001) have been some of the key interests of those scholars studying teleworkers and remote work policies. In the spring of 2020, remote work became even more prevalent as the COVID-19 pandemic erupted, causing a global emergency and creating a need for large-scale restrictions in societies around the world. In March 2020, as in many other countries, the Finnish government recommended that all public sector employers switch to remote work to prevent the spread of COVID-19. Several private and third-sector employers followed the same principle. During the first wave of the pandemic, over a million Finnish employees transferred to remote work (Yle News, April 5, 2020).

Prior research has been based on the premise that remote work is the choice of the employee being negotiated with the employer. Typically, remote work has also been studied as a part of regular office work or in

comparison with work conducted on the employer's premises. In Gajendran and Harrison's (2007) literature review, remote work was classified as high in intensity if the employee worked two and a half days a week remotely. Thus, a situation in which the entire organization may work remotely most of the time, if not full time, is exceptional, creating a new setting to study remote workers' experiences. Recent research on remote work in the context of COVID-19 has shown that remote work during a time of crisis has increased technostress for some employees, especially for those not accustomed to remote working (Oksanen et al., 2021). Further, Hodder (2020, p. 265) has argued that the COVID-19 situation created a "surreal" work environment with pressure to stay connected while also staying socially distanced, which has led to freedom of structure and order but to an increase of work intensity and pressures.

With the abrupt change to remote work bringing several new practices to organizations, it is important to understand what consequences remote work and the use of communication technologies can have for work relationships on relational communication. Positive experiences in work relationships have been found to increase well-being (e.g., Sias,

E-mail address: rasa.p.jamsen@jyu.fi (R. Jämsen).

<sup>\*</sup> Corresponding author.

2005) and organizational commitment (e.g., Fay & Kline, 2011) while decreasing turnover intentions (e.g., Regts & Molleman, 2013). Meeting coworkers face to face, even occasionally, has been found to result in positive effects, such as job satisfaction (Nurmi & Hinds, 2020). With the COVID-19 pandemic bringing restrictions to face-to-face meetings in organizations and causing a swift transition to remote work, the current study focuses on the changes in relational communication – specifically in public sector organizations – because of this transition. We focus on public sector workers because it has been suggested that more formalized and bureaucratic systems at work reduce the importance of informal communication (Cooper & Kurland, 2002) and because the governance recommendations on the transition to remote work were especially binding for the public sector.

Furthermore, by examining the exceptional context of full-time remote work because of a pandemic, we extend our current understanding of the connection between remote work and relational communication in a situation where even occasional face-to-face meetings between coworkers are not possible. We unpack the multidimensionality of relational communication and what it means to employees in the context of full remote work. Finally, our study uncovers which aspects of work relationships are highlighted when the opportunity to work face-to-face or side by side with colleagues is taken away.

## 2. Relational communication in organizations

Work relationships are an important part of employees' work and well-being and are meaningful for entire organizations. Positive work relationship experiences have been found to increase well-being and coping at work (Sias, 2005; Alegre et al., 2016), as well as organizational commitment (Fay & Kline, 2011). Peer relationships at work have also been found to decrease turnover intentions (Nurmi & Hinds, 2020; Sias, 2009, p. 76; Regts & Molleman, 2013) and have a positive effect on task performance through, for example, humor (Vuorela, 2005), trust (Altschuller & Benbunan-Fich, 2010), and friendships (Jehn & Shah, 1997; Sias, 2009).

On the contrary, the lack of possibilities for forming work relationships has been found to lead to feelings of isolation and decrease well-being and employee satisfaction (e.g., Cooper & Kurland, 2002; Hislop et al., 2015). The benefits of work relationships are particularly challenging to achieve if the organization – or even just part of it – works remotely (Cooper & Kurland, 2002; Gajendran & Harrison, 2007). Thus, because the COVID-19 pandemic caused a large-scale, unpredicted shift to working remotely, it may also have posed challenges to developing work relationships and benefiting from them. Building new relationships may be more challenging in remote work, and even existing relationships may face changes and new types of challenges.

Like all relationships, work relationships are created and maintained through communication. In the current paper, we use the concept of relational communication to describe the communication at work that creates relationships, maintains them, or expresses or even causes a change in them. Scholars have introduced multiple aspects that can be understood as the determinants of relational communication. Walther and Bunz define relational communication as "reciprocal processes of how partners regard one another and how they express that regard," (2005, p. 830) noting that it occurs, for example, in the expressions of affection, cohesion, and level of formality. Similarly, Burgoon and Hale state that relational communication occurs in several dimensions, along which "partners interpret and define their interpersonal relationships" (1984, p. 194). Solomon et al. (2002, p. 137) suggest that the most determining dimensions of relational evaluations are between dominance and submission and affiliation and disaffiliation; the interactions between parties is framed through either one of them.

In the present study, relational communication is understood as a phenomenon that encompasses various forms of communication that are related to relationship building and maintenance. Relational communication can be relationship centered and merely fulfill relationship development functions, but it can also be work centered and focused on task-oriented functions because organizational peer relationships also fulfill task functions, such as mentoring and information sharing (Sias, 2009). Both positive and negative communication processes are part of relational communication because they both have a role in defining the relationship between the concerned parties. Thus, the concept of relational communication can be used to describe, for example, communication expressing support, encouragement, and friendship, but also negative issues, such as conflicts (e.g., Hood et al., 2016) or bullying (e.g., Forssell, 2016). A broad understanding of relational communication makes it possible to look at the manifold experiences related to relational communication at work in the exceptional context of the COVID-19 pandemic.

Research on relational communication in work settings has been criticized for being limited and lacking because the concept of relational communication has been mostly used to study more intimate relationships, such as marriage, dating, and communication between a parent and child (Mikkelson et al., 2019). However, the research on relational communication at work has focused on issues such as the identity and well-being of employees. For example, social support as a form of relational communication has been found to be important for employees' professional identity and professional learning (Mikkola et al., 2018) and for managing job-related stress or even burnout because supportive relationships help solve work-related problems and discussions with peers can mitigate the effects of stressful work (Babin et al., 2012). Conversely, coworker incivility has been found to cause emotional exhaustion and reduce job satisfaction (Hur et al., 2015).

#### 3. The role of remote work and remote workers before COVID-19

Remote work is a phenomenon that has been of interest in research ever since globalization and digitalization have made it a possible way of working. Studies have defined remote work, along with the concepts of telework and telecommuting, in multiple ways, but certain key factors are repeated in numerous studies. Communication technology and its use at work play a key role in working remotely, and in most cases, the definition of remote work includes a reference to the use of technology for conducting work (see, e.g., Gajendran & Harrison, 2007; Fay & Kline, 2011; Caillier, 2012). Similarly, working from elsewhere rather than from an employer-provided office such as from home, a satellite office, or customer's premises (e.g., Gajendran & Harrison, 2007; Leonardi et al., 2010) full time, part time, or on a rare occasion is part of the definition of remote work. In the present study, we use the concept of remote work to illustrate a form of work that employees perform outside the physical premises of the organization by utilizing communication technology. In the context of the present paper, the exceptional pandemic situation with recommendations for avoiding physical contact suggests that remote work takes place full time on employees' personal premises, most likely at their homes.

Prior research has discovered several special challenges employees face when remote work is considered unconventional in the organization. Cristea and Leonardi (2019) find that employees who work outside the organizations' headquarters felt pressure to put a lot more effort into being noticed as hardworking, competent employees. This made remote workers compromise their personal lives but often did not result in getting noticed at headquarters. Remote workers have also been found to suffer from professional and social isolation, which surfaces as losing the opportunities for informal learning and networking (Cooper & Kurland, 2002) and as weaker job performance (Golden et al., 2008). Professional isolation has already been identified as a challenge regarding how COVID-19 has influenced work because it has been found to have a strong and substantial negative impact on adjustment to remote work in the pandemic situation (Carillo et al., 2021) and to increase psychological distress (VanZoonen & Sivunen, 2022). Remote workers have also been found to recede socially from office-based workers over time and to be reluctant or unable to form relationships with organizational members they have not met face to face (Collins et al., 2016). Specifically, in COVID-19-influenced work, teams have been found to emphasize the importance of relationship-centered interactions in their successful adjustment to virtual work (Whillans et al., 2021).

Prior studies on remote work adjustment, as well as findings of isolation experienced by remote workers, reflect the understanding of remote work being an alternative and unconventional way of work, which has also been shown in statistics before the pandemic (e.g., Eurostat, 2020). Thus, it is important to understand how the large-scale transition to remote work caused by COVID-19, as well as the growing popularity of hybrid work policies in organizations, may affect the way in which remote work and remote work relationships are perceived in organizations. Because building and maintaining meaningful work relationships can be a challenge in remote work (see e.g., Gajendran & Harrison, 2007; Cooper & Kurland, 2002; Hislop et al., 2015), we aim to study the relational aspects that are closely tied with experiences of working remotely. We seek to unpack the multidimensionality of relational communication in work settings and provide insights into how it manifests in organizations that are transferred into working remotely. Alongside focusing directly on the perceptions employees have of the different aspects of relational communication at remote work, we look for the explanatory factors that may have played a role in the different perceptions. Drawing from prior research in adjusting to remote work (Raghuram et al., 2001; Carillo et al., 2021), we aim to find patterns in which experiences in relational communication in remote work, together with individual characteristics, further predict both individual suitability and organizational readiness for working remotely. Based on this, we enter the current study with the following question:

What kinds of perceptions and profiles regarding relational communication can be found among full-time remote workers?

By finding an answer to this question, we seek to understand how full-time remote work can shape the attitudes and practices related to building and maintaining relationships through relational communication with and between remote workers.

#### 4. Methods

## 4.1. Sample and procedure

The present study is part of a larger research project on the transfer to remote work in Finland because of the COVID-19 pandemic. As a part of the research project, an online, open-ended survey was published; the survey was addressed primarily to public sector employees in Finland. Because open-ended questionnaires provide information from the respondents' own point of view, spontaneous opinions, and prevailing attitudes (Pietsch & Lessmann, 2018; Roberts et al., 2014), this type of online questionnaire was deemed the most appropriate method to gain insights on employees' experiences on a large scale at the beginning of the pandemic. The qualitative approach provides the possibility to study topical issues from people's personal, authentic points of view (see, e.g., Tracy, 2013), which is important in studying such an exceptional context as the COVID-19 pandemic. The call to participate in the survey, as well as the online survey address, was distributed in a press release published by collaborating universities and on social media in April 2020. The research project also received help from several participating governmental organizations and work labor unions, which distributed the call for responses and survey link in their email lists.

All respondents were asked to read the consent form and confirm their voluntary participation before starting the survey. There was a total of 1,205 respondents, from which only full-time public sector employees were selected for the study because of their clearly emphasized representation. Thus, the final number of respondents was 1,091.

Overall, the survey consisted of seven open-ended questions, in

addition to 13 background questions, and was answered anonymously. The seven questions were as follows:

- 1. What kinds of thoughts and feelings do you have related to the current work situation caused by the COVID-19 pandemic?
- 2. Please describe the nature and requirements of your work. What has changed the most in your work in the current situation?
- 3. What has been especially challenging because of the COVID-19 pandemic?
- 4. How do you feel about interaction and communication in the COVID-19 pandemic situation?
- 5. Has your opportunity to follow and participate in your organization's operations changed because of the COVID-19 pandemic? How so?
- 6. On what work issues would you need support or training in the COVID-19 pandemic situation?
- 7. What kinds of tips for remote work would you give to others in your organization?

Our sample included the employees of government services or state enterprises, municipalities or associations of municipalities, and semigovernmental organizations. The respondents' ages ranged from 20 to 66 years, and the mean age was 46 years. The tenure of the respondents varied from less than a year to 45 years, and the average tenure with their current employer was 11 years. Most (75%) of the respondents identified themselves as female, whereas 21.5% identified themselves as male. One respondent identified their gender as other, and 3.5% of the respondents did not report their gender. The majority (61%) of the respondents worked in organizations with more than 250 employees, whereas 32% worked in organizations with less than 250 employees, and 7% of the respondents reported that they did not know the number of employees in their organization. The majority (68%) were workers with no leadership position or supervising responsibilities. Most (91%) of the respondents had worked remotely no more than two days a week before COVID-19. Thus, for most of the respondents, remote work as the main form of working was new, and the change in their daily lives was significant after the COVID-19 pandemic. Table 1 provides a summary of the respondents' background information.

## 4.2. Coding and data analysis

The data were analyzed using a qualitative, thematic analysis procedure (Braun & Clarke, 2006). The first inspection of the data showed that many of the respondents mentioned relational communication in their responses, even though they were not precisely asked about it. Thus, the approach to analysis was inductive and data driven. The first author read and reread all the responses to become familiarized with the data, highlighting all the responses dealing with relational communication. These responses were identified from the whole dataset by recognizing words, such as "social," "work community," and "togetherness." The responses left out from the analyzed data were related to things such as changes in ergonomics or the absence of commuting in remote work.

After the first round of analysis, the reduced dataset was systematically coded to identify patterns relevant to the research topic. The unit of analysis was a sentence or set of sentences belonging to the same topic. If including several sentences was meaningful for understanding the context of the extract, they were treated as one unit of analysis (Croucher & Cronn-Mills, 2014, p. 211). The same response, as well as the same unit, could be included in several categories in situations where the respondent described several relevant topics in one response or sentence.

Next, the codes were collated into aspects of relational communication, which were then reviewed and defined to their final form by going back to the original data set and to the primary codes to ensure that the final themes represented the original meaning of the data (Braun & Clarke, 2006).

#### 5. Findings

To understand the perceptions of relational communication in remote work, we look at the findings in three sections. First, we present the different aspects of relational communication experienced by the respondents. Next, we look at how these perceptions differ from each other by presenting three respondent profiles with quotations. Finally, we look at the respondents' individual characteristics related to the different perceptions.

## 5.1. Relational communication aspects in remote work

The respondents mentioned 17 different aspects of relational communication in their responses. Some aspects represented a certain type of relational communication (e.g., support, humor), some represented the respondents' feelings or attitudes regarding relational communication (e.g., longing for coworkers), and some represented perceptions related to time, place, and channel of relational communication (e.g., mentions about a threshold to contact, descriptions on the lack of shared breaks). From all 17 aspects, seven appeared as pairs of counterparts (e.g., stronger vs. weaker sense of community; increase vs. decrease in social support from a supervisor). Ten of these aspects represented a challenge for relational communication in remote work, and seven represented an opportunity for it. Overall, the aspects of relational communication were mentioned 956 times in the responses. Table 2 provides an overview of all the identified relational communication aspects according to the number of mentions.

As Table 2 illustrates, most mentions of relational communication were related to the perception of remote work as a challenge to relational communication. Here, 86% of all aspects mentioned described the challenges transitioning to remote work posed to relational communication. However, 14% of the mentions were related to the perception that working remotely was an opportunity for relational communication. To deepen our understanding of these different perceptions, we next present the perceptions according to the respondent profiles.

## 5.2. Perceptions of relational communication in remote work

Overall, 606 respondents mentioned relational communication aspects in at least one of their responses, representing about 56% of all respondents. This means that some of the respondents mentioned multiple aspects, and some survey respondents did not mention relational communication in their responses at all. We found that the respondents fell into three categories based on their perceptions of relational communication in remote work. The first category consisted of those respondents who found remote work to be only a challenge to relational communication. Similarly, the second category was formed by those respondents for whom remote work unequivocally appeared to be an opportunity for relational communication. Finally, there were also some respondents who found remote work to be both a challenge and opportunity for relational communication. These respondents formed the third category of ambivalent respondents. Table 3 presents how the respondents fall into these three categories.

Next, we present the responses of the three respondent groups in more detail. All quotes presented in this section are translated from Finnish to English, and the respondents are denoted by numbers.

## 5.2.1. Remote work as a challenge for relational communication

Most of the respondents who described relational communication in their responses perceived that the transition to remote work challenged the possibilities and benefits of relational communication. Overall, 487 respondents found that working remotely decreased the amount of relational communication, removed the natural moments for it, or made it more difficult to contact coworkers or receive support from them. The

ways in which working remotely challenged relational communication fell into the 10 categories presented in Table 2. Most of these respondents (N = 289) mentioned one of the relational communication aspects in their responses, and as many as 198 respondents had noticed a negative development in multiple aspects.

The respondents described how the absence of social lunch and coffee breaks, as well as spontaneous encounters in the hallways, led to a drop in the amount of relational communication, decreased the amount of humor and support, and raised the threshold to contact others. All of these changes led the respondents to experience longing for coworkers, loneliness, isolation, and a weaker sense of community with their organization.

In many responses, the challenge between relational communication and remote work was related to the experience that the ways and places that were typical for relational communication were lost when work was done remotely and via technology. The lack of joint breaks and spontaneous encounters were often mentioned alongside other challenges. The following example shows how the absence of a shared physical place was reflected in the challenges of relational communication:

R964: Discussions focus almost exclusively on work; the usual coffee table conversation is gone. This has been important for coping at work. Breaks with coworkers have helped me recover from work during the day.

The respondents also compared face-to-face communication and technology-mediated communication regarding their relational aspects. Some of the respondents found that communication did not fulfill relational purposes when it happened via technology:

R877: I find myself missing the daily company of coworkers. Although we have conversations every day with the same people via instant messaging, it is not the same as meeting people face to face in the office.

The change from working at the office to working from home also challenged communication between different teams and units. The respondents associated this change in location with a change in the sense of community in remote work:

R878: In my local work community, where we normally work in the same open office, communication and interaction have decreased and become more intermittent. I have noticed that I keep in touch only with those few coworkers whose tasks are closely related to mine. [ ...] There has been a tendency in the office to share personal things as well, and now, this social aspect has decreased.

In many ways, the challenges in remote work for the respondents were first and foremost related to relational communication. Typically, the respondents noted that remote work was good in terms of task performance, but the challenges in relational communication turned the experience negative:

R761: My personal situation allows me to focus on work because there are no distractions at home, as many colleagues have. I can be happy and grateful for that. However, the social contacts that come from work are limited, and because I am living alone, I often feel lonely and anxious.

R579: In work matters, communication is sufficient, but informal social interaction is missing. It has been surprisingly important for coping at work. Humor has relieved stress, and now, its absence is prominent.

Communication technology played a significant role in the responses, in which the respondents described the amount and possibilities for support from the work community and supervisors. Perceptions of a decrease in social support in remote work were explained by a reluctance to use communication technology for asking for support or by

describing that the new and uncertain situation led to a greater need for support, which was not available. The following example illustrates how one employee felt about the need for support and difficulty of getting it in remote work:

R924: When you are at the very beginning of your career and need the support and advice of the work community in many situations, remote work poses a lot of challenges. You have to put up with a lot more uncertainty, ambiguity, feelings of isolation, and anxiety than you would normally have when starting a new job.

Some of the respondents felt that their supervisors were not as supportive as they should be in such a new and uncertain situation:

R1051: Within my team, we meet daily via Skype. Instead, when it comes to my supervisor, it feels like even the slightest contact they previously had has been left out. Interaction and communication are malfunctioning. I understand that this has been challenging for supervisors and administration as well. But right now, they should be taking care of that: "No one is left behind and the ship is kept on course."

The role of communication technology was also shown in the respondents mentioning conflicts in remote work. Challenges in communication were estimated to have increased because the work community did not know how to use communication technology. Another reason for conflicts was that virtual coffee breaks did not offer the same choice of preferred communication partners as office spaces do, but everyone has to participate on the same online platform. The following example illustrates the conflicts that surfaced in remote work:

R667: The current situation has highlighted the communication problems in our work community. [...] In these [virtual] coffees, those who have been the loudest in the past have taken up more space for themselves, with others remaining mainly in the background. In Skype coffees, you cannot form your own clique with people you prefer to talk to, but you must listen to the nonsense of roaring colleagues.

The respondents who found remote work to be a challenge for relational communication also reflected on their feelings about working remotely and not meeting face to face with their coworkers. Many described that with the transition to remote work reducing the amount of relational communication in general, it also led to feelings of loneliness and isolation. The respondents also expressed feelings of being outsiders and forgotten in the work community. Employees described these feelings in very strong terms, using expressions such as "distressing," "terrible," "horrible," and "mentally burdening." The following example illustrates how strong feelings the extraordinary transition to remote work evoked in some of the respondents:

R203: [The situation has evoked] anxiety. I am isolated from all the others. I want to work together by discussing and meeting people. This is a horrible, horrible time.

The importance of the work community was particularly noticeable in those responses where the expression of loneliness included a mention that the respondent was living alone. The work community and its relational communication provide important relationships and fulfill the important needs of many. As one respondent (*R949*) noted, "For some, work community contacts are an enormous part of normal life contacts."

## 5.2.2. Remote work as an opportunity for relational communication

Overall, 76 respondents described their experiences of relational communication in remote work in a way that highlighted their satisfaction regarding the new remote working mode. These respondents found that working remotely increased the amount of relational communication, made it easier to implement relational communication into daily work, or strengthened the sense of community in their

organization. The possibilities fell into the seven categories presented in Table 2. In all, 67 of the respondents mentioned one of the relational communication aspects in their responses, and 11 of them mentioned positive changes in multiple aspects. The respondents described how working remotely increased the amount of humor and support received from their coworkers and supervisors, lowering the threshold required to contact members of the organization. Some respondents perceived the sense of community as being stronger in remote work compared with the situation in offices. For some, remote work provided an opportunity to control the amount of relational communication better than in the office, leading to a decrease in conflicts and increase in the well-being of some of the respondents.

Most of the positive experiences with relational communication in remote work were related to the possibilities offered by communication technology. The respondents described how social support manifested in technology-mediated meetings and how organizations started using technologies, such as instant messaging applications, to express humor and build a sense of community:

R807: In my opinion, sharing information is at least as effective [in remote work] as it was before. When we have daily meetings, for example, for half an hour, we share content issues but also check that the group is mentally doing well.

R611: I have been longing for more social interaction in my organization, and before [the start of remote working], we had WhatsApp groups within units, with no possibility for people joining in from other units. Now, we are joking among the whole department, and no one is left out. I hope this way of communicating will continue in the future

The respondents also described how organizations had adopted taskrelated software for relational communication:

R223: Work-related information moves very well via email and intranet. Communication on the intranet is also considerably more positive than before, so something good has emerged from this situation. Coworkers across the country share their positive updates and tips rather than complain about trivial things.

For some, the opportunities offered by technologies lowered the threshold to contact coworkers because it seemed easier and quicker to communicate via technology:

R889: I feel like it is easier for me to be socially active via phone, Teams, or with the tools of virtual interaction in general. For example, I rarely participated in coffee breaks in the office, and even if I did, I usually did not speak very much. Now, when team coffee breaks are conducted with Teams, I have participated every time and also talked there – even on my own initiative.

Communication technology also offered more equal opportunities for communication for everyone compared with the previous situation, in which only some members of the organization were working remotely. The following example represents the view of an employee who had been working remotely before the pandemic:

R601: I find that now, when everyone else is also working remotely, I feel more like an integral part of my work community than I used to be when most of the others were at the workplace and only I was working remotely. We use Signal, which allows you to quickly ask for advice in case of a problem. We also have "Friday coffees" together, where we open a Skype connection and chat about anything.

A couple of the respondents who found remote work to be an opportunity for relational communication also expressed satisfaction regarding the fact that the amount of relational communication had decreased as organizations started working remotely. In these cases, remote work was actually perceived as an opportunity to control the

amount of relational communication. Many of these individuals found relational communication burdening or described themselves as introverts who were happy to work alone:

R687: I like to work independently, and because an introvert I find (excessive) interaction burdening. In the office, much of my energy goes to "chitchat," which is completely useless for work. I believe some people get energy from that sort of interaction, but I believe I am not the only one who is merely burdened.

Similarly, those respondents who mentioned a decrease in conflicts seemed to benefit from the fact that, for example, the "cliques" of the workplace had unraveled in remote work. The following example shows how the absence of conflicts in remote work was described:

R66: In addition, there have been some nasty incidents in the workplace over the last few years where one person has behaved inappropriately, first toward my coworker and then toward me. These situations have now been almost completely ruled out, with the exception of one individual case, so remote work has also been a positive thing for my mental coping.

As the examples indicate, communication technology plays a significant role in making remote work an opportunity for relational communication. Technology has enabled new channels for relational communication and made it easier and quicker. The amount of communication was easier for some respondents to control. Because most worked remotely, relational communication also became more equal when it happened via communication technology.

#### 5.2.3. Ambivalent experiences

Relational communication is a multidimensional phenomenon, as our data-driven analysis shows. Although most of the respondents expressed solely positive or negative perceptions of relational communication in remote work, some observed both opportunities and challenges related to it. These respondents described their contradictory thoughts on remote work; on the one hand, they found it an opportunity, yet on the other hand, they saw it as a challenge for relational communication. Altogether, 43 respondents described their experiences in an ambivalent way. Every aspect of relational communication (presented in Table 2) was mentioned in at least one of the ambivalent responses.

For several of the respondents, relational communication had actually increased in amount but become more time-consuming or difficult to achieve after the transition to remote work. The following example illustrates how a respondent found the sense of community increasing in remote work but at the same time found the lack of shared breaks and spontaneous encounters as a barrier to relational communication:

R99: This is a good collegial experience. The spirit of the organization seems to be closer and more relaxed than in the so-called normal times. We are helping friends out and supporting each other's competences. The channels to communicate have narrowed down now when casual encounters are missing. [...] In a community of experts, it is usually possible to get feedback and boost one's ideas and actions constantly; one can ask for advice casually and hear news in the coffee room. Now, it is up to one's own initiative to seek information and contacts; spontaneous interaction hardly exists, and that is a clear shortcoming.

Ambivalence in their experiences also appeared in the responses; here, one respondent described how working remotely changed relational communication in different ways depending on the person. For some, transition to remote work increased the amount of support from coworkers but decreased the support received from supervisors or vice versa:

R294: You have to put a lot more effort into communication and the flow of information between coworkers because all the quick conversations in the hallways have been left out. There is a higher threshold to contact a coworker for advice on smaller things than it would be to ask the same thing in the office. [...] Also, all kinds of social chatter and shared lunches are gone, and I miss them. [...] My supervisor's communication has been successful. He has specified that you can call or send a message now, even at a low threshold.

R806: [...] Our team has been on board with an incredible spirit of helping and supporting. There has been a will to work for the customers' best in every way. [...] Management disappeared somewhere out of reach; they only communicated in meetings with a lot of people.

For some, the ambivalence arose from the difference between coworkers' personalities, which made these respondents perceive an increase in conflicts with some coworkers, but also an increase in support and sense of community with others:

R58: I can see that some people are really trying, which is great. Instead, when it comes to awkward personalities, their fooling around is even more apparent than before, and tolerating that in video calls often requires a lot of patience. [...] But with some, we have clearly got closer because we regularly have long calls in the absence of live encounters. We also talk about everything other than work. That has been nice.

As these results show, relational communication in remote work can be experienced differently among different people. The perception may also differ between the various aspects of relational communication, which makes the experience ambivalent.

#### 5.3. Perceptions in light of individual characteristics

In addition to the perceptions of relational communication in remote work, we looked at the respondents' individual characteristics to see how they differed between different perceptions. Analysis of individual characteristics shows that regardless of the respondents' characteristics, a significant majority found remote work to be a challenge for relational communication. However, almost all the characteristics were represented in each respondent group; therefore, we cannot say that a particular characteristic would make the perception of remote work negative. When comparing the characteristics of the different respondent groups to all the respondents, we can see that in all respondent groups the emphasis was on female respondents with no children in the same household, working in an organization with 250-999 employees, holding no formal leadership position, and having only little (one day or less) remote work experience prior to the pandemic, as it was for the whole sample. This proves the robustness of our analysis in the sense that no individual characteristics differentiated the respondents in terms of the importance of relational communication and how it manifested in their perceptions of remote work. Table 4 illustrates the overview of each respondent group when put together.

Our findings indicate that an abrupt transition to remote work causes changes in relational communication in organizations. Multiple aspects of relational communication changed as the employees shifted from shared office spaces to working through technology. This was reflected in employees' perceptions, which showed how some people found remote work to be a challenge for relational communication, whereas some people found it to be an opportunity. For some, the experience was ambivalent. Different perceptions could not be explained by the respondents' backgrounds or individual characteristics because all perception profiles followed similar trends in background information.

#### 6. Discussion

#### 6.1. Theoretical contributions

The aim was to understand how the abrupt transition to remote work during the COVID-19 pandemic changed relational communication in organizations. We know from both prior research and international statistics (Eurostat, 2020) that remote work has been seen as a secondary form of working compared with work on organizations' physical premises. This has created challenges for remote workers, such as perceptions of professional isolation and difficulties in participating in conversations and relationship building. Thus, our study contributes to the literature on remote work by showing how a large-scale transition to remote work caused by the pandemic has changed the ways in which remote work is perceived. We chose to look at this phenomenon through the lens of relational communication because it has often been found to be a key factor related to the challenges of working remotely (see e.g., Cooper & Kurland, 2002; Gajendran & Harrison, 2007; Hislop et al., 2015). The research question we posed aimed to understand the perceptions and profiles regarding relational communication that can be found among full-time remote workers. We answered this by looking at the different aspects and perceptions of relational communication in remote work, as well as the respondent's profiles behind these perceptions. Our framework on relational communication seeks to inspire research to move toward a more comprehensive and holistic view of relational communication and to see it as an important factor in remote work experiences. The current study demonstrates that relational communication is an important concept unifying fragmented research initiatives on this topic.

Our results show that most employees experienced remote work as a challenge for relational communication, which is consistent with previous research. Cooper and Kurland (2002) find that remote workers feel professionally isolated from their coworkers and lose the possibilities for organizational learning. Hislop et al. (2015), Golden et al. (2008), and Carillo et al. (2021) all report similar findings. Similarly, our respondents reported feeling isolated and lonely in remote work, experiencing a lack of opportunities to benefit from others' knowledge and support in organizations.

However, our results also show that some employees perceived remote work as an opportunity for relational communication. This is both interesting and important because prior research has not explicitly provided similar findings. Some of our respondents expressed that prior to the pandemic, they felt burdened over the amount of interactions at the office; thus, a remote work situation made it possible for them to manage the amount of communication. This is in line with Fonner and Roloff's (2010) finding about remote work reducing the stress caused by interruptions and may also be connected to creating stronger feelings of autonomy in employees (Hislop et al., 2015).

Nevertheless, most of the positive experiences about relational communication in remote work were related to the experience that the transition to remote work actually increased the amount of relational communication. For employees who had worked remotely before the pandemic, the situation brought more equality in the sense of increased communication possibilities. These employees described how they felt like they were a more integral part of their work community now that others did not meet at the office without them. Communication technology played a significant role in making remote work an opportunity, providing new channels and methods for conducting relational communication in organizations.

Our analysis has shown that none of the individual characteristics we looked at predicted a particular take on relational communication in remote work. At the same time, almost all the characteristics were represented in each respondent group. Therefore, we argue that in pandemic-influenced remote work where employees cannot choose to work in offices, individual characteristics do not play a significant role in adjusting to remote work in terms of relational communication.

By analyzing the changes our respondents observed in their relational communication at work, we can also interpret the typical time and place of relational communication in organizations. The respondents who found relational communication challenging in remote work described how the lack of shared breaks after meetings and spontaneous encounters in the hallways made them aware of the existence and role of relational communication at work. We argue this indicates that shared coffee and lunch breaks, as well as unplanned or serendipitous encounters at different times of the workday, are – or at least used to be – crucial for relational communication and the development of work relationships. This finding calls for further research on the temporal aspects of remote work and timing of relational (and task-related) communication in organizations to understand their role in hybrid work.

Altogether, our findings confirm the importance of relational communication at work. This was also verified by the fact that none of the questions in our questionnaire literally asked about relational communication. Still, the experiences related to relational communication were very noticeable in the data and, thus, important for the respondents because they mentioned these phenomena without being asked to do so. The fact that when asked, for example, about the feelings evoked by the situation, the respondents described their perceptions of relational communication shows the importance of relational communication and noticeable changes during the transition to remote work. Our research has shown multiple different aspects through which employees in remote work experience, structure, and define relational communication. However, because of the inductive approach of our study, we cannot weigh the importance of specific aspects. We suggest that future research build on our findings to measure how the different aspects of relational communication are perceived in relation to each other, here by developing validated measures regarding relational communication and its importance in remote work.

## 6.2. Practical implications and suggestions

Our findings provide practical implications and suggestions for organizations that have recently shifted to remote work or are planning to do so. As organizations prepare for post-COVID-19 policies that will address remote and hybrid work, it is important to understand how different ways of working are linked to relational communication. Our findings highlight the importance of relational communication and, as such, call for strategic designing of organizational communication practices and resources to the implementation and maintenance of relational communication at work. We suggest that organizations consider how to enable communication between employees in remote work as widely as in physical premises because our results show that the lack of shared physical space was associated with challenges in relational communication. This means that in remote work, communication possibilities should be provided not only in task-related meetings, but also in encounters comparable to joint lunch and coffee breaks and spontaneous meetings in hallways. Different communication technology applications already provide possibilities for dividing the participants of the meeting into smaller breakout rooms; indeed, there are applications precisely designed for the purpose of enabling small-group conversations (e.g., Kumospace.com; Wonder. me; MeetingRoom.io). These technologies provide the possibility for informal encounters and even enable multiple conversations in the same virtual space, which can remove the challenge of one joint virtual coffee break turning into a monologue.

Although communication technology provides many opportunities for organizing informal and spontaneous encounters, the change in relational communication practices requires actions and timing from management. Leading by example and supporting relational communication practices are crucial actions to make relational communication possible in remote work. Supporting and enabling relational communication are also important in situations where only a part of the personnel is working remotely. As our findings indicate, before the widespread

shift to remote work, those who worked remotely often felt that they were in some way external to the rest of the organization. The transition brought them a greater sense of equality and, thus, made them the ones finding the change the most positive. If the future of work moves toward more flexible work arrangements, it is highly important to ensure that all employees feel connected to the organization, regardless of where they work. The lessons learned during the pandemic should not be forgotten, even when some employees may again meet at the coffee machines.

To conclude our suggestions, we want to highlight what can be deduced from our analysis of the individual characteristics of respondents. There is no single group that should be better at learning to build and maintain meaningful relationships in remote work, but everyone, despite their gender, age, tenure, or any other characteristic, should be able to learn over time. This is an important finding for organizations that are hesitant to implement remote or hybrid working models. We argue that with technological and managerial support, jointly negotiated communication practices, and the addition of time to learn and adapt to remote work, organizations can work remotely without the risk of losing the potential of work relationships.

#### 6.3. Limitations and future directions

The current study is limited by its exceptional context and the challenges this poses to comparability with previous research. The widespread transition to remote work for Finnish public sector workers happened rapidly under government guidance, with probably no time to prepare for it. This also made the situation exceptional from a research standpoint. Therefore, our findings should be seen as indicators of this exceptional situation and not as indicators of remote work in general. The COVID-19 pandemic and the suddenness of the transition are both factors that have most likely affected the respondents' understanding of relational communication in remote work. It is impossible to say with cross-sectional data to what extent the perceived challenges are related to the anxiety and stress caused by COVID-19 in general and, for example, if the experiences of loneliness are affected by a reduction in other encounters outside of work. This calls for longitudinal research on organizations that shifted to remote work during the pandemic to

understand how the experiences change over time, that is, once remote work becomes a more familiar work mode to employees who had no previous experience with it. Longitudinal research could also discover whether there is a positive connection between longer remote working experiences and those opportunities found for relational communication, as we have assessed based on the results of our study. Research on hybrid working models (for prepandemic research, see, e.g., Van Yperen et al., 2016; Windeler et al., 2017) could benefit from the findings obtained in this exceptional situation.

Our study is also limited by its sample. To understand how this abrupt change was reflected in employees' experiences, we chose public sector workers with minor remote work experience. With this sample, we were able to reach the authentic experiences of this exceptional situation. At the same time, however, it has limited broader interpretations of remote work. It is possible that when compared with, for example, start-up employees or employees of IT organizations, our sample will show more challenges in adjusting to technology-mediated relational communication. A similar background may also explain why there were no differences in the individual characteristics of the respondents with different perceptions. Thus, we suggest that future research on remote work consider a wide range of organizations operating in different sectors, as well as employees with different backgrounds and experiences of working remotely.

## Credit author statement

Rasa Jämsen: Conceptualization, Methodology, Formal Analysis, Writing – Original draft preparation, Writing – Review & Editing. Anu Sivunen: Methodology, Writing- Reviewing and Editing, Supervision, Project administration, Funding acquisition. Kirsimarja Blomqvist: Methodology, Writing- Reviewing and Editing, Project administration, Funding acquisition.

## Acknowledgement

This research has been supported by Business Finland [grant no. 40981/31/2020]. The authors have no interests to declare.

## Appendix

**Table 1**Sample characteristics

All respondents (N $=$ 1091)					
Age	M = 46 (Range = 20-66)				
Tenure in organization	M = 11  (Range = 0-45)				
Average working hours in a week	M = 38  (Range = 3-65)				
Variable	n	%			
Gender					
Female	816	75			
Male	235	21.5			
Other	1	< 0.1			
Do not want to tell/missing	39	3.5			
Children in the same household					
Have	393	36			
Do not have	634	58			
Missing	64	6			
Number of staff in the organization					
1–249	349	32			
250–999	381	35			
Over 1,000	286	26			
Do not know/missing	75	7			
Leadership position					
No formal leadership position	744	68			
Supervise others, but no formal leadership position	237	22			
Formal leadership position	102	9			
Do not know/missing	8	1			

(continued on next page)

Table 1 (continued)

All respondents (N = $1091$ )							
Previous amount of remote work							
Never worked remotely	223	20					
One day a week or less	513	47					
Two days a week	259	24					
Three to seven days a week	95	9					
Missing	1	< 0.1					

**Table 2** Aspects of relational communication

Relational communication aspect	Mentions in all responses ( $N = 956$ )	Percentage of all aspects mentioned
Challenges	819	86
Longing for coworkers	147	15
Absence of spontaneous encounters	122	13
Absence of informal breaks	122	13
Weaker sense of community	112	12
Loneliness and feeling of isolation	105	11
Decrease in social support from work community	79	8
Higher threshold to contact	65	7
Decrease in social support from supervisor	48	5
Decrease in humor	12	1.3
Increase in conflicts	7	0.7
Opportunities	137	14
Stronger sense of community	51	5
Control over the amount of communication	30	3
Increase in social support from work community	27	3
Increase in social support from supervisor	14	1.5
Decrease in conflicts	6	0.6
Lower threshold to contact	5	0.5
Increase in humor	4	0.4

**Table 3** Distribution of respondents by category

Respondent group	Respondents ( $N = 606$ )	(%)
Remote work as a challenge	487	80
Remote work as an opportunity	76	13
Ambivalent experiences	43	7

**Table 4**Overview of all three respondent groups

Respondent group	Remo	ote work as an opportunity ( $N = 76$ )	Remo	te work as a challenge ( $N = 487$ )	Amb	ivalent experiences (N = 43)	
Age	M =	45 (Range = 24–62)	M = 46 (Range = 24–65)		M = 45 (Range = 28–63)		
Tenure in organization	$\mathbf{M} =$	10 (Range = 0-37)	M = 10  (Range = 0-45)		M =	M = 8  (Range = 0-35)	
Average working hours in a week	M =	38 (Range = 9–50)	M = 3	38 (Range = 3–60)	M =	38 (Range = 7-55)	
Variable	n	%	n	%	n	%	
Gender							
Female	65	86	385	79	35	81	
Male	7	9	87	18	4	9	
Other	0	0	1	<1	0	0	
Do not want to tell/missing	4	5	14	3	4	9	
Children in the same household							
Have	28	37	160	33	13	30	
Do not have	45	59	300	61	28	65	
Missing	3	4	27	6	2	5	
Number of staff in the organization							
1–249	21	28	141	29	12	28	
250-999	30	39	181	37	15	35	
Over 1,000	18	24	130	27	11	26	
Do not know/missing	7	9	35	7	5	12	
Leadership position							
No formal leadership position	59	78	341	70	29	67	
Supervise others, but no formal leadership position	12	16	99	20	13	30	
Formal leadership position	5	7	44	9	1	2	
Do not know/missing	0	0	3	1	0	0	

(continued on next page)

#### Table 4 (continued)

Respondent group	Rem	ote work as an opportunity (N = 76)	Remote work as a challenge ( $N = 487$ )		Ambivalent experiences ( $N = 43$ )	
Previous amount of remote work						
Never worked remotely	13	17	115	24	9	21
One day a week or less	29	38	252	52	15	35
Two days a week	24	32	98	20	16	37
Three to seven days a week	9	12	22	4	3	7
Missing	1	1	0	0	0	0

#### References

- Alegre, I., Mas-Machuca, M., & Berbegal-Mirabent, J. (2016). Antecedents of employee job satisfaction: Do they matter? *Journal of Business Research*, 69(4), 1390–1395. https://doi.org/10.1016/j.jbusres.2015.10.113
- Altschuller, S., & Benbunan-Fich, R. (2010). Trust, performance, and the communication process in ad hoc decision-making virtual teams. *Journal of Computer-Mediated Communication*, 16(1). https://doi.org/10.1111/j.1083-6101.2010.01529.x
- Babin, E. A., Palazzolo, K. E., & Rivera, K. D. (2012). Communication skills, social support, and burnout among advocates in a domestic violence agency. *Journal of Applied Communications*, 40(2), 147–166. https://doi.org/10.1080/00909882.2012.670257
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Burgoon, J., & Hale, J. (1984). The fundamental topoi of relational communication. *Communication Monographs*, 51(3), 193. https://doi.org/10.1080/03637758409390195
- Caillier, J. G. (2012). The impact of teleworking on work motivation in a U.S. federal government agency. The American Review of Public Administration, 42(4), 461–480. https://doi.org/10.1177/0275074011409394
- Carillo, K., Cachat-Rosset, G., Marsan, J., Saba, T., & Klarsfeld, A. (2021). Adjusting to epidemic-induced telework: Empirical insights from teleworkers in France. European Journal of Information Systems, 30(1), 69–88. https://doi.org/10.1080/ 0960085X 2020 1829512
- Collins, A. M., Hislop, D., & Cartwright, S. (2016). Social support in the workplace between teleworkers, office-based colleagues and supervisors. New Technology, Work and Employment, 31(2), 161–175. https://doi.org/10.1111/ntwe.12065
- Cooper, C. D., & Kurland, N. B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behavior*, 23(4), 511–532. https://doi.org/10.1002/job.145
- Cristea, I. C., & Leonardi, P. M. (2019). Get noticed and die trying: Signals, sacrifice, and the production of face time in distributed work. *Organization Science*, 30(3), 552–572. https://doi.org/10.1287/orsc.2018.1265
- Croucher, S. M., & Cronn-Mills, D. (2014). Understanding communication research methods: A theoretical and practical approach. Routledge.
- Eurostat. (2020). In Employed persons working from home as a percentage of the total employment by sex, age and professional status (%). https://appsso.eurostat.ec.europaeu/nui/show.do?dataset=lfsaehomp&lang=en. (Accessed 14 May 2021).
- Fay, M. J., & Kline, S. L. (2011). Coworker relationships and informal communication in high-intensity telecommuting. *Journal of Applied Communication Research*, 39(2), 144–163. https://doi.org/10.1080/00909882.2011.556136
- Fonner, K., & Roloff, M. (2010). Why teleworkers are more satisfied with their jobs than are office-based workers: When less contact is beneficial. *Journal of Applied Communication Research*, 38(4), 336–361. https://doi.org/10.1080/ 00909882.2010.513998
- Forssell, R. (2016). Exploring cyberbullying and face-to-face bullying in working life prevalence, targets and expressions. *Computers in Human Behavior*, 58, 454–460. https://doi.org/10.1016/j.chb.2016.01.003
- Gajendran, R. S., & Harrison, D. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524–1541. https://doi.org/ 10.1037/0021-9010.92.6.1524
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, 93(6), 1412.
- Hislop, D., Axtell, C., Collins, A., Daniels, K., Glover, J., & Niven, K. (2015). Variability in the use of mobile ICTs by homeworkers and its consequences for boundary management and social isolation. *Information and Organization*, 25(4), 222. https://doi.org/10.1016/j.infoandorg.2015.10.001
- Hodder, A. (2020). New technology, work and employment in the era of COVID-19: Reflecting on legacies of research. New Technology, Work and Employment, 35(3), 262–275. https://doi.org/10.1111/ntwe.12173
- Hood, A., Cruz, K., & Bachrach, D. (2016). Conflicts with friends: A multiplex view of friendship and conflict and its association with performance in teams. *Journal of Business and Psychology*, 32(1), 73–86. https://doi.org/10.1007/s10869-016-9436-y
- Hur, W., Kim, B., & Park, S. (2015). The relationship between coworker incivility, emotional exhaustion, and organizational outcomes: The mediating role of emotional exhaustion. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 25(6), 701–712. https://doi.org/10.1002/hfm.20587

- Jehn, K., & Shah, P. (1997). Interpersonal relationships and task performance: An examination of mediating processes in friendship and acquaintance groups. *Journal* of Personality and Social Psychology, 72(4), 775–790. https://doi.org/10.1037/0022-3514 72 4 775
- Leonardi, P., Treem, J., & Jackson, M. (2010). The connectivity paradox: Using technology to both decrease and increase perceptions of distance in distributed work arrangements. *Journal of Applied Communication Research*, 38(1), 85. https://doi.org/ 10.1080/00909880903483599
- Mikkelson, A. C., Sloan, D., & Hesse, C. (2019). Relational communication messages and leadership styles in supervisor/employee relationships. *International Journal of Business Communication*, 56(4), 586–604. https://doi.org/10.1177/ 2329488416687267
- Mikkola, L., Suutala, E., & Parviainen, H. (2018). Social support in the workplace for physicians in specialization training. *Medical Education Online*, 23(1). https://doi. org/10.1080/10872981.2018.1435114
- Nurmi, N., & Hinds, P. J. (2020). Work design for global professionals: Connectivity demands, connectivity behaviors, and their effects on psychological and behavioral outcomes. *Organization Studies*, 41(12), 1697–1724.
- Oksanen, A., Oksa, R., Savela, N., Mantere, E., Savolainen, I., & Kaakinen, M. (2021). COVID-19 crisis and digital stressors at work: A longitudinal study on the Finnish working population. Computers in Human Behavior, 122. https://doi.org/10.1016/j. chb.2021.106853
- Pietsch, A., & Lessmann, S. (2018). Topic modeling for analyzing open-ended survey responses. *Journal of Business Analytics*, 1(2), 93–116. https://doi.org/10.1080/ 2573234X.2019.1590131
- Raghuram, S., Garud, R., Wiesenfeld, B., & Gupta, V. (2001). Factors contributing to virtual work adjustment. *Journal of Management*, 27(3), 383–405. https://doi.org/ 10.1016/S0149-2063(01)00097-6
- Regts, G., & Molleman, E. (2013). To leave or not to leave: When receiving interpersonal citizenship behavior influences an employee's turnover intention. *Human Relations*, 66(2), 193–218. https://doi.org/10.1177/0018726712454311
- Roberts, M. E., Stewart, B. M., Tingley, D., Lucas, C., Leder-Luis, J., Gadarian, S. K., Albertson, B., & Rand, D. G. (2014). Structural topic models for open-ended survey responses. *American Journal of Political Science*, 58(4), 1064–1082. https://doi.org/ 10.1111/aips.12103
- Sias, P. M. (2005). Workplace relationship quality and employee information experiences. Communication Studies, 56(4), 375–395. https://doi.org/10.1080/ 10510970500319450
- Sias, P. M. (2009). Organizing relationships: Traditional and emerging perspectives on workplace relationships. SAGE.
- Solomon, D. H., Dillard, J. P., & Anderson, J. W. (2002). Episode type, attachment orientation, and frame salience: Evidence for a theory of relational framing. *Human Communication Research*, 28(1), 136–152. https://doi.org/10.1111/j.1468-2958.2002.tb00801.x
- Tracy, S. J. (2013). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. Wiley-Blackwell.
- Van Yperen, N. W., Wörtler, B., & De Jonge, K. M. (2016). Workers' intrinsic work motivation when job demands are high: The role of need for autonomy and perceived opportunity for blended working. *Computers in Human Behavior*, 60, 179–184. https://doi.org/10.1016/j.chb.2016.02.068
- Van Zoonen, W., & Sivunen, A. E. (2022). The impact of remote work and mediated communication frequency on isolation and psychological distress. *European Journal* of Work & Organizational Psychology, 1–12. https://doi.org/10.1080/ 1359432X.2021.2002299
- Vuorela, T. (2005). Laughing matters: A case study of humor in multicultural business negotiations. Negotiation Journal, 21(1), 105–130. https://doi.org/10.1111/j.1571-9979.2005.00049.x
- Walther, J., & Bunz, U. (2005). The rules of virtual groups: Trust, liking, and performance in computer-mediated communication. *Journal of Communication*, 55 (4), 828–846. https://doi.org/10.1111/j.1460-2466.2005.tb03025
- Whillans, A., Perlow, L., & Turek, A. (2021). Experimenting during the shift to virtual team work: Learnings from how teams adapted their activities during the COVID-19 pandemic. *Information and Organization*, 31(1), 100343.
- Wiesenfeld, B. M., Raghuram, S., & Garud, R. (2001). Organizational identification among virtual workers: The role of need for affiliation and perceived work-based

social support. Journal of Management, 27(2), 213–229. https://doi.org/10.1177/

Windeler, J. B., Chudoba, K. M., & Sundrup, R. Z. (2017). Getting away from them all: Managing exhaustion from social interaction with telework. *Journal of Organizational Behavior*, 38(7), 977–995. https://doi.org/10.1002/job.2176

Yle News. (5.4.2020). In *Poll: Solid support for continued telecommuting post-pandemic*. https://yle.fi/uutiset/osasto/news/poll\_solid\_support\_for\_continued\_telecommuting\_post-pandemic/11293365.