

Examining the perceived differences in connectedness and engagement of remote office employees when exposed to video conferencing instead of traditional methods

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Abstract

With the first lockdown of the COVID-19 pandemic the majority of workplaces were forced to make an abrupt switch to remote work. Instead of physical meetings in conference rooms, video conferencing emerged as a new standard to conduct these interactions. While the concept of video conferencing is not entirely new, it has never before been used so vastly and it is expected to stay a vital part of future work culture, even when all restrictions are fully lifted. However, since most employees never had to rely on remote work for such extensive time frames, the research on its effects on employee connectedness and engagement is lacking. This study aims to investigate how these factors differ under long-term conditions. A qualitative study, utilizing interviews and thematic analysis, was conducted to answer our research question. It was found that employees reported feeling less connected to co-workers when video conferencing for extended periods, which was often attributed to the lack of non-verbal communication. Engagement was heavily dependent on the employees' initiative to plan personal meetings with co-workers and to use their camera.

Keywords: remote work, video conferencing, employee, connectedness, engagement

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Introduction

In recent years, amid the Covid-19 pandemic and the lockdowns, the long-anticipated trend of remote work and video conferencing was advanced substantially (Nilles, 1975). Not only has such technology become a substantial part of everyday life, for example when FaceTiming friends near and far, whether to talk about personal matters or just to have someone's virtual presence as a remote form of hanging out. It has also become the main conference and communication tool for employees that used to gather and do these things in person at their workplace.

Due to these developments, it is not surprising that, in 2020, internet bandwidth and traffic had expanded at significantly higher rates than ever before (TeleGeography, 2021). Many service providers, e.g. Google Meet, had to make adjustments to accommodate the surge in usage and add additional servers (Schaevitz, n.d.). Connection issues and frozen screens were common at the beginning of the first lockdown, but also many people's technological skills have improved since (Hohman & DeRose, 2020).

A considerably smooth, despite minor challenges, switch to online remote work would not have been possible ten years ago. Bandwidth was much lower and so was the number of high-speed internet connections (McKetta, 2021). While software such as Skype might have been used to video chat friends, the functionality (no group calls) and quality were nowhere near what is possible mid- and post-Covid.

However, not only the technological network and possibilities have changed, but so have many individuals' mindsets. While the technology was also available in the time frame shortly before the lockdown started, moving a meeting to an online platform was not common practice without justifiable reason. This could have, for example, been a substantial difference in locations among participants.

Video conferencing fatigue

The effects of video conferencing on employee fatigue were investigated in a qualitative study using thematic analysis (Bennett et al., 2021). They described VC (video conferencing) fatigue as "the degree to which people feel exhausted or tired attributed to engaging in a videoconference" (p. 330). One of the reasons why video conferences can be exhausting can be attributed to the need for sustained attention. The authors note, however, that this contradicts findings that show employees prefer video conferencing. Despite similarities to previously known work fatigue, VC fatigue differs in two ways. The authors note that work fatigue "is caused by general job demands [...] as well as nonwork demands that spill over into work time" (p. 331). First, the stressors leading to VC fatigue are more specific, including "avoiding distractions from technology and paying greater attention due to fewer nonverbal cues" (p. 331). Second, VC fatigue occurs at distinct times i.e., attributed to a video conference. Normal work fatigue usually occurs at the end of the workday. Feelings of fatigue have been shown to decrease at the beginning of the workday and to steadily increase in the following hours.

Participants in the study by Bennett et al. (2021) noted that maintaining a personal connection to co-workers during times of online meetings also influenced their fatigue, partly because VCs are less personal. Turning on one's video has been reported to help feel an increase in a personal connection. A lack of non-work chats before and after meetings has also been mentioned to decrease feelings of personal connectedness.

VC fatigue was shown to be reduced by high group belongingness. In turn, low group belongingness combined with high use of the mute function was associated with the highest levels of fatigue. The researchers also pointed out possible long-term effects of employees getting tired of VC tools with sustained use.

Deliberately low engagement of remote participants

Kuzminykh & Rintel (2020) further looked into "low engagement as a deliberate practice of remote participants in video meetings" (p. 1). They noted that previous research looked into how

technical issues lead to low engagement of remote workers but did not deeply investigate how remote workers decide on their level of engagement.

The results of their qualitative analysis showed that, generally, remote participation is "associated with lower motivation both behaviorally and cognitively" (p. 2). Low engagement when joining remotely is often blamed on technological constraints and higher potential for distractions and multitasking. Kuzminykh & Rintel found that employees were less likely to multitask and more likely to pay attention when their camera was on because others could see if their eyes wandered or if they engaged in other activities. However, engagement was impeded when part of the group was physically present in a conference room as the present party tended to forget about those joining remotely.

When employees decided to leave off their cameras this was seen as a deliberate social signal of low engagement. The researchers also found the relationship between remote participation and low engagement was not only about technological constraints that decreased motivation. It also appeared the other way around with remote participation presenting a signal in itself, indicating low perceived importance of or interest in the conference. Kuzminykh's & Rintel's participants mentioned that they would join in person if they were interested in the meeting or if they felt like they could make a valuable contribution. If they did not feel that way, they would choose to join the remote meeting to deliberately reduce their engagement. Additionally, if employees knew that their co-workers would join online, this indirectly signaled low importance of the anticipated meeting and they were more likely to join online themselves.

Therefore, the relationship between remote participation and "lower motivation to participate and lower meeting importance, as well as decreased levels of behavioral engagement, manifesting in multitasking and reduced direct contribution [...] is not merely an association but often a deliberate choice" (p. 5).

Research focus

The contemporary research aims to investigate perceived differences in employee connectedness and engagement using VC as opposed to classical meetings. This is done by conducting

interviews with employees involved in both settings. The themes emerging from this process are intended to be informative by themselves but also to provide a basis for future research.

Methods

Research Paradigm

The research conducted investigates the social and, to a varying degree, collaborative frame of an online office workplace. Our philosophical perspective is constructivist. The applied research paradigm is based on the comprehension of reality as a sophisticated puzzle of subjective human experiences that constantly interact with and within the social, collective and individual levels. The constructivism paradigm essentially entails the notion that humans construct their individual understanding and knowledge of their environment by experiencing the world and critically reflecting on these events (Hornebein, 1996). Therefore, the strengths of this theory are that it further "develops advanced skills such as critical thinking, analysis, evaluation, and creation" (Dover, 2018).

We utilized the current academic accord, examining experiences and the perceived differences in engagement and connectedness during online and offline meetings from an office worker's perspective. By conducting personal interviews and subsequent thematic analysis we investigated whether the same academic consensus can be derived from the subjective reality of our research.

Since we made use of interviews to gain insights into the effects of online meetings in an organizational environment, our research uses a qualitative design. As part of the project, we posed not only as researchers but also as interviewers, thus, inevitably interacting with the research subjects (participants who met the pre-screened inclusion criteria). It must therefore be acknowledged that, given subjective preferences and personal biases, pure objectivity was not possible. However, as long as human researchers are involved pure objectivity never exists. Braun and Clarke (2006) noted "[R]esearchers cannot free themselves of their theoretical and epistemological commitments, and data

are not coded in an epistemological vacuum.” (p. 84). Our interviews consisted of active interaction with the participants, which included deciding whether or not to ask certain follow-up questions.

Instruments

Semi-structured interviews were used to collect data. This enabled us to combine the benefits of both structured and unstructured interviews i.e., a certain level of control over the interview directions and topics while allowing respondents to freely express their experiences and opinions without the constraints of a narrow/ limiting framework (DeJonckheere et al., 2019).

A questionnaire (see Appendix A) containing questions to investigate the research questions of all thesis group members was created to have a universal guide to use during interviews. However, because of time constraints each member primarily focused on their own (and related) questions, while asking additional questions towards the end of the interview, if feasible.

The questionnaire informing the current paper included ten main questions, with a varying amount of probing questions. These were asked depending on the length and information density of the interviewee’s response. For example, the question “How have you experienced video conferencing over the last few years?” would be followed up with “Do you have a preference for online meetings or in person meetings? Why?” if the sub-question was not answered in the initial answer. Another question example includes “How close/ connected do you feel to your co-workers during online meetings as compared to physical meetings?”. Since the interviews were semi structured, the benefits of qualitative research were used when investigating interesting responses with off-the-script questions.

Procedure

Research participants were primarily sampled through the researcher team's personal network. An invitation letter was sent out to suitable candidates via email to inform them about the content and purpose of the study. Following a positive response, consent forms were sent out and specific times for the interviews were agreed upon. These were based on the participants' preferences to ease

participation. The sampling technique can also be described as purposive (based on criteria) convenience sampling i.e., non-probability sampling of easy-to-reach participants (Andrade, C., 2021). The advantage here lies in the efficiency, simplicity and low cost of sampling. The weakness is a lack of generalizability, however, collecting numerical data is not the purpose of this study (Jager et al., 2017). Instead, individual perceptions that had the potential to inform future research, potentially quantitative, were the objective.

In total 15 interviews were conducted, with three of them using the additional sub-questions to inform the contemporary study. Each interview lasted about 45 to 60 minutes and was recorded following the participants' written and verbal consent. The majority of interviews informing this study took place in an online environment of the participant's preference, either Google Meet or Teams, except for one interview being conducted in person at the participant's home. The interview recordings were transcribed and prepared for coding using the otter.ai software (otter.ai, n.d.).

Participants

In total 15 interviews were conducted, three of which specifically informed this study. This sub-sample consistent of one female and two males with an average age of 28.3 years. Participant one was from Australia, 37 years old, (*removed for anonymity*). Participant two was from The Netherlands, 26 years old, male and worked in the (*removed for anonymity*). Participant three was from Germany, 22 years old, female and worked in the (*removed for anonymity*).

Participants were sampled based on including criteria stating that they (1) were adult full-time employees in an office setting, (2) had worked at their respective company for at least a year prior to the onset of COVID measures, (3) regularly participated in online meetings for work purposes and (4) actively engaged and communicated with their co-workers in online environments during the last two years.

Data analysis

Regarding data analysis, we applied the six-step-framework of Thematic Analysis (Braun & Clarke, 2006), as shown in Table 1, which is harmonious with both the essentialist and constructionist psychological paradigms.

Table 1

The Six Phases of Thematic Analysis

Phase	Description of the process
1. Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Note. Adapted from Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3(2), p. 87. Copyright 2006 by Braun & Clarke.

Thematic analysis is a “method for identifying, analyzing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79) and was used to organize and interpret our data corpus i.e., the output of all interviews. The benefit of this method is it is not limited to any specific theoretical framework, but can instead be applied along various frameworks including ours. When it comes to analyzing and interpreting the data through the process of coding and finding themes amongst these codes, Braun & Clarke offer guidelines but there is room for the researchers' subjective judgment.

Having identified repeated patterns, we further used the chosen framework to “understand a set of experiences, thoughts, or behaviors” (Kinger & Varpio, 2020, p. 2) within our set of data. A theme here refers to a “patterned response or meaning” (Braun & Clarke 2006, p. 82) derived from the data collected to inform our research question. Noting that the interview questions asked were based on some underlying assumptions, but no preconceptions on specific themes and the constructivist

approach, our theme identification approach was inductive i.e., data-driven. According to Braun and Clarke (2006) inductive analysis is “a process of coding the data without trying to fit it into a pre-existing coding frame, or the researcher’s analytic preconceptions.” (p. 83). The general approach to analysis was semantic, assessing the more “explicit’ or surface meanings of the data” (Braun & Clarke 2006, p. 84).

Quality assurance

Qualitative studies are subject to heavier academic criticism and controversy (Leung L., 2015). It is, therefore, even more important to ensure the quality of this study. This was done with the concepts of dependability, conformability, transferability, and authenticity as outlined in the literature review on quality assurance in qualitative studies by Elo et al. (2014).

With this model in mind, dependability was ensured by carefully documenting all essential steps, resources and documents used in the process of this research, like the inclusion criteria and questionnaires. Generally, transparent research practices including mentioning limitations (see Discussion section) were employed. This should suffice to inform other researchers to replicate the study on another or a larger sample in the future. Conformability was facilitated by focusing on a semantic approach to coding and finding themes. This would make it significantly easier for another researcher to agree with the analysis. A list of the codes used and the themes that emerged can be found in Appendix B. Transferability was ensured by a detailed research plan and documentation, as discussed in detail earlier. Finally, the assurance of authenticity is done similarly i.e., by presenting the range of information presented to enable third parties to evaluate the plausibility of the research process including data collection and analysis.

Additionally, once interviews had been transcribed they were offered to be shared with the respective participants to obtain validation and source triangulation. Method triangulation was implemented through the combination of interviews conducted by five researchers and the use of three varying questionnaires (Noble & Heale 2019).

Results

In this section, we will report on the findings of contemporary research. While many possible themes emerged from the data, we are here focusing on the five that inform the underlying research question. *What are the perceived differences in connectedness and engagement of remote office employees when exposed to video conferencing instead of traditional methods (physical meetings in the real world)?*

A full list of all codes used and the themes that emerged from them can be found in Appendix B, the ones not reported on did not fit into the specific objective of this study but may be useful for future research. The reported themes will be illustrated by quotes, which highlight some specific aspects. To identify the participant each quote originated from descriptives i.e., participant number, gender and age, are given. Finally, each theme is interpreted from the researcher's point of view with the intention to answer the research question in mind.

Connectedness and the lack of human interaction

One of the major themes was how the level of connectedness to their co-workers changed with the lack of genuine human interaction experienced during VC. A general decrease in communication due to lack of proximity was mentioned by the majority of participants. This included interactions before, after and between work tasks, such as the conversations on the walks to and from conference rooms, in the kitchen or quickly coming to someone's desk to ask a question.

It also came up that employees were losing their overall connection to the company they were working for. Since they spent virtually no time at a work location physically it did not feel like a key part and place of their life anymore. Respondents reported feeling less connected to their co-workers and the company, mentioning that it was especially difficult with employees that joined shortly before or during the lockdown. To illustrate, one participant stated:

“[V]ideo calls are a really hard way for new staff to get integrated into a company. It's really hard to get someone to know someone and [...] to develop a rapport and a relationship

with someone if you only ever meet them on video calls. [...] So those small moments, you know, in the kitchen, or getting a coffee or walking past someone's desk that kind of add up to a friendship and a working relationship that you don't have, you're just talking to him on the internet.” (Participant 1, male, 37)

Often it was mentioned that the decrease in connectedness was due to the limited signals from body language and non-verbal communication. For example:

“I would say with meetings in person, a huge pro is that [...] you can read their mimics a little more and read their body language [...] With online meetings, you don't really see the person fully and maybe can't really detect such things.” (Participant 3, female, 22)

Another point was that the decrease in connectedness was intensified when participants did not show their video during calls, as one respondent put it: "I definitely feel less connected to my coworkers when we have online meetings, especially if their camera is off." (Participant 2, male, 26) This will be analyzed in detail in the next theme section.

Camera use

The main theme that emerged regarding camera use is that employees see it as important to have one's camera on. “I don't think there's a reason not to have your camera on unless you've got a kid or a dog or something really distracting that's gonna ruin the meeting.” (Participant 1, male, 37)

Not sharing one's video, especially in smaller groups, is seen as impolite and even a form of disinterest or deliberate disengagement from the discussions - especially in combination with a muted microphone. Additionally, it was noted that those not using their camera came across as more anonymous, which connects to the first theme of decreased connectedness. It was also mentioned that blurring filters or background image effects could be used if one does not want to show their surroundings. The only times where it seems to be acceptable to have one's camera off are during large one-way (primality listening) meetings, where one is not in the position to give any input, or when having issues with the internet connection.

“[...] it should become a rule [...] to always have your camera on. I just think it's too anonymous, it doesn't really work when some people have that camera off [...] especially when they're also muted because then you don't even know if the people are really there [...]” (Participant 2, male, 26).

On the positive side, camera use was also noted as a tool to adjust one's posture and facial expressions to appear more engaged and friendly:

“I noticed that I've been getting a lot more positive feedback, since we started meeting online exclusively because I see myself and I basically, I correct my posture, sit up a little more straight, put on a smile” (Participant 3, female, 22).

A common theme was also the desire for clear rules regarding VC behavior, especially regarding when to have the microphone and camera on. From the findings, it can be derived that camera use is a powerful tool to show if and how engaged a participant is with the current meeting.

(Dis)engagement and commitment

The theme of perceived engagement appears to be highly intertwined with the theme of camera use. When colleagues use their cameras they are perceived as more committed to the job and more engaged with the group. Conversely, low camera use was mentioned to signal disinterest and deliberately low commitment. Compared to physical meetings it is much easier to be present without actually participating actively. Interestingly, participants complained about their co-workers' actions in such situations while also mentioning their own benefits. Some examples include participants remarking that they could focus on more important tasks, such as responding to emails or checking one's phone, during a meeting they perceive to be unimportant. As one participant noted:

“[W]ith online meetings, it really depends on how you commit yourself. When you have your phone there on the side, obviously, you're not going to be as attentive. But that kind of has to do with how much you commit yourself to your work and how important the meeting is.” (Participant 3, female, 22)

Bonding over similar experiences (amongst established teams)

All participants mentioned that among established teams bonding during the lockdowns was possible - if deliberate efforts were made. It often came up that especially during the first lockdowns some employees took the initiative to plan online meetings designated to replace the lack of non-work interaction from the office. Employees would have coffee meetings online, play games together and do other things. It again came up that this depends on an active effort on the employee's side, if one does not participate in those meetings or does not take the initiative to ask a colleague for a coffee break chat, relationships cannot be worked on. For example, one participant said:

“I think back to lockdown. My team couldn't see each other. We bonded a lot through chat through video calls through doing stupid games on video calls or sending memes and recording tiktoks of each other and sending them around.” (Participant 1, male, 37)

Fading into the background

One possible downside that emerged was that some participants indicated that they are more likely to fade into the background during online meetings. This might be due to several reasons, for example, it was mentioned that it can be a lot harder to get through to say something during an ongoing discussion. This, in turn, was attributed to the lack of non-verbal cues that indicate that one is about to say something. Because of this, some employees tend to feel ignored or not seen, which further decreases their motivation to participate actively.

On the other hand, there also is less pressure to say something and actively engage during the meeting if one does not intend to. Compared to a conference room, where one would be seen as a quiet, disengaged participant, online, people are more likely to forget about one's presence.

It also came up that during presentations, where questions are submitted via an online chat, presenters can ignore questions more easily than in a room where all participants will hear the question being asked, as one participant articulated:

“[P]resenters can just skip the question and pretend they didn't see it, when it doesn't really fit the type of things they want to communicate.” (Participant 3, female, 22)

Discussion

The purpose of this study was to gain a better understanding of employee connectedness and engagement in a remote VC setting. Generally, respondents preferred VC for low-engagement/ one-way meetings. A variety of reasons including the ability to multitask, e.g. doing laundry, checking emails or working on other things while listening to the meeting were mentioned. When it came to dynamic/ high-engagement meetings, the majority of respondents preferred these to happen in person. While acknowledging the advantage of VC when meeting those from distant locations, the presence of non-verbal communication, body language and subsequently smoother communication were just some of the factors mentioned, that made office workers prefer online meetings.

Relating back to the research on VC fatigue by Bennett et al. (2021), they mentioned: "paying greater attention due to fewer nonverbal cues" (p. 331) as one of the reasons office workers feel more exhausted when meeting online. This aligns with the pattern of the contemporary research's theme "Connectedness and the lack of human interaction" insofar that participants mentioned a sharp decrease in body language and nonverbal signals as one of the reasons they felt less of a personal relationship with their coworkers, but also that communication was hindered in itself i.e., it is harder to signal when one intends to chime into a conversation.

One of the findings of the study on deliberately low engagement from remote participants (Kuzminykh & Rintel, 2020) was that participants who leave their camera off come across as less interested and engaged in the meeting, which aligns with our findings on "Camera use". Just like their research showed, our participants also mentioned that they might disengage and turn off their video if they were in no position to give important input or if the meeting was perceived as unimportant (e.g. listening only). Our findings in "(Dis)engagement and commitment", that remote participation and not

using one's camera are socially signaling disinterest and deliberately low commitment, are consistent with Kuzminykh's & Rintel's findings.

Limitations

Despite its informativity, there are some limitations to the current research. First, convenience and purposive sampling were used by contacting participants through the researchers' personal network of candidates fitting the inclusion criteria. Generally, a larger number of participants might lead to more information density and stronger support for results. While participants were sampled from various workfields and countries, all of them were western middle-class employees. However, regarding diversity, it could be argued that these are the people using VC the most, which is why they present our population of interest. Nonetheless, not all participants were native English speakers which could have potentially limited their vocabulary.

The researchers themselves might also be seen as a limitation. As bachelor students trained in qualitative research, we did not have much experience with quantitative methods. Given that data collection happened in the form of interviews, conducted by the researchers themselves, we might have unconsciously given (nonverbal) cues when participants responded in a way that confirmed our ideas regarding the research outcome. Participants themselves might have also been subject to unconscious social desirability bias by tending to give answers that are closer to what they thought we might want to hear.

Despite these possible limitations, the current research has enhanced our understanding of engagement and connectedness of employees in a long-term remote work environment. We hope that the findings will already be useful when implied partially in an organizational context and stimulate further research.

Practical implications and future research

Findings, such as employee preferences and opinions on camera use, could already be applied by companies to make their employees feel more engaged in their work and more connected to their

co-workers. Regarding future research, it would be interesting to investigate whether, on average, VC policies and cultural norms differ across companies and industries. References to camera use behavior the company encourages or that co-workers expect did come up during the interviews. It might be interesting for future research to look into these behaviors. Furthermore, based on the outcomes of this informative qualitative study a large sample quantitative study could be conducted to yield generalizable and quantifiable information.

Conclusion

Looking back at the question informing this research “What are the perceived differences in *connectedness and engagement* of remote office employees when exposed to video conferencing instead of traditional methods (physical meetings in the real world)?”, it can be concluded that employees do report feeling less connected to their colleagues attributed to decreased body language and other non-verbal signals, therefore, connectedness was especially low when others did not show themselves on camera or even muted themselves in addition. Engagement was not only closely connected to camera use but was also perceived to be heavily influenced by a participant's own motivation. Those using cameras and actively meeting their co-workers for coffee breaks or games reported feeling not just more engaged but also more connected.

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Appendix A

Interview Questionnaire

Short Verbal Introduction to Participant:

- How are you?
- This interview is for our thesis on the bright and dark side of technology, specifically about videoconferencing. The aim is to get an understanding of the subjective experiences office workers have when using online video conferencing for different types of work related meetings and the factors that influence their attention, engagement and interaction with others.
- The interview will take about 45 minutes. I've sent an information form about the research, did you find a chance to read that through? If not, please do so now. Do you have any questions about that?
- I will be recording the audio of the interview only. The audio will be stored safely and used to make an anonymized transcript after which the audio recordings will be deleted. Responses will be anonymised and not connected to your name or other identifiable information.
- To do the interview and record it we do need your consent. I have already sent the consent form, please fill that in, sign it and send it to me. If not immediately possible, verbally agree and sign later.

Demographics of the questionnaire:

- Age
- Gender
- Education
- Job position
- Location workplace

General Questions

1. How have you experienced video conferencing over the last few years?
 - a. How would you compare it to offline meetings?
 - b. Can you identify some pros and cons?
 - c. Does the way you prepare for meetings differ?
 - C. Do you have a preference for online meetings or in person meetings? *What could be reasons for this preference*
2. What kind of work-meetings have you experienced in the last few years, regarding whether they're more dynamic/ democratic/ sharing-information type or more one-way/ hierarchical?
3. Please share your experiences (positive and negative) of online meetings for the purpose of one-way (low engagement) meetings?
 - a. How would you compare them to offline meetings?
 - b. Can you identify some pros and cons?
4. Please share your experiences (positive and negative) of online meetings for the purpose of dynamic (high engagement) meetings?
 - a. How would you compare them to offline meetings?
 - b. Can you identify some pros and cons?
5. What would you change about video conferencing? What would you keep the same?

Engagement/ Attention

1. Do you use any strategies to keep attention/be engaged in a videoconference?

2. What is your experience with interruptions or distractions during remote meetings? How do these compare to in person meetings?
3. How often do you use your camera in online meetings?
 1. Are there any reasons not to use video?
4. How does your attention during online meetings compare to your attention during physical meetings?
5. How close/ connected do you feel to your co-workers during online meetings as compared to physical meetings?

If you would like to, we will send the transcript back to you so you can check whether your data is correct and of good quality.

Appendix B

Coded and Themes

Table 2
List of Codes and Themes

Codes	Themes
Connectedness Lack of human interaction Integrating new employees awkward Harder to connect Less interaction Human interaction Body language Communication	Connectedness and the lack of human interaction
Camera Impolite (camera off) Blurring filter/ background (video effect) Anonymous (camera off) Physical appearance (correcting posture) Rules	Camera use
Engagement Commitment Purposefully not putting in work (disengaging)	(Dis)engagement and commitment
Feeling ignored/ not seen Fading into background Holding back (see also: Communication) Harder to get through Exclusion/ Inclusion	Fading into the background
Bonding over similar experiences	Bonding over similar experiences
conflict (overly polite on VC) Emotion (discussion, more heated offline) Honesty (more online)	Conflict and depth of discussions -> no consensus among respondents
Distractions Attention Attention strategies Phone (distraction) Animals (distraction) Children (distraction)	Distractions and attention strategies
Technology Sharing documents Technical issues Software issues Internet connection Internet connection issues Learning skills	Technological benefits and shortcomings

Efficiency exhaustion Taxing Multitasking Annoyed Lack of boundaries/ privacy Stress Time Too systematic Professional Seriousness (offline meeting) Censorship (online)	The efficiency of VC and the exhaustion that comes along with it
Preparation	Meeting preparations
Limitations (of physical meetings) Physical notes Transcribing Travel	Limitations of physical meetings
Hybrid (preference) Preference	Respondents' (future) preference
Benefits Relaxed (in) control (in own home) Attitude (positive/ negative) Flexible Easy	Perceived benefits of VC
Pre-covid Post-covid	

Note. This table presents all codes that were used when analyzing the interviews. Lines between rows were added to enhance readability of the table.