

**How do age differences influence conflicts in video conference environments?**

Max-Johannes Dettmann

s3903354

Department of Psychology, University of Groningen

PSB3E-BT15: Bachelor Thesis

Group number 26

Supervisor: Samantha Adams

Second evaluator: Robert Goersch

In collaboration with: Ben Kazlauskas, David Päper, Antonios Pinakoulakis,

Eva de Ruiter.

July 11, 2022

*A thesis is an aptitude test for students. The approval of the thesis is proof that the student has sufficient research and reporting skills to graduate, but does not guarantee the quality of the research and the results of the research as such, and the thesis is therefore not necessarily suitable to be used as an academic source to refer to. If you would like to know more about the research discussed in this thesis and any publications based on it, to which you could refer, please contact the supervisor mentioned.*

### **Abstract**

During the COVID-19 pandemic, many workplaces became remote, and most of the work was via video conferences. Video conferencing is not a new technology; however, due to massive changes in the usability and high frequency of new implications within video conferencing, the technology itself has evolved from what it was before. Research indicates that even after the pandemic, organizations will still use video conferences as a tool in the workplace. The reason that it will still be used also in the future makes this topic also crucial for the future.

Nevertheless, not a lot of research has been done on employee experiences in the video conferencing environment. This paper investigates whether age differences in the workplace lead to conflicts in the video conference context. To investigate our research question, we conducted a qualitative study. This paper is based on four interviews conducted with people who experienced video conferences within the last three years. To analyze the data corpus, we used thematic analysis. We found that attitudes toward technology seem to influence the skill level. Those differences in skill level can provoke conflict in the workplace. It seems that older people have a less positive attitude towards technology, leading to lower skill levels. So basically, no age difference directly affects the conflicts. It is more like a moderate that affects attitudes that provoke skill differences between younger and older employees. Based on this study, further research can be done to see if other factors like high workload could potentially increase the effect.

*Keywords:* age difference, attitudes towards technology, conflicts in workplace, skill differences, video conferences

### **Do age differences influence conflicts in video conference environments?**

Recent events of COVID -19 have brought many changes in society. Measurements like lockdowns and social distancing led to a society relying more on online meeting possibilities like zoom or google meet in the workplace context. This opened new ways of meeting and socially interacting. The government significantly impacted the change in the workplace because they put specific laws in place that held people in their homes. Therefore they were not allowed to enter the office. To be aligned with government measurements, organizations relied on video conferences. As a result, video conferences at the workplace gained more importance and became more prevalent in industrial and organizational psychology. This paper will focus on video conferences and how age difference plays a role in the communication between employees and emerging group conflicts by investigating the research question "Do age differences influence conflicts in video conference environments?"

#### **Video conferences as a new technology**

Video conferences themselves are not the newest technology. They, however, gained importance during the pandemic. Additionally, video conference usability and settings have changed drastically over the last two years. Before the pandemic, it was primarily used in so-called conference rooms, where a part of the group was in person, and only a few people would join online. However, there were still cases where organizations used video conferences as we do today, but not with the frequency as it is now. Nowadays, everybody with access to the internet and an electronic device can use video conferences in the workplace. For instance, Zoom went from 10 million daily meeting participants to over 300 million (Evans, 2020). Video conferences create many upsides. One of the advantages is that it seems more convenient for the user, for instance, due to not commuting to the workplace, which also means that they do not have to worry about the traffic and the complication that goes along with it. Companies also benefit from this. One advantage is that they spend less on offices since everybody can work from home. Standaert et al. (2021) predict that the percentage of in-person meetings will decrease to 25% after the COVID-19 measures, which means that many companies will probably continue using video conferences, which increases the need to investigate this topic further and lay the ground for future research. Another factor is that video conferences come with benefits and challenges,

which have also been highlighted by recent research. For instance, technology can decrease work performance due to mentally and physically exhausted users (Fossilien & Duffy, 2020). Those physical consequences could potentially impact social and group dynamics. With the lack of research on social and group dynamics in an online workplace like video conferences, this paper will investigate employee perception of group conflicts arising in an online environment focusing on age differences.

### **Literature review**

Similar research has been conducted by Gupta et al. (2021). Their paper investigated the usage of technologies in the Indian finance sector. The Indian finance sector also experiences many changes regarding the technology used in the workplace. Their study used the term technological natives, which describes a group of young employees who have an easy time working with technology. In comparison, older employees with insufficient technological knowledge and hard adapting to technological changes are called technological migrants. Gupta et al. proposed that both lacks of skill and knowledge can be associated with the age difference between the groups. Those differences will lead to technological migrants becoming the outgroup. This disrupts the feeling of belongingness which leads to being excluded. The study found that conflicts emerged due to differences in skills and knowledge. Those conflicts led to distrust. Trust is one of the essential foundations for work performance (Salamon & Robinson, 2008).

This paper aims to partially replicate and extend the study of Gupta et al. (2021). However, their study looked more generally at technology. This paper will focus on video conferences—raising the question of whether a relatively simple technology such as video conferencing is enough to create those conflicts due to age differences. Also, Gupta et al.'s study was only done in India and could potentially have a different outcome in other parts of the world. So it is interesting to see whether their findings are also evident in western cultures.

Additionally, Gupta et al.'s (2021) paper only focused on the finance sector. The competitiveness within this sector could be a potential contributor to conflicts, which might not be the case for less competitive workplaces. Samples from different sectors enable us to examine whether this effect is also present in other sectors.

Contradicting Gupta et al. (2021), the study of Rizzuto (2009) found that satisfaction with IT implementation was higher among older employees than younger employees. This challenges the common stereotype that older employees are more likely to have negative attitudes towards technology implementation. Additionally, the IT implementation acceptance was higher for older employees (Rizzuto, 2009). Those results were also evident when looking at older or younger departments. Older departments seem to be more satisfied with IT implementation.

When looking at differences in conflict behavior among younger and older employees, Davis et al. (2009) did a study where they applied the socioemotional selectivity theory (SST) in the workplace context. As suggested by the SST, they expected that older employees are more likely to engage in passive avoidance responses and less in active, destructive behavior. Additionally, they hypothesized that there is no difference between younger and older employees regarding active constructive responses. They found that older employees are more likely to engage in passive avoidance responses and that there was no difference in active constructive responses. However, the most interesting finding was that contradicting the literature, older employees are not significantly less destructive regarding their response to conflicts.

### **Research questions**

To narrow the main research question down, we came up with the following sub-question we want to investigate. "Are video conferences as a newly introduced technology enough to evoke conflicts within the workplace if skill differences are present?".

## **Methods**

### **Research paradigm**

The philosophical perspective that guided this research is constructivism. The basic premise underlying the constructivist perspective is to understand and interpret how people construct the world. Constructivists assume that the people themselves create their reality based on their interpretation of it (Guba & Lincoln, 1994). We examined complex social structures and interactions underpinned by the assumption that there is more than one objective truth. So we investigated through interviews and thematic analyses whether the current findings in psychology are comparable to what we found regarding age difference in video conferences at the workplace.

### **Methods**

To investigate the research question "How do age differences influence conflicts in video conference environments?" we conducted a qualitative study. Our goal was to get a deeper understanding of employees' experience and the influence of online meetings in an organizational context, especially with the focus on age differences. Interviews are a common and valuable instrument to enable such understanding. It opens the possibility of focusing on subjective and individual differences in perception in online meetings' and a more detailed data collection. However, interviews can lead to biased results since we actively interacted with the participants. Therefore, even by being as objective as possible, it is almost unavoidable to conduct the research without the influence of biases or subjective preferences.

### **Instruments**

Semi-structured interviews seemed to be most fitting for our research question. They have the advantage that we could control the interview questions and topics that will be investigated and adjust or narrow the questions down if needed. By narrowing the questions down, we could adjust the questionnaire to each participant to get the most out of the interviews and allowed us to go more into detail to get a more prosperous and deeper understanding. Therefore, our questionnaire was split into three, with three different main themes to ask. This way, we obtained more responses and could distribute the workload. The questionnaire consisted

of five main questions (Appendix A). Those five questions investigated perceptions and experiences of video conferences. To collect more general information about how the participants perceived video conferences. We implemented sub-questions to the initial main questions to get more detail and specific information. Those are rather specific and more related to the research question.

### **Procedure**

Before selecting our participants, we agreed on specific inclusion criteria. Those were workers working at the same company for at least the past three years, have used online video conferencing, have moderate proficiency in English, and have participated in both one-way and dynamic meetings in the video conferencing environment. In addition to those criteria, it was also essential that the sample consisted of participants who differed in age. Therefore, we used convenience and purposive sampling as sampling methods. Using a non-probabilistic sampling method, we could choose the participant based on our inclusion criteria, ensuring that the participants fit our research question.

Additionally, getting participants for the sample was much easier since we reached out to possible participants that are readily available, for instance, relatives or people from the closed circle. In total, the questionnaire contained three sub-questions that are closely related to the research question. For instance, to explore the participants' skill level, we asked, "How would you describe your skill level regarding video conferences?". Another example would be "How would you describe the dynamics between young and older workers during video conferences?" to explore the dynamics between employee groups.

### **Participants**

The sample consisted of 4 men with a mean age of 33. Participant 1 was from Germany and is 47 years old. His job position is to guide the dismantling of a nuclear power plant. His areas of responsibility are commercial activities, such as controlling, auditing, ordering, coordination of external companies, and work planning. Participant 2 was also from Germany and is 23 years old. He studied mechanical engineering and is currently working in an engineering company. The third participant is a German programmer with an age of 22. He



works in a technology company. The fourth participant is 40 years old and is from the Netherlands. He has a Bachelor's in chemical engineering and a Master's in Engineering Environmental Studies. His job position is a permit authority, meaning he writes permits for large chemical plants with hazardous chemicals.

### **Analysis of data**

Before analyzing the data corpus, we transcribed the interviews. For transcribing, we used the software otter.ai. After that, the transcripts were shared among all the members of the thesis group. The approach we used to analyze the data is the thematic analysis of Braun and Clarke (2006). Thematic analysis is more flexible regarding interpretation compared to, for instance, content analyses. It allows for a richer and more detailed evaluation of the data, making it more useful for our research. We followed the inductive approach for this research question since only a little research is available on this topic. So what we did was we looked at the data corpus to find a pattern on which we base our theory or conclusion.

Additionally, we also looked at the data corpus semantically. We were more interested in the opinion or statements of the participants rather than in subtle pieces of information of their statements. This also guided the process of coding the generation of themes. For the analyses, we followed the six steps of Braun and Clarke. We first familiarized ourselves with the data and then generated initial codes. After that, we searched for themes and reviewed them. Lastly, we defined and named those themes and finally reported them (Braun & Clarke, 2006)

### **Quality assurance**

Since qualitative studies earn much criticism and are controversial in the academic world, it is even more critical to ensure the quality of the study. Therefore, to ensure the qualitative validity of this study, we have to look at dependability, conformability, transferability, and authenticity (Elo et al., 2014).

To ensure dependability, we described the methods and instruments we used as detailed as possible, including the inclusion criteria, sample technique, and the questionnaire used in this study. Additionally, all the themes and codes of the thematic analysis were provided to be as transparent as possible (Appendix B). Regarding conformability, we ensured a detailed and most

accrued representation of what the participants said during the interviews. Also, providing evidence when stating the findings further strengthens the conformability. Furthermore, we could ensure transferability due to a detailed description of the data collection process and an accurate representation of the results. Lastly, authenticity is ensured, which is also done by the presentation and description of all our research processes so that it is easy for others to review the research process and evaluate whether the interpretations are plausible.

We used triangulation to ensure further quality and credibility (Lacey & Luff, 2001). Two triangulations seem most fitting for our research. One of the triangulations we used was the investigator triangulation, where the other researcher in our group will look at the results and see if they come up with the same results. This decreases the subjective influence by showing that other research aligns with our perception (Campbell et al., 2020).

Additionally, we used source triangulation. That means that the researcher group checks the transcripts of the interview, and also, the participants will be asked if they want to add any information to what they said if they feel that something is missing or unsaid (Campbell et al., 2020). This ensured that no information was missing and that nothing was interpreted or manipulated in a more corresponding way to the research question. However, our primary strategy is to be as trustworthy and transparent as possible. To do that, we described every detail and possible shortcoming that could potentially influence the study's outcome

### **Findings**

This section will summarize the ideas and perceptions that emerged from the data corpus. We will elaborate on our themes and their connection to the codes.

We came up with a total of four main themes (Appendix B). The first theme is "perception of video conferences", divided into the perception of older and younger employees. The second theme is "attitudes toward technology". From this theme, two categories emerged, mindset and avoidance of technology. The third and most important theme for this study is "skill difference", with three categories, handling of video conferences, experience, and physical consequences. The last theme that emerged from the data corpus is "dynamics". Dynamics is

categorized as interaction with older colleagues, interaction with younger colleagues, general problems, and work environment.

### **Perception of video conferences**

Perception of video conferences is a broad theme. It includes everything about the perception and experience of younger and older participants regarding video conferences. Comparing younger and older participants regarding differences in perception of video conferences, they were almost similar—both experienced video conferences as a positive experience. However, younger participants mentioned more advantages when it comes to video conferences. They appreciate the technological advantage of video conferences more, for instance, when it comes to presenting or in general that it is easier to speak up than in a big room. One aspect that stands out is that the younger participants also seem to appreciate more flexibility and the ability to work from wherever they want, demonstrated by:

*So I would keep encouraging flexible working, because with flexible working, people were able to travel or visit friends and be flexible, where they want to work.*

(Participant 3, Male, 22)

This might be the case since the younger participants are generally better at using and adapting the technology. So they might also be more inclined to experience more benefits since they are more efficient in using technology.

However, one downside that almost exclusively only the younger participants mentioned was the missing social aspect. Younger participants might be more focused on their social surroundings, so that they might be more sensitive to missing social activities. For instance, one missing part in their daily work life was the communication during breaks and the exchange of private affairs.

*Yeah, the con is that you don't can discuss private things on the team meeting. So you can socialize with the others from the team, but not on a private level. So just on a professional level, because every time your supervisors there, it's maybe not that good for, like, colleagues that you would count as friends because you don't have that much private contact at your work, like you had before. Because you also did the breaks*

*together, went for lunch. And yeah, with good colleagues, you could discuss more private things.*

(Participant 2, Male, 23)

On the other hand, one of the older participants mentioned that he has more time for his family due to video conferences. Maybe due to a higher age, the goals and needs change so that older participants value social contacts less and focus more on their closer circle. The similarities between older and younger participants were that video conferences are less time-consuming, that during video conferences, the engagement decreases, and there is missing body language. The most common similarity was the advantage of being less time-consuming which was mentioned the most, except for one younger participant who complained about longer meetings and an increased workload. Nonetheless, having more time in this sample, for instance, due to a missing drive to work seems to be an intergenerational perceived advantage of video conferences.

*And also, a lot of people save a lot of time because they don't have to commute to work. I think that's the biggest, so the biggest advantages and pros of online conferences.*

(Participant 3, Male, 22)

### **Attitudes towards technology**

"Attitudes toward technology" are participants' general attitudes towards all kinds of technology. This theme summarizes two significant elements. First, when we looked at the data corpus, we observed that the younger participants identified themselves as part of a generation that grew up with all kinds of new technology. So they are a generation of technological natives who learned how to handle and learn new technologies from the beginning. Those who described growing up with technology also described an easier use of video conferences. They seem more interested in technology and engage with it in their free time. Prior engagement with new technologies and using already acquired knowledge makes it easier for them to adapt to changes and improves their handling of technologies. This is also evident in video conferences.

*I think my skill is very good. Because even before videoconferencing, and my job or my university, in my free time, I spend a lot of time with my computer. And I did a lot of video conferencing with my friends before. But I had a big personal interest also in technology. And because of that, I grew up with technology. So for me, it was not was not hard to adapt to the new work environment with video conferences.*

(Participant 3, Male, 22)

Contrary to that, older colleagues are described as more old-fashioned regarding technology, meaning they are more conservative than younger employees. As a result, they are less willing to engage with technology and would be more inclined to use the old methods they always used, resulting in less prior knowledge that they can fall back on.

*So they were struggling the beginning. And I think there are still some older people who will just do things that they have to do and nothing more so they are refusing to use the tools they have. Because they are some kind of conservative, especially the engineers.*

(Participant 2, Male, 23)

Because of a negative attitude towards technologies and being less engaged, avoidance seems common in older colleagues. Younger participants described older colleagues that they reject using new technologies, like video conferences. Instead, they would like to stick to old-fashioned methods. So they not only intend to be less engaged or involved with new technology, they even engage in behavioral acts like actively rejecting or avoiding using new technologies. This could be some self-protection mechanism to avoid making a fool of themselves when for instance, they struggle using technologies.

*The older generation is usually a bit more reluctant using the video conferencing tools they prefer just calling by phone, the younger generation doesn't care, you can use video conferencing just use whatever chat function is available.*

(Participant 4, Male, 40)

## **Skill differences**

"Skill difference" includes all perceptions that are related to skill. Interesting to see was that all participants mentioned that they had no problems adapting to video conferences and using them. However, when describing other colleagues, the data sets show differences in perception. Some participants mentioned that their colleagues, especially the older ones, had struggled using video conferences. Others said there were no problems and that everyone did well using video conferences. So there were mixed perceptions of how others perform, but not regarding their skill level. This might be the case that the older participants do not want to embarrass themselves and say that they struggled or even, in general, that the participants rated their skills higher than they are.

Related to the theme of attitudes and as already mentioned, those participants growing up as digital natives mentioned that they have prior experience with video conferences. They also indicated that those prior experiences seem beneficial since the topic of video conferences is not new for them. This seems to be the case exclusively for younger employees.

*And I did a lot of video conferencing with my friends before. But I had a big personal interest also in technology. And because of that, I grew up with technology. So for me, it was not was not hard to adapt to the new work environment with video conferences.*

(Participant 3, Male, 22)

One of the younger participants also reported physical consequences of video conferences. They stated that younger employees seem to be fresher and work better with video conferences also after a longer duration of working with video conferences. On the other hand, the participant mentioned that older colleagues get exhausted after a more extended period. A factor contributing to that is the unfamiliarity of working with video conferences and not being used to sitting in front of a screen for extended periods. In the same context, older colleagues appeared more passive-aggressive towards other employees.

*But I think especially the duration is a problem for older colleagues, because they weren't used to look into a screen for eight hours a day, especially not in their job. Because most of the time, before Corona, they didn't need to look into the screen the whole the whole day and maybe just one hour to to check their mails and send some emails but they didn't do this intense digital working for maybe 30 years, so you can*

*understand that it is a lot for them. It's maybe too much for them and they don't want that.*

(Participant 2, Male, 23)

### **Dynamics**

The last theme that manifested from the coding process is dynamics. Investigating the interaction with younger employees, they experienced passive-aggressive behavior from the older employees. Additionally, the older employees made fun of younger employees. Those behaviors could potentially also be some self-protection mechanism. By making fun of younger employees for using video conferences or, in general, new technologies, they downgrade the importance of learning those new technologies. This, in turn, justified their lack of engagement since they do not see learning new technologies as necessary. So they think playing around with new stuff is a waste of time. Also, not listening and attending to what younger employees say is one of the changes in dynamics. This is illustrated in the excerpt;

*I wouldn't say open conflict but some passive aggressive behavior at the later times of the day, especially by older colleagues, because they are exhausted and don't like the online way but I think an open conflict wasn't there from my opinion. Maybe passive so then you're exhausted and don't want to listen to person anymore because you did that the whole day but I think there was no fight or open open conflict between two persons.*

(Participant 2, Male, 23)

On the other hand, younger employees look down on the older ones. Older colleagues sometimes experience difficulties using new technology, making them look less competent. This is not reasonable for younger colleagues who are ahead of the technology. Potentially this leads to younger colleagues looking down on older employees. It could also be a defense reaction to the passive-aggressive behavior of the older colleagues.

*I think the younger employees as digital natives, they maybe look a little bit down on the older ones and think that's funny that they are engineers who worked for 30 or 40 years*

*on new technologies and now refusing to finish learn a new technology.*

(Participant 2, Male, 23)

Interesting to see is that none of the aforementioned interactions are applicable in the interviews where the participants did not mention skill differences between employees. Furthermore, those who did not experience any skill difference also have not experienced negative or positive changes in the interaction between younger and older colleagues.

An additional factor that could put stress on less skilled employees and evoke conflicts is general problems. For instance, internet problems and connection issues create stressful environments, especially for less-skilled employees, which in turn could potentially lead to conflicts. Also, being unable to reach someone makes the video conference more complicated due to missing important people, which could create stress. However, none of those affect the dynamic since none of the participants experience them negatively regarding dynamics or interactions.

One of the participants who experienced conflicts between age groups also noticed a change in the work environment. This was expressed by dividing the work. For example;

*But I think at the end, they worked, they work together and for them, they sometimes they split topics when it's more digital* (Participant 2, Male, 23).

The younger employees who are perceived to have better technical knowledge have to do the work that is more related to technical tasks, and the older employees who seem to have more difficulties still proceed with their areas of responsibility. By doing so, they try to avoid interaction with each other. This might be some strategy to prevent conflicts.

### **Personal reflections**

Since the researcher plays a vital role in qualitative research, he also influences the results. The researcher can influence the data collection, and the coding process can be biased by the researcher's perceptions and goals of the research. So considering your influence is essential. The first thing I noticed was the lack of experience and knowledge in qualitative research. I



rarely encountered nor learned how to do qualitative research during my academic journey. This had a tremendous influence on the writing and how to evaluate the results since I was not used to it. The interviews were a bit easier since we had courses like dialogue and group skills where we learned how to do interviews and prevent, for instance, roadblocks. However, we only did this in an artificial setting, so having actual interviews with real participants made me a bit nervous and excited. This might have influenced how the interview turned out, especially if the participant said something that "confirmed" an assumption I had in my head. When that happened, I had to control myself to not lead or not suggest anything within the questions.

Additionally, I think the lack of experience led to difficulties in coding and interpreting the findings since I was only used to looking at numbers and interpreting what they meant. Having this elaborative and explorative mindset was a bit hard for me since, at first, I just looked for "proof" for the assumptions I had in mind. However, throughout the Bachelor Thesis, I gained many insights about conducting qualitative research and improved on many of the above mentioned points.

### **Discussion**

Video conferences gained much importance during the pandemic and will most likely continue to be part of the workplace. Therefore we wanted to investigate whether age differences affect conflicts in the workplace in the context of video conferences. Therefore, we conducted a qualitative study interviewing employees about their perceptions of video conferences to answer our research question, "How do age differences influence conflicts in video conference environments?".

The analysis revealed the following possible interactions, the interaction between age and attitudes towards technology. Attitudes towards technology, in turn, seem to be related to skill level. Additionally and most important for this study is the interaction between skill differences and emerging conflicts.

As shown in Figure 1, we suggested that technological natives have, in general, a more positive attitude toward technologies. Growing up with such technology seems to remove barriers to engaging with technology. A positive attitude toward technology also increased the

usage and handling of technology outside of the workplace, which, on the other hand, increased prior experience. Those prior experiences can be applied in the work context regarding technologies, allowing them to adapt quickly to changes and increase their skill level.

Technological migrants do not necessarily grow up with technology, contributing to less positive attitudes towards technology. Vice versa, as for technological natives, technological migrants with negative attitudes toward technology not only have a negative mindset or way of thinking about technologies but also seem to engage in behavioral actions, such as avoidance. Having this missing experience with technology could potentially lower the ability to adapt to changes in the workplace concerning new technologies and also decrease the skill level when it comes to using new technologies. However, the attitude towards tech seems to be more important than age.

We also found that having a lower skill level can lead to physical consequences, like exhaustion. This is in line with the study of Fossilien and Duffy (2020) and even applicable within the video conference context. Exhaustion and skill differences, as the data suggested, influence possible conflicts in the workplace. For example, in the interview of the participant with the highest perceived skill difference, those skill differences seemed to contribute to passive-aggressive behavior in older employees, such as making fun of younger colleagues. In the same environment, younger colleagues also show negative appraisals against older colleagues, for instance, looking down on those who are not that good with video conferences. This is also in line with the study of Davis et al. (2009), at least for the finding that older employees are not less likely to engage in destructive responses to conflicts. Unfortunately, we do not have enough evidence to conclude anything about the other two assumptions of Davis et al. (2009).

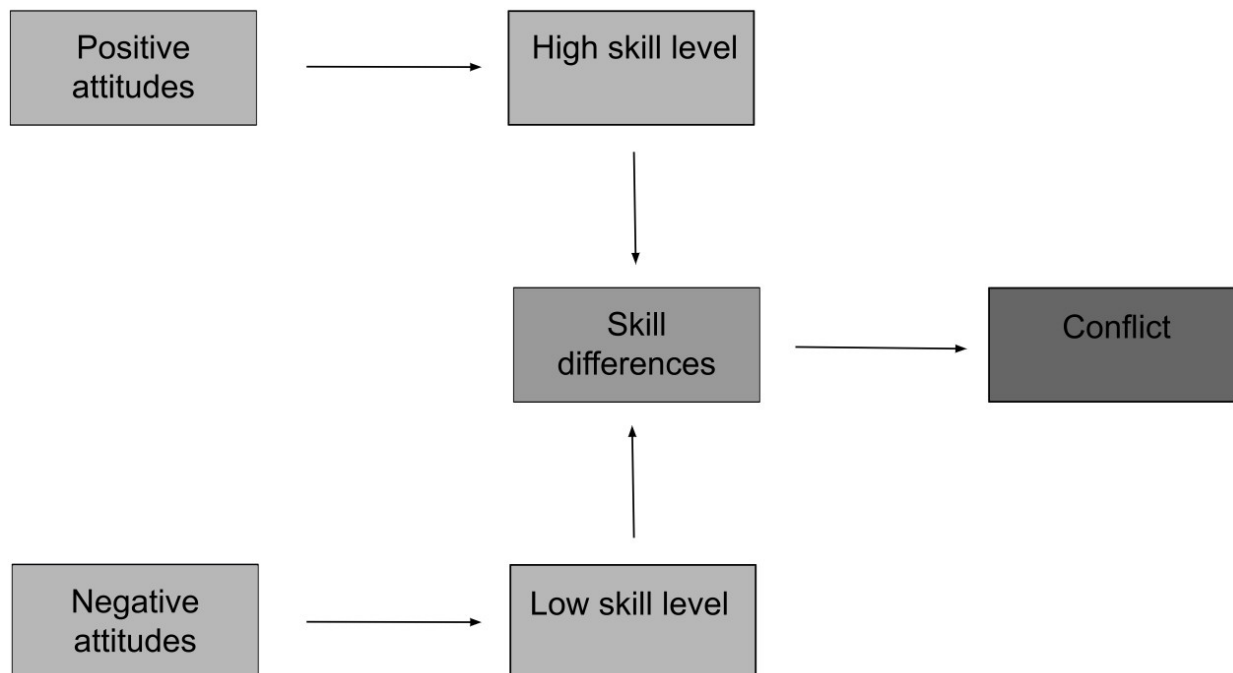
Another factor that emerged from the data corpus was the perception of videoconferences. These perceptions were similar between all age groups and did not seem to influence conflicts. Nevertheless, technological natives (i.e., younger participants) reported more advantages of video conferences than technological migrants (i.e., older participants), which could be due to better and more effective usage of video conferences which enables them to gain more profits.

Furthermore, we could replicate the findings of the study of Gupta et al. (2021), namely that conflicts can emerge between technological natives and technological migrants. This seems to be also evident across different cultures and different working sectors. However, we narrowed the research down to video conferences, which became an essential tool during the COVID-19 pandemic. Even in this context, there is evidence of conflicts between those two types of employees. In addition to what Gupta et al. (2021) found, we identified that attitudes influence the skill level regardless of age and that the skill difference appears sufficient to evoke conflicts.

Lastly, our study provided not sufficient evidence to support the finding of Rizzuto (2009). Based on their findings, there should be more positive attitudes toward implementing video conferences for older employees. However, our data suggest that older employees experience the opposite regarding video conferences. Instead, they want to stick to their old methods and avoid new technological implementations.

**Figure 1**

*Interactions emerged from the data between attitudes, skill level and conflict*



*Note.* The arrows describe the interaction between each element and also indicate the direction of the interaction. This is a visualization of the findings that emerged from the data corpus.

### **Limitations**

We could not make any suggestions about the influence of the workplace due to the small sample size and less control over confounding variables. Another limitation is that the participants were selected from our close circle. A purposive sample allowed us to select participants with the necessary experience and insights we were interested in examining. Nevertheless, since the sample consisted primarily of family and friends, this could lead to increased biases like social desirability, which would influence the participant to answer in a more socially acceptable way. Also, the language barrier could be a limiting factor. All the participants are not native Englishspeakers . This could lead to miscommunication or, especially when interviewing older participants, to missing vocabulary, limiting the quality and quantity of information shared.

As mentioned in the personal reflection section, we as researchers could potentially influence the data in the interviewing and coding processes. Primarily since we are less experienced, there is an increased chance of biased data. For instance, when the participant mentioned something in line with what we wanted to hear, we quickly got excited, which can lead to closed questions or even leading questions to further confirm what we had in mind. To minimize the impact, we tried to stick to the semi-structured interview we created beforehand to have some guidance throughout the interview still. This bias would be minimised for more experienced researchers conducting interviews.

Despite these limitations, this research can be seen as the first step toward a better understanding of how new technologies influence the workplace, especially video conferences. Moreover, conducting such an exploratory study can stimulate future research or implications for employee training programs. Finally, qualitative research also allows one to understand complex issues better.

### **Future research**

For future research, it would be interesting to see if the working sector might play a role. Since we just briefly investigated this factor by selecting different working sectors, a quantitative

study with a bigger sample size could potentially be more suited to investigate this effect across different work sectors. This study showed little evidence that the workplace environment influenced the conflict potential. For instance, one of the participants is working on the process of dismantling a reactor. Those jobs are not competitive, which might decrease the chance of emerging conflicts. This might not be the case in a more competitive work environment, such as for a salesperson who could experience an increased likelihood of conflicts due to his competitive environment. However, as mentioned in the limitations the evidence is not sufficient enough to make any conclusion from the data.

Additionally, one participant talked about an increased workload caused by video conferences. This puts additional pressure on the low-skilled employees. So maybe workload could be a moderator of the severity or, in general, the emergence of conflicts. An additional qualitative study could give more insights to further elaborate on this. First, qualitative research would enable a richer data collection to see whether this effect is evident. Later, a quantitative study could be followed up to see whether this is generalizable and enable control for possible confounding variables.

## **Conclusion**

Revisiting the research question "How do age differences influence conflicts in video conference environments?" there was insufficient evidence to suggest that age differences cause conflict. Instead, it seems stronger attributed to attitudes and the resulting skill level.

Nevertheless, age seems to play a role in attitude formation. Nevertheless, introducing such a simple tool as video conference in the workplace appears to be sufficient to evoke conflicts when skill differences are present.

### References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.
- Campbell, R., Goodman-Williams, R., Feeney, H., & Fehler-Cabral, G. (2020). Assessing Triangulation Across Methodologies, Methods, and Stakeholder Groups: The Joys, Woes, and Politics of Interpreting Convergent and Divergent Data. *American Journal of Evaluation, 41*(1), 125–144. <https://doi.org/10.1177/1098214018804195>
- Davis, M. H., Kraus, L. A., & Capobianco, S. (2009). Age differences in responses to conflict in the workplace. *International Journal of Aging and Human Development, 68*(4), 339–355.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative Content Analysis: A Focus on Trustworthiness. *SAGE Open*. <https://doi.org/10.1177/2158244014522633>
- Evans, B. (2020, June 4). The Zoom revolution: 10 eye-popping stats from tech's new superstar. *Cloud Wars*. <https://cloudwars.co/covid-19/zoom-quarter-10-eye-popping-stats-from-techs-new-superstar/>
- Fosslien, L., Duffy, M. W. (2020, April 29). How to combat Zoom fatigue. *Harvard Business Review*. <https://hbr.org/2020/04/how-to-combat-zoom-fatigue>
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research, 2*(163-194), 105.
- Gupta, M., Hassan, Y., Pandey, J., & Kushwaha, A. (2021). Decoding the dark shades of electronic human resource management. *International Journal of Manpower, (20210308)*. <https://doi.org/10.1108/IJM-11-2020-0512>
- Lacey, A., & Luff, D. (2001). *Qualitative data analysis* (pp. 320-357). Sheffield: Trent focus.
- Rizzuto, T. E., (2009) Fifth International Conference on Intelligent Computing ICIC 2009 Ulsan Korea 20090916-20090919. (2011). Age and technology innovation in the workplace:

does work context matter? *Computers in Human Behavior*, 27(5), 1612–1620.

<https://doi.org/10.1016/j.chb.2011.01.011>

Salamon, S.D. and Robinson, S.L. (2008), "Trust that binds: the impact of collective felt trust on organizational performance", *Journal of Applied Psychology*, American Psychological Association, Vol. 93 No. 3, p. 593.

Standaert, W., Muylle, S., & Basu, A. (2021). How shall we meet? understanding the importance of meeting mode capabilities for different meeting objectives. *Information & Management*, 58(1). <https://doi.org/10.1016/j.im.2020.103393>

## Appendix A

### Interview questions

#### Short Verbal Introduction to Participant:

Thesis Group from University of Groningen

Bright and Dark Side of New Technology in the Workplace - Video Conferencing/ Meetings

Open Question Questionnaire with a Duration of 45-60mins

Data confidentiality; recordings stored safely and deleted after Completion of Research

-> Responses are anonymised and not connected to their name or other identifiable information

#### 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?
  - d. How would you compare the supervisors' behaviors in both, offline and video meetings?
  - e. How would you describe your skill level regarding video conferences?
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?
  - a. Which ones do you react better to when contrasting offline meetings and online ones?
  - b. How would you describe the dynamics between young and older workers during video conferences?



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?
  - c. How do you react to the leader's behavior in these types of meetings?
  
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?
  - c. How do you react to the leader's behavior in these types of meetings?
  
5. What would you change about video conferencing? What would you keep the same?
  - a. Were there any conflicts? If yes could you describe them?

## Appendix B

Themes, categories and codes emerged from thematic analysis

Themes	Perception of video conferences		Attitudes towards video conferences	
Categories	<u>Older employees</u>	<u>Younger employees</u>	<u>Mindset</u>	<u>Avoidance of technology</u>
Codes		Technical advantage	Conservative (o)	Refusing the use of technologies (o)
		Less social	Growing up with technologies (y)	
		Too long meetings	Interested in technology (y)	
		Flexibility		
		High workload		
	Less time consuming	Less time consuming		
	Less engagement	Less engagement		
	Missing body language	Missing body language		
	Family			

Themes	Skill differences		
Categories	<u>Handling of video conferences</u>	<u>Knowledge</u>	<u>Physical consequences</u>
Codes	No problems using tools (y/o)	Prior experience (o)	Stamina (y)

	Struggle using tools (o)		Exhausted (o)
	colleagues have no problems using tools		

Themes	Dynamics			
Categories	<u>Interaction with older employees</u>	<u>Interaction with younger employees</u>	<u>General problems</u>	<u>Work environment</u>
Codes	Looking down	Making fun	Hard to reach	Dividing task
		Passive aggressive	External factors	
		Not listening	Hard to reach	

*Note.* "(y)" indicates younger employees or technological natives and "(o)" indicates older employees or technological migrants.