



Copenhagen Business School

Research Proposal

Effects of Remote Work during the Covid-19 Pandemic on Employees' Mental Health

Re-take Exam – Business Research Methodology

Copenhagen Business School

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1 Introduction

The first known outbreak of Corona virus can be traced back to Hubei, China in November 2019. According to WHO, now more than two years and several lockdowns later, the world has had more than 281 million confirmed cases of Covid-19. (WHO Coronavirus (COVID-19) Dashboard, 2020)

In March 2020 the World Health Organization and the International Chamber of Commerce agreed to work closely together to combat the spread of the virus with a joint statement concerning the need for initiatives in the global business sector. (ICC-WHO Joint Statement, 2020)

Digital platforms have seen a rapid growth of users even before confinement measures were introduced worldwide. The pandemic has further accelerated the future of work with platforms such as “Zoom”, “Microsoft Teams” and “Google Meets”. (Sensor Tower, 2021) Going online instead of commuting to the office has revealed to have both positive and negative aspects and the adaption of such a different work environment is bound to affect employees. Remote working creates great opportunities for corporations to gain efficiency, but such adaptations can simultaneously affect human behaviour, with negative psychological effects, that this paper will explore. (Risi & Pronzato, 2021)

Social and psychological needs are important to satisfy in a daily work life. Connections and interpersonal relationships motivate human behaviour and should be fulfilled in order to gain a feeling of belongingness and respect. Meeting co-workers through a screen instead of in real life can possibly challenge connection-making and thereby not meet the social needs. (McLeod, 2007)

In this research proposal, remote working during the pandemic will be analysed in the Danish consulting industry to examine the effects it poses on mental well-being for the employee. This paper seeks to add to the growing literature on the subject two years after the outbreak of the Covid-19 pandemic. With the findings of this study, it is encouraged to conduct further research in the long-term effects of remote working.

2 Research Question

This study aims to answer the research question:

What, if any, are the effects of remote work during the Covid-19 pandemic on employees' mental health in the Danish consulting industry?

Deriving methods and results from existing literature on the subject of remote work at the very beginning of the pandemic, this paper aims further investigate the effects of remote work on mental health of employees as of today, two years into the pandemic. An exploratory method will be used to acquire qualitative and quantitative results of employees chosen from a specific Danish consulting company. The research will be conducted on the purpose of adding more literature and evidence to the effects of remote work, so that private and public actors can gain an understanding of the future of work. Additionally, the results of this research will be available for future studies to build upon.

3 Text and graphic explication of the empirical background

Remote work can also be characterized as working from home (WFH) or teleworking, and it is defined in research from Mokhtarian (1991) as “*Work done by an individual while at a different location than the person(s) directly supervising and/or paying for it*” (Mokhtarian, 1991).

The adaption of remote work is viewed in line with the findings from Raghuram et. Al. (2000) as “*an overall state of adaption to environmental demands and conditions*”, with several indicators such as employees’ satisfaction with work conditions, perceived job performance because of remote work and the ability to balance work and non-work demands. (Raghuram et al., 2001)

However, in contrast to the research of Raghuram et. Al (2001), and their analysis of adjustment to remote work, the Covid-19 pandemic has required companies and employees to unexpectedly and without an end date to change their work environments and ways of working. (van Zoonen et al., 2021) In March 2020 The danish government strongly encouraged private companies to work from home and passed an epidemic law to send home all public employees. (Pressemøde 11. marts i Spejlsalen, 2020)

According to a survey of more than 1000 Danish companies conducted by Dansk Industri (2021), approximately 70.000 Danes worked from home or remotely on a given workday before the pandemic begun. During the pandemic this number has increased to around half a million. Experts predict that after the pandemic ends, when restrictions are lifted, at least 11% will still be working remotely as seen on figure 1 below, which is twice as many as pre-covid numbers. This indicates that many danish companies see positive benefits of working remotely and it is likely to influence the future of work. However, there is a clear difference between working sectors and the prospects of keeping workers remote. According to the analysis from Dansk Industri, “trading and supply” is the sector with most employees expected to stay working from home. In contrast, “building and construction” will have fewest employees working remotely, however this sector is still expected to see a slight increase. The reason for building and construction having the lowest prospect of remote work after the pandemic, is possibly due to the significant amount of manual work in this sector compared to others. (Dansk Industri, 2021)

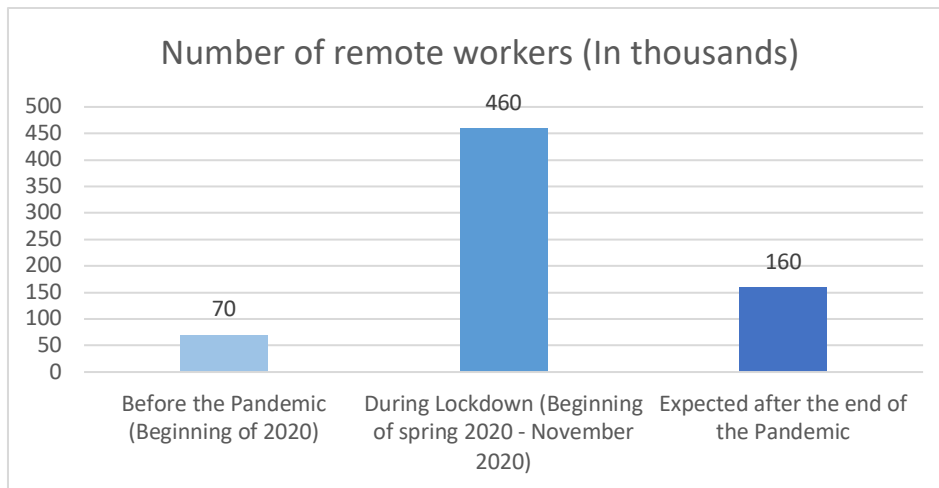


Figure 1 – Number of remote workers in Denmark.

Estimated from 1.101 danish companies and 118.000 employees in total.

Source: "Danmarks Statistik" and "DI's Virksomhedspanel"

Research from McKinsey (2021) has specifically revealed that the financial and business service sector have a higher potential for remote working. (Lund et al., 2021). With a significant increase in remote working due to restrictions, companies have been investing more in digital tools and databases to avoid decreasing productivity. Especially communication and information systems have been heavily invested in, and that trend is likely going to continue after the pandemic, which would support a future of remote work even more. (Dansk Industri, 2021)

Despite the new digital tools, many companies have experienced decreasing productivity in periods. An explanation for this decrease is, according to the companies in the survey, the fact that children of employees have been sent home from school, which could create less focus at home for the employees to keep the same workflow. (Dansk Industri, 2021)

According to studies from Deloitte (2021) and Kraka (2020), the decrease in productivity was also a result of employees being sent home without a warning and in long periods during government lockdown. Following the pandemic, it is expected that remote work will be single days and not several uninterrupted weeks. Moreover, workdays from home will be effectively planned regarding specific tasks. This demonstrates the idea of increasing remote work not affecting productivity negatively in the future and can explain why companies expect to continue working from home after the pandemic. (Hatfield, 2021; Wilken & Jørgensen, 2020)

Despite the expectations of an unchanged measure of productivity while working remotely, it is important to study other effects that remote work might have on employees. In a national

public poll, reported by the American Psychiatric Association (APA) in April 2021, most employees in the survey answered that they experienced negative mental health impacts when working from home. Nearly 2 out of 3 remote workers felt isolated or lonely at least sometimes and 17% felt isolated or lonely all the time. More than 2 out of 3 remote workers reported that they had trouble getting away from work by the end of the day, and young adults (18-29 years old) were more likely to feel isolated or lonely when working from home compared to older adults. (American Psychiatric Association, 2021)

The survey highlights the importance of taking care of your employees' well-being out of the office and it is also observed in the study that 54 % of employees report that their employer has become more accommodating to their mental health needs since the start of the pandemic. Nonetheless, it is reported that more than 4 out of 10 employees are concerned about retaliation if they seek mental health care or take time off for their mental health. (American Psychiatric Association, 2021)

4 Theoretical background

The effects of remote work are a well-studied area within the field of international business. However, research about the effects of working from home in relation to the Covid-19 pandemic is still limited, which is why this paper will be relying mainly on journal articles from internet resources. Analysing existing literature on the topic is crucial in order to settle upon the best research methods. This section will provide a review of specific studies relevant for examining the effects of remote work on employee basis.

Risi and Pronzato (2021) researched the experiences of remote workers during the first Italian government lockdown and investigated the role of digital platforms in their working and everyday life activities, leading to an assessment of the consequences of remote working on personal and work conditions. Risi and Pronzato relied on 20 in-depth semi-structured interviews to follow an exploratory and qualitative approach. This method was chosen to explore the experiences and the meanings they attach to their personal and working activities, since the majority had not been exposed to such confinement measures before. Hence it was a novel research scenario. The participants were chosen on behalf of a criterion sample according to gender, age and job. Software was applied to analyse each 45 min interview to find recurring themes. (Risi & Pronzato, 2021)

The result of the study revealed that remote workers experienced a fractured and “always-on” setting, with digital platforms blurring out the lines that would separate private and professional life. Participants felt that their work became increasingly embedded within each sphere of social life and working objectives became the main concern one’s existence. Results showed that the impact of the pandemic was not gender-neutral, since the burden of remote work was articulated more strongly by women especially with young children in the household.

For several interviews, remote work was viewed positively considering the many digital opportunities it created, however participants also expressed the lack of relational aspects of online communication, which made the relationship between co-workers insufficient. (Risi & Pronzato, 2021)

This part of the study significantly relates to the mental health effects of working from home, and clearly highlights how social needs and empathic relationships affected by the pandemic are worth researching the effects of.

The research that Risi and Pronzato (2021) provided came with the following limitations. Making use of a small qualitative sample does not necessarily translate into a general opinion and the participants were only from Italy, which is somewhat close to Denmark in their

European system, however there can be significant cultural differences that could show contrary results. Moreover, this study was conducted in the very beginning of lockdown measures after the shock of the pandemic and the following months. Recreating such an interview now, two years into the pandemic, would plausibly change the outcomes of the effects of remote working. Nonetheless, Risi and Pronzato's findings (2021) demonstrate that remote work is in fact changing the work environment and the people in it.

Another study conducted by van Zoonen et al. (2021) draws on a sample a little closer to Scandinavia in Finland. The study took place in Finland and involved 5452 Finnish employees who had been asked to work remotely in the beginning of the pandemic. The cross-sectional study was aimed to explore the factors associated with employees' sudden adjustment to working from home. This included structural, relational and contextual factors and communication dynamics. (van Zoonen et al., 2021)

van Zoonen et al. (2021) conducted an online survey in spring 2020. The questionnaire was measured using likert scales with seven options between strongly agree to strongly disagree. Previous research defined the survey items. The dependent variable "adjustment to remote work" was measured in the same way as Raghuram et al.'s findings (2001) in the context of virtual work, with satisfaction with remote work, perceived performance as the consequence of remote work and ability to balance work and non-work demands. Using a common method variance and a latent factor approach, van Zoonen et al. (2021) were able to analyse their hypotheses of adjustment to remote work based on a quantitative method with the likert scales showing correlations between the variables.

The findings of the study showed that structural factors (High work independence and clarity of job criteria) make it easier for employees to adjust to remote work. Relational factors (Interpersonal trust and isolation) are negatively related to adjustment, which again highlights how remote work affects the social dynamics of work, that feelings of social isolation decrease adjustment to remote work. (van Zoonen et al., 2021)

The research by van Zoonen et al. (2021) had some specific implications and limitations.

First, the research was exposed to crisis-specific environmental factors, the shock of the pandemic, that affected the adjustment to remote work differently compared to earlier research with the same methods. Conducting a study with the same methods as van Zoonen et Al. (2021) at this point in the pandemic, would possibly show a smaller implication of the same crisis-specific factors, since many Danish employees have gotten used to working remotely as of beginning of 2022.

Second, the study was obtained through a convenience sampling method, which limits the generalizability of the results. Additionally, the data did not track the adjustment of remote work over time.

However, the Finnish socio-economic system has many similarities to the Danish system, hence the research of van Zoonen et al. (2021) is relevant to consider and analyse when conducting research in the same subject in Denmark.

Another study conducted in 2020 by Madero Gómez et al. approached research about complications of Covid-19 in the same way as van Zoonen et al. (2021), with a quantitative exploratory methodology. An online questionnaire with likert scales was sent out to Mexican remote workers in the beginning of the pandemic. The results showed a relation between stress and the aspects related to the arrival of Covid-19, highlighting the effect that remote working had on employees' emotional well-being. (Madero Gómez et al., 2020)

As seen with several research papers (Madero Gómez et al., 2020; Risi & Pronzato, 2021; van Zoonen et al., 2021) the social and mental wellbeing is affected by remote work in many instances based on their findings in Italy, Finland and Mexico, both through the lenses of the qualitative and quantitative method. Therefore, conducting a study of the mental health effects is highly relevant in Denmark. It is worth considering that new research on the subject would highlight long term effects, since the research that has been reviewed were all in the very beginning of the pandemic. (Madero Gómez et al., 2020; Risi & Pronzato, 2021; van Zoonen et al., 2021)

Based on the recent results of remote work from the American Psychiatric Association (2021), it is plausible that mental health effects are created over a longer period and could possibly be even more prevalent two years into the pandemic. (American Psychiatric Association, 2021)

5 Proposed research design

The final part of the research proposal will be the proposed design and structure and important parts of the overall project will be highlighted.

5.1 Population and sample

The proposed research design will be based on a single danish firm in the consulting industry to make inferences about the population, which is here Danish remote workers in the same, or a similar, industry. The business services sector, here the consulting industry, is chosen due to its high adaptability and expectation of keeping workers remote (Lund et al., 2021). The results of the study are highly relevant for the participating company to gain an understanding about how the new workplace affects the mental health of employees.

The sample will be aimed for 30 employees that are, and have been, working remotely during the pandemic. The employees are chosen as a stratified random sample, meaning that the participants are selected according to a specific variable, which will be gender, age and position in the company. This approach is used to ensure representation and that separate results may be generated from each stratum. (Ghauri et al., 2020)

An exploratory method for this research is deemed appropriate because it helps to understand how people experience an environment. Time and budget constraints are important to consider, since this research will be conducted by a bachelor student with a limited budget and a 6-month timeframe. Choosing a small sample size allows for more timely data collation and analysis. (Ghauri et al., 2020)

5.2 Data collection

The data collection will be approached in the same method as Risi & Pronzato (2021), with semi-structured interviews on the employees' experiences working from home. The interviews will be aimed for 20 minutes of length and scheduled online. Interviewees will be anonymous to avoid any potential bias and get a better chance of elaborating on their experiences with remote working. The semi-structured interview approach will allow for both predetermined questions along with open follow-up questions that are not planned, so that the interviewees can answer in a detailed and transparent manner.

Furthermore, the interviewees will be asked to answer a survey with likert scales ranging from "1) Strongly agree" to "7) Strongly disagree", inspired by the methodology used by existing research. (American Psychiatric Association, 2021; Madero Gómez et al., 2020; van Zoonen et al., 2021)

The questions in the interview and in the survey will be constructed in a way so that they touch upon several factors associated with mental health, such as loneliness and isolation, work-life balance, stress and motivation, relationships with co-workers and whether or not there have been mental health tools introduced by the management.

A survey will allow the analysis of results to be more comparable and straightforward.

Using a mix of interviews and questionnaires will help increase representativeness, since the open questions in the interview make up for a situation in which the respondents answer falsely due to the sensitive nature of the questions in the survey. The focus point of the research is mental health, and it is thereby crucial that the interviewer makes the participants feel comfortable, considering the very personal subject.

5.3 Data analysis

The data from the interviews will be analyzed using a mix of detailed qualitative data reduction and interpretation to identify patterns and themes from the employees' experiences. The purpose of the qualitative research is here to understand and gain insights about the collected data. Additionally, well-known software, Atlas.ti, will be used to recognize reoccurring elements using open coding techniques, to faster and more efficiently analyse the worker's perceptions and experiences from the recorded and transcribed interviews. (Ghauri et al., 2020) The results of questionnaire will be examined with a quantitative method. The likert scales will be treated as interval scales and analyzed with comparing means and standard deviations to describe the data.

The findings of the analyzed interviews and questionnaire will be used to answer the research question and draw conclusions about the mental health effects of remote working in the Covid-19 pandemic.

5.4 Limitations

There are several drawbacks associated with conducting any study that could impact the validity and reliability of the conclusions made. This study is based on a very small sample size which could affect how representative the results are for other employees and different companies. However, it should be stressed that a single company is chosen by the reasoning that time and budget constraints do not allow for a larger sample size. It should in addition be mentioned that the population in this study are companies in the same or a similar industry as consulting. Therefore, generalization is very limited to other working sectors and as an exploratory study it is heavily encouraged for future research to explore the same subject.

A qualitative method has been preferred with more in-depth answers, considering that the employees' experiences are very subjective. The drawbacks of qualitative method have been approached by also conducting a questionnaire. Nonetheless, mixing a qualitative and quantitative method can also be too time-consuming given the timeframe.

Most of the existing literature that this study is based upon, was all conducted in the first months following the shock of the pandemic. Naturally, the results of this study will possibly differ since employees have been used to working remotely in periods for the past two years.

The findings of this study are based on employee's emotional perceptions, which are not always a stable measure. The collected data could possibly be affected if the respondents have had a stressful experience prior to the interview or if the questions are too sensitive for the employees to answer. In addition, several factors in the home environment will change the employees' perception of working from home, such as having children in the household while working. The difference in working tasks will also possibly influence the experiences about working from home. Controlling for age, gender, position in the company and number of children in the household will meet the potential risk of invalid comparisons of experiences and representativeness.

5.5 Proposed time frame

1st month

Keep researching for existing literature in the field, since new literature could be published any day given the high relevance of the subject at this point in time. Reach out to relevant companies.

2nd month

Decide on company and employees for the survey. Construct questionnaire and prepare statistical analysis tool.

3rd month

Collect all survey answers and interviews and begin analyzing the responses with software.

4th month

Finish data analysis and write up results, theoretical review and discussion to complete thesis.

5th month

Flexible month to prevent a planning fallacy.

6th month

Proofread thesis and revise for any last changes. Hand in and begin preparing for oral defense.

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