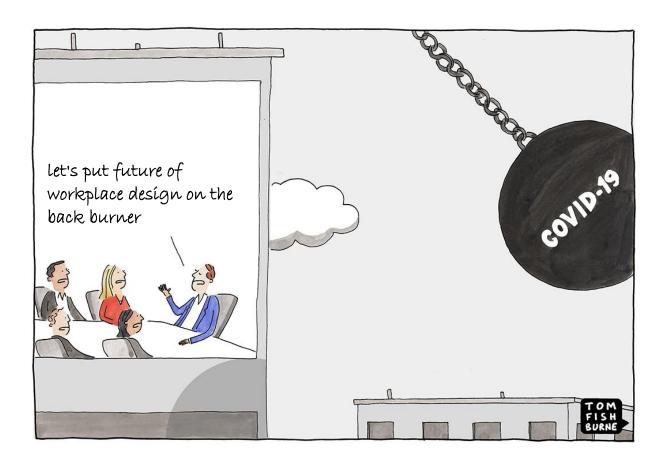
# The expectations of different generations on the workplace design after Covid-19 within Dutch municipalities.



<sup>1</sup> Titlepage (Deloitte, nd.; adjusted by author, 2021)





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#### **Foreword**

Welcome to the thesis: The expectations of different generations on the workplace design after Covid-19 within Dutch municipalities. The master thesis in front of you is the final product of the Master Facility and Real Estate Management at the University of Greenwich and Saxion, University of Applied Sciences.

I am proud of what I have accomplished. After a good start, I went through a really difficult period. With the help of family and good friends, I managed to get back on my feet and finish this master. This research has been conducted during the Covid–19 pandemic, which brought me nothing but benefits. I owe the subject for my thesis to it, and the lockdowns have ensured that I did not miss too much of my normally busy social life.

I would like to take this opportunity to thank a number of people without whose help this report would not have been before you. First of all, my colleagues of all the Dutch municipalities who filled in my questionnaire, especially those from the municipalities of Apeldoorn and Zwolle. In addition, I would like to thank my sister, Carlijn Mels who helped me out a lot (although it was with a little bit of self-interest). Also my mom deserves a big thanks for supporting me during the whole course.

Of course I would like to thank Feike Bergsma and Adrienn Eros, who helped me through a number of difficult moments during the final months. In addition to some psychological help, they have helped and supported me academically.

I hope you enjoy reading my masterpiece.

Oh, and dad, this one is for you!

Sincerely,

Rianne Mels Apeldoorn, June 2021

## Management summary

Due to Covid-19 the way of working changed rapidly. Also the change of the work environment accelerated. A 'new normal' emerges because organisations and employees have discovered the advantages of working from home. This influences the use of the offices and thereby the corresponding facilities. Dutch municipalities want to anticipate to the future and are seeking to find out what their employees expect when they return to the office post-Covid-19.

The aim of this research is to get insight into how different the expectations of distinct generations are on post-Covid-19 workplace design at Dutch municipalities. The following research question has been formulated: How different are the expectations of distinct generations on post-Covid-19 workplace design at Dutch municipalities?

This research has been conducted during the Covid-19 pandemic, which means literature about the period post-Covid-19 was not available. Based on the literature from before the Covid-19 pandemic several aspects were found to be important when looking into the workplace design at the office and looking into working from home. Aspects such as characteristics of an employee, the home situation, and personality are of influence. The literature also shows reasons why employees do not want or can work from home, just as advantages and disadvantages of working from home are given.

In order to give an answer to the research question a literature review and survey have been conducted. The questionnaire was divided into four sections: general information about the respondent, such as age, gender, and function. But also the composition of the household was asked. Experiences before Covid–19 with working from home were researched, just as experiences with working from home during Covid–19. Hereby the reason why employees were not working from home was asked, but also the advantages and disadvantages were researched. The expectations post–Covid–19 were asked regarding the preferred workplace design and the extent of going back to the office.

This revealed that there is no insurmountable difference between generations. Overall, they are agreed about the workplace design they prefer the most, and also the expectation to work more from home post–Covid–19 is similar. Aspects they think differently about are the extent to which they want to continue working from home post–Covid–19 and the suitability of their home office.

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#### Introduction

The introduction provides background information and gives the context for the research problem. It also gives an explanation about how the topic is of importance for the Facility and Real Estate Management industry. Furthermore, the research objective, research question and sub questions are stated.

The workplace is always changing. Technological developments have accelerated this since the 1980s. It has become possible to work outside a traditional workplace such as an office. In other words, time and place–specific work became less relevant (Haynes, Nunnington, & Eccles, 2017). In addition to technological developments, other ways of working have also contributed to changes in the workplace. Until recently, flex offices, open–plan offices and Activity Based Working offices were booming. In the beginning, the flexible offices were mainly implemented in private organisations. Following the example of private companies, municipalities have also realised this new office concept. For civil servants, this meant giving up the 9 to 5 mentality. They could now also determine the location where they worked (de Vries, 2019).

Since the outbreak of the coronavirus, change and development of the workplace has accelerated. A lockdown was declared in the Netherlands in March 2020. This meant that Dutch people had to work from home, unless they have a vital profession (e.g. supermarket employees, cleaners and healthcare professionals). Before the corona crisis, employees came to the office to work, and meet their colleagues. Activities like conferences and meetings were attended in the office, while working from home was used to perform individual tasks. This will change due to the corona crisis. Working from home has become the 'new normal' and employees will work at home more than before the coronavirus (van Veldhoven & van Gelder, 2020). The 'new normal' affects all employees who work in the office. By researching the workplace design post–Covid–19, organisations can respond to the needs of their employees.

Civil servants who mainly used to work at the town hall or in the city office also had to work from home. Municipalities in the Netherlands set an example because they are part of the Dutch government, but they are not in the lead. Information about the expected workplace designs is therefore important for the municipality. With this research, FREM organisations of Dutch municipalities can respond to how employees perceive the workplace design post–Covid–19. By researching this now, the FREM organisations can start developing new designs.

The average age of civil servants was 48.1 years in 2018, and the number of civil servants over-60s also increased. Municipalities are seeking ways to keep, and reduce the outflow of younger employees (Trends in HR, 2019). Meanwhile four generations work within Dutch municipalities: The Baby Boomers, Generation X, Millennials, and Generation Z. All these generations have their own view on workplace design (Bekkers, 2019). These four generations are approached separately to form a good picture of the expectations of the civil servants on the post–Covid–19 workplace design.

#### Literature review

This research is about the expectations of different generations on the workplace design, who are working at Dutch municipalities. The research focuses on the workplace design before, during and after Covid–19. In the literature review, theoretical background information is given about the core concepts of this research.

#### 2.1 Changed workplace environment

In this section, different workplace environments will be discussed. First, the change from fixed offices to open-plan offices will be reviewed. Then, two major developments of recent years will be discussed, namely Activity-Based working and teleworking. Finally, the effect of Covid-19 on the workplace environment will be discussed.

#### 2.1.1 From fixed offices to the open-plan office

In the last half of the 20th century a lot has changed within the office environment. Technological developments have left their mark on the workplace and the way of working. A big change was the disappearance of the typewriter and the analog telephone. These were replaced by laptops and cell phones. Because of this change, more and more work was done digitally and most of the paperwork disappeared. These developments have changed the way work is performed at organisations (Harris, 2015). The work environment has also changed significantly during that period. Initially, the office buildings were divided into individual offices for all employees. They worked here within set times and on set days. Due to various developments such as globalisation, internationalisation, technical developments, and growing individualism the work environment was viewed differently (van der Voordt, 2004; Harris, 2015; Brunia, de Been, & van der Voordt, 2016). The fixed offices vanished and office floors were created where the walls and rooms disappeared. These open offices, also known as Burolandschafts, should ensure that employees communicate and collaborate more than when they worked in cellular offices (Bedoir, 1979; van Meel, 2000). Other reasons for organisations to change the work environment and implement an open-plan office are cost reduction and increasing efficiency (Vos & Van der Voordt, 2002; Brunia et al., 2016; Monaghan & Ayoko, 2019; Nanayakkara, 2019). Van der Voordt (2004) recapitulates it nicely as: 'organisations are primarily concerned with achieving a better performance at lower costs' In recent centuries, much has been written about the open-plan office. Various features of open-plan office are mentioned in literature, such as the removal of walls in the office and the replacement of fixed workplaces by non-territorial workplaces (Baldry & Barnes, 2012). This makes that a workplace can only be used when it is free. This phenomenon is also referred to as 'hot-desking'. (Millward, Haslam, & Postmes, 2007; Harris, 2015). As a result, employees are not visually and auditory separated.

In an open-office environment employees must share facilities. In addition to standard shared facilities such as the coffee maker and printer, this also includes desks, cabinets, chairs and other furniture. Small closed workplaces are created to meet the needs of some employees for concentrated work. The same goes for meeting rooms, which can be used on request. Other aspects of the open-plan office are central control of lighting, air quality and temperature (Elsbach, 2004; Brunia, de Been, & van der Voordt, 2016; Hongisto, Haapakangas, Varjo, Helenius, & Koskela, 2016).

#### 2.1.2 Activity-Based working and Teleworking

Following on from previous developments in the field of workplaces, there have been two other major developments in recent years. For employees it has become possible to telecommute, and Activity–Based working (ABW) has been implemented. ABW is often confused with open–plan offices, where desk–sharing is used. The major difference between the open–plan office and an ABW environment is that within an open–plan office there is still an atmosphere of a traditional office with standard furniture and little distinguishing materials. An Activity–Based work environment is a work environment in which many different settings are created for activities that employees have to perform. In an ABW environment, different furniture and different materials are used to create a different atmosphere in every room.

The essence of ABW is that employees understand that different activities can be better performed in specially designed places. As Leesman (2017) describes it: 'Rather than forcing individuals to carry out the majority of their work at a single allocated desk or cubicle, ABW encourages employees to recognise that different work activities can be better supported by spaces and features designed specifically for that task.' Spaces are specially designed for different activities (Engelen, et al., 2019). For example, there are concentration workplaces for concentrated and individual work. There are also special closed rooms for telephone conversations (Leesman, 2017). Furthermore, there are boardrooms and meeting rooms. The rest of the office is furnished with separate workplaces where employees can perform their tasks (Wyllie, Green, Nagrath & Town, 2012).

Besides the ABW trend, teleworking was introduced. According to Messenger and Gschwind (2016) the European Framework Agreement on Telework defined Telework as: 'a form of organising and/or performing work, using information technology, in the context of an employment contract/relationship, where work, which could also be performed at the employer's premises, is carried out away from those premises on a regular basis.'

This definition covers the three dimensions Messenger and Gschwind (2016) elaborate, namely technology, location and organisation. New technologies have revolutionised the 21st century. The smartphones, laptops and tablets have ensured that we can be in constant contact with friends, family, but also with colleagues and managers (Yun, Kettinger, & Lee, 2012). As mentioned earlier, work has been detached from traditional office spaces. Thanks to the Internet and ICT, work activities can be carried out anywhere, anytime. Over the years, teleworking has evolved from a home workplace, to a mobile workplace, to fully virtual thanks to technology (Messenger & Gschwind, 2016). In figure 2 the conceptual framework determined by Messenger & Gschwind (2016) is displayed.

Below, the three generations of Telework are briefly defined.

Home office: The employee was facilitated by fixed computers and new telecommunication tools at home.

Mobile office: Employees can perform their work in the office, at home and also at various locations in between, consequently work activities became disconnected from fixed places.

Virtual office: Information and communication are kept in clouds and on networks, it is possible to check emails, messages and access news in the palm of someone's hand (Messenger & Gschwind, 2016).

The various offices that Messenger & Gschwind (2016) have appointed are all applicable to the home environment. Only the last two also apply

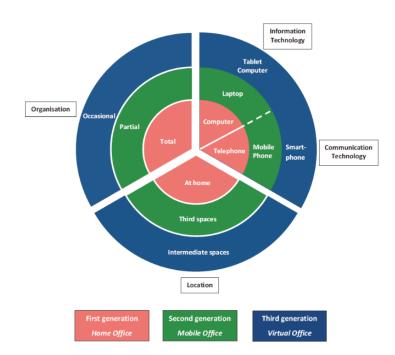


Figure 2. Three generations of Teleworking (Messenger & Gschwind, 2016)

to other locations. Ng (2010) affirms that by stating: 'the use of mobile technologies is influencing work at home and everywhere else'.

#### 2.1.3 Workplace design preferences and characteristics

Now that most workplace types have been set out, workplace preferences have been looked at depending on several characteristics, such as kind of organisation, position of the employee, and age (generation).

For organisations within the knowledge economy, the implementation of new ways of working and other workplace designs is possible. This is because knowledge workers regularly work behind a computer and it often does not matter where this computer stands (van Veldhoven & van Gelder, 2020). Some functions, on the other hand, do have the need to be in a specific place. Peters et al. (2011) indicate that employees who have a support function have fewer opportunities to switch to, for example, teleworking.

According to van Meel and van der Voordt (2001a), a workplace tells something about the status of an employee. With the arrival of the open-plan offices, the private offices are disappearing. Middle management in particular attaches great importance to their own office, to show that they are higher in the hierarchy.

When looking at literature about age and workplace preferences, it is remarkable that there is a big difference between Baby Boomers and Millennials. While Baby Boomers are satisfied with a solid, safe, clean, workplace with enough privacy and the ability to concentrate, this is different for millennials. Millennials want a workplace where there is room for socialising with colleagues, where they can grow, but also where they can create a good balance between work and private life. While Baby Boomers and Generation X make extensive use of the workplace in the office, millennials want to be able to use the workplace flexibly (Appel–Meulenbroek et al., 2019). The characteristics of generations will later be discussed in more detail.

#### 2.1.4 The workplace design and activities

As described above, the work environment and the office layout are changing. For many employees, a fixed workplace is no longer a matter of course. Although the work environment changes, the tasks and activities that employees must perform do not change. In order to develop a suitable workplace design, various activities are considered (Kleijn, Appel–Meulenbroek, Kemperman, & Hendriks, 2012; Beijer, De Bruyne, Brunia, & Gosselink, 2014). For example, it is important that employees who have to perform concentrated work can do this in a concentration workplace (van Meel & van der Voordt, 2001). In addition, van der Voordt and van Meel (2002) state that employees who perform different tasks tolerate a different level of noise. Besides concentration areas for people engaged in a task that requires concentration, there should be areas where colleagues can have contact with each other. By creating these spaces, communication and collaboration are stimulated (Ashkanasy et al., 2014). Beijer (2011) from the center for People and Buildings defines nine activities performed at the office. These activities are shown in table 1.

Activity	Description				
General desk work	Routine desk work				
Undisturbed desk work	Desk work where you don't want to be disturbed				
Interactive desk work	Desk work where interaction/cooperation with a colleague is desired or necessary				
Scheduled meeting	Agreed consultation with 1 or more colleagues				
Unplanned meeting	Ad hoc consultation				
Talk on the phone	Phone calls (of different nature)				
Reading	Reading for more than half an hour continuously				
Archiving and document care	Processing documents (for example in folders) and incoming mail (for				
Archiving and document care	the average employee)				
Other activities	All other activities that do not fit under any of the above activities				
Table 1. Activities and their description (Beijer, 2011)					

According to Beijer (2011), activity profiles can be drawn up with the help of the above activities and the extent to which they are carried out. With these profiles, the workplace environment can then be tailored to the work processes. In other words, the workplace design within an organisation can depend on the activities that employees perform in the office.

#### 2.1.5 The workplace environment in times of Covid-19

The arrival of Covid-19 in the Netherlands has changed the working environment and way of working. Due to the pandemic, organisations are busy adapting the office environment to ensure that the coronavirus will not spread further. When it is necessary that employees are allowed to come to the office, it is important that the workplace is 'corona-proof' (Cushman & Wakefield, 2020). A number of measures that organisations have been taken to ensure that employees could return to the office safely are: use a fixed workplace as much as possible, place desks 1.5 meters apart, distribute working hours, video call during meetings (also from home), do not use the company canteen, the possibility to disinfect hands, extra cleaning of the office and the interior, and demarcation of 1.5 meters at the

printers and coffee machines. The 1.5-meter measure means that within the average working environment the number of available workplaces decreased to 40 to 50 percent (Arbo-online, 2020). Another measure to stop the spread of the coronavirus is to let employees work from home. An elaboration on working from home can be found in the next chapter.

#### 2.2 Working from home

Working from home has increased enormously in recent decades and the home office has got a more professional character (Derks, Agterberg, Beumer, & Weel, 2011). During the 1970s, the workplace was (partially) removed from the employer's premises and placed close to or even in the employee's home. This was done to reduce long, precious hours of commuting. This new form of decentralisation has been made possible by new technologies (Derks et al., 2011; Haynes, Nunnington, & Eccles, 2017). For organisations in the information industry, this new form has brought the most benefits, because their employees frequently work behind computers. The further development of technologies has made it possible for more and more organisations to give employees the opportunity to work from home (Messenger & Gschwind, 2016). Nowadays the population of employees who mainly use the option to work from home are knowledge workers. A part of the knowledge workers choose to work from home for a small part of their working week (van Veldhoven & van Gelder, 2020).

Just like the workplace in the office, working from home has both advantages and disadvantages for both the employee and the employer. According to Soetman (2011) the reduction of travel time is one of the advantages of working from home. Employees do not have to commute anymore when they work from home. Another advantage is that working from home gives the opportunity to better adjust the work life to the private life and vice versa (Soetman, 2011; De Spiegelaere, Van Gyes, Benders, & Van Hootegem, 2013). Besides the experience of more freedom of choice in the distribution of time, employees also experience more freedom in the way of working (Vos & Van der Voordt, 2002). A more comfortable working environment, more privacy and more control over the indoor climate are also mentioned as benefits of working from home (Ng, 2010).

When employees work from home, this means that there is no face-to-face contact with both supervisors and colleagues, in other words the ties with co-workers and the organisation are diminishing (Vos & Van der Voordt, 2002). This can lead to feelings of isolation and communication problems. Employees that work from home can experience an increased workload, because they feel they are constantly 'on' (Vos & Van der Voordt, 2002). Consequently, employees can develop negative feelings while working from home (Soetman, 2011). Contrary to what Soetman (2011) and De Spiegelaere et al. (2013) state, working from home can lead to conflicts between private and business because the boundaries are blurred both physically and psychologically. Distraction by children or household tasks can prevent employees from performing their work optimally (Vos & Van der Voordt (2002).

Likewise, for the employer there are advantages and disadvantages when their employees work from home. According to Hill, Ferris and Martinson (2003), working from home has a number of advantages for organisations: higher productivity when working from home, less absenteeism due to illness, better customer contact thanks to virtual office employees and improved operational effectiveness. Furthermore, working from home increases the job satisfaction, dedication and motivation of

employees (Ng, 2010; Messenger & Gschwind, 2016). A satisfied employee is more productive and will work longer for an organisation (Verhoeven, n.d.; Weidema, 2020). In addition, working from home ensures that employees waste less time on commuting (Derks et al., 2011) and therefore experience a higher energy level (Hill et al., 2003).

One of the biggest financial benefits for organisations when it comes to working from home is the personnel aspect. Thanks to the ability to work from home, organisations have the opportunity to recruit and retain the best candidates for a job, even though they do not live nearby. As a result, various direct and indirect costs are saved, such as recruitment, selection and hiring costs, lost productivity, and the training of new employees. All of this ensures that it benefits the organisation and improves work performance (Hill et al., 2003).

Working from home also has disadvantages for employers, for example the synergy between employees can be reduced through less informal contact. Because of that employees working from home can weaken the organisational structure and culture. Furthermore, employees are less available during office hours due to private circumstances. In addition, non-verbal communication is more difficult and teamwork is reduced due to digital communication channels (Soetman, 2011). These disadvantages can lead to reduced work performance, which in turn translates into a negative operating result.

When employers choose to give their employees the opportunity to work from home, they have a task to facilitate this properly. Employers need to facilitate technological resources (e.g. mobile devices) to keep employees more agile, flexible and in contact with each other (Harris, 2015). This requires resources and input from the organisation and especially from the facility department. Also, good information and support in setting up the home workplace must be provided (Simonis, 2020).

Research has shown that in particular, home workers with a good home workplace and support from the employer feel more productive when working from home. On the other hand, the home settings like family, type of house, character and someone's job can have impact on this feeling (Hamersma, de Haas, & Faber, 2020). According to Ng (2010) there are nine aspects, physical and psychological, of the home office, namely: Space requirement, Size, Location in the house, Layout and use, Ambient features, Job equipment, Work behaviours, Interpersonal relationships, and Job satisfaction and performance. These features show what is important for employees when they work from home. An overview of the characteristics of the home office mentioned by Ng (2010) and an explanation of the various aspects is displayed in table 2. These characteristics can be reflected in the housing and living situation of the different generations, from which conclusions can then be drawn.

Aspect of the home office	
Space requirement	There is a barrier to working at home when a home is perceived as not being big enough. A large part of the employees wants a separate room to work from home, but this is not possible for everyone. An employee must have enough rooms and space in his house to create a private office at their home.
Size	Employees need a minimum surface area to work well at home. The ideal average home office should be about 11 square meters.

Location in the house	Home workers prefer a specific room in the house where they can work
Location in the nouse	from home. As stated above, this is not possible for every employee.
	Home workers use different strategies to combine work and private life,
Layout and use	creating a physical separation between the rest of the house and the
Layout and use	workspace (segmentation) or working between the rest of the family
	(integration).
Ambient features	This aspect contains noise and music, light, and view of outdoors
	To be able to carry out daily activities, employees need certain
Job equipment	equipment, such as ICT resources, ergonomic furniture, a separate
Job equipment	telephone (to separate private and work conversations), and adequate
	storage space.
	Work behaviours include the following aspects: cognitive workload (less
	distractions), flexibility in working hours, use of communication
Work behaviours	technology, increase autonomy and control of the work schedule and
Work beliaviours	physical workspace, increased privacy, control of access to information,
	personalisation to create a territory, and status and image of an
	employee's role in the organisation
	Employees that work from home miss the social interaction with their
Interpersonal relationships	colleagues, social isolation is lurking. Teleworkers seek for other ways to
	communicate with clients, friends, and co-workers.
Job satisfaction and performance	The job satisfaction and performance of teleworkers increases, due to the
Job satisfaction and performance	flexibility in time and space.
Table 2. Aspects of the home office	e (Ng, 2010)

Although it was said at the end of the 20th century that much of the work would be done from home, working from home has not become the main way of working in recent years (van Veldhoven & van Gelder, 2020). How different has the situation became due to the coronavirus.

#### 2.2.1 Working from home due to Covid-19.

At the end of 2019 the coronavirus started to spread in Asia, the first contamination was detected in the Netherlands in February 2020. All over the world, the coronavirus has made everyone realise the importance of keeping their distance from one another. The one and a half meter society was introduced in the Netherlands (Cushman & Wakefield, 2020). In March 2020, it was announced in the Netherlands that employees should work from home as much as possible. People were only allowed to go to work if they had a vital profession or if there was another reason (NOS, 2020). An employer can oblige the employee to come to the office, other reasons why employees had to or could go to the office are (Rijksoverheid, 2021): the home workplace is not sufficient, the work requires physical presence in the office, and a high degree of loneliness and lack of social contacts.

At first, working from home was an emergency measure against the virus, but working from home has become the new normal and the expectation is that employees will work at home more than before the coronavirus (van Veldhoven & van Gelder, 2020).

#### 2.3 Dutch municipalities

The organisations on which this research focuses are Dutch municipalities. In this chapter, the core concept of municipalities is discussed in more detail.

The Kingdom of the Netherlands is divided into municipalities. After the national government and the provinces, the municipalities are the third level of government. The size of the 355 municipalities in the Netherlands varies enormously. The smallest municipality has about 950 inhabitants, the largest about 870,000 (van der Meer & Boonstra, 2011).

In addition to the administrative organisation, carried out by the mayor, aldermen and municipal council, a municipality has an official organisation. These are the functionaries who prepare and implement decisions daily. Besides the visible civil servants on the street, such as the garbage collectors and the road workers, there are functionaries who work at the office (van der Meer & Boonstra, 2011).

Following private companies, municipalities have implemented new ways of working, such as the openplan offices or Activity-Based Working. For civil servants this meant giving up the 9 to 5 mentality. New ways of working allowed them to determine their working hours themselves. The location where they worked also changed. Instead of having their own office and workplace, they could now decide for themselves where they perform their work (de Vries, 2019).

Like other organisations, the government organisations also started with teleworking and working from home. If the work of the civil servant allowed it, they were given the opportunity to work from home. Initially, it was not self-evident for municipal officials to work from home. The culture within the government made employees feel compelled to be present at the office (G. den Besten, personal communications, March 5th 2021). One of the reasons for working from home was to avoid traffic jams, but the more people started working from home, the more benefits they experienced. Civil servants realised that they could organise their lives differently by working from home. To be able to work from home, it was important for civil servants to be facilitated with a good and ergonomic home workplace (van Berlo, 2009; van Massenhove & Auwers, 2012).

Because Dutch municipalities are part of the Dutch government, they set an example. This also applies to the measures against Covid-19 imposed by the national government (Gemeente Zwolle, 2020). That is why it has become mandatory for civil servants to work from home, unless there is no other option. At the time of writing, there is little academic literature specifically targeting municipalities and civil servants, and working from home during Covid-19. In order to form a picture of how civil servants view working from home during Covid-19, the researcher chose to use other literature, knowing that these are not academic sources.

Despite the fact that within many municipalities there was already the possibility to work from home, compulsory working from home did not get off to a good start. Especially civil servants who normally did not work from home, find it difficult to work completely from home (van der Jagt, 2020). A quick scan performed by Binnenlands Bestuur (2020a) showed that civil servants who work from home during the pandemic experience higher productivity and more flexibility. Yet they also notice that they suffer more from physical and psychological complaints.

In addition, it appears that civil servants who work from home during the pandemic miss direct contact with their colleagues (van den Berkhof, 2020; Binnenlands Bestuur, 2020b).

Besides the above-mentioned disadvantages that civil servants experience from working from home, a number of advantages are mentioned. The loss of travel time is seen as one of the advantages of working from home during the corona crisis (Binnenlands Bestuur, 2020b).

During the first week of the lockdown, in March 2020, Binnenlands Bestuur (2020c) issued a survey to which more than 6,000 civil servants responded. The 5 advantages and disadvantages of working from home that civil servants experience are listed below (Binnenlands Bestuur, 2020c). The percentage after the answer indicates how many percent of the respondents gave this answer.

	Advantages	Disadvantages					
1	I have less travel time (89%)	I miss my colleagues (75%)					
2	Less time is spent on meetings (77%)	I cannot do all my work from home (49%)					
3	I can decide when I work (69%)	My workplace is not ideal (47%)					
4	The coffee is better (58%)	Meetings by phone is difficult (44%)					
5 I can put on some music (57%) I hardly get outside now (41%)							
Tab	Table 3. Top 5 advantages and disadvantages of working from home experienced by civil servants						
(Birmandanda Bartuma 2020a)							

(Binnenlands Bestuur, 2020c)

According to Berkelder (2020), a number of municipalities see that working from home does not only have advantages for employees. The municipalities themselves also experience benefits from working from home for their employees, especially in terms of costs. As mentioned earlier, costs are saved on the travel of employees. In addition, if employees work from home, fewer workplaces are needed in the office. This not only leads to a saving in accommodation costs, but also in the associated facility costs. Just like other organisations, municipalities are facilitating their employees to work from home in a good matter. That is why municipalities gave office furniture to employees at the start of the pandemic. Civil servants find it pleasant that their employer facilitates them with a keyboard, extra screen and desk chair (van der Jagt, 2020). Ultimately, new furniture will have to be purchased, either for the office or for employees who work from home. This means that the aforementioned savings can initially be used for the purchase of new furniture. In the long run, the savings will pay off for organisations (G. den Besten, personal communications, March 5th 2021).

#### 2.4 Different generations

There are different definitions of the concept 'generation'. In 1922 Mannheim described a generation as: 'A generation has been defined as a group that shares both a particular span of birth years and a set of worldviews grounded in defining social or historical events that have occurred during the generation's formative development years' (Van Wensveen, 2017). Kupperschmidt (2000) states that a generation is 'a group of people or cohorts who share birth years and experiences as they move through time together, influencing and being influenced by a variety of critical factors'. The critical factors Kupperschmidt (2000) talks about include 'shifts in society-wide attitudes; changes in social, economic, and public policy; and major events. According to Cogin (2012) and Bennett, Pitt and Price (2012), people who have grown up in different periods of time have different values and norms, beliefs, attitudes, dreams, ambitions and work styles. These affect the behaviour of different generations in general and also in the workplace.

The similarities between the definitions found are that a generation is seen as a group that was born within a certain period of time. It is also mentioned that because they grow up together, they share certain norms and values. Generations share many aspects, including work styles. This influences the expectations of different generations regarding their workplace.

Regarding the birth years of generations, a lot has already been written. The literature does not always agree on the birthyears of the different generations. The following years are used in this study. These are the years of birth that appear in most literature. In recent years much has been written about the fact that four generations are working side by side at organisations. For a number of years, these four generations were the Traditionalists born between 1922 and 1945, the Baby Boomers, born between 1946 and 1964, Generation X, born between 1965 and 1980, and finally Generation Y (also known as Millennials), born between 1981 and 2000 (Schullery, 2013; Ritter, 2014). At the time of writing (2021), the youngest Traditionalists are 76 years old, which means that this generation is no longer part of the workforce in the Netherlands. In addition to the Traditionalists disappearing completely from the workforce, Baby Boomers will retire from 2020. The generation that makes its entry into working life is Generation Z, who are born after 2000. The oldest members of Generation Z are at time of writing (2021) 21 years old. This means that the number of Generation Z's that are working already is relatively small. According to Gaidhani et al. (2019) there will be four generations working side by side, these are the Baby Boomers, and Generation X, Y and Z. Because the expectation is that the number of Generation Z will be too small to analyse, the researcher may add the results of Generation Z to the results of the Millennials. As stated before, the oldest members of Generation Z are born in 2000, which is also the limit of the Millennials. Eventually the expected generations are: the Baby Boomers, Generation X and the Millennials.

#### 2.4.1 Baby Boomers (1946-1964)

Baby Boomers have seen the world change a lot over the past 60 years. Before the war, there was industrialisation. After the war, more and more offices were opened and the knowledge economy emerged. This is also the period when the Baby Boomers grew up (Haynes, 2011). Baby Boomers are described as workaholics, value promotions, titles, their own office and parking space (Kupperschmidt, 2000). Still, Baby Boomers like to work in a team, enjoy being involved in important decisions, and enjoy personal contact (Haynes, 2011). They are also seen as optimistic and team players, but they are accused of not being technologically grounded (Joy & Haynes, 2011). Baby Boomers have difficulty adapting to a flexible work environment because they place great value on a hierarchical structure (Harber, 2011). As mentioned earlier, Baby Boomers are in awe of their own office. A private office gives them a sense of status (Kupperschmidt, 2000; Joy & Haynes, 2011). For concentrated work, Baby Boomers prefer to work from home (Joy & Haynes, 2011). Baby Boomers also prefer to hold meetings in a pre-bookable meeting room (Joy & Haynes, 2011). Three specific workplace types are mentioned that contribute to the productivity of older workers, including Baby Boomers. These are the concentration spaces (space where the employee can work in a concentrated way), spaces to collaborate (for example, a project space), and spaces to contemplate (a place to escape from the normal office) (Haynes, 2011; Rothe et al., 2011). It has already been stated that Baby Boomers find it difficult to adapt to flexible work environments (Harber, 2011). In addition to being difficult to adapt, Baby Boomers suffer from noise pollution within an open-plan office. Baby Boomers work best in an office with a formal atmosphere (Joy & Haynes, 2011).

#### 2.4.2 Generation X (1965-1980)

Each generation has its own story. Generation X grew up between 1965 and 1980, during the digital revolution. They have witnessed the advent of the computer and the Internet. While they were growing up, there was a lot going on in the economic field. Generation Xers have learned that they can expect high-impact changes (Bova et al., 2001). One reason for this is the Cold War that was going on while Generation X was growing up (Bennet, Pitt & Price, 2012). Generation X is seen as pragmatic, independent, informal, entrepreneurial and self-reliant (Bennet, Pitt & Price, 2012). In addition, Generation Xers are called individualistic, sceptical and materialistic. Another striking aspect is that members of Generation X 'work to live' (Angeline, 2011). According to Bennet, Pitt & Price (2012), positive characteristics of Generation X are: 'Adaptable, techno literate, independent, unintimidated by authority, and creative'. Negative characteristics are: 'impatient, different manners, sceptical, perceived as lazy, quick to criticise, lack of assertiveness, emphasise result over process' (Kupperschmidt, 2000; Bennet et al., 2012). Gen X is also seen as laid-back and they solve problems efficiently, but are not eager to do more work than necessary (Angeline, 2011). Generation X employees change jobs faster than Baby Boomers, but will stay with an organisation longer if they can work flexibly, are given interesting tasks, and career opportunities (Angeline, 2011). Now that the Baby Boomers are retiring, Generation X is moving into senior positions (Mahmoud et al., 2020).

When it comes to the workplace, Generation X considers appearance and quality as important. They like to work in open, accessible, alternative offices. They also have an interest in individual space and personal flexible mobile workplaces (Bennet, Pitt & Price, 2012). For Generation X, technology in the workplace is also of great importance, they grew up with it (Haynes, 2011). Furthermore, the somewhat older employees, such as Generation X, prefer a more formal workplace environment (Twenge & Campbell, 2008).

#### 2.4.3 Millennials (1981-2000)

According to Kurz, Li and Vine (2018) Millennials are the most diverse, highly educated generation, and have the lowest marriage rates compared to the generations before them. They are also optimistic and performance-oriented (Brack, 2012). Opinions about Millennials differ within organisations. What is certain is that when a Millennial enters an organisation, the first step they should take is to socialise. During socialisation they learn what their tasks are and what the social norms are within the organisation, and how they can be accepted as a cooperating member in the workplace (Myers & Sadaghiani, 2010). Millennials have grown up with different technologies (Bannon, Ford & Meltzer, 2011). That is how they became aware of their impact on the environment. Millennials expect their employer to act in a socially conscious way, also known as the 'we-feeling' (Brack 2012). Millennials are labelled impatient, self-righteous and disloyal. Millennials are often expected to have a negative impact on processes and colleagues within the organisation (Kurz, Li, & Vine, 2018). Millennials also have positive characteristics. They accept diversity more, they have knowledge of advanced communication and information technologies, and have the ability to see problems and opportunities from different perspectives. Furthermore, the experience is that they work more pleasantly in teams than the generations before them.

Before Covid-19, Millennials saw the office as an extension of home. As mentioned earlier, sustainability scores high among Millennials, so they prefer a sustainable working environment,

provided it is comfortable and attractive. As this generation has grown up with the development of the technology, they expect the latest technologies to be available in their work environment. For Millennials, the location of the workplace (combining living and working within walking distance in an urban setting), flexibility (a flexible work environment plus options for mobile and remote work), and a social work environment (the office as an extension of home, where business and private activities and contacts intertwine; this calls for relaxation and meeting spaces) are important (Hoendervanger, Van der Voordt, & Wijnja, 2012).

#### 2.5 Post-Covid-19

The post-Covid-19 period can only be speculated at the moment. Expectations are expressed, but because this period is in the future, it is difficult to determine how this will turn out. Van Veldhoven and van Gelder (2020) conclude that during the lockdown it became clear that more advantages than disadvantages are experienced when working from home. Organisations should not look at the corona situation as a crisis, but should look further ahead and amplify the benefits now experienced in the post-Covid-19 period. Despite the fact that many organisations within the EU have struggled with the transition to teleworking, the most common expectation is that a 'new normal' will arise where employees will work from home more than they did before Covid-19. A small proportion of workers in the EU even indicate that they want to continue working completely from home (European Commission, 2020; Hamersma, de Haas & Faber, 2020). One of the biggest obstacles that employers have to overcome in order for their employees to work from home are the ICT facilities (Gorlick, 2020). In addition to the improvements in ICT facilities, the corona crisis has caused other changes in the workplace. As mentioned earlier, major adjustments have been made within the offices to prevent contamination with the corona virus. It has also been stated that employees must work from home as much as possible during the crisis. Organisations therefore had to adapt quickly, which in this case means that the physical office has moved to a virtual and online environment (Bick, Blandin & Mertens, 2020; Urick, 2020). It is good for organisations to preserve the benefits experienced by employees working from home through Covid-19 and perhaps even to increase them after the crisis (van Veldhoven & van Gelder, 2020). The benefits that employees experience to which van Veldhoven and van Gelder (2020) refer are: "a better fit with their own social preferences, being able to work more efficiently at home than at the office, and more control over the working day".

Research has shown that all generations seem to think quite similar about continuing working from home full-time after Covid-19. Thirty-nine percent of the Baby Boomers, 36 percent of generation X, 37 percent of the Millennials, and 31 percent of generation Z would prefer to continue working from home (Salesforce, 2020). It should be noted that Salesforce (2020) used different boundaries of years of birth to classify the generations than in this study.

Just because employees do not want to work from home after Covid-19 does not mean they want to go back to the office completely. Instead, the office is moving to the home situation of employees. The office of the future, as it is also called, is seen more as a place for social interaction and meetings (Hamersma, de Haas & Faber, 2020).

In addition to the trends seen when it comes to working from home after Covid-19 within organisations, Binnenland Bestuur (2020a) provides a picture of how civil servants view this. Before measures to restrain the Covid-19 outbreak were announced in March 2020, 69 percent of city officials

worked at home at some point. On average, 66 percent worked at home less than one day a week. The reason why officials did not work from home before the corona crisis was that it was not the norm within the organisation. In other words, officials were expected to come to the office. Now that civil servants have experienced what it is like to be able to work from home, 64 percent say they want to work from home two or more days a week. A large number of civil servants expect that working from home will become the norm after the corona crisis, if tasks can be performed independently of location (Binnenlands Bestuur, 2020a).

# 3 Problem statement, research questions and conceptual framework

Based on the previous literature review, the problem statement, the research objective and questions are formulated. Also, the conceptual framework is shown.

#### 3.1 Problem statement

During the Covid-19 pandemic, people have been forced to work from home. People have become accustomed to the 'new normal', but what are the consequences for the use of the office?

Many organisations, including municipalities, are now thinking about how to set up this new normal and how the office will be used in the future. When it comes to the use of the office, different people and generations have different needs. The two aspects 'how will the office be used after Covid-19' and 'the needs of different generations regarding the workplace' are brought together in this study.

#### 3.2 Research objective

The aim of this research is to get insight into how different the expectations of distinct generations are on post-Covid-19 workplace design at Dutch municipalities.

#### 3.3 Research question

How different are the expectations of distinct generations on post-Covid-19 workplace design at Dutch municipalities?

#### 3.4 Sub research questions

In order to be able to give an answer to the research question sub research questions have been formulated. A breakdown of these sub research questions is shown here.

#### **Sub question 1:**

What kind of workplace arrangements are used at Dutch municipalities before Covid-19?

- a. What kind of workplace design is used at Dutch municipalities before Covid-19?
- b. To what extent was working from home widespread before Covid-19 at Dutch municipalities?

#### **Sub question 2:**

What are the workplace design preferences of different generations at Dutch municipalities before Covid-19?

- What are the workplace design preferences of the Baby Boomers at Dutch municipalities before a. Covid-19?
- What are the workplace design preferences of generation X at Dutch municipalities before b. Covid-19?
- What are the workplace design preferences of the Millennials at Dutch municipalities before c. Covid-19?

#### **Sub question 3:**

What are the experiences of different generations with working from home during Covid-19 at Dutch municipalities?

- What are the experiences of Baby Boomers with working from home during Covid–19 at Dutch a. municipalities?
- b. What are the experiences of generation X with working from home during Covid-19 at Dutch municipalities?
- What are the experiences of Millennials with working from home during Covid-19 at Dutch c. municipalities?

#### **Sub question 4:**

What are the expectations regarding ideal workplace design of different generations at Dutch municipalities post- Covid-19?

- What are the expectations Baby Boomers regarding ideal workplace design of different a.

  generations at Dutch municipalities post– Covid–19?
- b. What are the expectations generation X regarding ideal workplace design of different generations at Dutch municipalities post– Covid–19?
- What are the expectations Millennials regarding ideal workplace design of different c. generations at Dutch municipalities post– Covid–19?

#### **Sub question 5:**

What are other characteristics (besides generation) that influence the post-Covid-19 workplace design preference of employees working at Dutch municipalities?

- What is the influence of someone's gender on the post-Covid-19 workplace design preference a. of employees working at Dutch municipalities?
- b. What is the influence of someone's function on the post–Covid–19 workplace design preference of employees working at Dutch municipalities?
- What is the influence of someone's employment on the post-Covid-19 workplace design c. preference of employees working at Dutch municipalities?
- d. What is the influence of someone's work-home distance on the post-Covid-19 workplace d. design preference of employees working at Dutch municipalities?
- e. What is the influence of the composition of someone's household on the post-Covid-19 workplace design preference of employees working at Dutch municipalities?
- f. What is the influence of having a private home office (location at the house) on the post-Covid-19 workplace design preference of employees working at Dutch municipalities?

#### 3.5 Conceptual framework

Before a researcher starts conducting the research, a conceptual framework is created. In this model, the expected connections and relationships between the variables are shown. In addition to a visual and schematic representation, an explanation of the conceptual framework is provided. In this research the following conceptual framework has been drawn up:

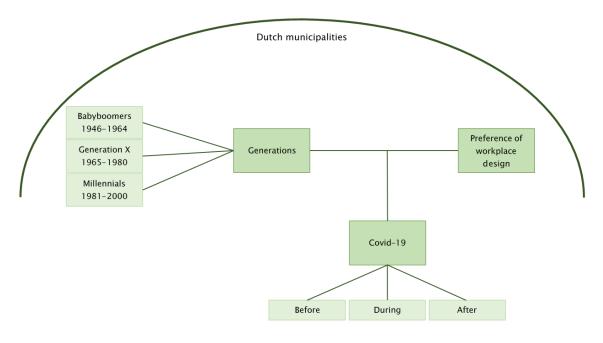


Figure 3. Conceptual Framework (by author, 2021)

The conceptual framework is based on the research question of this research. With this conceptual framework, the researcher wondered whether the workplace design is influenced by the different expectations of generations working at Dutch municipalities. These generations are: Baby Boomers, Generation X, and Millennials. In addition, a moderator variable is added in the conceptual framework. This variable can influence the effect that the independent variable has on the dependent variable. The effect this variable has, does depend on the value of the moderator (Swaen, 2018).

The moderator in this research is: 'Covid-19'. This variable is split into three stages namely, before, during and after. The research expects that the different generations have other expectations regarding the workplace design during and after Covid-19 than before Covid-19.

During the research it appeared that the researcher expects that there are more aspects that influence the preferences regarding workplace design. That is why an extra sub question (5) has been added.

## 4 Research design

This chapter contains the description of the way data is collected and analysed during this research in order to give an answer to the research questions.

#### 4.1 Research strategy

Saunders, Lewis and Thornhill (2016) describe the research strategy as 'a plan of action to achieve a goal'. In other words, it explains how the main research question and sub research questions will be answered. There are two ways of doing research, namely quantitative research and qualitative research. Quantitative research is based on standardised data. Qualitative research is based on non standardised, open data, like text or pictures (Saunders et al., 2016).

Quantitative data is used in this study to identify workplace preferences of a large group of municipality employees. In other studies quantitative data is also used to collect this kind of data. For example, in their research Rothe et al. (2011) used quantitative research to identify the differences and similaries in work environment preferences of office users of different age. Joy and Haynes (2011) used quantitative research to find out what the preferences are of different generations regarding different work settings for knowledge work and knowledge transfer. This study is a mono method quantitative study, which means only one type of quantitative research is conducted (Saunders et al., 2016).

The research design of this project is a survey research design. According to Creswell (2012) survey research designs are 'procedures in quantitative research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviours, or characteristics of the population.'

This study uses an embedded approach with multiple kinds of respondents. Respondents for the quantitative data collection are employees of municipalities (population), whose opinion is asked for in the role of the user of the office. This research is a cross-sectional survey design, because data is collected at one point in time (Creswell, 2012).

#### 4.2 Data collection techniques

Besides literature research a questionnaire has been conducted in order to give an answer to the research questions. The reason for this choice is that information needs to be collected from employees about their preferences to find patterns. A questionnaire often goes hand in hand with a deductive research approach. This approach is used to find out what a larger group of people thinks about a particular topic (Turner et al., 2012; Saunders et al., 2016). Because a large group of people (Dutch municipal officials) was asked what they think about workplace design and working from home, a questionnaire was the best data collection technique for this study. A questionnaire research is a data collection method in which the questions are fixed in advance. A small number of answer options were given from which the respondent could choose. The answers provided by the respondents ultimately formed the dataset that was analysed by the researcher (Verhoeven, 2010). There are different types of questionnaires, in this study self–completed surveys were used. The questions were read by the respondent themself. In view of the required number of respondents in this survey, it was decided to keep an online questionnaire, which could be completed via the web and via mobile phone. The link to

the questionnaire was sent by email and was spread via LinkedIn (Saunders et al., 2016). The questions in the questionnaire were presented to the respondents via Qualtrics. The dataset resulting from the surveys has been analysed using SPSS.

#### 4.3 Sampling

In survey studies there are three terms distinguished when talking about the sampling. The *Population* is 'the group of individuals having one characteristic that distinguishes them from other groups'. Following, is the *Target Population*, also called *Sampling Frame*. This is defined as 'the actual list of sampling units from which the sample is selected'. The *Sample* is 'the group of participants in a study selected from the target population from which the researcher generalises to the target population' (Creswell, 2012).

A non-probability-based sample was used in this research method. This is defined by Turner et al. (2012) as 'the use of the findings from research gained from a specific group or individual to solve a problem that is specific to them'. This study concerns employees from different generations who work for Dutch municipalities.

The questionnaire used a convenience sample, which is defined as: 'a sample of those people who are most conveniently accessed' (Turner et al. 2012). The researcher herself works at a municipality and therefore has a network with contacts within Dutch municipalities. The researcher has used her network to spread the survey. Permission to spread the questionnaire within the municipality where the respondent works (Zwolle) and lives (Apeldoorn) was asked for and was granted. In addition to the distribution in the two municipalities, the researcher shared the link to the survey on LinkedIn. The questionnaire is sent to approximately 1,500 to 2,000 civil servants. On LinkedIn, approximately 1,500 people saw the post with the link. This concerns the entire network, so this post was not only seen by employees of municipalities. The expected sample size was 300. In the end, 367 people started the questionnaire of which 319 could be used for this study.

#### 4.4 Analysis techniques

During the analysis it turned out that a lot of data was collected. An overview is included in appendix A of what is being researched per research question. As described earlier, the collected data is analysed using SPSS. Various analyses can be performed with SPSS. Several steps must be completed before analysis can be performed in SPSS. A distinction must be made between a univariate and a bivariate analysis. A univariate analysis is 'an analysis in which you try to provide insight into the answers of respondents regarding one variable (single variables)' (Saxion University of Applied Science, 2021). Bivariate analysis is 'an analysis in which you try to find out whether there exists a relationship between two variables, in other words whether there exists a particular answer to one question' (Saxion University of Applied Science, 2021).

Next, the analysis technique is determined by looking at the measurement scale of the variables. There are three measurement scales, namely: nominal, ordinal and scale. A different visualisation, measure of association and inferential statistics is used for each measurement level. In appendix B an overview is included of the possible visualisation and analysis techniques (Saxion University of Applied Science, 2021a). During this investigation, two out of three possible situations emerged. These are nominal/ordinal – nominal/ordinal and nominal/ordinal – scale. The visualisation, measure of association and inferential statistics associated with the nominal/ordinal – nominal/ordinal situation

are: Cross-tabulation, Cramer's V, and Chi-square test. For the nominal/ordinal - scale this is: Comparison of means, Eta, and t-test or F-test (Saxion University of Applied Science, 2021a). The results of the Cross-tabulation only can be used if two conditions are met, namely the expected cell count less than 5 must be lower than 20% and the minimum expected count should be larger than 1 (Saxion University of Applied Science, 2021a).

For Cramer's V and Eta, ranges were set to determine if a relationship was very weak (0 < - < 0,25), weak (0,25 < - < 0,5), strong (0,5< - < 0,75) or very strong (0,75 < - < 1). The results of the Chisquare test and F-test were considered significant if the p-value was lower or equal to 0,05 (Saxion University of Applied Science, 2021a).

For each research question, it was examined which analysis and measurement scale should be used. An overview of which analysis is used for each question can be found in appendix C.

#### 4.5 Operationalisation

The questions posed in the questionnaire were based on the literature review. This operationalisation without research questions is shown in table 4. In appendix D the operationalisation with research questions is added.

The questionnaire was split in four sections. Section A are the general questions to get more information about the respondent and their situation. Section B are questions to learn more about the workplace design and working from home before the outbreak of Covid-19. Section C are the questions about the period during Covid-19 and section D are the questions that are about the expectations post-Covid-19.

Eventually the operationalisation leads to the questionnaire. In this case there were two questionnaires because the municipality of Apeldoorn gave permission to spread the questionnaire under the condition that specific questions were added. In the two questionnaires three questions are different. Both questionnaires, including the ethics form and information letter, can be found in appendix E, F and G.

				>	Municipality	Fill in a municipality	X
						Stadhuis	
					Worklocation in	Samen055	(I. Everhard, personal communication,
					Apeldoorn	Werkgebouw Noord	Ferbruary 22 <sup>nd</sup> 2021)
					·	Werkgebouw Zuid	
						Between 1946–1964	
						Between 1965–1980	-
				>	Generation	Between 1981–2000	(Schullery, 2013; Ritter, 2014)
						After 2000	1
						Man	
				>	Gender	Female	X
					Cond Co	Other	- ^
				Н		Managing board	
						Management	-
						Head of department	-
					Function	Project leader / project manager	-
		>	Characteristics	>		Advisor	(Hamersma, de Haas, & Faber, 2020)
						Senior employee	(Hamersma, de Haas, d. aser, 2020)
	General information of employees					Employee	_
						Junior employee	-
Α						Intern	-
					Employment	Fulltime (36hours or more)	
	' '			>		Parttime (less than 36 hours)	(Messenger and Gschwind, 2016)
						Temporary (Interim/Intern)	<b>3</b>
						0–5 kilometer	
						6-10 kilometer	
						11–15 kilometer	-
						16–20 kilometer	-
				>	Commute distance	21–25 kilometer	(Soetman, 2011)
						26–30 kilometer	, , , ,
						31–40 kilometer	
						41–50 kilometer	-
						More than 50 kilometer	-
						Living alone, without children	
						Living together, without children	(Ng, 2010; Soetman, 2011; Hamersma, de
				>	Household	Single, with children	Haas, & Faber, 2020)
						Living together, with children	
		>	Home situation			Yes, I can work completely secluded in a separate room	
						Yes, but my housemates (partner/children) also use this space to	(Ng, 2010; Hamersma, de Haas, & Faber,
				>	> Location in the house	work/study	2020)
						No, I don't have the option to work secluded	
						ito, i don't have the option to work sectuded	

						Traditional office	(1, 1/1, 2010)	
				>	In a municipality	Open-plan office	(de Vries, 2019)	
						Activity Based Working		
					n 6	Traditional office	(4	
		>	Workplace	>	Preference	Open-plan office	(Appel-Meulenbroek et al., 2019)	
			design	L		Activity Based Working		
			uesign			Yes, I had a personal office		
				>	Private office	No, I was in a closed office with several colleagues	(van Meel and van der Voordt (2001a)	
				Ш		No, I didn't have a personal office		
					Fixed workplace	Yes, I was always in the same place	(Millward Haslam & Bostmos 2007: Harris	
					Tixed Workplace	No, I switched workplaces	(Millward, Hasiaili, & Fostilles, 2007, Hailis,	
						I was allowed to work from home and I did		
					Permission to WFH		(van der lagt 2020)	
В	Before Covid-19				T CITIII SSIOTI TO WITT	I was allowed to work from home, but I didn't	(van der jagt, 2020)	
-				H		I wasn't allowed to work from home	(van Veldhoven & van Gelder, 2020)	
					D 14/511	On my part-time workday (a workday of less than 8 hours)	( )( )( )	
				>	Days WFH	On my full-time workday (8 or 9-hour workday)	(van Veldhoven & van Gelder, 2020)	
				L		Both on my part-time and my full-time working day		
			Work from	>	Hours WFH	Fill in a number	(van Veldhoven & van Gelder, 2020)	
		>	home (WFH)		Reasons not WFH	My employer forced me to come to the office		
						My physical home workplace was not sufficient		
						My work requires physical presence in the office		
						I missed the social aspects of the office / I felt lonely	(	
				>		I could work more calmly at the office	(Binnenlands Bestuur, 2020a)	
						Working from home caused a bad work/life balance		
						It was not in the culture of the organisation to work from home (it		
						didn't feel right/didn't feel accepted)		
					During lockdown	Yes, completely		
				>		Partly	(van Veldhoven & van Gelder, 2020)	
						No		
						NO .		
						My employer forced me to come to the office		
						My physical home workplace was not sufficient and could not be		
							Danas was M/FU	made sufficient
				>	Reasons not WFH	My work requires physical presence in the office	(Rijksoverneid, 2021)	
						I missed the social aspects of the office / I felt lonely		
	During Covid-19		Work from			I could work more calmly at the office		
C	During Covid-19	/	home (WFH)			Working from home caused a bad work/life balance		
						I have less travel time		
						Less time is spent on meetings		
				>	Advantages	I can decide for myself when I work		
						I can set/determine the temperature by myself		
						I can decide for myself whether and which music I play	(Rinnanlanda Rastuur 2020s)	
						I miss my colleagues	(Binnenlands Bestuur, 2020c)	
						I cannot do all my work from home		
				>	Disadvantages	I cannot do all my work from home My home workplace is not ideal		
				>	Disadvantages			

				>	Days going back WAO	YES ON MY TILLETIME (13VIS)	(European Commission, 2020; Hamersma, de Haas & Faber, 2020)
			>	Extent WAO	I expect to go to the office more than before the Covid-19 outbreak I expect to go to the office as much as before the Covid-19 outbreak I expect to go to the office less than before the Covid-19 outbreak	(Binnenlands Bestuur, 2020a)	
		Work at the office (WAO)	>	Hours WAO	Fill in a number	(Binnenlands Bestuur, 2020a)	
D After Covid-19	>		>	Activities	General office work  Undisturbed office work Interactive office work Scheduled consultation with less than 4 people Scheduled consultation with 4 to 8 people Scheduled consultation with 8 people or more Talk on the phone Reading Archiving and document management	(Beijer, 2011)	
		Workplace Design	>	Preference	Traditional office Open-plan office Activity Based Working	(De Vries, 2019; Appel-Meulenbroek et al., 2019)	

Table 4. Operationalisation (by author, 2021)

# 5 Analysis and results

After the data has been collected, it is analysed. This chapter shows the analysis of the data that was retrieved during the research. Also the results of the analysis is shown.

In order to be able to properly analyse the results of both surveys, the data was combined in SPSS. The question 'Which municipality do you work for?' was filled in by the researcher with 'Apeldoorn' for respondents from the municipality of Apeldoorn.

Answers to open questions were equalised by the researcher. Answers such as 'Gemeente Zwolle' were changed into 'Zwolle', because this makes analysing easier and clearer.

The question 'At which location do you work most?' was removed from the combined dataset, because that question only applies to the municipality of Apeldoorn.

The outcome of the question about which workplace design the municipality had at the time of the Covid-19 outbreak is the same for both surveys.

This thesis was written in English, but the survey was conducted in Dutch. In order to make the analysis useful for this report, the labels and answer options in SPSS were translated from Dutch into English.

The results are presented and discussed per sub-research question. All the relevant outcomes of the SPSS analysis are shown in this chapter, the other tables and graphs are included per paragraph in appendices H to N.

#### 5.1 Demographic profile of respondents

The total sample of employees of Dutch municipalities was 319.

As expected from the literature review, the number of respondents born after 2000 (generation Z) was the smallest (1,9%) as can be seen in table 5. Therefore the results of Generation Z were added to the results of the Millennials for the rest of the analyses. The two largest groups in terms of generation were Generation X (born between 1965–1980) and Millennials (born between 1981–2000). They respectively represent 37,3% and 44,8% of the total sample. The remaining 16% are the Baby Boomers (born between 1946–1964). Women represented the largest part of the sample, namely 71,2%. The two functions most frequently performed by the respondents were 'employee' (42,1%) and 'advisor' (32%). With regard to the employment of the respondents, a small part (7%) indicated that they have an interim contract. The difference between full-time and part-time employment is small. Respectively 49,5% have a full-time employment contract and 43,5% have a part-time employment contract. More than a third (37,5%) of the respondents indicated that they live close to work, within 0–5 kilometres. The differences between the other distances are smaller.

Generation	N	%
Born between 1946-1964	51	16,0
Born between 1965-1980	119	37,3
Born between 1981-2000	143	44,8
Born after 2000	6	1,9
TOTAL	319	100,0

Gender	N	%
Man	92	28,8
Female	227	71,2
Other	0	0,0
TOTAL	319	100,0

Function	N	%
Managing board	1	0,3
Management	5	1,6
Head of department	5	1,6
Project leader / project manager	27	8,5
Advisor	101	32,0
Senior employee	20	6,3
Employee	133	42,1
Junior employee	19	6,0
Intern	5	1,6
TOTAL	316	100,0

Employment	N	%
Fulltime	156	49,5
Parttime	137	43,5
Interim	22	7,0
TOTAL	315	100,0

Commute distance	N	%
0-5 kilometer	119	37,5
6-10 kilometer	32	10,1
11-15 kilometer	25	7,9
16-20 kilometer	24	7,6
21-25 kilometer	24	7,6
26-30 kilometer	18	<i>5,7</i>
31-40 kilometer	25	7,9
41-50 kilometer	17	5,4
More than 50 kilometer	33	10,4
TOTAL	317	100,0

Table 5. Demographic information of the respondents

#### 5.2 Workplace arrangements before Covid-19

This paragraph covers the analysis and results of sub-question 1: What kind of workplace arrangements are used at Dutch municipalities before Covid-19? In order to answer this questions, two factors have to be researched, namely the current workplace design and whether employees were able to work from home before Covid-19 within Dutch municipalities. Frequency tables were used in order to answer this question.

Figure 4 shows that the almost half of the respondents (49,3%) indicated that there is an Open-plan office workplace design in the municipalities where they work. A third of the respondents indicated that they work in an Activity-Based work environment (34,5%). The remaining part, about one sixth, indicated that they work in a Traditional office (16,1%).

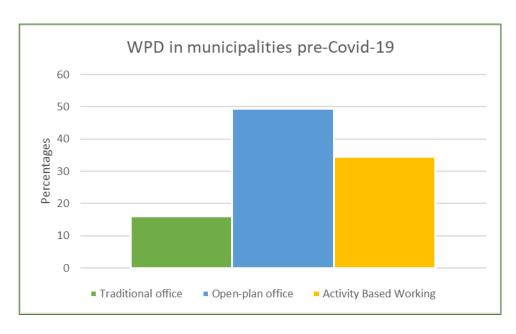


Figure 4. Percentages of workplace designs within municipalities before Covid-19 (N=304)

To find out whether the workplace design depends on the municipality, a frequency table containing the answers given per municipality was made, see appendix I. There are four municipalities of which 5 or more employees completed the survey. The majority of those were divided about the workplace design at their municipality. Only the respondents from the municipality of Twenterand were united regarding the workplace design. They indicated that they work in a Traditional Office.

Figure 5 shows that a small percentage (just over 10%) of those surveyed were not allowed to work from home before the Covid-19 outbreak. The majority of the respondents indicated that they were allowed to work from home. About half of this group indicated that they did not, although they could.

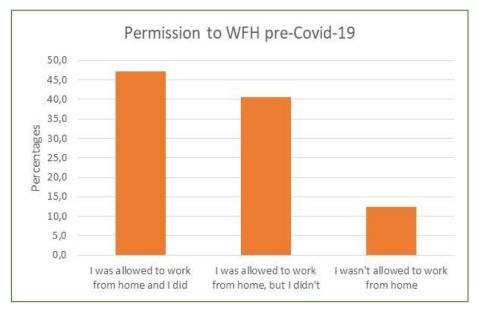


Figure 5. Permission to work from home pre-Covid-19 (N=301)

Two reasons not to work from home that were most often given by respondents are 'my work requires physical presence in the office' (N=32) and 'it was not in the culture of the organisation to work from home' (N=32), see figure 6. After these two answers, respondents indicated that they miss the social aspect of the office (N=18). Sixteen respondents indicated that their physical home workplace was not sufficient. This is the only aspect of working from home that can be influenced by facility managers.

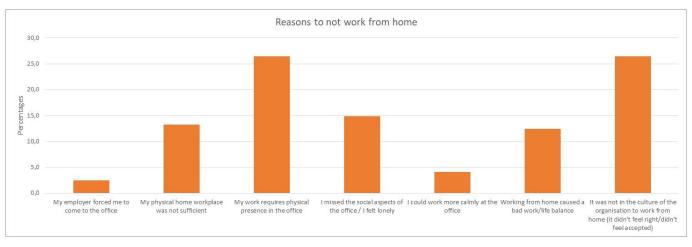


Figure 6. Reasons to not work from home pre-Covid-19 (N=121)

#### 5.3 Workplace design preferences and working from home before Covid-19

This paragraph covers the analysis and results of sub question 2: What are the workplace design preferences of different generations at Dutch municipalities before Covid-19? In order to answer this question, crosstabulation was used.

	Baby Boomers	Generation X	Millennials
Preffered workplace design pre-Covid-19			
Traditional office	37,5%	34,2%	34,1%
Open-plan office	10,4%	9,4%	12,3%
Activity Based Working	52,1%	56,4%	53,6%
	N=48	N=117	N=138

Table 6. Descriptive statistics per generation regarding the preferred workplace design pre-Covid-19

The expectation was that there is a relationship between generation and the workplace design preference before Covid-19.

- There is <u>no</u> relationship between generation and the workplace design preference H0 before Covid-19
- There is a relationship between generation and the workplace design preference before Covid-19

However, the results show that there was no significant relationship between the preference and generations,  $\chi^2$  (4, N=303) =0,789 ;p=0,940 V=0,036. This is in accordance with the descriptive statistics, where there is no difference between the preference and the generations, as can be seen in

table 6. The open-plan office was preferred the least, while an activity-based work environment was preferred the most.

This results in the following acceptance of hypotheses:

но	There is <u>no</u> relationship between generation and the workplace design		
по	preference before Covid-19		
ш1	There is a relationship between generation and the workplace design preference	Rejected	
пі	hefore Covid-19		

In addition to workplace design at the office, this research also has a link with working from home. Therefore the relationship between generations and whether they worked from home before Covid-19 was also analysed. When respondents indicated that they did not, the reason was asked. An analysis of the relationship between generations and reasons not to work from home before Covid-19 was conducted.

	Baby Boomers	Generation X	Millennials
Permission to WFH			
I was allowed to work from home and I did	36,2%	57,6%	47,2%
I was allowed to work from home, but I didn't	55,3%	33,9%	40,5%
I wasn't allowed to work from home	8,5%	8,5%	12,3%
	N= 47	N=118	N=136

Table 7. Descriptive statistics per generation regarding permission to work from home pre-Covid-19.

The expectation was that there is a relationship between generation and working from home before Covid-19.

- There is  $\underline{no}$  relationship between generation and the permission to work from home before Covid-19
- There is a relationship between generation and the permission to work from home before Covid-19

The analysis showed that there was a significant, but very weak relationship between working from home and generations  $\chi^2$  (4, N=301) =12,875 ;p=0,012 V=0,146. In table 7 it can be seen that there is a difference between Baby Boomers and Generation X. When allowed to work from home, the majority of Generation X did work from home, whereas the Baby Boomers did not. Millennials were more divided about working from home (see table 7).

This results in the following acceptance of hypotheses:

Н0	There is <u>no</u> relationship between generation and the permission to work from	Rejected
по	home before Covid-19	
	There is a relationship between generation and the permission to work from	Accepted
н	home before Covid-19	

A cross-tabular analysis was performed in order to see whether there is a relation between reasons for not working from home and the generations. However, the conditions to use the outcomes were not met. Therefore, a frequencies analysis was performed.

	Baby Boomers	Generation X	Millennials
Reasons to not work from home pre-Covid-19			
My employer forced me to come to the office	0,0%	2,5%	3,6%
My physical home workplace was not sufficient	15,4%	5,0%	18,2%
My work requires physical presence in the office	23,1%	25,0%	29,1%
I missed the social aspects of the office / I felt lonely	23,1%	17,5%	9,1%
I could work more calmly at the office	3,9%	7,5%	1,8%
Working from home caused a bad work/life balance	19,2%	12,5%	9,1%
It was not in the culture of the organisation to work from home (it didn't feel right/didn't feel accepted)	15,4%	30.0%	29,1%
accepted)	N=26	N=40	N=55

Table 8. Frequencies table reasons not to work from home pre-Covid-19 and generations

The descriptive statistics show differences between generations, which could explain why Baby Boomers do not work from home while being allowed (55,3%), while the Millennials (47,2%) and Generation X did (57,6%), as can be seen in table 7. None of the Baby Boomers indicated that they have been forced to come to the office by their employer, while a small part of the other generations did experienced this (2,5%, 3,6%). As shown in table 8, 15,4% of the Baby Boomers indicated that their home workplace was not sufficient, whereas only 5% of Generation X indicated this. Missing colleagues (23,1%) and a bad work/life balance (19,2%) could also be reasons why Baby Boomers do not prefer to work from home. Although their home workplace is not sufficient (18,2%), and their work requires physical presence in the office (29,1%), Millennials tend to work from home. Millennials are the generation that miss the social aspects of the office the least (9,1%). What is striking is the result whether working from home is in the culture of the organisation. Nearly twice as many Generation X (30%) and Millennials (29,1%) than Baby Boomers (15,4%) have the feeling that working from home is not in the culture of the organisation.

#### 5.4 Experiencing working from home during Covid-19

In the previous section, the results regarding working from home and workplace preference pre Covid-19 were discussed. In this paragraph the experiences of working from home during Covid-19 were analysed. This section therefore covers the analysis and results for sub question 3: What are the experiences of different generations with working from home during Covid-19 at Dutch municipalities?

First a frequency analysis has been conducted to see whether employees worked from home during the lockdowns, this is shown in table 9. The majority of employees worked from home during the lockdowns.

WFH During lockdown	N	%
Yes, completely	221	73,7
Partly	72	24,0
No	7	2,3
TOTAL	300	100,0

Table 9. Working from home during lockdown

The main reason to not work from home during the lockdowns is that work required someone's presence at the office, as can be seen in figure 7.

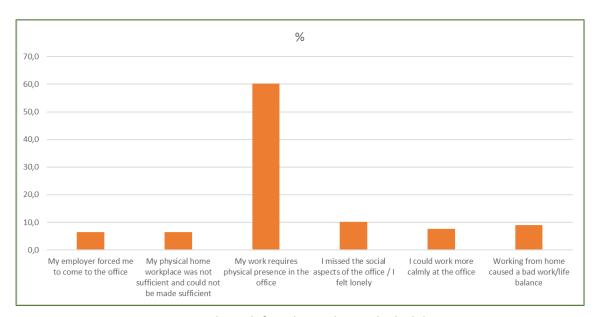


Figure 7. Reasons to not or partly work from home during the lockdown

The relationship between generations and the reasons not to go to the office could not be assessed, since the conditions were not met. However, a frequency table has been made to show what reasons were given by the different generations.

	Baby Boomers	Generation X	Millennials
Reasons not WFH during lockdown	N=16	N=26	N=36
My employer forced me to come to the office	0,0%	0,0%	13,9%
My physical home workplace was not sufficient and could not be made sufficient	12,5%	7,7%	2,8%
My work requires physical presence in the office	56,3%	57,7%	63,9%
I missed the social aspects of the office / I felt lonely	0,0%	15,4%	11,1%
I could work more calmly at the office	18,8%	7,7%	2,8%
Working from home caused a bad work/life balance	12,5%	1,5%	5,6%

Table 10. Generations and reasons to not work from home during lockdown

As expected from the previous analysis, the main reason all generations did not work from home is that their work requires physical presence in the office (see table 10). What is striking is that no Baby Boomer indicated that they missed the social aspect while working from home due to Covid–19, while Generation X (15,4%) and Millennials (11,1%) did. Almost a fifth of the Baby Boomers (18,8%) could work more calmly at the office. Also the not sufficient physical home office (12,5%) and a bad work/life balance (12,5%) were designated as reasons to not work from home by Baby Boomers. While Baby Boomers and Generation X indicate that they were not forced by their employer to come to the office, Millennials did (13,9%).

#### Generations

Generations have different experiences of working from home during Covid-19. In table 11 the means are shown of the analysis of the (dis)advantages and generations. These were based on a 3-point Likert scale, whereby 1 was I agree, and 3 was I disagree. This means, the lower the mean, the more people experience the advantage or disadvantage of working from home during Covid-19.

			Advantages					Disadvantages		
	I have less travel time	Less time is spent on meetings	I can decide for myself when I work	I can determine the temprature myself	I can decide wheter and which music I play	I miss my colleagues	I cannot do all my work from home	My home workplace is not ideal	I find telephone/ digital meetings difficult	I hardly get outside since I started working at home
<b>Baby Boomers</b>										
Mean	1,19	2,26	1,96	1,36	1,34	1,28	1,57	2,00	1,79	2,04
N	47	47	47	47	47	47	47	47	47	47
Std. Deviation	0,449	0,846	0,751	0,568	0,562	0,54	0,801	0,86	0,832	0,884
Generation X										
Mean	1,18	1,94	1,65	1,23	1,26	1,26	1,95	1,94	2,09	2,21
N	117	117	117	117	117	117	117	117	117	117
Std. Deviation	0,428	0,854	0,791	0,48	0,511	0,544	0,879	0,893	0,851	0,879
Millennnials										
Mean	1,18	2,14	1,52	1,26	1,22	1,17	1,93	1,87	2,14	1,94
N	133	133	132	133	132	133	132	133	132	133
Std. Deviation	0,505	0,886	0,805	0,532	0,514	0,418	0,901	0,874	0,854	0,903

Table 11. Comparison of means '(Dis)advantages of working home during Covid-19' and 'Generations'

It is striking that all generations indicated that they miss their colleagues. Furthermore, the experience was that there is less travel time since they are working from home. However, Generation X claimed they still get outside since working from home, followed by the Baby Boomers, Millennials stayed indoors the most.

Millennials found their workplace at home the least ideal, followed by Generation X. The ability to adjust the work environment themselves was experienced as positive by all the generations. Baby Boomers indicated that they have more trouble with performing from home. It was the same for the ability to determine when the generations work and the difficulty of digital meetings. Baby Boomers indicated that they experience less freedom deciding when they work and have more difficulty with digital meetings, while Generation X and Millennials experienced more freedom and less difficulties.

The expectation was that there is a significant difference between generations and the advantages and disadvantages they experienced while working from home during Covid-19.

- $\frac{\text{There is } \underline{no} \text{ significant difference between generations and advantages/disadvantages of working from home during Covid-19}$
- There is at least one significant difference between generations and advantages/
  disadvantages of working from home during Covid-19

For one advantages and for three disadvantages it was found that they were significant and one disadvantage was almost significant:

I can decide for myself when I work (F(2.293) = 5,431; p = 0,005)I cannot do all my work from home (F(2.293) = 3,438; p = 0,033)I find telephone/digital meetings difficult (F(2.293) = 3,047; p = 0,049)I hardly get outside since I started working at home (F(2.294) = 2,959; p = 0,053)

The relation however was very weak for all advantages and disadvantages in this analysis (Eta  $(\eta)$  between 0,009 and 0,189). Although the relations are weak, **hypothesis H1** is accepted.

It was also examined whether there are significant differences between the generations for the advantage and disadvantages that already appeared to differ significantly. This analysis showed that there was no significant difference between the generations regarding the advantage 'I have less travel time'.

For the disadvantages it was found that there were significant differences between the generations. The disadvantage 'I cannot do all my work from home' differs significantly between Baby Boomers and Generation X (p = 0.037) and between Baby Boomers and Millennials (p = 0.045).

There was only one significant difference between generations regarding the disadvantage 'I find telephone/digital meetings difficult'. This is between Baby Boomers and Millennials (p = 0.043). The last disadvantage 'I hardly get outside since I started working at home' had no difference between Baby Boomers and the other generations. There was however a significant difference between

Generation X and Millennials (p = 0.042).

#### Location at the house

In order to be able to make statement regarding generations and how they experienced working from home, pre-analyses were conducted. These were cross-tabular analyses to see whether there is a relation between having a private home office (location at the house) and the composition of the household and generations. This section focuses on the location in the house, or in other words, having a private, shared or no private home-office.

	Baby Boomers	Generation X	Millennials
Location at the house	N=50	N=119	N=147
Yes, I can work completely secluded in a separate room	82,0%	68,1%	74,1%
Yes, but my housemates (partner/children) also use this space to work/study	6,0%	11,8%	12,2%
No, I don't have the option to work secluded	12,0%	20,2%	13,6%

Table 12. Generations and location at the house

The expectation was that there is a relationship between generation and having a private home-office.

- HO There is no relationship between generation and having an own private home-office
- H1 There is a relationship between generation and having an own private home-office

The analysis showed that there was not a significant relationship between having an own private office and generations  $\chi^2$  (4, N=316) =4,710 ;p=0,318 V=0,086. Table 10 showed that the majority of all the generations had a private home-office. The generation that had the least possibility to work secluded at home is Generation X. Millennials shared their workplace the most with other people at home (see table 12).

This results in the following acceptance of hypotheses:

но	There is <u>no</u> relationship between generation and the permission to work from	Accepted
по	home before Covid-19	
шı	There is a relationship between generation and the permission to work from	Rejected
ні	home before Covid-19	

The results as displayed in table 13 show that the main reason employees with a private home-office did not work from home during the lockdowns is that their work requires their presence in the office (67,9%). About a tenth of the respondents indicated that they felt lonely while working from home and that they miss their colleagues.

Employees that have to share a space while working at home were most divided on the reasons they did not work entirely from home. Three reasons were given an even number of times (28,6%), these were the physical home workplace was not sufficient, their work requires physical presence, and working from home caused a bad work/life balance. A small part of the group indicated that they could work more calmly at the office (14,3%).

The main reason to not work from home by employees that did not have the option to work secluded was that their work requires physical presence in the office (46,7%), One fifth indicated that working from home caused a bad work/life balance (20%). About 13% missed the social aspects of the office / felt lonely (13,3%).

		Yes, but my housemates also use this space to work/study	No, I do not have the option to work secluded
	N=56	N=7	N=15
My employer forced me to come to the office	7,1%	0,0%	6,7%
My physical home workplace was not sufficient and could not be made sufficient	3,6%	28,6%	6,7%
My work requires physical presence in the office	67,9%	28,6%	46,7%
I missed the social aspects of the office / I felt lonely	10,7%	0,0%	13,3%
I could work more calmly at the office	7,1%	14,3%	6,7%
Working from home caused a bad work/life balance	3,6%	28,6%	20,0%

Table 13. Frequency table Reasons not to work from home during Covid-19 and Location at the house

The following analysis was to find out if employees that have a private home office experienced working from home different than employees that did not have a private home office. Therefore the 'Location in the house' and the advantages and disadvantages of working from home were analysed.

		Advantages						Disadvantages			
	I have less travel time	Less time is spent on meetings	I can decide for myself when I work	I can determine the temprature myself	I can decide wheter and which music I play	I miss my colleagues	I cannot do all my work from home	My home workplace is not ideal	I find telephone/ digital meetings difficult	I hardly get outside since I started working at home	
Yes, I can work											
completely secluded in a											
separate room											
Mean	1,18							2,06			
N	214							214	214		
Std. Deviation	0,471	0,875	0,764	0,501	0,526	0,488	0,892	0,867	0,861	0,882	
Yes, but my housemates also use this space to work/study											
Mean	1,35	2,53	1,76	1,50	1,33	1,21	1,67	1,68	1,85	1,94	
N	34		33	34	33		33	34	33		
Std. Deviation	0,597	0,706	0,902	0,615	0,54	0,479	0,89	0,843	0,834	0,983	
No, I do not have the option to work secluded											
Mean	1,08				1,18	1,24	1,76	1,47	2,18		
N	49		49		49		49	49	49		
Std. Deviation	0,466	0,872	0,803	0,518	0,521	0,491	0,885	0,878	0,855	0,896	

Table 14. Comparison of means '(Dis)advantages of working home during Covid-19' and 'Location at the house'

In table 14 the means of this analysis are shown. These are based on a 3-point Likert scale, where 1 was I agree, and 3 was I disagree. This means, the lower the mean, the more people experienced the advantage or disadvantage while having a private home-office, a shared home-office or no private home-office.

Having a private home office or not did not affect missing colleagues, the means of that disadvantage were almost equal. Employees who have a private home-office felt the most freedom to determine

when they work and had the least feeling that they are spending more time on meetings while working from home.

The home workplace was rated the least ideal by employees who indicated that they do not have the option to work secluded. However, they did experience the freedom to set the temperature and play the music they like the most in comparison to the others. The analysis showed that employees who share their home office with others had difficulty doing their work from home. Also they come outside the least, and find it harder to have digital meetings.

The expectation was that there is a significant difference between having a private home-office and the advantages and disadvantages experienced while working from home during Covid-19.

- HO There is <u>no</u> significant difference between having an own private home-office and advantages/disadvantages of working from home during Covid-19
- There is at least one significant difference between having an own private home-office and advantages/disadvantages of working from home during Covid-19

For three advantages it was found that they were significant and one advantage was almost significant. One disadvantages was highly significant ( $\rho = 0,000$ ):

I have less travel time	(F(2.294) = 3,497; p = 0,032)
Less time is spent on meetings	(F(2.294) = 5,470; p = 0,005)
I can decide for myself when I work	(F(2.293) = 2,994; p = 0,052)
I can determine the temperature by myself	(F(2.294) = 4,386; p = 0,013)
My home workplace is not ideal	(F(2.294) = 11,244; p = 0,000)

The relation however was very weak for nine advantages and disadvantages in this analysis (Eta ( $\eta$ ) between 0,009 and 0,189). For the disadvantage 'My home workplace is not ideal' the relationship was weak (Eta ( $\eta$ ) = 0,267). Although the relations are (very) weak, **hypothesis H1 is accepted**.

It was also examined whether there are significant differences between having a private home-office, having a shared home-office or not having a private home-office for the advantage and disadvantages that already appeared to differ significantly. This analysis showed that there is no significant difference between having a private or shared home-office or not regarding the advantage 'I can decide for myself when I work'. However, the analysis shows that there was a significant difference between having a shared home-office and not having a private home-office regarding the advantage 'I have less travel time' (p = 0.024).

Between having a shared home-office and a private home-office and not having a private home-office there are significant differences regarding the ability to set the temperature. The significance between a shared home-office and a private home-office was p = 0.019 and between a shared home-office and not having a private home-office this was p = 0.017.

There was also a significant difference between a shared home-office and a private home-office in relation to the time spent on meetings (p = 0.003).

For the disadvantage 'my workplace is not ideal' it was found that there were significant differences between having a private home-office and having a shared home-office (p = 0.039) and not having a private home-office (p = 0.000).

#### Composition of the household

Similar to the location at the house, a cross-tabular analysis has been conducted to see whether there is a relation between generations and the composition of the household.

	Baby Boomers	Generation X	Millennials
Household	N=50	N=119	N=146
Living alone, without children	24,0%	7,6%	19,9%
Living together, without children	60,0%	12,6%	41,1%
Living alone, with children	4,0%	10,9%	2,7%
Living together, with children	12,0%	68,9%	36,3%

Table 15. Generations and location at the house

The expectation was that there is a relationship between generation and the composition of the household.

- HO There is no relationship between generation and the composition of the household
- H1 There is a relationship between generation and the composition of the household

The analysis showed that there was a highly significant, but weak relationship between the composition of the household and generations  $\chi^2$  (6, N=315) =74,879; p=0,000 V=0,345. Table 15 shows that the majority of Generation X lived together with children (68,9%). Baby Boomers mainly lived together without children (60%). Almost a quarter lived alone without children (24%) while 19,9% of the Millennials lived alone without children. A little less than half the Millennials also lived together without children (41,1%) and a little over a third lived together with children (36,3%).

This results in the following acceptance of hypotheses:

пі	household	
ш	There is a relationship between generation and the composition of the	Accepted
110	household	
H0	There is <u>no</u> relationship between generation and the composition of the	Rejected

A cross-tabular analysis was performed in order to see whether there is a relation between the composition of the household and reasons to not work from home. However, the conditions to use the outcomes were not met. Therefore, a frequencies analysis was performed.

It seems there was a low response rate, but that can be explained due to the previous survey question that was: 'Did you work from home during the lockdowns?'. Three answer options were given and only the respondents who answered 'partly' or 'no' got the follow-up question 'What was the reason you

worked partly or not from home during the lockdowns?'. In total 72 respondents answered 'partly' and 7 answered 'no', meaning the N in this analysis was 79, as can be seen in table 9.

	Living alone, without children	Living together, without children	Living alone, with children	Living together, with children
	N=14	N=26	N=7	N=31
My employer forced me to come to the office	7,1%	11,5%	0,0%	3,2%
My physical home workplace was not sufficient and could not be made sufficient	7,1%	3,8%	28,6%	3,2%
My work requires physical presence in the office	50,0%	57,7%	57,1%	67,7%
I missed the social aspects of the office / I felt lonely	28,6%	3,8%	0,0%	9,7%
I could work more calmly at the office	7,1%	11,5%	0,0%	6,5%
Working from home caused a bad work/life balance	0,0%	11,5%	14,3%	9,7%

Table 16. Frequency table 'Reasons not to work from home during Covid-19 and Composition of household'

It was striking that all groups indicated that the main reason they did not work from home during the lockdown was that their work requires physical presence at the office (50%, 57,7%, 57,1%, 67,7%), as can be seen in table 16. For employees that live together this was by far the main reasons that they did not work from home during the lockdowns.

A bit more than a quarter of the respondents that lived alone without children miss the social aspects of the home office (28,6%). Other reasons they did not work from home during the lockdowns were: they had to come to the office (7,1%), their home workplace was not sufficient (7,1%), and they could work more calmly at the office (7,1%). The respondents that lived alone, without children do not experience that working from home caused a bad work/life balance.

Besides that, their work required presences at the office. Employees that lived together without children found that working from home caused a bad work/life balance (11,5%), and that they could work more calmly at the office (11,5%). Also about a tenth was forced to come to the office by their employer (11,5%).

For employees that live alone with children the physical workplace was not sufficient (28,6%) and they experienced a bad work/life balance (14,3%) due to working from home.

The following analysis is to find out if experience of working from home is different for the different composition of an employee's household. In table 14 the means of this analysis are shown. These were based on a 3-point Likert scale, whereby 1 was I agree, and 3 was I disagree. This means, the lower the mean, the more people experience the advantage or disadvantage in relation to the composition of their household.

			Advantages					Disadvantages			
	I have less travel time	Less time is spent on meetings	I can decide for myself when I work	I can determine the temprature myself	I can decide wheter and which music I play	I miss my colleagues	I cannot do all my work from home	My home workplace is not ideal	I find telephone/ digital meetings difficult	I hardly get outside since I started working at home	
Living alone, without children											
Mean	1,21	2,00	1,47	1,23	1,26	1,13	1,81	1,77	2,23	1,94	
N	47	47	47	47	47	47	47	47	47	47	
Std. Deviation	0,508	0,909	0,718	0,52	0,607	0,337	0,876	0,89	0,89	0,942	
Living together, without children											
Mean	1,18	2,28	1,68	1,25	1,22	1,22	1,81	1,96	1,93		
N	96	96	96	96	96	96	96	96	96	96	
Std. Deviation	0,481	0,842	0,84	0,503	0,486	0,463	0,862	0,832	0,849	0,858	
Living alone, with children											
Mean	1,05	2,16	1,68	1,21	1,16	1,21	1,89	1,79	2,16	2,00	
N	19	19	19	19	19	19	19	19			
Std. Deviation	0,466	0,872	0,803	0,518	0,521	0,491	0,885	0,878	0,855	0,896	
Living together, with children											
Mean	1,19	1,95	1,66	1,29	1,29	1,26	1,96	1,96	2,09	2,18	
N	135	135	134	135	134	135	134	135	134	135	
Std. Deviation	0,465	0,858	0,804	0,531	0,532	0,546	0,908	0,901	0,845	0,905	

Table 17. Comparison of means '(Dis)advantages of working home during Covid-19' and 'Composition of household'

As can be seen in table 17, employees that lived alone and did not have children feel the most freedom to determine when they work, but also indicated that they miss their colleagues the most. In contrast, they are the ones that had the least trouble with digital meetings, while people that lived together without children found it the most difficult. It was striking that employees that lived alone, but did have children felt the most freedom to play the music they want, when they want. This was also the group that experienced the decrease of travel time since they are working from home the most. Not being able to do all work from home was most experienced by employees that lived together and had kids.

The expectation was that there is a significant difference between the composition of someone's household and the advantages and disadvantages experienced while working from home during Covid–19.

- HO There is <u>no</u> significant difference between the composition of household and advantages/disadvantages of working from home during Covid-19
- There is at least one significant difference between the composition of household and advantages/disadvantages of working from home during Covid-19

There was only one advantage that was found significant, namely 'Less time is spent on meetings':

Less time is spent on meetings

$$(F(2.293) = 2,971; p = 0,032)$$

The relation however was very weak for all advantages and disadvantages in this analysis (Eta  $(\eta)$  between 0,050 and 0,172). Although the relations are (very) weak, **hypothesis H1 is accepted.** 

It was also examined whether there were significant differences between the different compositions of someone's household in relation to the advantage 'less time is spent on meetings'. This analysis showed that there was a significant difference between living together without children and living together with children (p = 0.022).

### 5.5 Workplace preference and expectations post-Covid-19

In this section the results regarding sub question 4 what are the expectations regarding ideal workplace design of different generations at Dutch municipalities post– Covid–19 are discussed. The expectations are described per generation. Then it will be assessed whether there is a significant difference between generations. The expected activities at the office post–Covid–19 per generation were also examined.

Generations and their workplace preference	ce and expectation	ns post-Covid-	19
	<b>Baby Boomers</b>	Generation X	Millennials
Preffered workplace design post-Covid-19			
Traditional office	40,0%	22,9%	26,1%
Open-plan office	12,5%	5,5%	13,0%
Activity Based Working	47,5%	71,6%	60,9%
	N=40	N=109	N=115
Days going back to the office post-Covid-19			
Yes, on full-time days	55,3%	50,0%	44,7%
Yes, on my part-time days	14,9%	14,7%	10,6%
Yes, both on full-time and part-time days	21,3%	29,3%	34,8%
No, I don't expect to go back to the office	8,5%	6,0%	9,8%
	N=47	N=116	N=132
Extent of going back to the office post-Covid-19			
I expect to go more to the office	2,3%	0,0%	0,9%
I expect to go as much as before to the office	25,6%	13,6%	14,5%
I expect to go less to the office	72,1%	86,4%	84,6%
	N=43	N=110	N=117

Table 18. Descriptive statistics per generation

### Baby Boomers

The results as displayed in table 18 showed that most Baby Boomers would prefer an Activity Based workplace design post–Covid–19 (47,5%). Notably was the high percentage of Baby Boomers that would prefer a traditional office (40,0%). The open plan office was preferred the least with 12,5%. The majority of the Baby Boomers would go to the office on their full–time day (55,3%). This was followed by working in the office on both part–time and full–time days (21,3%) and on part–time days (14,9%). A small portion indicated to not return back to the office (8,5%). Almost three–quarter (72,1%) of the Baby Boomers expect to go less to the office than before Covid–19 and a quarter (25,6%) indicated to go back to the situation as before Covid–19. Only 2,3% indicated to go to the office more than before Covid–19.

#### Generation X

The majority (71,6%) of Generation X indicated to prefer an Activity Based workplace when going back to the office, followed by the traditional office. The open plan office was preferred the least (5,5%). Exactly half of Generation X would go to the office on their full-time workday. Almost a third indicated to go to the office on both part-time and full-time days and 14,7% on part-time days. Only 6% expected that they would not return to the office. No one expected to go to the office more than before Covid-19. It was quite the opposite. The majority (86,4%) expected to go less to the office, while 13,6% expected that they would go back to before Covid-19 (table 14).

#### Millennials

Same as the other generations, an open plan office was least preferred by Millennials (13,0%). The traditional office was preferred by 26,1% and the majority (60,9%) preferred an Activity Based environment. Most Millennials would go to the office on full-time days (44,7%), while 34,8% would go on both part-time and full-time days. Only 10,6% expected to go on part-time days and 9,8% expected to not go the office at all. A very small portion of the Millennials (0,9%) expected to go to the office more than before Covid-19. The majority expected to return less to the office (84,6%) and 14,5% indicated to go back to the way it was.

The expectation was that there was a relationship between generations and the workplace design preference, days employees expect to go back to the office post–Covid–19, and to what extent employees expect to go back to the office post–Covid–19. The corresponding hypotheses are:

- HO There is no relationship between generation and the workplace design post-Covid-19
- H1 There is a relationship between generation and the workplace design post-Covid-19
- HO There is no relationship between generations and days going back to the office post-Covid-19
- H1 There is a relationship between generations and days going back to the office post-Covid-19
- There is  $\underline{no}$  relationship between generations and the extent going back to the office post-Covid-19

There is a relationship between generations and the extent going back to the office post-

H1 Covid-19

A striking difference between the generations is that Baby Boomers (40,0%) prefer a traditional office more, compared to Generation X (22,9%) and Millennials (26,1%). Baby Boomers (47,5%) also preferred the Activity Based environment less, compared to Generation X (71,6%) and Millennials (60,9%). The relationship between generations and preferred workplace design post–Covid–19 was found to be significant  $\chi^2$  (4, N=264) =9,645; p=0,047 V=0,135. The relation was however, very weak (V=0,135). The relationship between generation and on which days they would return to the office, was not significant  $\chi^2$  (6, N=295) =5,156; p=0,524 V=0,093. The relationship between generations and the extent of going back to the office post–Covid–19 could not be assessed, since the conditions were not met. This results in the following acceptance of hypotheses:

НО	There is <u>no</u> relationship between generation and the preferred workplace	Rejected
по	design post-Covid-19	
Н1	There is a relationship between generation and the preferred workplace	Accepted
п.	design post-Covid-19	
шл	There is <u>no</u> relationship between generations and days going back to the	Accepted
Н0	There is <u>no</u> relationship between generations and days going back to the office post-Covid-19	Accepted
<b>H0</b>		<b>Accepted</b> Rejected

#### Activities at the office post-Covid-19

Generations have different expectations about activities they want to perform at the office post–Covid–19. In table 19 the means are shown. These are based on a 5–point Likert scale, whereby 1 was I strongly agree, and 5 was I strongly disagree. This means, the lower the mean, the more people expect to return to the office for that activity.

	General office work	Undisturbed office work	Interactive office work	Scheduled consultation with less than 4 people	Scheduled consultation with 4 – 8 people	Scheduled consultation with 8 people or more	Talk on the phone	Reading	Archiving and document management
<b>Baby Boomers</b>									
Mean	2,93	3,54	1,51	2,24	1,88	1,93	3,46	3,90	2,85
N	41	41	41	41	41	41	41	41	39
Std. Deviation	1,104	1,227	0,553	0,916	0,812	0,877	0,977	0,944	1,182
Generation X									
Mean	3,70	4,05	1,53	2,64	1,96	1,76	4,05	4,27	3,18
N	109	108	109	109	108	108	109	109	109
Std. Deviation	1,357	1,203	0,74	1,206	1,004	1,022	1,109	1,006	1,448
Millennnials									
Mean	3,44	3,80	1,58	2,50	1,93	1,89	3,97	3,99	2,90
N	117	116	116	115	116	116	115	116	116
Std. Deviation	1,155	1,203	0,771	1,18	0,921	1,07	0,912	0,955	1,254

Table 19. Comparison of means 'Activities at the office post-Covid-19'

All the generations expect to not return to the office to telephone or to read. Also undisturbed office work is an activity that would rather not be performed at the office. Baby Boomers seem to want to perform general office work both at home and at the office. While Millennials and Generation X are less willing to return to the office for that activity. The opinions of all generations are alike about archiving and document management: this activity can be done at home and at the office.

Activities that included collaboration with colleagues appear to make employees return to the office. Generation X stands out with a stronger opinion than the other generations.

The expectation was that there is a significant difference between generations and the activities they want to return to the office for post–Covid–19.

- There is <u>no</u> significant difference between generations and activities in the workplace post-Covid-19
- There is at least one significant difference between generations and activities in the workplace post-Covid-19

For three activities it was found that they were significant, and one activity was almost significant:

General office work (F(2.264) = 5,854; p = 0,003)Talk on the phone (F(2.262) = 5,224; p = 0,006)Reading (F(2.263) = 3,131; p = 0,045)Undisturbed office work (F(2.262) = 2,896; p = 0,057)

The relation however was very weak for all activities in this analysis (Eta ( $\eta$ ) between 0,031 and 0,196). Although the relations are very weak, **hypothesis H1** is accepted.

It was also examined whether there are significant differences between generations for the four activities that already appeared to differ significantly. This analysis showed that returning to the office

for general office work (p = 0,002) and to telephone (p = 0,005) differs significantly between Baby Boomers and Generation X.

#### 5.6 Other characteristics

In this section the results regarding sub question 5 what are other characteristics (besides generation) that influence the post-Covid-19 workplace design preference of employees working at Dutch municipalities are discussed. Only the characteristics that have an influence on the post-Covid-19 workplace design preference are analysed.

For each characteristic a cross-tabular analysis was performed in order to see whether there is a relation between characteristics and post-Covid-19 workplace design preference. However, not for all the characteristics the conditions to use the outcomes were met.

All the characteristics whereby the conditions were met, are shown in this paragraph. The other outcomes of the analysis can be found in appendix N.

The characteristics whereby the conditions to use the results were met are: gender and days going back to the office post-Covid-19, gender and workplace design preference post-Covid-19, employment and days going back to the office post-Covid-19, and composition of the household and days going back to the office post-Covid-19. The corresponding hypotheses are:

- There is <u>no</u> relationship between someone's gender and days going back to the office post-Covid-H0 19
- H1 There is a relationship between someone's gender and days going back to the office post-Covid-19
- H0 There is <u>no</u> relationship between someone's gender and the workplace design preference after Covid-19
- H1 There is a relationship between someone's gender and the workplace design preference after Covid-
- HO There is no relationship between the employment and days going back to the office post-Covid-19
- H1 There is a relationship between the employment and days going back to the office post-Covid-19
- H0 There is <u>no</u> relationship between the composition of the household and days going back to the office post-Covid-19
- H1 There is a relationship between the composition of the household and days going back to the office post-Covid-19

The relationship between gender and days going back to the office post Covid-19 was found to be significant  $\chi^2$  (3, N=295) =7,853 ;p=0,049 V=0,163. The relation was however, very weak (V=0,163). The relationship between gender and the preferred workplace design post-Covid-19, was not significant  $\chi^2$  (2, N=264) =0,223 ;p=0,895 V=0,029.

Regarding the employment and on which days respondents expect to go back to the office post-Covid-19 the relationship is highly significant  $\chi^2$  (6, N=293) =40,101 ;p=0,000 V=0,262. The relationship is >0,25, so it is a weak relationship.

The relationship between the composition and days going back to the office post Covid-19 was found to be not significant  $\chi^2$  (9, N=295) =6,630 ;p=0,676 V=0,087.

This results in the following acceptance of hypotheses:

	3 , ,,	
НО	There is $\underline{no}$ relationship between someone's gender and days going back	Rejected
	to the office post-Covid-19	
	There is a relationship between someone's gender and days going back	Accepted
H1	to the office post-Covid-19	
НО	There is <u>no</u> relationship between someone's gender and the workplace	Accepted
110		Accepted
	design preference post-Covid-19	
H1	There is a relationship between someone's gender and the workplace	Rejected
	design preference post-Covid-19	
Н0	There is <u>no</u> relationship between the employment and days going back	Rejected
	to the office post-Covid-19	
Н1	There is a relationship between the employment and days going back to	Accepted
	the office post-Covid-19	
H0	There is <u>no</u> relationship between the composition of the household and	Accepted
	days going back to the office post-Covid-19	
Н1	There is a relationship between the composition of the household and	Rejected
	days going back to the office post-Covid-19	

## 6 Discussion and conclusion

The purpose of this research was to get insight into how different the expectations of distinct generations are on post-Covid-19 workplace design at Dutch municipalities. In order to determine what the expectations of distinct generations are, literature research and survey research was conducted. In this section, the answers to the main and sub research questions will be provided. Subsequently, this research will be assessed in relation to previous research.

## 6.1 Workplace arrangements before Covid-19

In this section the answer to sub question 1 'What kind of workplace arrangements are used at Dutch municipalities before Covid-19?' will be provided.

The Open-Plan office is the workplace design used the most within municipalities pre-Covid-19 and the Traditional office design is used the least. This is in accordance with literature. De Vries (2019) found that municipalities have implemented new ways of working, such as Open-Plan and Activity-Based work environments.

The results of the survey show that the majority of the employees of municipalities were allowed to work from home before Covid–19, but not everyone did this. For a number their work required their physical presence, which was also found by Peters et al. (2011). Also social aspects such as missing colleagues and a bad private/work balance were indicated by respondents as reasons to not work from home. The literature is contradictory about this. Soetman (2011) and De Spiegelaere et al. (2013) found that employees see working from home as an advantages because they can better adjust the work life to their private life and vice versa. Vos and Van der Voordt (2002) state that working from home can lead to conflicts between private and business. Although the literature says that municipalities facilitate their employees to work from home in a good matter (van der Jagt, 2020), respondents indicate that they could not work from home due to an insufficient home workplace.

What was striking about the reasons for not working from home is that a significant part of the respondents indicated that it was not part of the culture of the organisation to work from home. This was also stated during discussions with the professional field.

In conclusion, the Open-Plan office is the workplace design which is most used within Dutch municipalities and in the majority of the municipalities it is allowed to work from home.

## 6.2 Workplace design preferences and working from home before Covid-19

The answer to sub question 2 'What are the workplace design preferences of different generations at Dutch municipalities before Covid-19?' will be discussed in this section.

The Open–Plan office workplace design is least preferred by all generations. Although there was not a significant relationship between generations and the workplace design preference, it is striking that the least preferred workplace design is used in the majority of the municipalities. However, the literature shows that Generation X and Millennials like to work in an open, accessible work environment (Bennet, Pitt & Price, 2012; (Hoendervanger, Van der Voordt, & Wijnja, 2012). The literature endorses that Baby Boomers suffer from noise pollution within an open–plan office (Joy & Haynes, 2011) and that they have difficulty adapting to a flexible work environment (Harber, 2011).

Generation X worked the most from home before Covid-19, Baby Boomers worked the least from home. However, in the literature it is stated that Generation X would make extensive use of the

workplace in the office (Appel-Meulenbroek et al., 2019). Millennials were more divided about working from home before Covid-19, which goes against the expectations that are stated in the literature (Bennet, Pitt & Price, 2012; Hoendervanger, Van der Voordt, & Wijnja, 2012). This could be explained because Millennials designated that their physical home workplace was not sufficient.

All the generations indicated that their work prevented them to work from home. Millennials and Generation X are the generations that indicated that working from home was not in the culture of an organisation. Baby Boomers indicated that they did not work from home because of social aspects, while Millennials are the generations that indicated this the least. Missing colleagues and a bad private/work balance are stated in the literature to be aspects that Millennials would be missing while working from home (Appel–Meulenbroek et al., 2019).

Overall, the workplace design preference at the office pre-Covid-19 for all generations was an Activity-Based workplace design. Baby Boomers did not prefer to work from home before Covid-19, while Generation X and Millennials did.

## 6.3 Experiencing working from home during Covid-19

In this section the answer to sub question 3 'What are the experiences of different generations with working from home during Covid-19 at Dutch municipalities? will be provided.

At the time of writing the world is still in the phase 'during Covid-19', that is why limited discussion in relation to the literature is possible. The results of the analysis before and during Covid-19 have been compared.

During the research reasons to not work from home during Covid-19 and (dis)advantages of working from home during Covid-19 were analysed. Not only the experiences of generations were analysed, but also whether the home situation had an influence.

The main reason generations did not work from home during Covid-19 was that their work requires physical presence in the office. This is the same as pre-Covid-19. A difference that occurred during the research is that especially Baby Boomers indicated that they could work more calmly at the office during Covid-19 than before Covid-19. Baby Boomers are the only generation that missed the social aspects of the office less during Covid-19 than before. For all generations working from home during Covid-19 decreased the extent that the work/life balance was disturbed.

Overall generations indicated that they experience more advantages than disadvantages while working from home, which is supported by the literature (Van Veldhoven and van Gelder, 2020). Baby Boomers are the generation that experiences the advantages the least. They designated that they have trouble with performing from home. Millennials experience that their workplace at home is the least ideal.

Out of the comprehensive analysis, some general conclusions can be drawn. Employees that live together without children, find it most difficult to have digital meetings. This can be caused by the composition of the household of Baby Boomers, where the majority live together without kids. Whereas people that live together with kids, experience that they cannot do all their work from home. So the generations that have trouble with performing their tasks from home are Generation X and Millennials, because they represent the majority of the household 'together with children'.

The generation that misses the social aspects the most are the Baby Boomers, which can be explained by the high part of Baby Boomers that live alone, or together without children.

The majority of all the generations indicated that they have the possibility to work in a private-office at home. The advantage designated the most by employees that have a private home-office was: 'I can decide for myself when I work'. 'My home workplace is not ideal' is experienced the least by employees that have a private home-office, just like 'I cannot do all my work from home'.

Concluded, generations experience less disadvantages than advantages while working from home. They miss the social interactions, but also experience more freedom regarding work and adjusting their workplace. Besides, the decrease of travel time is an advantages all generations perceive.

### 6.4 Workplace preference and expectations post-Covid-19

The answer to sub question 4 'What are the expectations regarding ideal workplace design of different generations at Dutch municipalities post- Covid-19?' will be discussed in this section.

This sub research question focuses on the period after Covid-19, which lays in the future. In the literature some expectations have been found, but it is not clear what the coming period will look like. The analysis shows that all generations prefer the Open-plan office the least when they return to the office. Baby Boomers however are more divided between Activity Based working and the Traditional office, while before Covid-19 they tended to prefer Activity Based working more. Overall the Activity-Based working design is preferred the most by all generations.

Like the literature predicted, all generation indicated that they expect to return to the office less than before Covid-19. A small part even stated that they expect to continue working completely from home, which is conform the findings of the European Commission, 2020 and Hamersma et al., 2020. According to Binnenlands Bestuur (2020a), a large number of civil servants expect that working from home will become the norm after the corona crisis. This research shows that just as before Covid-19, Baby Boomers are the generation that expect to work at the office the most. Generation X and Millennials are going to be the generations that can be found least in the office post-Covid-19. Overall, all generations indicated that they would not to go back to the office on part-time days.

The results of this research show that all generations will not return to the office to perform individual tasks This expectation is supported by Binnenlands Bestuur (2020a). Mostly work that requires concentration, such as undisturbed office work or reading, is preferably done at home post–Covid–19. For social occasions, such as meeting with a number of colleagues, employees want to come to the office post–Covid–19. The only notable thing is that Baby Boomers are divided to come to the office for general office work, while Millennials and Generation X stay at home for this.

Overall, the expectations of the generations are the same. They prefer to return to an Activity-Based work environment to perform social tasks. For individual tasks all generations will be less at the office and perform the tasks they can from home.

## 6.5 Other characteristics

In this section the answer to sub question 5: 'What are other characteristics (besides generation) that influence the post–Covid–19 workplace design preference of employees working at Dutch municipalities?' will be provided.

As stated before, this research has been conducted during the Covid-19 pandemic. At the time of writing, the situation post-Covid-19 does not exists yet. Therefore, no literature can be found about this topic and cannot be discussed in relation to the results of the analysis. The researcher has attempted to identify other characteristics that could have an influence on preferred post-Covid-19

workplace design. The characteristics researched are: gender, function, employment, commute distance, composition of the household, and having a private-home office.

The answer to the sub research question is that within this research no other characteristics were found that influence the post-Covid-19 workplace design. However, for gender and employment it was found that they have an influence on the days (full-time/part-time) that employees want to go back to the office.

#### 6.6 Final conclusion

The main question of this thesis was: 'How different are the expectations of distinct generations on post-Covid-19 workplace design at Dutch municipalities?' It was found that there is no insurmountable difference between generations. Overall, they are agreed about the workplace design they prefer the most, and also the expectation to work more from home post-Covid-19 is similar. Aspects they think differently about are the extent to which they want to continue working from home post-Covid-19 and the suitability of their home office.

## 7 Limitations, validity, and reliability

## 7.1 Reliability

According to Saunders et al. (2016) reliability is: 'the extent to which data collection technique or techniques will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data'. In other words: if the research is done again, will the outcomes be the same?

The reliability of an investigation can be influenced by human actions. In addition, there are other aspects that affect the reliability of respondents: someone does not know the answer to a question, the environment in which a respondent completes the questionnaire varies per respondent, a wrong or different answer is accidentally ticked. Reliability can also be reduced at the hands of the researcher, for example by making mistakes when entering the data collected (Verhoeven, 2010). The reliability of a survey can be increased by having a large sample size. Within this research this is done by distributing the questionnaire to several different municipalities. In addition, the researcher makes use of triangulation, in which two research methods are used. These research methods are literature review and questionnaires. The use of multiple research methods increases the reliability because the researcher checks, as it were, whether the measurements within the different research methods give the same results (Verhoeven, 2010). The literature review resulted in the operationalisation for the questionnaire. In other words, the researcher uses a questionnaire based on operationalisation that is based on academic literature. An error that could occur during the questionnaire is the misunderstanding of (important) questions. This is overcome by conducting a test questionnaire, where the misunderstandings are filtered and can be adjusted. Also the irrelevant questions can be filtered during a test questionnaire (Saunders et al., 2016). In addition to the above ways to increase reliability, the researcher asked a fellow student to read the results at the end. A so-called peer examination is used to increase reliability. Finally, the reliability of this research is assured and enlarged by noting everything that is done. In this so-called audit trail, also called logbook, everything that is done during the research is recorded. In this way insight is made into what the researcher has done and how the research data have been obtained. In addition, the primary research materials, such as the datasets of the questionnaires, and the all other relevant information is made available. In this way the research is made followable and repeatable (Baarda, de Goede, & Teunissen, 2005).

#### 7.2 Validity

The validity of a research is 'the extent to which data collection method or methods accurately measure what they were intended to measure' (Saunders, Lewis, & Thornhill, 2016). In other words, does the researcher knows what he or she wants to measure, and will the chosen research methods measure that? The data collection method used within this research is a questionnaire.

#### 7.2.1 Construct validity

Construct validity relates to the measuring instruments used in a study, in other words, do you measure what you want to measure? It is sometimes difficult to measure the construct validity, for example when concepts are subjective or unclear. An example of a concept that is not subjective is the **opinion of a respondent**. Such concepts must first be well described and defined before they are

converted into a question. Only in this way will a measuring instrument be created that actually measures what the researcher wants to measure (Verhoeven, 2010). In this research, construct validity is increased by using an **operationalisation based on academic literature**. Definitions of the core concepts are retrieved from this literature. It is up to the researcher to check in the meantime whether the **operationalisation and the survey questions still match**. By continuing to check this, the construct validity increases. Literature is also being searched for **existing measuring instruments** that can be used in this research. This concerns, for example, the scale used in the questionnaire.

#### 7.2.2 Internal validity

The internal validity of a study is defined as: 'whether or not the methods and approaches that you chose actual measured what you set out to measure, in other words, have you answered the question that you set out to answer?' (Turner, Ireland, Krenus, & Pointon, 2012).

Internal validity is also seen as the degree to which the correct conclusions can be drawn after the research has been carried out (Verhoeven, 2010). As with reliability, **triangulation** also influences validity. Triangulation is used to try to limit systematic errors as much as possible. This research uses **data triangulation**, because multiple sources are used during the literature review (Baarda, de Goede, & Teunissen, 2005).

#### 7.2.3 External validity

The external validity of a study 'can be assessed according to the appropriateness of the generalisability of the results, in other words, can the findings be applied to the target population and/or to another similar population?' (Turner, et al., 2012).

In order to determine whether the sample accurately reflects the population, it is important to determine whether the sample has relevant characteristics similar to those of the population. If it turns out that the sample is representative, the research results may be generalised (Verhoeven, 2010). By first **determining the relevant characteristics of the population through literature research**, an attempt is made to make this research representative and thus increase the external validity.

#### 7.3 Limitations

Several limitations influence the success of this research. First, **time** is a major factor, because time available for this research is limited. By making a good and realistic planning the chance that the deadline will not be met will be reduced. Besides the amount of time, the research can be influenced by **external factors**. One of those external factors are the respondents, which are needed for the questionnaires (Saunders et al., 2016). During this study a questionnaire will be held. For the questionnaire the right respondents have to found and they need to have time to fill in the survey. A high response rate is necessary to increase the validity of this research. This limitations is overcome by sending the questionnaire to a large number of respondents that fit the predefined profile. The researcher took a risk by posting the survey on LinkedIn in order to increase the response rate. On LinkedIn non-civil servants also had access to the questionnaire. It cannot be verified whether they have completed the survey. Another limitation is that respondents of a questionnaire cannot ask the researcher what is meant by a question or an answer possibility. This can lead to respondents guessing what the question means, which is not desirable, because respondents can give the wrong answers.

Another limitation of a questionnaire is that respondents can give an answer that is socially desirable instead of the answer they really want to give (Price & Murnan, 2004).

Furthermore, there are several limitations to **the scope of this study**. The geographic focus is limited to the Netherlands. This is relevant as municipalities of other countries may work in a very different manner. The study considers the generations baby boomers, generation X, Millennials, and the generation Z. However, the results of Generation Z are merged with the results of Millennials. This means that no information and conclusions specific to Generation Z can be given.

There are also some **academic limitations** to the study. One of them is that only one characteristic (age) of employees of municipalities is researched. Other characteristics can certainly be researched, but the time for this research was too limited. Also, there are many different definitions of the years in which a generation falls. It may occur that when the researcher chose other limits of birth years, the outcomes were different. Another academic limitations is that this research took place during the Covid pandemic. The study looks at the situation before, during, and after Covid–19, while the situation after Covid–19 does not yet exist. This means that no academic literature is available yet.

## 8 Recommendations

The aim of this research was to get insight into how different the expectations of distinct generations are on post-Covid-19 workplace design at Dutch municipalities. The researcher wanted to create insights for the FREM field about expectations regarding the workplace design after Covid-19. In this section recommendations are given for the FREM field, but also for further research.

#### 8.1 Recommendations for FREM

At the moment, the Netherlands is returning to the 'new normal' fast. This also means that the offices can be used again soon. During this study, it was found that there is little difference between what generations expect after Covid-19. For the future workplace concept, it is recommended to create personas based on the demographic data from this research. Based on this, it is possible to gain insight into which type of employees mainly work at an organisation, to which the workplace design can be adjusted.

What all generations do agree on is that the Open-plan office may disappear. It is recommended that FREM investigates which workplace concept is currently used within Dutch municipality and how this fits to the wishes of the employees. Also, it is expected that employees will come to the office less to perform individual tasks. The future has yet to show whether this will actually be the case, but it is good to think about this already. This could affect the layout and furnishing of the office. If people actually come to the office less for individual tasks, it may be that the office is only used for social interactions and activities that require collaboration with colleagues, which requires different facilities than individual work

The survey showed that employees experience that they have an insufficient home workplace. For Facility Managers it is recommended to ask the employee if they can change something about that. Sometimes it is not possible to offer a solution, but when it is possible, working from home will become more pleasant for the employee.

#### 8.2 Recommendations for further research

This research has been a study within Dutch municipalities, but the pandemic is a worldwide phenomenon. Therefore, research within other countries is recommended in order to see what the influence of Covid–19 was on their (local) governments. This research is a cross–sectional research which has been conducted during the Covid–19 period. In the future, a longitudinal research can be conducted to see if the expectations that arose from this study came out to be met. Also the difference between expectations now and after Covid–19 can be compared by conducting a longitudinal research. When the Covid–19 pandemic is completely over, it could even be that research is being conducted into a completely new office concept. It remains to be seen what the future will look like, but it is likely that we will no longer talk about the Traditional, Open–plan or Activity–Based office. Perhaps all organisations will switch to 'Post–Covid workplace design'.

As stated before, only one characteristic (age) is researched in detail. Other researchers could decide to conduct studies about the other characteristics of Dutch civil servants in relation to the workplace design preference. At last, a recommendations is made for Dutch municipalities. During this research all Dutch municipalities were taken into account. The results show that there are different expectation between municipalities regarding the preferred workplace arrangements. If a municipality really wants

to know what their employees want post-Covid-19, it is recommended to set out a questionnaire within the municipality.

## Resources

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## **Appendices**

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Appendix B: Analyses techniques

Appendix C: Analyses technique per research question

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Appendix F: Questionnaire for the municipality of Apeldoorn (including ethics form)

Appendix G: Questionnaire for the other municipalities (including ethics form)

Appendix H: Statistics and visualisation of the demographic information of the respondents

Appendix I: Statistics and visualisation of workplace arrangements before Covid-19

Appendix J: Statistics and visualisation of workplace design preferences and working from home before

Covid-19

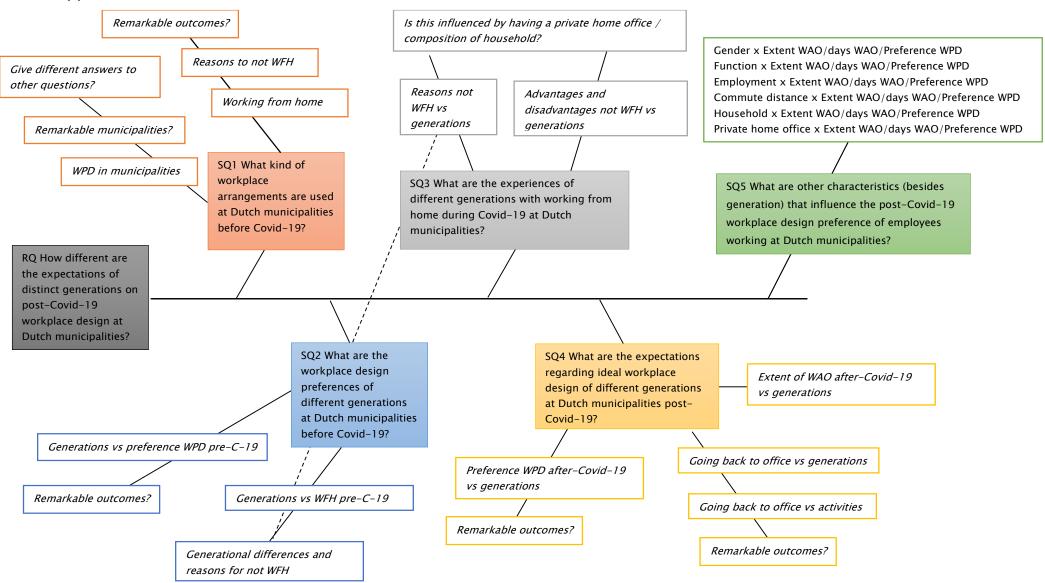
Appendix K: Statistics and visualisation of experiencing working from home during Covid-19

Appendix L: Statistics and visualisation of workplace preference and expectations post-Covid-19

Appendix M: Statistics and visualisation of other characteristics (in results)

Appendix N: Statistics and visualisation of other characteristics (not in results)

## Appendix A



# Appendix B

		<u>Univariate</u>				
Measurement levels	Nominal	Ordinal	Scale			
Frequency distribution (visualisation)	Tables, pie chart, bar chart	Tables, pie chart, bar chart	Tables, and bar chart			
Measure of central tendency	Mode	Mode Median	Mode Median Mean			
Measure of dispersion		Range	Range Standard Deviation			
Table Univariate analysis (Saxion University of Applied Science, 2021)						

<u>Bivariate</u>								
	Situation 1 (nom/ord - nom/ord)	Situation 2 (nom/ord-scale)	Situation 3 (scale-scale)					
Visual	Cross tabs	Comparison of means	Scatter plot					
Sample (strength)	Cramer's v	Eta	(Pearson's) Product moment correlation coefficient					
Inference (generalisation)	Chi-square test	T- test (if 2 groups) F-test / ANOVA (more groups)	r-test (pearson's product moment correlation coefficient)					

## Appendix C

Sub	Sub question 1:									
Wha	What kind of workplace arrangements are used at Dutch municipalities before Covid-19?									
a.	What kind of workplace design is used at Dutch		Univariate descriptive analysis							
a.	municipalities before Covid-19?		Nominal > Frequencies table							
b.	To what extent was working from home widespread be	fore	Univariate descriptive analysis							
D.	Covid-19 at Dutch municipalities?		Nominal > Frequencies table							
Sub	question 2:									
Wha	at are the workplace design preferences of different gen	erations	at Dutch municipalities before Covid-19?							
2	What are the workplace design preferences of the Baby	/	Bivariate descriptive analysis of 2 variables							
a.	Boomers at Dutch municipalities before Covid-19?		question 2 (generation) (ordinal) (independent)							
b.	What are the workplace design preferences of generati	on X	AND							
D.	at Dutch municipalities before Covid-19?		question 10 (WPD before) (nominal)							
	What are the workplace design preferences of the Mille	nnials	(dependent)							
с.	at Dutch municipalities before Covid-19?		Crosstabs + Cramer's V + Chi-square test							
Sub	question 3:									
Wha	at are the experiences of different generations with work	cing fro	m home during Covid-19 at Dutch							
mui	nicipalities?									
	What are the experiences of Baby Boomers with	Bivaria	Bivariate descriptive analysis of 2 variables							
a.	working from home during Covid-19 at Dutch	question 2 (generation) (ordinal) (independent)								
a.	municipalities?	AND								
	mamerpanaes:	question 13/13a (work from home) (nominal)								
	What are the experiences of generation X with	(depe	ndent)							
b.	working from home during Covid-19 at Dutch	Crosstabs + Cramer's V + Chi-square test								
D.	municipalities?	+								
	mumcipanties:	Bivaria	ate descriptive analysis of >2 variables question							
		2 (ger	eration) (ordinal) (independent)							
_	What are the experiences of Millennials with working	AND								
C.	from home during Covid-19 at Dutch municipalities?	question 14 a-j (experiences) (scale) (dependent) Comparison of means + Eta + F-test								

#### Sub question 4:

What are the expectations regarding ideal workplace design of different generations at Dutch municipalities post-Covid-19?

+

What are the expectations Baby Boomers regarding ideal workplace design of different generations at

a. ideal workplace design of different generations at Dutch municipalities post- Covid-19?

What are the expectations generation X regarding
b. ideal workplace design of different generations at
Dutch municipalities post- Covid-19?

What are the expectations Millennials regarding ideal c. workplace design of different generations at Dutch municipalities post- Covid-19?

Bivariate descriptive analysis of >2 variables question 2 (generation) (ordinal) (independent) AND

question 18 a-i (activities) (scale) (dependent) Comparison of means + Eta + F-test

Bivariate descriptive analysis of 2 variables – question 2 (generation) (ordinal) (independent) AND

question 19 (WPD after) (nominal) (dependent) Crosstabs + Cramer's V + Chi-square test

#### Sub question 5:

d.

What are other characteristics (besides generation) that influence the post-Covid-19 workplace design preference of employees working at Dutch municipalities?

What is the influence of someone's gender on the

a. post-Covid-19 workplace design preference of employees working at Dutch municipalities?

What is the influence of someone's function on the

b. post-Covid-19 workplace design preference of employees working at Dutch municipalities?

What is the influence of someone's employment on

c. the post-Covid-19 workplace design preference of employees working at Dutch municipalities?

What is the influence of someone's work-home distance on the post-Covid-19 workplace design preference of employees working at Dutch municipalities?

What is the influence of the composition of someone's household on the post-Covid-19 e. workplace design preference of employees working at Dutch municipalities?

What is the influence of having a private home office (location at the house) on the post–Covid–19 workplace design preference of employees working at Dutch municipalities?

Bivariate descriptive analysis of 2 variables - questions 3, 4, 5, 6, 7, and 8 (nominal / ordinal) (independent) AND

question 19 (WPD after) (nominal) (dependent) Crosstabs + Cramer's V + Chi-square test

# Appendix D

## Operationalisation

			>	Municipality	Fill in a municipality	x	In which municipality do you work?	
					Stadhuis			
				Worklocation in Apeldoorn	Samen055	(I. Everhard, personal communication,	At what location do you work the most?	
			>		Werkgebouw Noord	Ferbruary 22 <sup>nd</sup> 2021)	At what location do you work the most?	
					Werkgebouw Zuid	i i		
					Between 1946-1964			
					Between 1965-1980			
			>	Generation	Between 1981-2000	(Schullery, 2013; Ritter, 2014)	What is your year of birth?	
					After 2000			
					Man			
			>	Gender	Female	x	What is your gender?	
					Other			
					Managing board			
					Management			
					Head of department		What is your function?	
	>				Project leader / project manager			
		> Characteristics	>	Function	Advisor	(Hamersma, de Haas, & Faber, 2020)		
					Senior employee			
					Employee			
General					Junior employee			
A information of					Intern			
employees					Fulltime (36hours or more)	(Messenger and Gschwind, 2016)	What kind of employment do you have?	
			>	Employment	Parttime (less than 36 hours)			
					Temporary (Interim/Intern)			
					0–5 kilometer			
					6–10 kilometer			
					11–15 kilometer			
					16–20 kilometer		How many kilometers from you work do you live?	
			>	Commute distance	21–25 kilometer	(Soetman, 2011)		
					26-30 kilometer			
					31-40 kilometer			
					41–50 kilometer			
	-		1		More than 50 kilometer			
					Living alone, without children			
			>	Household	Living together, without children	(Ng, 2010; Soetman, 2011; Hamersma, de	What is the composition of your household?	
					Single, with children	Haas, & Faber, 2020)	, , , , , , , , , , , , , , , , , , , ,	
		> Home situation			Living together, with children			
					Yes, I can work completely secluded in a separate room			
			>	Location in the house	Yes, but my housemates (partner/children) also use this space to		Do you have the option to work in a private office at	
					work/study		home?	
					No, I don't have the option to work secluded			

					Traditional office		What workplace design did the municipality where					
		>	In a municipality	Open-plan office	(de Vries, 2019)	vou work have at the time of the Covid-19						
			- 1	,	Activity Based Working	(40 1110)	outbreak?					
					Traditional office							
			>	Preference	Open-plan office	(Appel-Meulenbroek et al., 2019)	What workplace design did you prefer before the					
		Workplace	- 1		Activity Based Working	( френ постана и и и и и и и и и и и и и и и и и и	Covid-19 outbreak?					
		design			Yes, I had a personal office							
			>	Private office	No, I was in a closed office with several colleagues	(van Meel and van der Voordt (2001a)	Did you have a private office before the Covid-19					
					No, I didn't have a personal office		outbreak?					
					Yes, I was always in the same place		Did you have a fixed workplace before the Covid-19					
			>	Fixed workplace	No, I switched workplaces	(Millward, Haslam, & Postmes, 2007; Harris,	outbreak?					
				B	I was allowed to work from home and I did	(	To what extent were you allowed to work from					
B Before Covid-19			>	Permission to WFH	I was allowed to work from home, but I didn't	(van der Jagt, 2020)	home before the Covid-19 outbreak?					
b before Covid-19					I wasn't allowed to work from home							
					On my part-time workday (a workday of less than 8 hours)							
			>	Days WFH	On my full-time workday (8 or 9-hour workday)	(van Veldhoven & van Gelder, 2020)	On which day(s) did you work from home?					
					Both on my part-time and my full-time working day							
		Work from	>	Hours WFH	Fill in a number	(van Veldhoven & van Gelder, 2020)	How many hours on average did you work from home before the Covid-19 outbreak?					
	ľ	home (WFH)			My employer forced me to come to the office							
					My physical home workplace was not sufficient		What was the main reason for not working from					
			>	Reasons not WFH	My work requires physical presence in the office							
					I missed the social aspects of the office / I felt lonely	(Binnenlands Bestuur, 2020a)						
					I could work more calmly at the office	(Billiellialius Bestuul, 2020a)	home before the Covid-19 outbreak?					
					Working from home caused a bad work/life balance							
					It was not in the culture of the organisation to work from home (it							
					didn't feel right/didn't feel accepted)							
				During lockdown	Yes, completely	(van Veldhoven & van Gelder, 2020)	Did you work from home during the lockdown?					
			>		Partly							
					No							
					My employer forced me to come to the office							
					My physical home workplace was not sufficient and could not be							
				D	made sufficient	(B::1   1   1   2021)	What was the main reason that you did not or					
			>	Reasons not WFH	My work requires physical presence in the office	(Rijksoverheid, 2021)	worked partly from home?					
					I missed the social aspects of the office / I felt lonely							
C Desires Cassid 10		Work from			I could work more calmly at the office							
C During Covid-19	>	home (WFH)			Working from home caused a bad work/life balance							
					I have less travel time							
					Less time is spent on meetings							
			>	Advantages	I can decide for myself when I work							
					I can set/determine the temperature by myself							
					I can decide for myself whether and which music I play	(Binnenlands Bestuur, 2020c)	To what extent do you agree with the following					
					I miss my colleagues	(Difficilianus Destuul, 2020C)	statements?					
					I cannot do all my work from home							
			>	Disadvantages	My home workplace is not ideal							
					I find telephone / digital meetings difficult							
									I hardly get outside since I started working at home			

		>	Days going back WAO	Yes, on my part-time day(s) Yes, on my full-time day(s) Yes, both on my part-time and full-time days No, I don't expect to go back to the office	(European Commission, 2020; Hamersma, de Haas & Faber, 2020)	Do you expect to return to the office if possible?
		>	Extent WAO	l expect to go to the office more than before the Covid-19 outbreak l expect to go to the office as much as before the Covid-19 outbreak l expect to go to the office less than before the Covid-19 outbreak	(Binnenlands Bestuur, 2020a)	When it is possible again, do you expect to go to office more, as much of less as you did before the Covid-19 outbreak?
After Covid 10	Work at the office (WAO)	>	Hours WAO	Fill in a number	(Binnenlands Bestuur, 2020a)	How many hours on average do you expect to return to the office per week, when that is possible again?
D After Covid-19		>	Activities	General office work  Undisturbed office work Interactive office work Scheduled consultation with less than 4 people Scheduled consultation with 4 to 8 people Scheduled consultation with 8 people or more Talk on the phone Reading Archiving and document management	(Beijer, 2011)	To what extent do you agree with the following statements? When it is possible to work in the office again, I would go to the office for
	Workplace Design	>	Preference	Traditional office  Open-plan office  Activity Based Working	(De Vries, 2019; Appel-Meulenbroek et al., 2019)	Which workplace design would you prefer if it is possible to work in the office again?

## Appendix E

Information letter Beste deelnemer,

Ik vraag u om deel te nemen aan deze enquête die gaat over de verwachting van verschillende generaties met betrekking tot het werkplekontwerp binnen Nederlandse gemeenten voor, tijdens en na corona. Meedoen is vrijwillig. Om mee te doen is uw toestemming nodig. Voordat u beslist of u dit wilt doen, leg ik uit waarom ik deze enquête wil afnemen. Lees deze informatie rustig door. Als u vragen heeft, kunt u contact met mij opnemen. Zie de contactinformatie onderaan deze informatiebrief.

Het coronavirus heeft er voor gezorgd dat de werkomgeving flink veranderd is. Niet alleen tijdens corona, maar ook daarna zal de werkomgeving verder veranderen. Om erachter te komen wat de verwachtingen zijn van de verschillende generaties die werkzaam zijn bij Nederlandse gemeenten, wordt dit onderzoek uitgevoerd. Dit onderzoek is onderdeel van het afstuderen aan de Master Facility and Real Estate Management.

In dit onderzoek worden de enquêtes via de mail verzonden aan ambtenaren van Nederlandse gemeenten. U wordt gevraagd om antwoorden te geven op de vragen die ik heb opgesteld. Het invullen van de enquête zal ongeveer 10 minuten in beslag nemen. Voor zover bekend zullen er geen nadelen verbonden zijn aan deelname aan dit onderzoek. Mocht u geen antwoord willen geven op een vraag, kunt u deze vraag overslaan zonder een antwoord in te vullen.

Voor dit onderzoek is het belangrijk dat vraag ik naar uw leeftijd. Om uw gegevens te beschermen en privacy risico's zoveel mogelijk te beperken, neem ik als student de eisen van de Algemene Verordening Gegevensbescherming (AVG) in acht.

Uw deelname aan dit onderzoek is geheel vrijwillig. Er zijn voor u geen kosten verbonden aan dit onderzoek en er is geen vergoeding voor deelname aan dit onderzoek. Mocht u zich tijdens de enquête bedenken en willen stoppen, dan is dat mogelijk. De tot dan vergaarde informatie zal gebruikt worden, als hier bezwaar op is, dan kunt u dit kenbaar maken via een e-mail aan onderstaand e-mailadres.

Voor meer informatie of vragen over dit onderzoek kunt u contact opnemen met:

Rianne Mels (onderzoeker)

riannemels@gmail.com

of f.h.j.bergsma@saxion.nl

0649006281 0645592419

In geval van klachten over gegevensbeheer kunt u contact opnemen met Saxion via het Meldpunt Klacht en Geschil: <a href="https://www.saxion.nl/over-saxion/organisatie/klachtenloket">https://www.saxion.nl/over-saxion/organisatie/klachtenloket</a>.

Bij deze informatiebrief hoort een toestemmingsverklaring. Door het ondertekenen van deze toestemmingsverklaring gaat u akkoord met deelname aan het onderzoek.

Met vriendelijke groet, Rianne Mels

#### Appendix F

Questionnaire for the municipality of Apeldoorn

Enquête

Geachte respondent,

Hartelijk dank voor het invullen van deze enquête.

Mijn naam is Rianne Mels en deze vragenlijst hoort bij mijn afstudeeronderzoek waarbij ik onderzoek doe naar de verwachtingen van medewerkers van Nederlandse gemeenten betreffende het werkplekontwerp na Covid-19.

Het invullen van deze vragenlijst zal ongeveer 10 minuten duren en uw antwoorden zijn volledig anoniem en zullen vertrouwelijk behandeld worden. Bij vragen en stellingen dient u het antwoord te kiezen dat voor u het meeste van toepassing is, hierbij bestaan er geen goede of foute antwoorden.

Als u nog vragen heeft over mijn onderzoek of deze enquête kunt u contact opnemen met mij via riannemels@gmail.com

Met vriendelijke groet, Rianne Mels

In verband met de AVG moet ik u vragen om akkoord te gaan met de volgende punten:

#### Als deelnemer aan dit onderzoek:

- Ben ik over aard, methode en doel van dit onderzoek op een voor mij duidelijke wijze geïnformeerd.
- Heb ik genoeg tijd gekregen om over deelname te beslissen
- o Heb ik de gelegenheid gehad om vragen te stellen over dit onderzoek
- o Weet ik dat deelname vrijwillig is
- Weet ik dat ik op elk gewenst moment kan stoppen met deelnemen aan het onderzoek. Daarvoor hoef ik geen reden te geven.
- Geef ik toestemming voor het verzamelen, bewaren en gebruiken van mijn gegevens voor de beantwoording van de onderzoeksvraag in dit onderzoek.
- Weet ik dat de uitkomsten van dit interview verwerkt kunnen worden in een verslag of (wetenschappelijke) publicatie
- Geef ik toestemming voor hergebruik van mijn gegevens na dit onderzoek voor nu nog onbekend onderzoek dat binnen het vakgebied van dit onderzoek valt. Hierbij worden de erkende ethische normen voor deze vorm van onderzoek in acht genomen.
- Weet ik dat alleen ter controle van de wetenschappelijk integriteit van het onderzoek sommige mensen toegang tot mijn verzamelde gegevens kunnen krijgen.
- Begrijp ik dat alle informatie die ik met betrekking tot deze studie verstrek, anoniem zal worden verzameld en niet tot mij herleidbaar zal zijn.
- Weet ik dat ik inzage kan krijgen in de wijze waarop de gegevens worden verwerkt en bewaard.
- Weet ik dat als ik mij terugtrek, mijn gegevens tot dat moment gebruikt kunnen worden, tenzij ik ook vraag om de reeds verzamelde gegevens te wissen.

Als u de bovenstaande punten hebt gelezen en ermee instemt deel te nemen aan het onderzoek, klikt u op DOORGAAN.

Α	Algemeen	
, ,	- agenicon	o Tussen 1946 en 1964
		o Tussen 1965 en 1980
1	Wat is uw geboortejaar?	o Tussen 1981 en 2000
		o Na 2000
		o Man
2	Wat is uw geslacht?	o Vrouw
_	wat is aw gestacht:	Anders, namelijk
		Stadhuis
		o Samen055
3	Op welke locatie bent u het	Werkgebouw Noord
	meest aan het werk?	Werkgebouw Zuid
		o Directie
		<ul> <li>Management</li> </ul>
		<ul> <li>Afdelingshoofd / Leidinggevende</li> </ul>
		<ul> <li>Projectleider/Projectmanager</li> </ul>
4	Wat is uw functie?	o Adviseur
		<ul> <li>Senior medewerker</li> </ul>
		o Medewerker
		o Junior medewerker
		o Stagiaire
	Wat voor dienstverband heeft	o Fulltime (36 uur of meer)
5	u?	o Parttime <i>(minder dan 36 uur)</i>
		o Tijdelijk <i>(inhuur / stagiaire)</i>
		○ 0–5 kilometer
		o 6–10 kilometer
		o 11–15 kilometer
_	Hoeveel kilometer woont u van	o 16–20 kilometer
6	uw werk?	o 21–25 kilometer
		o 26–30 kilometer
		o 31–40 kilometer
		o 41–50 kilometer
		Meer dan 50 kilometer
		Alleenwonend zonder kinderen (geen kinderen óf kinderen zijn het  kuis vis)
	Wat is do some a talling one one	huis uit)
7	Wat is de samenstelling van uw	Samenwonend zonder kinderen (geen kinderen óf kinderen zijn het      buic vit)
	huishouden?	huis uit)
		<ul> <li>Alleenstaand met kinderen (thuiswonende kinderen)</li> <li>Samenwonend met kinderen (thuiswonende kinderen)</li> </ul>
		, , , , , , , , , , , , , , , , , , ,
	Hooft u do mogaliikhaid are	o Ja, ik kan volledig afgezonderd in een aparte ruimte werken  a Ja maar mijn huisgangten (partner/kinderen) maken ook gebruik van
8	Heeft u de mogelijkheid om	Ja, maar mijn huisgenoten (partner/kinderen) maken ook gebruik van  daza ruimta om ta worken/studeren
	thuis afgezonderd te werken?	deze ruimte om te werken/studeren
		<ul> <li>Nee, ik heb niet de mogelijkheid om afgezonderd te werken</li> </ul>

В	Kantoor vóór Corona		
		<ul> <li>Traditioneel</li> </ul>	kantoor
9	Welk werkplekontwerp had de gemeente Apeldoorn op het moment van de uitbraak van Covid-19?		
10	Welk werkplekontwerp had uw voorkeur vóór de uitbraak van Covid-19?	brainstormruimtes, telefoonruimtes, lounges en vergaderruimtes.) (AVEX, 2014)  Traditioneel kantoor  (ledereen heeft zijn eigen plaats in een vaak afgesloten of apart kantoor. De enige ruimte in het gebouw waar medewerkers van verschillende afdelingen elkaar tegenkomen, is meestal de kantine of bij een pantry op de gang.) (Kuper, 2020)  Open kantoorinrichting  (Ook wel kantoortuin genoemd. In een kantoortuin zijn veel medewerkers (doorgaans meer dan 12) bij elkaar in dezelfde ruimte werkzaam. Er zijn geen scheidingswanden en bureaus staan vaak in groepjes opgesteld. Vaak zijn deze groepjes toegewezen aan een bepaalde afdeling of groep medewerkers. Er wordt veel gebruikgemaakt van plantenbakken om de ruimte op te delen en een organische uitstraling te geven.) (Kuper, 2020)  Activity Based Working  (Het kantoor is zo ingericht dat werkzaamheden optimaal worden ondersteund, dit houdt in dat er verschillende zones zijn binnen een kantoorpand met voorzieningen die aansluiten op deze werkzaamheden. Denk bijvoorbeeld aan een zone met meerdere bureaus, of zones met stilte-/concentratieruimtes,	
	Had u een afgesloten, eigen		n persoonlijk kantoor
11	kantoor voor de uitbraak van Covid-19?		net meerdere collega's op een afgesloten kantoor geen persoonlijk kantoor
11a	Als respondent kies voor 'i persoonlijk kantoor' Had u een vaste werkplek?	o Ja, ik zat altijd op dezelfde plek Nee, ik wisselde van werkplek	
13	In hoeverre mocht u voor de u 19 thuiswerken?	itbraak van Covid-	<ul> <li>Ik mocht thuiswerken en deed dit ook</li> <li>Ik mocht thuiswerken, maar deed het niet</li> <li>Ik mocht niet thuiswerken</li> </ul>
13a	Als respondent kiest voor thuiswerken en deed dit oo Op welke dag(en) werkte u	ok'	<ul> <li>Op mijn parttime werkdag (een werkdag van minder dan 8 uur)</li> <li>Op mijn fulltime werkdag (een werkdag van 8 of 9 uur)</li> <li>Zowel op mijn parttime als mijn fulltime werkdag</li> </ul>

13b	thuisw Hoevee	pondent kiest voor 'ik mocht erken en deed dit ook' el uur werkte u gemiddeld thuis voor de uk van Covid-19?	o Cijfer invullen
13c	thuisw Wat wa	pondent kiest voor 'ik mocht erken, maar deed het niet' is de voornaamste reden dat u niet erkte voor corona?	<ul> <li>Ik moest naar kantoor komen van mijn werkgever</li> <li>Mijn fysieke thuiswerkplek was niet toereikend</li> <li>Mijn werkzaamheden behoeven fysieke aanwezigheid op kantoor</li> <li>Ik miste de sociale aspecten van kantoor / ik voelde me eenzaam</li> <li>Op kantoor kon ik rustiger werken</li> <li>Thuiswerken zorgde voor een slechte werk/privé balans</li> <li>Het zat niet in de cultuur van de organisatie om thuis te werken (het voelde niet goed/voelde niet geaccepteerd)</li> </ul>
С	Tijdens Co	<u>orona</u>	
14	Heeft u tij	dens de lockdowns thuisgewerkt?	<ul><li>Ja, volledig</li><li>Gedeeltelijk</li><li>Nee</li></ul>
14a		Als respondent kiest voor 'gedeeltelijk of nee' Wat was de voornaamste reden dat u niet of gedeeltelijk thuiswerkte?	<ul> <li>Ik moest naar kantoor komen van mijn werkgever</li> <li>Mijn fysieke thuiswerkplek was niet toereikend en kon niet toereikend gemaakt worden</li> <li>Mijn werkzaamheden behoeven fysieke aanwezigheid op kantoor</li> <li>Ik miste de sociale aspecten van kantoor / ik voelde me eenzaam</li> <li>Op kantoor kan ik rustiger werken</li> <li>Thuiswerken zorgde voor een slechte werk/privé balans</li> </ul>
15		e bent u het eens met de volgende stellin	
15a	lk minder	huiswerken als gevolg van Covid-29 erva reistijd heb tijd op aan vergaderen	o Mee eens o Neutraal o Niet mee eens o Mee eens o Mee eens o Mee oens
15c	Ik zelf kan	ı bepalen wanneer ik werk	<ul> <li>Niet mee eens</li> <li>Mee eens</li> <li>Neutraal</li> <li>Niet mee eens</li> </ul>
15d	Ik zelf de	temperatuur kan instellen/bepalen	<ul><li>Mee eens</li><li>Neutraal</li><li>Niet mee eens</li></ul>
15e	Ik zelf kan bepalen of en welke muziek ik draai		<ul><li>Mee eens</li><li>Neutraal</li><li>Niet mee eens</li></ul>
15f	Ik mijn collega's mis		<ul><li>Mee eens</li><li>Neutraal</li><li>Niet mee eens</li></ul>

		o Mee eens		
15g	Ik niet al mijn werkzaamheden vanuit huis kan doen	o Neutraal		
		o Niet mee eens		
		o Mee eens		
15h	Mijn thuiswerkplek niet ideaal is	o Neutraal		
		o Niet mee eens		
		o Mee eens		
15i	Ik telefonisch/digitaal vergaderen lastig vind	o <i>Neutraal</i>		
		o Niet mee eens		
		o Mee eens		
15j	Ik nauwelijks buiten kom sinds dat ik thuis aan het v	werk ben o Neutraal		
		o Niet mee eens		
		ie zoals deze is wanneer het weer mogelijk is om op		
D	kantoor te werken.			
_		oment nog niemand kan aangeven of voorzien hoe de		
	toekomst eruit zal zien.			
		o Ja, op mijn parttime dag(en)		
16	Verwacht u dat u, als het weer mogelijk is, terug	o Ja, op mijn fulltime dag(en)		
	zal gaan naar kantoor?	o Ja, zowel op mijn parttime als fulltime dagen		
		o Nee, ik verwacht niet terug te gaan naar kantoor		
	Als respondent 'nee, ik verwacht niet terug te gaan			
		o Ik verwacht <b>meer</b> naar kantoor te gaan dan voor		
	Verwacht u dat u, als het weer mogelijk is, meer,	de uitbraak van Covid-19		
16a	evenveel of minder naar kantoor gaat dan voor de	o Ik verwacht <b>evenveel</b> naar kantoor te gaan dan		
	uitbraak van Covid-19?	voor de uitbraak van Covid-19		
		Ik verwacht <b>minder</b> naar kantoor te gaan dan voor		
		de uitbraak van Covid-19		
1.6h	Hoeveel uur verwacht u gemiddeld per week terug	Cotal invullan		
16b	te keren naar kantoor, wanneer dat weer mogelijk is?	o Getal invullen		
		2		
17	In hoeverre bent u het eens met de volgende stelling Ik zou na corona naar kantoor gaan voor	genr		
	ik zou na corona naar kantoor gaan voor	. Holomaal maa aans		
		Helemaal mee eens     Mee eens		
1 <i>7</i> a	Algemeen bureauwerk	<ul><li>Mee eens</li><li>Neutraal</li></ul>		
17α	Routinematig bureauwerk	A.P.		
		11.11		
1 <i>7</i> b	Ongestoord bureauwerk	N I		
176	Bureauwerk waarbij u niet gestoord wilt worden	Att		
		<ul> <li>Niet mee eens</li> <li>Helemaal niet mee eens</li> </ul>		
		Helemaal mee eens		
	Interactief bureauwerk	Mee eens		
1 <i>7</i> c	Bureauwerk waarbij interactie/samenwerking met	Neutraal		
.,.	een collega gewenst of noodzakelijk is	A.P		
	cen conega gewenst or noouzakenjk is			
		Helemaal niet mee eens		

			1		
			0	Helemaal mee eens	
	Gepland overleg met minder dan 4 personen		0	Mee eens	
17d			0	Neutraal	
			0	Niet mee eens	
			0	Helemaal niet mee eens	
			0	Helemaal mee eens	
	Gepland overleg met 4 tot 8 personen		0	Mee eens	
17e			0	Neutraal	
			0	Niet mee eens	
			0	Helemaal niet mee eens	
			0	Helemaal mee eens	
			0	Mee eens	
1 <i>7</i> f	Gepland overleg met 8 pers	onen of meer	0	Neutraal	
	. 5 .		0	Niet mee eens	
			0	Helemaal niet mee eens	
			0	Helemaal mee eens	
			0	Mee eens	
17g	Telefoneren		0	Neutraal	
179	Telefoongesprekken (van verschillende aard)		0	Niet mee eens	
				Helemaal niet mee eens	
			0		
			0	Helemaal mee eens	
	Lezen  Lezen langer dan een half uur aaneengesloten		0	Mee eens	
1 <i>7</i> h			0	Neutraal	
			0	Niet mee eens	
			0	Helemaal niet mee eens	
			0	Helemaal mee eens	
	Archiveren en documentverzorging Verwerken van documenten (bijvoorbeeld in mappen doen) en ingekomen post		0	Mee eens	
1 <i>7</i> i			0	Neutraal	
			0	Niet mee eens	
			0	Helemaal niet mee eens	
		<ul> <li>Traditioneel k</li> </ul>	antoor		
		(ledereen heeft zijn eig	gen plaat.	s in een vaak afgesloten of apart kantoor. De enige	
		ruimte in het gebouw v	vaar med	dewerkers van verschillende afdelingen elkaar	
		tegenkomen, is meesta	al de kan	tine of bij een pantry op de gang.) (Kuper, 2020)	
		<ul> <li>Open kantoor</li> </ul>	inrichtin	g	
		(Ook wel kantoortuin g	genoemd.	. In een kantoortuin zijn veel medewerkers	
		(doorgaans meer dan i	12) bij eli	kaar in dezelfde ruimte werkzaam. Er zijn geen	
	Welk werkplekontwerp	=	n bureaus staan vaak in groepjes opgesteld. Vaak zijn deze		
18	zou uw voorkeur hebben	=		pepaalde afdeling of groep medewerkers. Er wordt	
	als het weer mogelijk is			enbakken om de ruimte op te delen en een	
	om op kantoor te werken?	organische uitstraling			
		<ul> <li>Activity Based</li> </ul>	-	-	
			_	s werkzaamheden optimaal worden ondersteund, dit	
				ones zijn binnen een kantoorpand met	
		=		o deze werkzaamheden. Denk bijvoorbeeld aan een	
				f zones met stilte-/concentratieruimtes,	
		brainstormruimtes, tel	etoonruii	mtes, lounges en vergaderruimtes.) (AVEX, 2014)	

## Appendix G

Questionnaire for the other municipalities

Enquête

Geachte respondent,

Hartelijk dank voor het invullen van deze enquête.

Mijn naam is Rianne Mels en deze vragenlijst hoort bij mijn afstudeeronderzoek waarbij ik onderzoek doe naar de verwachtingen van medewerkers van Nederlandse gemeenten betreffende het werkplekontwerp na Covid-19.

Het invullen van deze vragenlijst zal ongeveer 10 minuten duren en uw antwoorden zijn volledig anoniem en zullen vertrouwelijk behandeld worden. Bij vragen en stellingen dient u het antwoord te kiezen dat voor u het meeste van toepassing is, hierbij bestaan er geen goede of foute antwoorden.

Als u nog vragen heeft over mijn onderzoek of deze enquête kunt u contact opnemen met mij via riannemels@gmail.com

Met vriendelijke groet, Rianne Mels

In verband met de AVG moet ik u vragen om akkoord te gaan met de volgende punten:

#### Als deelnemer aan dit onderzoek:

- Ben ik over aard, methode en doel van dit onderzoek op een voor mij duidelijke wijze geïnformeerd.
- Heb ik genoeg tijd gekregen om over deelname te beslissen
- o Heb ik de gelegenheid gehad om vragen te stellen over dit onderzoek
- o Weet ik dat deelname vrijwillig is
- Weet ik dat ik op elk gewenst moment kan stoppen met deelnemen aan het onderzoek. Daarvoor hoef ik geen reden te geven.
- Geef ik toestemming voor het verzamelen, bewaren en gebruiken van mijn gegevens voor de beantwoording van de onderzoeksvraag in dit onderzoek.
- Weet ik dat de uitkomsten van dit interview verwerkt kunnen worden in een verslag of (wetenschappelijke) publicatie
- Geef ik toestemming voor hergebruik van mijn gegevens na dit onderzoek voor nu nog onbekend onderzoek dat binnen het vakgebied van dit onderzoek valt. Hierbij worden de erkende ethische normen voor deze vorm van onderzoek in acht genomen.
- Weet ik dat alleen ter controle van de wetenschappelijk integriteit van het onderzoek sommige mensen toegang tot mijn verzamelde gegevens kunnen krijgen.
- Begrijp ik dat alle informatie die ik met betrekking tot deze studie verstrek, anoniem zal worden verzameld en niet tot mij herleidbaar zal zijn.
- Weet ik dat ik inzage kan krijgen in de wijze waarop de gegevens worden verwerkt en bewaard.
- Weet ik dat als ik mij terugtrek, mijn gegevens tot dat moment gebruikt kunnen worden, tenzij ik ook vraag om de reeds verzamelde gegevens te wissen.

Als u de bovenstaande punten hebt gelezen en ermee instemt deel te nemen aan het onderzoek, klikt u op DOORGAAN.

Α	Algemeen				
1	Bij welke gemeente bent u werkzaam?	o Tekst invullen			
2	Wat is uw geboortejaar?	<ul> <li>Tussen 1946 en 1964</li> <li>Tussen 1965 en 1980</li> <li>Tussen 1981 en 2000</li> <li>Na 2000</li> </ul>			
3	Wat is uw geslacht?	<ul><li>Man</li><li>Vrouw</li><li>Anders, namelijk</li></ul>			
4	Wat is uw functie?	<ul> <li>Directie</li> <li>Management</li> <li>Afdelingshoofd / Leidinggevende</li> <li>Projectleider/Projectmanager</li> <li>Adviseur</li> <li>Senior medewerker</li> <li>Medewerker</li> <li>Junior medewerker</li> <li>Stagiaire</li> </ul>			
5	Wat voor dienstverband heeft u?	<ul> <li>Fulltime (36 uur of meer)</li> <li>Parttime (minder dan 36 uur)</li> <li>Tijdelijk (inhuur / stagiaire)</li> </ul>			
6	Hoeveel kilometer woont u van uw werk?	<ul> <li>0-5 kilometer</li> <li>6-10 kilometer</li> <li>11-15 kilometer</li> <li>16-20 kilometer</li> <li>21-25 kilometer</li> <li>26-30 kilometer</li> <li>31-40 kilometer</li> <li>41-50 kilometer</li> <li>Meer dan 50 kilometer</li> </ul>			
7	Wat is de samenstelling van uw huishouden?	<ul> <li>Alleenwonend zonder kinderen (geen kinderen óf kinderen zijn het huis uit)</li> <li>Samenwonend zonder kinderen (geen kinderen óf kinderen zijn het huis uit)</li> <li>Alleenstaand met kinderen (thuiswonende kinderen)</li> <li>Samenwonend met kinderen (thuiswonende kinderen)</li> </ul>			
8	Heeft u de mogelijkheid om thuis afgezonderd te werken?	<ul> <li>Ja, ik kan volledig afgezonderd in een aparte ruimte werken</li> <li>Ja, maar mijn huisgenoten (partner/kinderen) maken ook gebruik van deze ruimte om te werken/studeren</li> <li>Nee, ik heb niet de mogelijkheid om afgezonderd te werken</li> </ul>			

В	Kantoor vóór Corona			
		o Traditioneel kan	toor	
9	Welk werkplekontwerp had de gemeente waar u werkt op het moment van de uitbraak van Covid-19?	scheidingswanden en bureaus staan vaak in groepjes opgesteld. Vaak zijn dez groepjes toegewezen aan een bepaalde afdeling of groep medewerkers. Er wordt veel gebruikgemaakt van plantenbakken om de ruimte op te delen en ee organische uitstraling te geven.) (Kuper, 2020)  Activity Based Working (Het kantoor is zo ingericht dat werkzaamheden optimaal worden ondersteund dit houdt in dat er verschillende zones zijn binnen een kantoorpand met voorzieningen die aansluiten op deze werkzaamheden. Denk bijvoorbeeld aan een zone met meerdere bureaus, of zones met stilte-/concentratieruimtes, brainstormruimtes, telefoonruimtes, lounges en vergaderruimtes.) (AVEX, 2014)  Traditioneel kantoor (ledereen heeft zijn eigen plaats in een vaak afgesloten of apart kantoor. De enige ruimte in het gebouw waar medewerkers van verschillende afdelingen elkaar tegenkomen, is meestal de kantine of bij een pantry op de gang.) (Kupe 2020)  Open kantoorinrichting (Ook wel kantoortuin genoemd. In een kantoortuin zijn veel medewerkers (doorgaans meer dan 12) bij elkaar in dezelfde ruimte werkzaam. Er zijn geen scheidingswanden en bureaus staan vaak in groepjes opgesteld. Vaak zijn dez groepies teegewezen aan een benaalde afdeling of groep medewerkers. Er		
10	Welk werkplekontwerp had uw voorkeur vóór de uitbraak van Covid-19?			
	Had u een afgesloten, eigen		n persoonlijk kantoor	
11	kantoor voor de uitbraak van Covid-19?		met meerdere collega's op een afgesloten kantoor I geen persoonlijk kantoor	
11a	Als respondent kies voor 'nd persoonlijk kantoor' Had u een vaste werkplek?		<ul> <li>Ja, ik zat altijd op dezelfde plek</li> <li>Nee, ik wisselde van werkplek</li> </ul>	
12	In hoeverre mocht u voor de uit 19 thuiswerken?	braak van Covid-	<ul> <li>Ik mocht thuiswerken en deed dit ook</li> <li>Ik mocht thuiswerken, maar deed het niet</li> <li>Ik mocht niet thuiswerken</li> </ul>	
12a	Als respondent kiest voor 'i thuiswerken en deed dit ooi Op welke dag(en) werkte u t	K'	<ul> <li>Op mijn parttime werkdag (een werkdag van minder dan 8 uur)</li> <li>Op mijn fulltime werkdag (een werkdag van 8 of 9 uur)</li> <li>Zowel op mijn parttime als mijn fulltime werkdag</li> </ul>	

12b	Als respondent kiest voor 'ik mocht thuiswerken en deed dit ook' Hoeveel uur werkte u gemiddeld thuis voor de uitbraak van Covid-19?	o Cijfer invullen
12c	Als respondent kiest voor 'ik mocht thuiswerken, maar deed het niet' Wat was de voornaamste reden dat u niet thuiswerkte voor corona?	<ul> <li>Ik moest naar kantoor komen van mijn werkgever</li> <li>Mijn fysieke thuiswerkplek was niet toereikend</li> <li>Mijn werkzaamheden behoeven fysieke aanwezigheid op kantoor</li> <li>Ik miste de sociale aspecten van kantoor / ik voelde me eenzaam</li> <li>Op kantoor kon ik rustiger werken</li> <li>Thuiswerken zorgde voor een slechte werk/privé balans</li> <li>Het zat niet in de cultuur van de organisatie om thuis te werken (het voelde niet goed/voelde niet geaccepteerd)</li> </ul>
С	Tijdens Corona	
13	Heeft u tijdens de lockdowns thuisgewerkt?	<ul><li>Ja, volledig</li><li>Gedeeltelijk</li><li>Nee</li></ul>
13a	Als respondent kiest voor 'gedeeltelijk of nee' Wat was de voornaamste reden dat u niet of gedeeltelijk thuiswerkte?	<ul> <li>Ik moest naar kantoor komen van mijn werkgever</li> <li>Mijn fysieke thuiswerkplek was niet toereikend en kon niet toereikend gemaakt worden</li> <li>Mijn werkzaamheden behoeven fysieke aanwezigheid op kantoor</li> <li>Ik miste de sociale aspecten van kantoor / ik voelde me eenzaam</li> <li>Op kantoor kan ik rustiger werken</li> <li>Thuiswerken zorgde voor een slechte werk/privé balans</li> </ul>
14	In hoeverre bent u het eens met de volgende stelling	
14a	Door het thuiswerken als gevolg van Covid-19 ervaa Ik minder reistijd heb Er minder tijd op aan vergaderen	o Mee eens o Neutraal o Niet mee eens o Mee eens o Mee eens o Mee eens
14c	Ik zelf kan bepalen wanneer ik werk	<ul> <li>Niet mee eens</li> <li>Mee eens</li> <li>Neutraal</li> <li>Niet mee eens</li> </ul>
14d	Ik zelf de temperatuur kan instellen/bepalen	<ul><li>Mee eens</li><li>Neutraal</li><li>Niet mee eens</li></ul>
14e	Ik zelf kan bepalen of en welke muziek ik draai	<ul><li>Mee eens</li><li>Neutraal</li><li>Niet mee eens</li></ul>
14f	Ik mijn collega's mis	<ul><li>Mee eens</li><li>Neutraal</li><li>Niet mee eens</li></ul>

		o Mee eens		
14g	Ik niet al mijn werkzaamheden vanuit huis kan doen			
		o Niet mee eens		
		o Mee eens		
14h	Mijn thuiswerkplek niet ideaal is	o Neutraal		
		o Niet mee eens		
		o Mee eens		
14i	Ik telefonisch/digitaal vergaderen lastig vind	o Neutraal		
		o Niet mee eens		
		o Mee eens		
14j	Ik nauwelijks buiten kom sinds dat ik thuis aan het v	werk ben o Neutraal		
		o Niet mee eens		
		ie zoals deze is wanneer het weer mogelijk is om op		
D	kantoor te werken.			
		oment nog niemand kan aangeven of voorzien hoe de		
	toekomst eruit zal zien.			
		o Ja, op mijn parttime dag(en)		
15	Verwacht u dat u, als het weer mogelijk is, terug	o Ja, op mijn fulltime dag(en)		
	zal gaan naar kantoor?	o Ja, zowel op mijn parttime als fulltime dagen		
		o Nee, ik verwacht niet terug te gaan naar kantoor		
	Als respondent 'nee, ik verwacht niet terug te gaan			
		o Ik verwacht <b>meer</b> naar kantoor te gaan dan voor		
	Verwacht u dat u, als het weer mogelijk is, meer,	de uitbraak van Covid-19		
16a	evenveel of minder naar kantoor gaat dan voor de	o Ik verwacht <b>evenveel</b> naar kantoor te gaan dan		
	uitbraak van Covid-19?	voor de uitbraak van Covid-19		
		o Ik verwacht <b>minder</b> naar kantoor te gaan dan voor		
		de uitbraak van Covid-19		
1.61-	Hoeveel uur verwacht u gemiddeld per week terug	Carling		
16b	te keren naar kantoor, wanneer dat weer mogelijk	o Getal invullen		
	is?	2		
17	In hoeverre bent u het eens met de volgende stelling Ik zou na corona naar kantoor gaan voor	genr		
	ik zou na corona naar kantoor gaan voor	. Holomaal maa aans		
		Helemaal mee eens     Mee eens		
1 <i>7</i> a	Algemeen bureauwerk	<ul><li>Mee eens</li><li>Neutraal</li></ul>		
17a	Routinematig bureauwerk	All .		
		11.11		
		Helemaal mee eens     Mee eens		
1 <i>7</i> b	Ongestoord bureauwerk	Neutraal		
175	Bureauwerk waarbij u niet gestoord wilt worden	AP .		
		<ul> <li>Niet mee eens</li> <li>Helemaal niet mee eens</li> </ul>		
		Helemaal mee eens		
	Interactief bureauwerk			
1 <i>7</i> c	Bureauwerk waarbij interactie/samenwerking met	Mee eens     Neutraal		
170	een collega gewenst of noodzakelijk is			
	een conega gewenst of hoodzakelijk is	<ul><li>Niet mee eens</li><li>Helemaal niet mee eens</li></ul>		
		Helemaal niet mee eens		

	lemaal mee eens		
	e eens utraal		
	et mee eens		
o Hel	lemaal niet mee eens		
o Hel	lemaal mee eens		
o Me	e eens		
17e Gepland overleg met 4 tot 8 personen o Nei	utraal		
	et mee eens		
o Hel	lemaal niet mee eens		
o Hel	lemaal mee eens		
o Me	e eens		
17f Gepland overleg met 8 personen of meer o New	utraal		
o Nie	et mee eens		
o Hel	lemaal niet mee eens		
o Hel	lemaal mee eens		
→ L C ○ Me	e eens		
Telefoneren One	utraal		
Telefoongesprekken (van verschillende aard)    Nie	et mee eens		
o Hel	lemaal niet mee eens		
o Hel	lemaal mee eens		
o Me	e eens		
17h Lezen o Nei	utraal		
Lezen langer dan een half uur aaneengesloten	et mee eens		
o Hel	lemaal niet mee eens		
o Hel	lemaal mee eens		
Archiveren en documentverzorging o Me	e eens		
	utraal		
mappen doen) en ingekomen post o Nie	et mee eens		
	lemaal niet mee eens		
o Traditioneel kantoor			
(ledereen heeft zijn eigen plaats in	een vaak afgesloten of apart kantoor. De enige		
ruimte in het gebouw waar medewe	erkers van verschillende afdelingen elkaar		
tegenkomen, is meestal de kantine	of bij een pantry op de gang.)		
(Kuper, 2020)			
o Open kantoorinrichting			
(Ook wel kantoortuin genoemd. In e	een kantoortuin zijn veel medewerkers		
(doorgaans meer dan 12) bij elkaar	12) bij elkaar in dezelfde ruimte werkzaam. Er zijn geen		
Welk werkplekontwerp  scheidingswanden en bureaus staai	bureaus staan vaak in groepjes opgesteld. Vaak zijn deze		
zou uw voorkeur hebben  groepjes toegewezen aan een bepaa	aan een bepaalde afdeling of groep medewerkers. Er wordt		
als het weer mogelijk is  om op kontoor to worken?	kken om de ruimte op te delen en een		
om op kantoor te werken?  organische uitstraling te geven.)			
(Kuper, 2020)			
<ul> <li>Activity Based Working</li> </ul>			
(Het kantoor is zo ingericht dat wer	kzaamheden optimaal worden ondersteund, dit		
houdt in dat er verschillende zones	zijn binnen een kantoorpand met		
voorzieningen die aansluiten op de.	ze werkzaamheden. Denk bijvoorbeeld aan een		
	re bureaus, of zones met stilte-/concentratieruimtes,		
zone met meerdere bureaus, of zon	ies met stille-/concentratierumiles,		

## Appendix H

Statistics and visualisation of the demographic information of the respondents.

## Generation (ordinal).

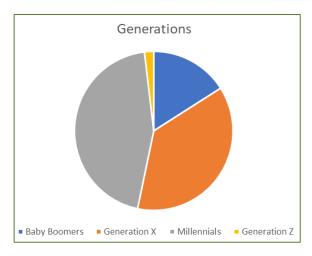
## Statistics

#### Generation

N	Valid	319
	Missing	0
Median		2,00
Mode		3
Range		3

#### Generation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Between 1946 en 1964	51	16,0	16,0	16,0
	Between 1965 en 1980	119	37,3	37,3	53,3
	Between 1981 en 2000	143	44,8	44,8	98,1
	After 2000	6	1,9	1,9	100,0
	Total	319	100,0	100,0	



## Gender (nominal).

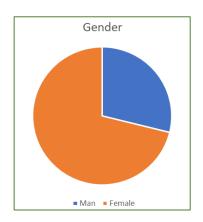
## Statistics

#### Gender

Ν	Valid	319
	Missing	0
Mode		2

#### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	92	28,8	28,8	28,8
	Female	227	71,2	71,2	100,0
	Total	319	100,0	100,0	



## Function (nominal).

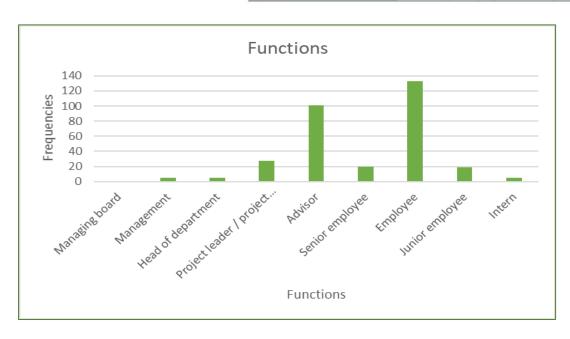
## **Statistics**

## Function

Ν	Valid	316
	Missing	3
Mode		7

#### Function

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Managing board	1	,3	,3	,3
	Management	5	1,6	1,6	1,9
	Head of department	5	1,6	1,6	3,5
	Project leader / project manager	27	8,5	8,5	12,0
	Advisor	101	31,7	32,0	44,0
	Senior employee	20	6,3	6,3	50,3
	Employee	133	41,7	42,1	92,4
	Junior employee	19	6,0	6,0	98,4
	Intern	5	1,6	1,6	100,0
	Total	316	99,1	100,0	
Missing	System	3	,9		
Total		319	100,0		



## Employment (nominal).

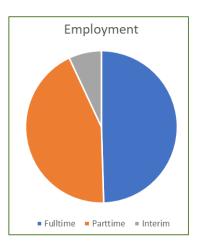
## **Statistics**

## Employment

N	Valid	315
	Missing	4
Mode		1

#### **Employment**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fulltime (36 hours or more)	156	48,9	49,5	49,5
	Parttime (less than 36 hours)	137	42,9	43,5	93,0
	Temporary (Interim/Intern)	22	6,9	7,0	100,0
	Total	315	98,7	100,0	
Missing	System	4	1,3		
Total		319	100,0		



#### Commute distance (ordinal).

## Statistics

## Commute distance

N	Valid	317
	Missing	2
Mediar	1	3,00
Mode		1
Range		8

#### Commute distance

		Frequency	Percent	Valid Percent	Percent
Valid	0-5 kilometer	119	37,3	37,5	37,5
	6-10 kilometer	32	10,0	10,1	47,6
	11-15 kilometer	25	7,8	7,9	55,5
	16-20 kilometer	24	7,5	7,6	63,1
	21-25 kilometer	24	7,5	7,6	70,7
	26-30 kilometer	18	5,6	5,7	76,3
	31-40 kilometer	25	7,8	7,9	84,2
	41-50 kilometer	17	5,3	5,4	89,6
	more than 50 kilometer	33	10,3	10,4	100,0
	Total	317	99,4	100,0	
Missing	System	2	,6		
Total		319	100,0		



## Appendix I

The workplace design before Covid-19 at Dutch municipalities (nominal).

## Statistics

WPD Municipality pre-Covid-19

****	name panty	p. 0	00114	
N	Valid		30	4
	Missing		1	5
Mode				2

WPD	Munici	nality	pre-Co	vid-19
WIFD	Mullici	panty	pre-co	viu-is

		Frequency	Percent	Valid Percent	Percent
Valid	Traditional office	49	15,4	16,1	16,1
	Open-plan office	150	47,0	49,3	65,5
	Activity Based Working	105	32,9	34,5	100,0
	Total	304	95,3	100,0	
Missing	System	15	4,7		
Total		319	100,0		

Municipalities (nominal) and the workplace design before Covid-19 at Dutch municipalities (nominal).

## **Case Processing Summary**

Cases

	0.000					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Municipality * WPD Municipality pre-Covid-19	304	95,3%	15	4,7%	319	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	204,089ª	106	,000,
Likelihood Ratio	187,494	106	,000
N of Valid Cases	304		

a. 151 cells (93,2%) have expected count less than 5. The minimum expected count is ,16.

		Value	Approximate Significance
Nominal by Nominal	Phi	,819	,000
	Cramer's V	,579	,000
N of Valid Cases		304	

## Municipality \* WPD Municipality pre-Covid-19 Crosstabulation

Count

		Traditional office	unicipality pre-Co Open-plan office	Activity Based Working	Total
Municipality		14	30	13	5
	's-Hertogenbosch	0	1	0	
	8KTD	1	0	0	
	Altena	0	0	1	
	Amsterdam	1	1	1	
	Apeldoorn	3	52	46	10
	Borne	1	1	0	
	Coevorden	0	1	1	
	Den Haag	0	1	0	
	Deventer	0	0	1	
	Dronten	0	1	0	
	Enschede	0	3	0	
	Haarlem	0	1	0	
	Halderberge	1	0	0	
	Heerenveen	0	1	0	
	Hellendoorn	0	2	0	
		0	3		
	Hengelo			0	
	Hilversum	0	1	0	
	Hoogeveen	1	0	0	
	Katwijk	1	0	0	
	Kempengemeenten	0	1	0	
	Krimpenerwaard	0	0	1	
	Leeuwarden	0	0	1	
	Leiderdorp	0	0	1	
	Loon op Zand	0	1	0	
	Maastricht	0	1	0	
	Medemblik	0	1	0	
	Montfoort	0	1	0	
	Mook en Middelaar	1	0	0	
	Nijmegen	0	0	1	
	Oldenzaal	3	1	1	
	Oude IJsselstreek	1	0	0	
	OVER-gemeenten	0	1	0	
	Pijnacker-Nootdorp	0	0	1	
	Putten	1	0	0	
		0	1	0	
	Regionaal				
	Rotterdam	0	1	1	
	Schouwen-Duiveland	0	0	1	
	Steenwijkerland	1	0	0	
	Sudwest Fryslan	0	1	0	
	Tiel	0	0	1	
	Twenterand	11	0	0	1
	Utrecht	0	1	0	
	Veiligheidsregio Twente	0	1	0	
	Venlo	1	0	0	
	Vijfheerenlanden	1	0	0	
	Vlissingen	1	0	0	
	Weert	0	1	0	
	Westerkwartier	0	0	1	
	Westerkwartier, Midden- Drenthe en Midden- groningen	0	1	0	
	Wil ik niet zeggen	1	0	0	
	Zoetermeer	0	1	0	
	Zwolle	4	36	32	7
otal		49	150	105	30

## The permission to work from home before Covid-19 in Dutch municipalities (nominal).

#### **Statistics**

#### Permission to WFH pre-Covid-1!

N	Valid	301
	Missing	18
Mode		1

Permission to WFH	pre-Covi	d-19
<u> </u>	225	200000000000000000000000000000000000000

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I was allowed to work from home and I did	142	44,5	47,2	47,2
	I was allowed to work from home, but I didn't	122	38,2	40,5	87,7
	I wasn't allowed to work from home	37	11,6	12,3	100,0
	Total	301	94,4	100,0	
Missing	System	18	5,6		
Total		319	100,0		

## Reasons not to work from home before Covid-19 in Dutch municipalities (nominal).

#### Reasons not WFH pre-Covid-19

Statistics

Ν	Valid	121
	Missing	198
Mode		3 <sup>a</sup>

a. Multiple modes exist. The smallest value is shown

#### Reasons not WFH pre-Covid-19

		Frequency	Percent	Valid Percent	Cumulative Percent
	My employer forced me to come to the office	3	.9	2,5	2,5
	My physical home workplace was not sufficient	16	5,0	13,2	15,7
	My work requires physical presence in the office	32	10,0	26,4	42,1
	I missed the social aspects of the office / I felt lonely	18	5,6	14,9	57,0
	I could work more calmly at the office	5	1,6	4,1	61,2
	Working from home caused a bad work/life balance	15	4,7	12,4	73,6
	It was not in the culture of the organisation to work from home (it didn't feel right/didn't feel accepted)	32	10,0	26,4	100,0
	Total	121	37,9	100,0	
Missing	System	198	62,1		
Total		319	100,0		

## Appendix J

Workplace design preference before Covid-19 (nominal/dependent) and generations (ordinal/independent).

## **Case Processing Summary**

Cases

	Valid		Miss	sing	To	tal
	N	Percent	N	Percent	N	Percent
WPD preference pre- Covid-19 * GEN3	303	95,0%	16	5,0%	319	100,0%

#### WPD preference pre-Covid-19 \* GEN3 Crosstabulation

		GEN3				
			Baby Boomers	Generation X	Millennials	Total
WPD preference pre-	Traditional office	Count	18	40	47	105
Covid-19		% within GEN3	37,5%	34,2%	34,1%	34,7%
	Open-plan office	Count	5	11	17	33
		% within GEN3	10,4%	9,4%	12,3%	10,9%
	Activity Based Working	Count	25	66	74	165
		% within GEN3	52,1%	56,4%	53,6%	54,5%
Total		Count	48	117	138	303
		% within GEN3	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	,789ª	4	,940
Likelihood Ratio	,788	4	,940
Linear-by-Linear Association	,035	1	,852
N of Valid Cases	303		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,23.

		Value	Approximate Significance
Nominal by Nominal	Phi	,051	,940
	Cramer's V	,036	,940
N of Valid Cases		303	

## Permission to work from home before Covid-19 (nominal/dependent) and generations (ordinal/independent).

## **Case Processing Summary**

Cases

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Permission to WFH pre- Covid-19 * GEN3	301	94,4%	18	5,6%	319	100,0%

#### Permission to WFH pre-Covid-19 \* GEN3 Crosstabulation

			GEN3			
			Baby Boomers	Generation X	Millennials	Total
Permission to WFH pre-	I was allowed to work	Count	17	68	57	142
Covid-19	from home and I did	% within GEN3	36,2%	57,6%	41,9%	47,2%
	I was allowed to work from home, but I didn't I wasn't allowed to work from home	Count	26	40	56	122
		% within GEN3	55,3%	33,9%	41,2%	40,5%
		Count	4	10	23	37
		% within GEN3	8,5%	8,5%	16,9%	12,3%
Total		Count	47	118	136	301
		% within GEN3	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12,875 <sup>a</sup>	4	,012
Likelihood Ratio	12,635	4	,013
Linear-by-Linear Association	1,357	1	,244
N of Valid Cases	301		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,78.

		Value	Approximate Significance
Nominal by Nominal	Phi	,207	,012
	Cramer's V	,146	,012
N of Valid Cases		301	

## Reasons to not work from home before Covid-19 (nominal/dependent) and generations (ordinal/independent).

## **Case Processing Summary**

Cases Valid Missing Total Percent Ν Percent Percent Reasons not WFH pre-121 37,9% 198 62,1% 319 100,0% Covid-19 \* GEN3

## Reasons not WFH pre-Covid-19 \* GEN3 Crosstabulation

				GEN3		
			Baby Boomers	Generation X	Millennials	Total
Reasons not WFH pre-	My employer forced me to	Count	0	1	2	3
Covid-19	come to the office	% within GEN3	0,0%	2,5%	3,6%	2,5%
	My physical home	Count	4	2	10	16
	workplace was not sufficient	% within GEN3	15,4%	5,0%	18,2%	13,2%
	My work requires physical presence in the office	Count	6	10	16	32
		% within GEN3	23,1%	25,0%	29,1%	26,4%
	I missed the social aspects of the office / I felt lonely	Count	6	7	5	18
		% within GEN3	23,1%	17,5%	9,1%	14,9%
	I could work more calmly at the office	Count	1	3	1	5
		% within GEN3	3,8%	7,5%	1,8%	4,1%
	Working from home	Count	5	5	5	15
	caused a bad work/life balance	% within GEN3	19,2%	12,5%	9,1%	12,4%
	It was not in the culture of the organisation to work	Count	4	12	16	32
	from home (it didn't feel right/didn't feel accepted)	% within GEN3	15,4%	30,0%	29,1%	26,4%
Total		Count	26	40	55	121
		% within GEN3	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11,808ª	12	,461
Likelihood Ratio	13,052	12	,365
Linear-by-Linear Association	,126	1	,723
N of Valid Cases	121		

a. 10 cells (47,6%) have expected count less than 5. The minimum expected count is ,64.

		Value	Approximate Significance
Nominal by Nominal	Phi	,312	,461
	Cramer's V	,221	,461
N of Valid Cases		121	

## Appendix K

## Working from home during the lockdowns

Statistics

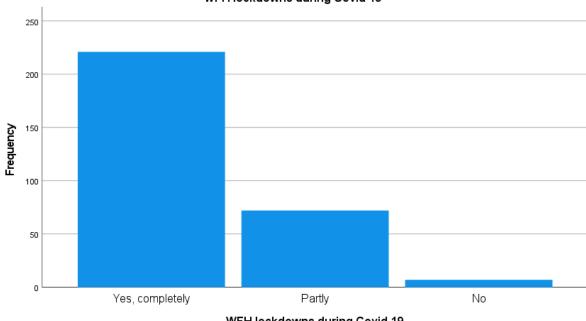
WFH lockdowns during Covid-19

Ν	Valid	300
	Missing	19

## WFH lockdowns during Covid-19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, completely	221	69,3	73,7	73,7
	Partly	72	22,6	24,0	97,7
	No	7	2,2	2,3	100,0
	Total	300	94,0	100,0	
Missing	System	19	6,0		
Total		319	100,0		

## WFH lockdowns during Covid-19



WFH lockdowns during Covid-19

## Reasons not to work from home during the lockdown

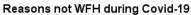
Statistics

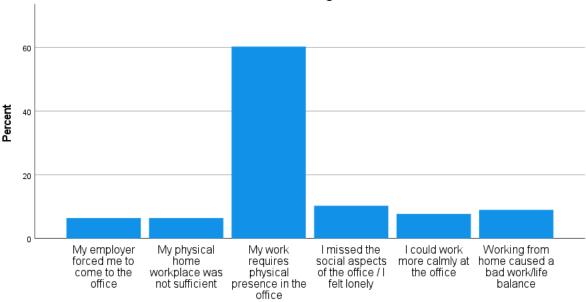
Reasons not WFH during Covid-

Ν	Valid	78
	Missing	241
Mode		3

## Reasons not WFH during Covid-19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	My employer forced me to come to the office	5	1,6	6,4	6,4
	My physical home workplace was not sufficient	5	1,6	6,4	12,8
	My work requires physical presence in the office	47	14,7	60,3	73,1
	I missed the social aspects of the office / I felt lonely	8	2,5	10,3	83,3
	I could work more calmly at the office	6	1,9	7,7	91,0
	Working from home caused a bad work/life balance	7	2,2	9,0	100,0
	Total	78	24,5	100,0	
Missing	System	241	75,5		
Total		319	100,0		





Reasons not WFH during Covid-19

## Generations (ordinal/independent) and reasons not working from home during Covid-19 (nominal/dependent)

## **Case Processing Summary**

Cases

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Reasons not WFH during Covid-19 * GEN3	78	24,5%	241	75,5%	319	100,0%

## Reasons not WFH during Covid-19 \* GEN3 Crosstabulation

				GEN3		
			Baby Boomers	Generation X	Millennials	Total
Reasons not WFH during	My employer forced me to	Count	0	0	5	5
Covid-19	come to the office	% within GEN3	0,0%	0,0%	13,9%	6,4%
	My physical home	Count	2	2	1	5
	workplace was not - sufficient	% within GEN3	12,5%	7,7%	2,8%	6,4%
	My work requires physical presence in the office	Count	9	15	23	47
		% within GEN3	56,3%	57,7%	63,9%	60,3%
	I missed the social aspects of the office / I felt lonely	Count	0	4	4	8
		% within GEN3	0,0%	15,4%	11,1%	10,3%
	I could work more calmly	Count	3	2	1	6
	at the office	% within GEN3	18,8%	7,7%	2,8%	7,7%
	Working from home	Count	2	3	2	7
	caused a bad work/life balance	% within GEN3	12,5%	11,5%	5,6%	9,0%
Total		Count	16	26	36	78
		% within GEN3	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14,604ª	10	,147
Likelihood Ratio	17,717	10	,060
Linear-by-Linear Association	3,622	1	,057
N of Valid Cases	78		

a. 15 cells (83,3%) have expected count less than 5. The minimum expected count is 1,03.

		Value	Approximate Significance
Nominal by Nominal	Phi	,433	,147
	Cramer's V	,306	,147
N of Valid Cases		78	

# Generations (nominal/independent) and advantages/disadvantages of working from home during Covid-19 (scale/dependent)

## Case Processing Summary

			Cas	000				
	Inclu	ded	Exclu	ided	To	Total		
	N	Percent	N	Percent	N	Percent		
Advantages - I have less travel time * GEN3	297	93,1%	22	6,9%	319	100,0%		
Advantages - Less time is spent on meetings * GEN3	297	93,1%	22	6,9%	319	100,0%		
Advantages - I can decide for myself when I work * GEN3	296	92,8%	23	7,2%	319	100,0%		
Advantages - I can set/determine the temperature by myself * GEN3	297	93,1%	22	6,9%	319	100,0%		
Advantages - I can decide for myself whether and which music I play * GEN3	296	92,8%	23	7,2%	319	100,0%		
Disadvantages - I miss my colleagues * GEN3	297	93,1%	22	6,9%	319	100,0%		
Disadvantages - I cannot do all my work from home * GEN3	296	92,8%	23	7,2%	319	100,0%		
Disadvantages - My home workplace is not ideal * GEN3	297	93,1%	22	6,9%	319	100,0%		
Disadvantages - I find telephone / digital meetings difficult * GEN3	296	92,8%	23	7,2%	319	100,0%		
Disadvantages - I hardly get outside since I started working at home * GEN3	297	93,1%	22	6,9%	319	100,0%		

#### Report

GEN3		Advantages - I have less travel time	Advantages - Less time is spent on meetings	Advantages - I can decide for myself when I work	Advantages - I can set/determine the temperature by myself	Advantages - I can decide for myself whether and which music I play	Disadvantage s - I miss my colleagues	Disadvantage s - I cannot do all my work from home	Disadvantage s - My home workplace is not ideal	Disadvantage s - I find telephone / digital meetings difficult	Disadvantage s - I hardly get outside since I started working at home
Baby Boomers	Mean	1,19	2,26	1,96	1,36	1,34	1,28	1,57	2,00	1,79	2,04
	N	47	47	47	47	47	47	47	47	47	47
	Std. Deviation	,449	,846	,751	,568	,562	,540	,801	,860	,832	,884
Generation X	Mean	1,18	1,94	1,65	1,23	1,26	1,26	1,95	1,94	2,09	2,21
	N	117	117	117	117	117	117	117	117	117	117
	Std. Deviation	,428	,854	,791	,480	,511	,544	,879	,893	,851	,879
Millennials	Mean	1,18	2,14	1,52	1,26	1,22	1,17	1,93	1,87	2,14	1,94
	N	133	133	132	133	132	133	132	133	132	133
	Std. Deviation	,505	,886	,805	,532	,514	,418	,901	,874	,854	,903
Total	Mean	1,18	2,08	1,64	1,26	1,25	1,22	1,88	1,92	2,06	2,06
	N	297	297	296	297	296	297	296	297	296	297
	Std. Deviation	,466	,872	,803	,518	,521	,491	,885	,878	,855	,896

#### Descriptives

						95% Confiden	ce Interval for an		
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages - I have less	Baby Boomers	47	1,19	,449	,066	1,06	1,32	1	3
travel time	Generation X	117	1,18	,428	,040	1,10	1,26	1	3
	Millennials	133	1,18	,505	,044	1,09	1,27	1	3
	Total	297	1,18	,466	,027	1,13	1,23	1	3
Advantages - Less time	Baby Boomers	47	2,26	,846	,123	2,01	2,50	1	3
is spent on meetings	Generation X	117	1,94	,854	,079	1,78	2,10	1	3
	Millennials	133	2,14	,886	,077	1,98	2,29	1	3
	Total	297	2,08	,872	,051	1,98	2,18	1	3
Advantages - I can decide	Baby Boomers	47	1,96	,751	,109	1,74	2,18	1	3
for myself when I work	Generation X	117	1,65	,791	,073	1,50	1,79	1	3
	Millennials	132	1,52	,805	,070	1,38	1,65	1	3
	Total	296	1,64	,803	,047	1,55	1,73	1	3
Advantages - I can	Baby Boomers	47	1,36	,568	,083	1,19	1,53	1	3
set/determine the	Generation X	117	1,23	,480	.044	1,14	1,32	1	3
temperature by myself	Millennials	133	1,26	.532	.046	1,16	1,35	1	3
	Total	297	1,26	,518	.030	1,20	1,32	1	3
Advantages - I can decide	Baby Boomers	47	1,34	,562	.082	1,18	1,51	1	3
for myself whether and	Generation X	117	1,26	,511	.047	1,16	1,35	1	3
which music I play	Millennials	132	1,22	,514	.045	1,13	1,31	1	3
	Total	296	1,25	,521	,030	1,19	1,31	1	3
Disadvantages - I miss	Baby Boomers	47	1.28	.540	.079	1.12	1,44	1	3
my colleagues	Generation X	117	1,26	.544	.050	1,16	1,36	1	3
	Millennials	133	1,17	,418	,036	1,10	1,24	1	3
	Total	297	1,22	,491	.028	1,17	1,28	1	3
Disadvantages - I cannot	Baby Boomers	47	1,57	.801	,117	1,34	1,81	1	3
do all my work from home	Generation X	117	1,95	,879	,081	1,79	2,11	1	3
	Millennials	132	1,93	.901	.078	1,78	2.09	1	3
	Total	296	1.88	.885	.051	1.78	1,98	1	3
Disadvantages - My	Baby Boomers	47	2.00	.860	,125	1,75	2,25	1	3
home workplace is not	Generation X	117	1.94	.893	.083	1.78	2.10	1	3
ideal	Millennials	133	1,87	,874	.076	1,72	2,02	1	3
	Total	297	1,92	,878	.051	1,82	2,02	1	3
Disadvantages - I find	Baby Boomers	47	1,79	.832	,121	1,54	2.03	1	3
telephone / digital	Generation X	117	2.09	,851	.079	1,94	2,25	1	3
meetings difficult	Millennials	132	2,14	,854	.074	1,99	2,28	1	3
	Total	296	2,06	,855	,050	1,97	2,16	1	3
Disadvantages - I hardly	Baby Boomers	47	2,04	,884	,129	1,78	2,30	1	3
get outside since I started	Generation X	117	2,04	,879	,081	2,05	2,37	1	3
working at home	Millennials	133	1,94	.903	.078	1.79	2,09	1	3
	Total	297	2.06	.896	.052	1,75	2,03	1	3

## Measures of Association

	Eta	Eta Squared
Advantages - I have less travel time * GEN3	,009	,000
Advantages - Less time is spent on meetings * GEN3	,136	,018
Advantages - I can decide for myself when I work * GEN3	,189	,036
Advantages - I can set/determine the temperature by myself * GEN3	,086	,007
Advantages - I can decide for myself whether and which music I play * GEN3	,080	,006
Disadvantages - I miss my colleagues * GEN3	,092	,008
Disadvantages - I cannot do all my work from home * GEN3	,151	,023
Disadvantages - My home workplace is not ideal * GEN3	,053	,003
Disadvantages - I find telephone / digital meetings difficult * GEN3	,143	,020
Disadvantages - I hardly get outside since I started working at home * GEN3	,140	,020

## ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Advantages - I have less	Between Groups	(Combined)	,005	2	,003	,012	,988
travel time * GEN3	Within Groups		64,177	294	,218		
	Total		64,182	296			
Advantages - Less time	Between Groups	(Combined)	4,138	2	2,069	2,751	,065
is spent on meetings * GEN3	Within Groups		221,081	294	,752		
	Total		225,219	296			
Advantages - I can decide	Between Groups	(Combined)	6,804	2	3,402	5,431	,005
for myself when I work * GEN3	Within Groups		183,517	293	,626		
02110	Total		190,321	295			
Advantages - I can	Between Groups	(Combined)	,587	2	,293	1,092	,337
set/determine the temperature by myself *	Within Groups		78,929	294	,268		
GEN3	Total		79,515	296			
Advantages - I can decide	Between Groups	(Combined)	,507	2	,253	,934	,394
for myself whether and which music I play *	Within Groups		79,490	293	,271		
GEN3	Total		79,997	295			
Disadvantages - I miss	Between Groups	(Combined)	,599	2	,299	1,244	,290
my colleagues * GEN3	Within Groups		70,735	294	,241		
	Total		71,333	296			
Disadvantages - I cannot	Between Groups	(Combined)	5,293	2	2,647	3,438	,033
do all my work from home * GEN3	Within Groups		225,568	293	,770		
02110	Total		230,861	295			
Disadvantages - My	Between Groups	(Combined)	,652	2	,326	,422	,656
home workplace is not ideal * GEN3	Within Groups		227,408	294	,773		
14041 02.10	Total		228,061	296			
Disadvantages - I find	Between Groups	(Combined)	4,397	2	2,198	3,047	,049
telephone / digital meetings difficult * GEN3	Within Groups		211,384	293	,721		
	Total		215,780	295			
Disadvantages - I hardly	Between Groups	(Combined)	4,693	2	2,346	2,959	,053
get outside since I started working at home * GEN3	Within Groups		233,092	294	,793		
	Total		237,785	296			

## **Multiple Comparisons**

Tukey HSD

			Mean Difference (l-			95% Confide	ence Interval
Dependent Variable	(I) GEN3	(J) GEN3	J)	Std. Error	Sig.	Lower Bound	Upper Bound
Advantages - I have less	Baby Boomers	Generation X	,012	,081	,988	-,18	,20
travel time		Millennials	,011	,079	,989	-,18	,20
	Generation X	Baby Boomers	-,012	,081	,988	-,20	,18
		Millennials	-,001	,059	1,000	-,14	,14
	Millennials	Baby Boomers	-,011	,079	,989	-,20	,18
		Generation X	,001	,059	1,000	-,14	,14
Disadvantages - I cannot	Baby Boomers	Generation X	-,374*	,152	,037	-,73	-,02
do all my work from home		Millennials	-,357	,149	,045	-,71	-,01
	Generation X	Baby Boomers	,374*	,152	,037	,02	,73
		Millennials	,017	,111	,987	-,25	,28
	Millennials	Baby Boomers	,357*	,149	,045	,01	,71
		Generation X	-,017	,111	,987	-,28	,25
Disadvantages - I find	Baby Boomers	Generation X	-,307	,147	,093	-,65	,04
telephone / digital meetings difficult		Millennials	-,349	,144	,043	-,69	-,01
	Generation X	Baby Boomers	,307	,147	,093	-,04	,65
		Millennials	-,042	,108	,919	-,30	,21
	Millennials	Baby Boomers	,349*	,144	,043	,01	,69
		Generation X	,042	,108	,919	-,21	,30
Disadvantages - I hardly	Baby Boomers	Generation X	-,171	,154	,507	-,53	,19
get outside since I started working at home		Millennials	,103	,151	,775	-,25	,46
Working at Horns	Generation X	Baby Boomers	,171	,154	,507	-,19	,53
		Millennials	,274*	,113	,042	,01	,54
	Millennials	Baby Boomers	-,103	,151	,775	-,46	,25
		Generation X	-,274*	,113	,042	-,54	-,01

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

## Generations (ordinal/independent) and location at the house (nominal/dependent)

## Case Processing Summary

Cases Valid Missing Total Ν Percent Ν Percent Ν Percent Location in the house \* 316 99,1% 3 0,9% 319 100,0% GEN3 Household \* GEN3 315 4 1,3% 100,0% 98,7% 319

#### Crosstab

			Baby Boomers	Generation X	Millennials	Total
Location in the house	Yes, I can work	Count	41	81	109	231
	completely secluded in a separate room	% within GEN3	82,0%	68,1%	74,1%	73,1%
	Yes, but my housemates (partner/children) also use this space to work/study No, I don't have the option to work secluded	Count	3	14	18	35
		% within GEN3	6,0%	11,8%	12,2%	11,1%
		Count	6	24	20	50
		% within GEN3	12,0%	20,2%	13,6%	15,8%
Total		Count	50	119	147	316
		% within GEN3	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4,710ª	4	,318
Likelihood Ratio	4,878	4	,300
Linear-by-Linear Association	,026	1	,872
N of Valid Cases	316		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,54.

Reasons to not work from home during Covid-19 (nominal/dependent) and having a private home office (location at the house) (nominal/independent)

## **Case Processing Summary**

Cases

		04000							
		Va	lid	Miss	sing	To	tal		
		N	Percent N Percent N P		Percent				
Reasons not WFH du Covid-19 * Location i house	_	78	24,5%	241	75,5%	319	100,0%		

#### Reasons not WFH during Covid-19 \* Location in the house Crosstabulation

			Lo	cation in the hou	se	
			Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/childr en) also use this space to work/study	No, I don't have the option to work secluded	Total
Reasons not WFH during	My employer forced me to	Count	4	0	1	5
Covid-19	come to the office	% within Location in the house	7,1%	0,0%	6,7%	6,4%
	My physical home	Count	2	2	1	5
	workplace was not sufficient	% within Location in the house	3,6%	28,6%	6,7%	6,4%
	My work requires physical	Count	38	2	7	47
	presence in the office	% within Location in the house	67,9%	28,6%	46,7%	60,3%
	I missed the social	Count	6	0	2	8
	aspects of the office / I felt lonely	% within Location in the house	10,7%	0,0%	13,3%	10,3%
	I could work more calmly	Count	4	1	1	6
	at the office	% within Location in the house	7,1%	14,3%	6,7%	7,7%
	Working from home	Count	2	2	3	7
	caused a bad work/life balance	% within Location in the house	3,6%	28,6%	20,0%	9,0%
Total		Count	56	7	15	78
		% within Location in the house	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16,884ª	10	,077
Likelihood Ratio	14,814	10	,139
Linear-by-Linear Association	2,612	1	,106
N of Valid Cases	78		

a. 14 cells (77,8%) have expected count less than 5. The minimum expected count is ,45.

		Value	Approximate Significance
Nominal by Nominal	Phi	,465	,077
	Cramer's V	,329	,077
N of Valid Cases		78	

## Having a private home office (location at the house) (nominal/independent) and advantages/disadvantages of working from home during Covid-19 (scale/dependent)

## Case Processing Summary

	Cases							
	Inclu	ded	Exclu	ıded	To	tal		
	N	Percent	N	Percent	N	Percent		
Advantages - I have less travel time * Location in the house	297	93,1%	22	6,9%	319	100,0%		
Advantages - Less time is spent on meetings * Location in the house	297	93,1%	22	6,9%	319	100,0%		
Advantages - I can decide for myself when I work * Location in the house	296	92,8%	23	7,2%	319	100,0%		
Advantages - I can set/determine the temperature by myself * Location in the house	297	93,1%	22	6,9%	319	100,0%		
Advantages - I can decide for myself whether and which music I play * Location in the house	296	92,8%	23	7,2%	319	100,0%		
Disadvantages - I miss my colleagues * Location in the house	297	93,1%	22	6,9%	319	100,0%		
Disadvantages - I cannot do all my work from home * Location in the house	296	92,8%	23	7,2%	319	100,0%		
Disadvantages - My home workplace is not ideal * Location in the house	297	93,1%	22	6,9%	319	100,0%		
Disadvantages - I find telephone / digital meetings difficult * Location in the house	296	92,8%	23	7,2%	319	100,0%		
Disadvantages - I hardly get outside since I started working at home * Location in the house	297	93,1%	22	6,9%	319	100,0%		

Re	р	0	r

				- TCPOIL							
Location in the house		Advantages - I have less travel time	Advantages - Less time is spent on meetings	Advantages - I can decide for myself when I work	Advantages - I can set/determine the temperature by myself	Advantages - I can decide for myself whether and which music I play	Disadvantage s - I miss my colleagues	Disadvantage s - I cannot do all my work from home	Disadvantage s - My home workplace is not ideal	Disadvantage s - I find telephone I digital meetings difficult	Disadvantage s - I hardly get outside since I started working at home
Yes, I can work	Mean	1,18	2,00	1,57	1,24	1,26	1,22	1,94	2,06	2,07	2,05
completely secluded in a separate room	N	214	214	214	214	214	214	214	214	214	214
osparato room	Std. Deviation	,471	,875	,764	,501	,526	,488	,892	,867	,861	,882
Yes, but my housemates	Mean	1,35	2,53	1,76	1,50	1,33	1,21	1,67	1,68	1,85	1,94
(partner/children) also use this space to	N	34	34	33	34	33	34	33	34	33	34
work/study	Std. Deviation	,597	,706	,902	,615	,540	,479	,890	,843	,834	,983
No, I don't have the option	Mean	1,08	2,08	1,86	1,18	1,18	1,24	1,76	1,47	2,18	2,22
to work secluded	N	49	49	49	49	49	49	49	49	49	49
	Std. Deviation	,277	,886	,866	,486	,486	,522	,830	,767	,834	,896
Total	Mean	1,18	2,08	1,64	1,26	1,25	1,22	1,88	1,92	2,06	2,06
	N	297	297	296	297	296	297	296	297	296	297
	Std. Deviation	.466	.872	.803	.518	,521	.491	,885	,878	.855	.896

Descriptives

			Des	criptives					
						95% Confidence Mea			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages - I have less travel time	Yes, I can work completely secluded in a separate room	214	1,18	,471	,032	1,11	1,24	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	34	1,35	,597	,102	1,14	1,56	1	3
	No, I don't have the option to work secluded	49	1,08	,277	,040	1,00	1,16	1	2
	Total	297	1,18	,466	,027	1,13	1,23	1	3
Advantages - Less time is spent on meetings	Yes, I can work completely secluded in a separate room	214	2,00	,875	,060	1,89	2,12	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	34	2,53	,706	,121	2,28	2,78	1	3
	No, I don't have the option to work secluded	49	2,08	,886	,127	1,83	2,34	1	3
	Total	297	2,08	,872	,051	1,98	2,18	1	3
Advantages - I can decide for myself when I work	Yes, I can work completely secluded in a	214	1,57	,764	,052	1,47	1,67	1	3
•	separate room								
	Yes, but my housemates (partner/children) also use this space to work/study	33	1,76	,902	,157	1,44	2,08	1	3
	No, I don't have the option to work secluded	49	1,86	,866	,124	1,61	2,11	1	3
	Total	296	1,64	,803	,047	1,55	1,73	1	3
Advantages - I can set/determine the temperature by myself	Yes, I can work completely secluded in a separate room	214	1,24	,501	,034	1,18	1,31	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	34	1,50	,615	,106	1,29	1,71	1	3
	No, I don't have the option to work secluded	49	1,18	,486	,069	1,04	1,32	1	3
	Total	297	1,26	,518	,030	1,20	1,32	1	3
Advantages - I can decide for myself whether and which music I play	Yes, I can work completely secluded in a separate room	214	1,26	,526	,036	1,19	1,33	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	33	1,33	,540	,094	1,14	1,52	1	3
	No, I don't have the option to work secluded	49	1,18	,486	,069	1,04	1,32	1	3
	Total	296	1,25	,521	,030	1,19	1,31	1	3
Disadvantages - I miss my colleagues	Yes, I can work completely secluded in a separate room	214	1,22	,488	,033	1,15	1,29	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	34	1,21	,479	,082	1,04	1,37	1	3
	No, I don't have the option to work secluded	49	1,24	,522	,075	1,10	1,39	1	3
	Total	297	1,22	,491	,028	1,17	1,28	1	3
Disadvantages - I cannot do all my work from home	Yes, I can work completely secluded in a separate room	214	1,94	,892	,061	1,82	2,06	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	33	1,67	,890	,155	1,35	1,98	1	3
	No, I don't have the option to work secluded	49	1,76	,830	,119	1,52	1,99	1	3
	Total	296	1,88	,885	,051	1,78	1,98	1	3
Disadvantages - My home workplace is not ideal	Yes, I can work completely secluded in a separate room	214	2,06	,867	,059	1,94	2,18	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	34	1,68	,843	,145	1,38	1,97	1	3
	No, I don't have the option to work secluded	49	1,47	,767	,110	1,25	1,69	1	3
	Total	297	1,92	,878	,051	1,82	2,02	1	3
Disadvantages - I find telephone / digital meetings difficult	Yes, I can work completely secluded in a separate room	214	2,07	,861	,059	1,95	2,19	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	33	1,85	,834	,145	1,55	2,14	1	3
	No, I don't have the option to work secluded	49	2,18	,834	,119	1,94	2,42	1	3
Disadvantages - I hardly get outside since I started working at home	Total  Yes, I can work completely secluded in a separate room	296 214	2,06 2,05	,855 ,882	,050	1,97 1,93	2,16	1	3
	Yes, but my housemates (partner/children) also use this space to work/study	34	1,94	,983	,169	1,60	2,28	1	3
	No, I don't have the option to work secluded	49	2,22	,896	,128	1,97	2,48	1	3
	Total	297	2,06	,896	,052	1,96	2,17	1	3

## Measures of Association

	Eta	Eta Squared
Advantages - I have less travel time * Location in the house	,152	,023
Advantages - Less time is spent on meetings * Location in the house	,189	,036
Advantages - I can decide for myself when I work * Location in the house	,142	,020,
Advantages - I can set/determine the temperature by myself * Location in the house	,170	,029
Advantages - I can decide for myself whether and which music I play * Location in the house	,075	,006
Disadvantages - I miss my colleagues * Location in the house	,022	,001
Disadvantages - I cannot do all my work from home * Location in the house	,117	,014
Disadvantages - My home workplace is not ideal * Location in the house	,267	,071
Disadvantages - I find telephone / digital meetings difficult * Location in the house	,102	,010
Disadvantages - I hardly get outside since I started working at home * Location in the house	,088	,008

## ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Advantages - I have less	Between Groups	(Combined)	1,491	2	,746	3,497	,032
travel time * Location in the house	Within Groups		62,691	294	,213		
uic ilouse	Total		64,182	296			
Advantages - Less time	Between Groups	(Combined)	8,079	2	4,040	5,470	,005
is spent on meetings * Location in the house	Within Groups		217,139	294	,739		
	Total		225,219	296			
Advantages - I can decide	Between Groups	(Combined)	3,812	2	1,906	2,994	,052
for myself when I work * Location in the house	Within Groups		186,509	293	,637		
Location in the nodes	Total		190,321	295			
Advantages - I can	Between Groups	(Combined)	2,304	2	1,152	4,386	,013
set/determine the temperature by myself *	Within Groups		77,211	294	,263		
Location in the house	Total		79,515	296			
Advantages - I can decide for myself whether and which music I play * Location in the house	Between Groups	(Combined)	,452	2	,226	,832	,436
	Within Groups		79,545	293	,271		
	Total		79,997	295			
Disadvantages - I miss	Between Groups	(Combined)	,036	2	,018	,074	,929
my colleagues * Location in the house	Within Groups		71,298	294	,243		
III uie iiouse	Total		71,333	296			
Disadvantages - I cannot	Between Groups	(Combined)	3,140	2	1,570	2,020	,135
do all my work from home * Location in the house	Within Groups		227,722	293	,777		
Location in the house	Total		230,861	295			
Disadvantages - My	Between Groups	(Combined)	16,205	2	8,103	11,244	,000
home workplace is not ideal * Location in the	Within Groups		211,856	294	,721		
house	Total		228,061	296			
Disadvantages - I find	Between Groups	(Combined)	2,242	2	1,121	1,538	,216
telephone / digital meetings difficult *	Within Groups		213,538	293	,729		
Location in the house	Total		215,780	295			
Disadvantages - I hardly	Between Groups	(Combined)	1,839	2	,919	1,146	,319
get outside since I started working at home *	Within Groups		235,946	294	,803		
Location in the house	Total		237.785	296			

### Multiple Comparisons

Tukey HSD

Tukey HSD			Mean			1	
Dependent Variable	(D. L. a. a. Mara Jar Abra Jarrasa	CD Location in the boson	Difference (I-	Std. Error	Sig.	95% Confide Lower Bound	nce Interval Upper Bound
Advantages - I have less travel time	(I) Location in the house Yes, I can work completely secluded in a separate room	(J) Location in the house Yes, but my housemates (partner/children) also use this space to work/study	J) -,175	,085	,101	-,38	,03
		No, I don't have the option to work secluded	,096	,073	,390	-,08	,27
	Yes, but my housemates (partner/children) also use this space to	Yes, I can work completely secluded in a separate room	,175	,085	,101	-,03	,38
	work/study	No, I don't have the option to work secluded	,271*	,103	,024	,03	,51
	No, I don't have the option to work secluded	Yes, I can work completely secluded in a separate room	-,096	,073	,390	-,27	,08
		Yes, but my housemates (partner/children) also use this space to work/study	-,271*	,103	,024	-,51	-,03
Advantages - Less time is spent on meetings	Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/children) also use this space to work/study	-,525*	,159	,003	-,90	-,15
		No, I don't have the option to work secluded	-,077	,136	,839	-,40	,24
	Yes, but my housemates (partner/children) also use this space to	Yes, I can work completely secluded in a separate room	,525*	,159	,003	,15	,90
	work/study	No, I don't have the option to work secluded	,448	,192	,053	,00,	,90
	No, I don't have the option to work secluded	Yes, I can work completely secluded in a separate room	,077	,136	,839	-,24	,40
		Yes, but my housemates (partner/children) also use this space to work/study	-,448	,192	,053	-,90	,00,
Advantages - I can decide for myself when I work	Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/children) also use this space to work/study	-,187	,149	,421	-,54	,16
		No, I don't have the option to work secluded	-,287	,126	,061	-,58	,01
	Yes, but my housemates (partner/children) also use this space to work/study	Yes, I can work completely secluded in a separate room	,187	,149	,421	-,16	,54
		No, I don't have the option to work secluded	-,100	,180	,844	-,52	,32
	No, I don't have the option to work secluded	Yes, I can work completely secluded in a separate room	,287	,126	,061	-,01	,58
		Yes, but my housemates (partner/children) also use this space to work/study	,100	,180	,844	-,32	,52
Advantages - I can set/determine the temperature by myself	Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/children) also use this space to work/study	-,257*	,095	,019	-,48	-,03
		No, I don't have the option to work secluded	,059	,081	,745	-,13	,25
	Yes, but my housemates (partner/children) also use this space to	Yes, I can work completely secluded in a separate room	,257*	,095	,019	,03	,48
	work/study	No, I don't have the option to work secluded	,316*	,114	,017	,05	,59
	No, I don't have the option to work secluded	Yes, I can work completely secluded in a separate room	-,059	,081	,745	-,25	,13
		Yes, but my housemates (partner/children) also use this space to work/study	-,316	,114	,017	-,59	-,05
Disadvantages - My home workplace is not ideal	Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/children) also use this space to work/study	,384*	,157	,039	,02	,75
		No, I don't have the option to work secluded	,591*	,134	,000	,27	,91
	Yes, but my housemates (partner/children) also use this space to	Yes, I can work completely secluded in a separate room	-,384*	,157	,039	-,75	-,02
	work/study	No, I don't have the option to work secluded	,207	,189	,519	-,24	,65
	No, I don't have the option to work secluded	Yes, I can work completely secluded in a separate room	-,591	,134	,000	-,91	-,27
		Yes, but my housemates (partner/children) also use this space to work/study	-,207	,189	,519	-,65	,24

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

## Generations (ordinal/independent) and composition of the household (nominal/dependent)

## Crosstab

			Baby Boomers	Generation X	Millennials	Total
child	Living alone, without	Count	12	9	29	50
	children	% within GEN3	24,0%	7,6%	19,9%	15,9%
	Living together, without children	Count	30	15	60	105
		% within GEN3	60,0%	12,6%	41,1%	33,3%
	Single, with children	Count	2	13	4	19
		% within GEN3	4,0%	10,9%	2,7%	6,0%
	Living together, with	Count	6	82	53	141
	children	% within GEN3	12,0%	68,9%	36,3%	44,8%
Total		Count	50	119	146	315
		% within GEN3	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	74,879ª	6	,000
Likelihood Ratio	81,032	6	,000
Linear-by-Linear Association	,027	1	,869
N of Valid Cases	315		

a. 1 cells (8,3%) have expected count less than 5. The minimum expected count is 3,02.

		Value	Approximate Significance
Nominal by Nominal	Phi	,488	,000
	Cramer's V	,345	,000
N of Valid Cases		315	

Reasons to not work from home during Covid-19 (nominal/dependent) and composition of household (nominal/independent)

# **Case Processing Summary**

Cases

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Reasons not WFH during Covid-19 * Household	78	24,5%	241	75,5%	319	100,0%

### Reasons not WFH during Covid-19 \* Household Crosstabulation

			Household					
			Living alone, without children	Living together, without children	Single, with children	Living together, with children	Total	
Reasons not WFH during	My employer forced me to	Count	1	3	0	1		
Covid-19	come to the office	% within Household	7,1%	11,5%	0,0%	3,2%	6,49	
	My physical home workplace was not sufficient	Count	1	1	2	1		
		% within Household	7,1%	3,8%	28,6%	3,2%	6,49	
	My work requires physical presence in the office	Count	7	15	4	21	4	
		% within Household	50,0%	57,7%	57,1%	67,7%	60,3	
	I missed the social aspects of the office / I felt lonely	Count	4	1	0	3		
		% within Household	28,6%	3,8%	0,0%	9,7%	10,3	
	I could work more calmly	Count	1	3	0	2		
	at the office	% within Household	7,1%	11,5%	0,0%	6,5%	7,7	
	Working from home caused a bad work/life	Count	0	3	1	3		
	balance	% within Household	0,0%	11,5%	14,3%	9,7%	9,0	
Total		Count	14	26	7	31	7	
		% within Household	100,0%	100,0%	100,0%	100,0%	100,0	

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17,860ª	15	,270
Likelihood Ratio	17,103	15	,313
Linear-by-Linear Association	,209	1	,647
N of Valid Cases	78		

a. 21 cells (87,5%) have expected count less than 5. The minimum expected count is ,45.

		Value	Approximate Significance
Nominal by Nominal	Phi	,479	,270
	Cramer's V	,276	,270
N of Valid Cases		78	

# Composition of household (nominal/independent) and advantages/disadvantages of working from home during Covid-19 (scale/dependent)

## Case Processing Summary

$\sim$	_	_	_	_
U	d	S	е	S

				,,,,			
	Included		Exclu	ıded	Total		
	N	Percent	N	Percent	N	Percent	
Advantages - I have less travel time * Household	297	93,1%	22	6,9%	319	100,0%	
Advantages - Less time is spent on meetings * Household	297	93,1%	22	6,9%	319	100,0%	
Advantages - I can decide for myself when I work * Household	296	92,8%	23	7,2%	319	100,0%	
Advantages - I can set/determine the temperature by myself * Household	297	93,1%	22	6,9%	319	100,0%	
Advantages - I can decide for myself whether and which music I play * Household	296	92,8%	23	7,2%	319	100,0%	
Disadvantages - I miss my colleagues * Household	297	93,1%	22	6,9%	319	100,0%	
Disadvantages - I cannot do all my work from home * Household	296	92,8%	23	7,2%	319	100,0%	
Disadvantages - My home workplace is not ideal * Household	297	93,1%	22	6,9%	319	100,0%	
Disadvantages - I find telephone / digital meetings difficult * Household	296	92,8%	23	7,2%	319	100,0%	
Disadvantages - I hardly get outside since I started working at home * Household	297	93,1%	22	6,9%	319	100,0%	

## Report

Household		Advantages - I have less travel time	Advantages - Less time is spent on meetings	Advantages - I can decide for myself when I work	Advantages - I can set/determine the temperature by myself	Advantages - I can decide for myself whether and which music I play	Disadvantage s - I miss my colleagues	Disadvantage s - I cannot do all my work from home	Disadvantage s - My home workplace is not ideal	Disadvantage s - I find telephone / digital meetings difficult	Disadvantage s - I hardly get outside since I started working at home
Living alone, without	Mean	1,21	2,00	1,47	1,23	1,26	1,13	1,81	1,77	2,23	1,94
children	N	47	47	47	47	47	47	47	47	47	47
	Std. Deviation	,508	,909	,718	,520	,607	,337	,876	,890	,890	,942
Living together, without children Mean	Mean	1,18	2,28	1,68	1,25	1,22	1,22	1,81	1,96	1,93	1,98
	N	96	96	96	96	96	96	96	96	96	96
	Std. Deviation	,481	,842	,840	,503	,486	,463	,862	,832	,849	,858
Single, with children	Mean	1,05	2,16	1,68	1,21	1,16	1,21	1,89	1,79	2,16	2,00
	N	19	19	19	19	19	19	19	19	19	19
	Std. Deviation	,229	,898	,820	,535	,375	,535	,875	,918	,834	,882
Living together, with	Mean	1,19	1,95	1,66	1,29	1,29	1,26	1,96	1,96	2,09	2,18
children	N	135	135	134	135	134	135	134	135	134	135
	Std. Deviation	,465	,858	,804	,531	,532	,546	,908	,901	,845	,905
Total	Mean	1,18	2,08	1,64	1,26	1,25	1,22	1,88	1,92	2,06	2,06
	N	297	297	296	297	296	297	296	297	296	297
	Std. Deviation	.466	.872	.803	,518	,521	.491	.885	.878	,855	,896

Descriptives

			Des	criptives					
						95% Confider Me	nce Interval for ean		
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages - I have less travel time	Living alone, without children	47	1,21	,508	,074	1,06	1,36	1	3
a aver anno	Living together, without children	96	1,18	,481	,049	1,08	1,27	1	3
	Single, with children	19	1,05	,229	,053	,94	1,16	1	2
	Living together, with children	135	1,19	,465	,040	1,11	1,27	1	3
	Total	297	1,18	,466	,027	1,13	1,23	1	3
Advantages - Less time is spent on meetings	Living alone, without children	47	2,00	,909	,133	1,73	2,27	1	3
	Living together, without children	96	2,28	,842	,086	2,11	2,45	1	3
	Single, with children Living together, with	19	2,16	,898,	,206	1,72	2,59	1	3
	children	135	1,95	,858	,074	1,80	2,09	'	3
	Total	297	2,08	,872	,051	1,98	2,18	1	3
Advantages - I can decide for myself when I work	Living alone, without children	47	1,47	,718	,105	1,26	1,68	1	3
	Living together, without children	96	1,68	,840	,086	1,51	1,85	1	3
	Single, with children	19	1,68	,820	,188	1,29	2,08	1	3
	Living together, with children	134	1,66	,804	,069	1,53	1,80	1	3
	Total	296	1,64	,803	,047	1,55	1,73	1	3
Advantages - I can set/determine the	Living alone, without children	47	1,23	,520	,076	1,08	1,39	1	3
temperature by myself	Living together, without children	96	1,25	,503	,051	1,15	1,35	1	3
	Single, with children	19	1,21	,535	,123	,95	1,47	1	3
	Living together, with children	135	1,29	,531	,046	1,20	1,38	1	3
	Total	297	1,26	,518	,030	1,20	1,32	1	3
Advantages - I can decide for myself whether and	Living alone, without children	47	1,26	,607	,089	1,08	1,43	1	3
which music I play	Living together, without children	96	1,22	,486	,050	1,12	1,32	1	3
	Single, with children	19	1,16	,375	,086	,98	1,34	1	2
	Living together, with children	134	1,29	,532	,046	1,20	1,38	1	3
	Total	296	1,25	,521	,030	1,19	1,31	1	3
Disadvantages - I miss my colleagues	Living alone, without children	47	1,13	,337	,049	1,03	1,23	1	2
	Living together, without children	96	1,22	,463	,047	1,12	1,31	1	3
	Single, with children	19	1,21	,535	,123	,95	1,47	1	3
	Living together, with children	135	1,26	,546	,047	1,17	1,35	1	3
	Total	297	1,22	,491	,028	1,17	1,28	1	3
Disadvantages - I cannot do all my work from home	Living alone, without children	47	1,81	,876	,128	1,55	2,07	1	3
	Living together, without children	96	1,81	,862	,088	1,64	1,99	1	3
	Single, with children	19	1,89	,875	,201	1,47	2,32	1	3
	Living together, with children	134	1,96	,908	,078	1,80	2,11	1	3
	Total	296	1,88	,885	,051	1,78	1,98	1	3
Disadvantages - My home workplace is not ideal	Living alone, without children	47	1,77	,890	,130	1,50	2,03	1	3
Iucai	Living together, without children	96	1,96	,832	,085	1,79	2,13	1	3
	Single, with children	19	1,79	,918	,211	1,35	2,23	1	3
	Living together, with children	135	1,96	,901	,078	1,81	2,12	1	3
Discharge	Total	297	1,92	,878	,051	1,82	2,02	1	3
Disadvantages - I find telephone / digital meetings difficult	Living alone, without children	47	2,23	,890	,130	1,97	2,50	1	3
- dilivent	Living together, without children	96	1,93	,849	,087	1,76	2,10	1	3
	Single, with children	19	2,16	,834	,191	1,76	2,56	1	3
	Living together, with children	134	2,09	,845	,073	1,95	2,23	1	3
	Total	296	2,06	,855	,050	1,97	2,16	1	3
Disadvantages - I hardly get outside since I started	Living alone, without children	47	1,94	,942	,137	1,66	2,21	1	3
working at home	Living together, without children	96	1,98	,858	,088	1,81	2,15	1	3
	Single, with children	19	2,00	,882	,202	1,57	2,43	1	3
	Living together, with children	135	2,18	,905	,078	2,02	2,33	1	3
	Total	297	2,06	,896	,052	1,96	2,17	1	3

## Measures of Association

	Eta	Eta Squared
Advantages - I have less travel time * Household	,077	,006
Advantages - Less time is spent on meetings * Household	,172	,030
Advantages - I can decide for myself when I work * Household	,093	,009
Advantages - I can set/determine the temperature by myself * Household	,050	,002
Advantages - I can decide for myself whether and which music I play * Household	,077	,006
Disadvantages - I miss my colleagues * Household	,092	,009
Disadvantages - I cannot do all my work from home * Household	,079	,006
Disadvantages - My home workplace is not ideal * Household	,090	,008
Disadvantages - I find telephone / digital meetings difficult * Household	,126	,016
Disadvantages - I hardly get outside since I started working at home * Household	,118	,014

## ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Advantages - I have less	Between Groups	(Combined)	,380	3	,127	,582	,628
travel time * Household	Within Groups		63,802	293	,218		
	Total		64,182	296			
Advantages - Less time	Between Groups	(Combined)	6,649	3	2,216	2,971	,032
is spent on meetings * Household	Within Groups		218,570	293	,746		
11000011010	Total		225,219	296			
Advantages - I can decide	Between Groups	(Combined)	1,636	3	,545	,844	,471
for myself when I work * Household	Within Groups		188,685	292	,646		
riouseilolu	Total		190,321	295			
Advantages - I can	Between Groups	(Combined)	,198	3	,066	,244	,865
set/determine the temperature by myself *	Within Groups		79,317	293	,271		
Household	Total		79,515	296			
Advantages - I can decide for myself whether and which music I play*	Between Groups	(Combined)	,479	3	,160	,586	,625
	Within Groups		79,518	292	,272		
Household	Total		79,997	295			
Disadvantages - I miss	Between Groups	(Combined)	,609	3	,203	,841	,472
my colleagues * Household	Within Groups		70,724	293	,241		
Tiousenoid	Total		71,333	296			
Disadvantages - I cannot	Between Groups	(Combined)	1,439	3	,480	,611	,609
do all my work from home * Household	Within Groups		229,422	292	,786		
riouscrioia	Total		230,861	295			
Disadvantages - My	Between Groups	(Combined)	1,829	3	,610	,790	,500
home workplace is not ideal * Household	Within Groups		226,232	293	,772		
Tacai Ticascilora	Total		228,061	296			
Disadvantages - I find	Between Groups	(Combined)	3,414	3	1,138	1,565	,198
telephone / digital meetings difficult *	Within Groups		212,367	292	,727		
Household	Total		215,780	295			
Disadvantages - I hardly	Between Groups	(Combined)	3,284	3	1,095	1,368	,253
get outside since I started working at home *	Within Groups		234,500	293	,800		
Household	Total		237,785	296			

## **Multiple Comparisons**

Dependent Variable: Advantages - Less time is spent on meetings

Tukey HSD

		Mean Difference (I			95% Confid	ence Interval
(I) Household	(J) Household	Difference (I- J)	Std. Error	Sig.	Lower Bound	Upper Bound
Living alone, without children	Living together, without children	-,281	,154	,262	-,68	,12
	Single, with children	-,158	,235	,907	-,76	,45
	Living together, with children	,052	,146	,985	-,33	,43
Living together, without children	Living alone, without children	,281	,154	,262	-,12	,68
	Single, with children	,123	,217	,941	-,44	,68
	Living together, with children	,333*	,115	,022	,04	,63
Single, with children	Living alone, without children	,158	,235	,907	-,45	,76
	Living together, without children	-,123	,217	,941	-,68	,44
	Living together, with children	,210	,212	,755	-,34	,76
Living together, with children	Living alone, without children	-,052	,146	,985	-,43	,33
	Living together, without children	-,333*	,115	,022	-,63	-,04
	Single, with children	-,210	,212	,755	-,76	,34

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

# Appendix L

Workplace design preference post-Covid-19 (nominal/dependent) and generations (ordinal/independent).

## Case Processing Summary

Cases

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WPD preference post- Covid-19 * GEN3	264	82,8%	55	17,2%	319	100,0%

## WPD preference post-Covid-19 \* GEN3 Crosstabulation

			GEN3				
			Baby Boomers	Generation X	Millennials	Total	
WPD preference post-	Traditional office	Count	16	25	30	71	
Covid-19		% within GEN3	40,0%	22,9%	26,1%	26,9%	
	Open-plan office	Count	5	6	15	26	
		% within GEN3	12,5%	5,5%	13,0%	9,8%	
	Activity Based Working	Count	19	78	70	167	
		% within GEN3	47,5%	71,6%	60,9%	63,3%	
Total		Count	40	109	115	264	
		% within GEN3	100,0%	100,0%	100,0%	100,0%	

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9,645ª	4	,047
Likelihood Ratio	9,711	4	,046
Linear-by-Linear Association	,917	1	,338
N of Valid Cases	264		

a. 1 cells (11,1%) have expected count less than 5. The minimum expected count is 3,94.

		Value	Approximate Significance
Nominal by Nominal	Phi	,191	,047
	Cramer's V	,135	,047
N of Valid Cases		264	

Days going back to the office post-Covid-19 (nominal/dependent) and generations (ordinal/independent).

# **Case Processing Summary**

Cases

	Valid		Missing		Total		
	N	Percent	N	Percent	N	Percent	
Days going back WAO post-Covid-19 * GEN3	295	92,5%	24	7,5%	319	100,0%	

## Days going back WAO post-Covid-19 \* GEN3 Crosstabulation

			Baby Boomers	Generation X	Millennials	Total
Days going back WAO	Yes, on my full-time day (s)	Count	26	58	59	143
post-Covid-19		% within GEN3	55,3%	50,0%	44,7%	48,5%
	Yes, on my part-time day (s)	Count	7	17	14	38
		% within GEN3	14,9%	14,7%	10,6%	12,9%
	Yes, both on my part-time and full-time days	Count	10	34	46	90
		% within GEN3	21,3%	29,3%	34,8%	30,5%
	No, I don't expect to go	Count	4	7	13	24
	back to the office	% within GEN3	8,5%	6,0%	9,8%	8,1%
Total		Count	47	116	132	295
		% within GEN3	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5,156ª	6	,524
Likelihood Ratio	5,315	6	,504
Linear-by-Linear Association	2,913	1	,088
N of Valid Cases	295		

a. 1 cells (8,3%) have expected count less than 5. The minimum expected count is 3,82.

		Value	Approximate Significance
Nominal by Nominal	Phi	,132	,524
	Cramer's V	,093	,524
N of Valid Cases		295	

# Extent going back to the office post-Covid-19 (nominal/dependent) and generations (ordinal/independent).

## **Case Processing Summary**

Cases

			040	, , , ,			
	Va	lid	Miss	sing	Total		
	N	Percent	N	Percent	N	Percent	
Extent WAO post-Covid- 19 * GEN3	270	84,6%	49	15,4%	319	100,0%	

## Extent WAO post-Covid-19 \* GEN3 Crosstabulation

				GEN3		
			Baby Boomers	Generation X	Millennials	Total
Extent WAO post-Covid- 19	I expect to go to the office	Count	1	0	1	2
	more than before the Covid-19 outbreak	% within GEN3	2,3%	0,0%	0,9%	0,7%
	l expect to go to the office as much as before the Covid-19 outbreak I expect to go to the office	Count	11	15	17	43
		% within GEN3	25,6%	13,6%	14,5%	15,9%
		Count	31	95	99	225
	less than before the Covid-19 outbreak	% within GEN3	72,1%	86,4%	84,6%	83,3%
Total		Count	43	110	117	270
		% within GEN3	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6,112ª	4	,191
Likelihood Ratio	6,051	4	,195
Linear-by-Linear Association	2,129	1	,145
N of Valid Cases	270		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,32.

		Value	Approximate Significance
Nominal by Nominal	Phi	,150	,191
	Cramer's V	,106	,191
N of Valid Cases		270	

## Activities in the workplace post-Covid-19 (scale/dependent) and generations (ordinal/independent)

## **Case Processing Summary**

			Cas	ses			
	Inclu	ded	Exclu	ıded	Total		
	N	Percent	N	Percent	N	Percent	
Activities WAO post- Covid-19 - General office work * GEN3	267	83,7%	52	16,3%	319	100,0%	
Activities WAO post- Covid-19 - Undisturbed office work * GEN3	265	83,1%	54	16,9%	319	100,0%	
Activities WAO post- Covid-19 - Interactive office work * GEN3	266	83,4%	53	16,6%	319	100,0%	
Activities WAO post- Covid-19 - Scheduled consultation with less than 4 people * GEN3	265	83,1%	54	16,9%	319	100,0%	
Activities WAO post- Covid-19 - Scheduled consultation with 4 to 8 people * GEN3	265	83,1%	54	16,9%	319	100,0%	
Activities WAO post- Covid-19 - Scheduled consultation with 8 people or more * GEN3	265	83,1%	54	16,9%	319	100,0%	
Activities WAO post- Covid-19 - Talk on the phone * GEN3	265	83,1%	54	16,9%	319	100,0%	

266

264

83,4%

82,8%

53

55

16,6%

17,2%

319

319

100,0%

100,0%

Activities WAO post-Covid-19 - Reading \*

Activities WAO post-

Covid-19 - Archiving and document management

GEN3

\* GEN3

					Report					
GEN3		Activities WAO post-Covid-19 - General office work	Activities WAO post-Covid-19 - Undisturbed office work	Activities WAO post-Covid-19 - Interactive office work	Activities WAO post-Covid-19 - Scheduled consultation with less than 4 people	Activities WAO post-Covid-19 - Scheduled consultation with 4 to 8 people	Activities WAO post-Covid-19 - Scheduled consultation with 8 people or more	Activities WAO post-Covid-19 - Talk on the phone	Activities WAO post-Covid-19 - Reading	Activities WAO post-Covid-19 - Archiving and document management
Baby Boomers	Mean	2,93	3,54	1,51	2,24	1,88	1,93	3,46	3,90	2,85
	N	41	41	41	41	41	41	41	41	39
	Std. Deviation	1,104	1,227	,553	,916	,812	,877	,977	,944	1,182
Generation X	Mean	3,70	4,05	1,53	2,64	1,96	1,76	4,05	4,27	3,18
	N	109	108	109	109	108	108	109	109	109
	Std. Deviation	1,357	1,203	,740	1,206	1,004	1,022	1,109	1,006	1,448
Millennials	Mean	3,44	3,80	1,58	2,50	1,93	1,89	3,97	3,99	2,90
	N	117	116	116	115	116	116	115	116	116
	Std. Deviation	1,155	1,203	,771	1,180	,921	1,070	,912	,955	1,254
Total	Mean	3,46	3,86	1,55	2,52	1,94	1,84	3,92	4,09	3,01
	N	267	265	266	265	265	265	265	266	264
	Std. Deviation	1,257	1,215	,726	1,158	,937	1,021	1,023	,983	1,331

Descriptives

				Descriptives	•				
						95% Confider Me	ice Interval for an		
		Ν	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Activities WAO post-	Baby Boomers	41	2,93	1,104	,172	2,58	3,28	1	5
Covid-19 - General office work	Generation X	109	3,70	1,357	,130	3,44	3,95	1	5
WOIN	Millennials	117	3,44	1,155	,107	3,22	3,65	1	5
	Total	267	3,46	1,257	,077	3,31	3,62	1	5
Activities WAO post-	Baby Boomers	41	3,54	1,227	,192	3,15	3,92	1	5
Covid-19 - Undisturbed office work	Generation X	108	4,05	1,203	,116	3,82	4,28	1	5
Ollice Work	Millennials	116	3,80	1,203	,112	3,58	4,02	1	5
	Total	265	3,86	1,215	,075	3,71	4,01	1	5
Activities WAO post-	Baby Boomers	41	1,51	,553	,086	1,34	1,69	1	3
Covid-19 - Interactive office work	Generation X	109	1,53	,740	,071	1,39	1,67	1	5
OIIICE WORK	Millennials	116	1,58	,771	,072	1,44	1,72	1	5
	Total	266	1,55	,726	,045	1,46	1,64	1	5
Activities WAO post-	Baby Boomers	41	2,24	,916	,143	1,95	2,53	1	4
Covid-19 - Scheduled consultation with less	Generation X	109	2,64	1,206	,116	2,41	2,87	1	5
than 4 people	Millennials	115	2,50	1,180	,110	2,28	2,71	1	5
	Total	265	2,52	1,158	,071	2,38	2,66	1	5
Activities WAO post-	Baby Boomers	41	1,88	,812	,127	1,62	2,13	1	4
Covid-19 - Scheduled consultation with 4 to 8	Generation X	108	1,96	1,004	,097	1,77	2,15	1	5
people	Millennials	116	1,93	,921	,085	1,76	2,10	1	5
	Total	265	1,94	,937	,058	1,82	2,05	1	5
Activities WAO post-	Baby Boomers	41	1,93	,877	,137	1,65	2,20	1	4
Covid-19 - Scheduled consultation with 8	Generation X	108	1,76	1,022	,098	1,56	1,95	1	5
people or more	Millennials	116	1,89	1,070	,099	1,69	2,08	1	5
	Total	265	1,84	1,021	,063	1,72	1,97	1	5
Activities WAO post-	Baby Boomers	41	3,46	,977	,153	3,15	3,77	1	5
Covid-19 - Talk on the phone	Generation X	109	4,05	1,109	,106	3,84	4,26	1	5
priorie	Millennials	115	3,97	,912	,085	3,81	4,14	1	5
	Total	265	3,92	1,023	,063	3,80	4,05	1	5
Activities WAO post-	Baby Boomers	41	3,90	,944	,147	3,60	4,20	1	5
Covid-19 - Reading	Generation X	109	4,27	1,006	,096	4,08	4,46	1	5
	Millennials	116	3,99	,955	,089	3,82	4,17	1	5
	Total	266	4,09	,983	,060	3,97	4,21	1	5
Activities WAO post-	Baby Boomers	39	2,85	1,182	,189	2,46	3,23	1	5
Covid-19 - Archiving and document management	Generation X	109	3,18	1,448	,139	2,91	3,46	1	5
uocument management	Millennials	116	2,90	1,254	,116	2,67	3,13	1	5
	Total	264	3,01	1,331	.082	2,85	3,17	1	5

## Measures of Association

	Eta	Eta Squared
Activities WAO post- Covid-19 - General office work * GEN3	,206	,042
Activities WAO post- Covid-19 - Undisturbed office work * GEN3	,147	,022
Activities WAO post- Covid-19 - Interactive office work * GEN3	,036	,001
Activities WAO post- Covid-19 - Scheduled consultation with less than 4 people * GEN3	,117	,014
Activities WAO post- Covid-19 - Scheduled consultation with 4 to 8 people * GEN3	,031	,001
Activities WAO post- Covid-19 - Scheduled consultation with 8 people or more * GEN3	,068	,005
Activities WAO post- Covid-19 - Talk on the phone * GEN3	,196	,038
Activities WAO post- Covid-19 - Reading * GEN3	,152	,023
Activities WAO post- Covid-19 - Archiving and document management * GEN3	,112	,012

### ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Activities WAO post-	Between Groups	(Combined)	17,853	2	8,927	5,854	,003
Covid-19 - General office work * GEN3	Within Groups		402,559	264	1,525		
WOIN OLIVO	Total		420,412	266			
Activities WAO post-	Between Groups	(Combined)	8,431	2	4,215	2,896	,057
Covid-19 - Undisturbed office work * GEN3	Within Groups		381,403	262	1,456		
	Total		389,834	264			
Activities WAO post- Covid-19 - Interactive office work * GEN3	Between Groups	(Combined)	,181	2	,091	,171	,843
	Within Groups		139,683	263	,531		
	Total		139,865	265			
Activities WAO post-	Between Groups	(Combined)	4,819	2	2,409	1,807	,166
Covid-19 - Scheduled consultation with less	Within Groups		349,355	262	1,333		
than 4 people * GEN3	Total		354,174	264			
Activities WAO post-	Between Groups	(Combined)	,219	2	,110	,124	,884
Covid-19 - Scheduled consultation with 4 to 8	Within Groups		231,690	262	,884		
people * GEN3	Total		231,909	264			
Activities WAO post-	Between Groups	(Combined)	1,279	2	,640	,611	,543
Covid-19 - Scheduled consultation with 8	Within Groups		274,064	262	1,046		
people or more * GEN3	Total		275,343	264			
Activities WAO post-	Between Groups	(Combined)	10,603	2	5,302	5,224	,006
Covid-19 - Talk on the phone * GEN3	Within Groups		265,888	262	1,015		
priorie OLIVS	Total		276,491	264			
Activities WAO post-	Between Groups	(Combined)	5,949	2	2,975	3,131	,045
Covid-19 - Reading * GEN3	Within Groups		249,886	263	,950		
	Total		255,835	265			
Activities WAO post-	Between Groups	(Combined)	5,819	2	2,910	1,650	,194
Covid-19 - Archiving and document management *	Within Groups		460,166	261	1,763		
GEN3	Total		465,985	263			

## **Multiple Comparisons**

### Tukey HSD

TakeyTIOD							
			Mean Difference (I-			95% Confidence Interval	
Dependent Variable	(I) GEN3	(J) GEN3	J)	Std. Error	Sig.	Lower Bound	Upper Bound
Activities WAO post-	Baby Boomers	Generation X	-,770*	,226	,002	-1,30	-,24
Covid-19 - General office work		Millennials	-,509	,224	,062	-1,04	,02
	Generation X	Baby Boomers	,770*	,226	,002	,24	1,30
		Millennials	,261	,164	,252	-,13	,65
	Millennials	Baby Boomers	,509	,224	,062	-,02	1,04
		Generation X	-,261	,164	,252	-,65	,13
Activities WAO post-	Baby Boomers	Generation X	-,510	,221	,057	-1,03	,01
Covid-19 - Undisturbed office work		Millennials	-,265	,219	,449	-,78	,25
	Generation X	Baby Boomers	,510	,221	,057	-,01	1,03
		Millennials	,245	,161	,285	-,14	,62
	Millennials	Baby Boomers	,265	,219	,449	-,25	,78
		Generation X	-,245	,161	,285	-,62	,14
Activities WAO post-	Baby Boomers	Generation X	-,582*	,185	,005	-1,02	-,15
Covid-19 - Talk on the phone		Millennials	-,510*	,183	,016	-,94	-,08
	Generation X	Baby Boomers	,582*	,185	,005	,15	1,02
		Millennials	,072	,135	,855	-,25	,39
	Millennials	Baby Boomers	,510	,183	,016	,08	,94
		Generation X	-,072	,135	,855	-,39	,25
Activities WAO post-	Baby Boomers	Generation X	-,364	,179	,106	-,78	,06
Covid-19 - Reading		Millennials	-,089	,177	,870	-,51	,33
	Generation X	Baby Boomers	,364	,179	,106	-,06	,78
		Millennials	,275	,130	,089	-,03	,58
	Millennials	Baby Boomers	,089	,177	,870	-,33	,51
		Generation X	-,275	,130	,089	-,58	,03

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

# Appendix M

Gender (nominal/independent) and days going back to the office post-Covid-19 (nominal/dependent)

## Crosstab

			Gen	ider	
			Man	Female	Total
Days going back WAO	Yes, on my full-time day	Count	50	93	143
post-Covid-19	(S)	% within Gender	58,1%	44,5%	48,5%
	Yes, on my part-time day	Count	5	33	38
	(s)	% within Gender	5,8%	15,8%	12,9%
	Yes, both on my part-time	Count	26	64	90
	and full-time days	% within Gender	30,2%	30,6%	30,5%
	No, I don't expect to go	Count	5	19	24
	back to the office	% within Gender	5,8%	9,1%	8,1%
Total		Count	86	209	295
,	hi-Sauare Tests		100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7,853ª	3	,049
Likelihood Ratio	8,600	3	,035
Linear-by-Linear Association	2,308	1	,129
N of Valid Cases	295		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,00.

		Value	Approximate Significance
Nominal by Nominal	Phi	,163	,049
	Cramer's V	,163	,049
N of Valid Cases		295	

## Gender (nominal/independent) and WPD preference post-Covid-19 (nominal/dependent)

## Crosstab

			Gen	Gender		
			Man	Female	Total	
WPD preference post-	Traditional office	Count	23	48	71	
Covid-19		% within Gender	28,7%	26,1%	26,9%	
	Open-plan office	Count	8	18	26	
		% within Gender	10,0%	9,8%	9,8%	
	Activity Based Working	Count	49	118	167	
		% within Gender	61,3%	64,1%	63,3%	
Total		Count	80	184	264	
		% within Gender	100,0%	100,0%	100,0%	

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	,223ª	2	,895
Likelihood Ratio	,221	2	,895
Linear-by-Linear Association	,222	1	,638
N of Valid Cases	264		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,88.

		Value	Approximate Significance
Nominal by Nominal	Phi	,029	,895
	Cramer's V	,029	,895
N of Valid Cases		264	

# Employment (nominal/independent) and days going back to the office post-Covid-19 (nominal/dependent)

### Crosstab

				Employment		
			Fulltime (36 hours or more)	Parttime (less than 36 hours)	Temporary (Interim/Intern )	Total
Days going back WAO post-Covid-19  Yes, on my full-time day (s)  Yes, on my part-time day (s)  Yes, both on my part-time and full-time days  No, I don't expect to go back to the office	Count	90	44	7	141	
	% within Employment	61,2%	34,1%	41,2%	48,1%	
	Count	6	31	1	38	
	% within Employment	4,1%	24,0%	5,9%	13,0%	
	Count	44	41	5	90	
	% within Employment	29,9%	31,8%	29,4%	30,7%	
	Count	7	13	4	24	
	% within Employment	4,8%	10,1%	23,5%	8,2%	
Total		Count	147	129	17	293
		% within Employment	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	40,101ª	6	,000
Likelihood Ratio	39,977	6	,000
Linear-by-Linear Association	11,294	1	,001
N of Valid Cases	293		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 1,39.

		Value	Approximate Significance
Nominal by Nominal	Phi	,370	,000
	Cramer's V	,262	,000
N of Valid Cases		293	

# Composition household (nominal/independent) and days going back to the office post-Covid-19 (nominal/dependent)

### Crosstab

			Living alone, without children	Living together, without children	Single, with children	Living together, with children	Total
Days going back WAO Yes, on my full-time day post-Covid-19 (s)	Count	26	50	9	58	143	
	% within Household	55,3%	52,1%	47,4%	43,6%	48,5%	
	Yes, on my part-time day	Count	3	12	1	22	38
(s)  Yes, both on my part-time	% within Household	6,4%	12,5%	5,3%	16,5%	12,9%	
		Count	14	26	8	42	90
	and full-time days	% within Household	29,8%	27,1%	42,1%	31,6%	30,5%
	No, I don't expect to go	Count	4	8	1	11	24
back to the office	back to the office	% within Household	8,5%	8,3%	5,3%	8,3%	8,1%
Total		Count	47	96	19	133	295
		% within Household	100,0%	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6,630ª	9	,676
Likelihood Ratio	7,068	9	,630
Linear-by-Linear Association	,974	1	,324
N of Valid Cases	295		

a. 3 cells (18,8%) have expected count less than 5. The minimum expected count is 1,55.

		Value	Approximate Significance
Nominal by Nominal	Phi	,150	,676
	Cramer's V	,087	,676
N of Valid Cases		295	

# Appendix N

## Gender

Gender (nominal/independent) and Extent going back to the office post-Covid-19

## Case Processing Summary

Cases Valid Missing Total Percent Ν Percent Ν Ν Percent Extent WAO post-Covid-270 84,6% 15,4% 319 100,0% 49 19 \* Gender Days going back WAO 295 92,5% 24 7,5% 319 100,0% post-Covid-19 \* Gender WPD preference post-264 82,8% 55 17,2% 319 100,0% Covid-19 \* Gender

#### Crosstab

			Gender		
			Man	Female	Total
Extent WAO post-Covid- 19	I expect to go to the office more than before the Covid-19 outbreak	Count	1	1	2
		% within Gender	1,2%	0,5%	0,7%
	I expect to go to the office as much as before the Covid-19 outbreak	Count	12	31	43
		% within Gender	14,8%	16,4%	15,9%
	I expect to go to the office less than before the Covid-19 outbreak	Count	68	157	225
		% within Gender	84,0%	83,1%	83,3%
Total		Count	81	189	270
		% within Gender	100,0%	100,0%	100,0%

# **Chi-Square Tests**

## (nominal/dependent)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	,476ª	2	,788
Likelihood Ratio	,445	2	,801
Linear-by-Linear Association	,001	1	,973
N of Valid Cases	270		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is ,60.

		Value	Approximate Significance
Nominal by Nominal	Phi	,042	,788
	Cramer's V	,042	,788
N of Valid Cases		270	

## **Function**

Function (nominal/independent) and the extent of going back to the office post-Covid-19 (nominal/dependent)

# **Case Processing Summary**

Cases

		04303							
	Va	lid	Miss	sing	Total				
	N Percent		N	Percent	N	Percent			
Extent WAO post-Covid- 19 * Function	270	84,6%	49	15,4%	319	100,0%			
Days going back WAO post-Covid-19 * Function	295	92,5%	24	7,5%	319	100,0%			
WPD preference post- Covid-19 * Function	264	82,8%	55	17,2%	319	100,0%			

Cros	sta
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						Funct	ion				
			Management	Head of department	Project leader / project manager	Advisor	Senior employee	Employee	Junior employee	Intern	Total
Extent WAO post-Covid-	I expect to go to the office	Count	0	0	0	1	0	1	0	0	2
19	more than before the Covid-19 outbreak	% within Function	0,0%	0,0%	0,0%	1,1%	0,0%	0,9%	0,0%	0,0%	0,7%
	I expect to go to the office as much as before the Covid-19 outbreak	Count	0	2	3	10	5	20	3	0	43
		% within Function	0,0%	40,0%	13,6%	10,8%	29,4%	17,5%	25,0%	0,0%	15,9%
	I expect to go to the office	Count	4	3	19	82	12	93	9	3	225
	less than before the Covid-19 outbreak	% within Function	100,0%	60,0%	86,4%	88,2%	70,6%	81,6%	75,0%	100,0%	83,3%
Total		Count	4	5	22	93	17	114	12	3	270
		% within Function	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9,274 <sup>a</sup>	14	,813,
Likelihood Ratio	10,048	14	,759
Linear-by-Linear Association	,771	1	,380
N of Valid Cases	270		

a. 17 cells (70,8%) have expected count less than 5. The minimum expected count is ,02.

		Value	Approximate Significance
Nominal by Nominal	Phi	,185	,813
	Cramer's V	,131	,813
N of Valid Cases		270	

# Function (nominal/independent) and days going back to the office post-Covid-19 (nominal/dependent)

			Crossta	ıb								
						Fu	nction					
			Managing board	Management	Head of department	Project leader / project manager	Advisor	Senior employee	Employee	Junior employee	Intern	Total
Days going back WAO Yes, on my full-time post-Covid-19 (s)	Yes, on my full-time day	Count	0	2	2	10	53	10	57	6	3	143
	(s)	% within Function	0,0%	40,0%	40,0%	40,0%	54,1%	52,6%	46,0%	40,0%	100,0%	48,5%
	Yes, on my part-time day	Count	0	0	0	4	5	1	27	1	0	38
	(s)	% within Function	0,0%	0,0%	0,0%	16,0%	5,1%	5,3%	21,8%	6,7%	0,0%	12,9%
	Yes, both on my part-time	Count	0	2	3	8	36	6	30	5	0	90
	and full-time days	% within Function	0,0%	40,0%	60,0%	32,0%	36,7%	31,6%	24,2%	33,3%	0,0%	30,5%
	No, I don't expect to go	Count	1	1	0	3	4	2	10	3	0	24
back to the	back to the office	% within Function	100,0%	20,0%	0,0%	12,0%	4,1%	10,5%	8,1%	20,0%	0,0%	8,1%
Total		Count	1	5	5	25	98	19	124	15	3	295
		% within Function	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	42,029 <sup>a</sup>	24	,013
Likelihood Ratio	38,109	24	,034
Linear-by-Linear Association	1,121	1	,290
N of Valid Cases	295		

a. 23 cells (63,9%) have expected count less than 5. The minimum expected count is ,08.

		Value	Approximate Significance
Nominal by Nominal	Phi	,377	,013
	Cramer's V	,218	,013
N of Valid Cases		295	

## Function (nominal/independent) and WPD preference post-covid-19 (nominal/dependent)

С	ros	sta
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			Function									
			Management	Head of department	Project leader / project manager	Advisor	Senior employee	Employee	Junior employee	Intern	Total	
WPD preference post-	Traditional office	Count	0	0	3	23	3	41	1	0	71	
Covid-19		% within Function	0,0%	0,0%	14,3%	24,7%	18,8%	37,3%	8,3%	0,0%	26,9%	
	Open-plan office	Count	0	0	1	8	2	13	2	0	26	
		% within Function	0,0%	0,0%	4,8%	8,6%	12,5%	11,8%	16,7%	0,0%	9,8%	
	Activity Based Working	Count	4	5	17	62	11	56	9	3	167	
		% within Function	100,0%	100,0%	81,0%	66,7%	68,8%	50,9%	75,0%	100,0%	63,3%	
Total		Count	4	5	21	93	16	110	12	3	264	
		% within Function	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20,723ª	14	,109
Likelihood Ratio	25,241	14	,032
Linear-by-Linear Association	6,803	1	,009
N of Valid Cases	264		

a. 14 cells (58,3%) have expected count less than 5. The minimum expected count is ,30.

		Value	Approximate Significance
Nominal by Nominal	Phi	,280	,109
	Cramer's V	,198	,109
N of Valid Cases		264	

## **Employment**

Employment (nominal/independent) and the extent of going back to the office post-Covid-19 (nominal/dependent)

# **Case Processing Summary**

Cases

	04000					
	Va	lid	Miss	Missing		tal
	N	Percent	N	Percent	N	Percent
Extent WAO post-Covid- 19 * Employment	268	84,0%	51	16,0%	319	100,0%
Days going back WAO post-Covid-19 * Employment	293	91,8%	26	8,2%	319	100,0%
WPD preference post- Covid-19 * Employment	262	82,1%	57	17,9%	319	100,0%

### Crosstab

		Employment				
			Fulltime (36 hours or more)	Parttime (less than 36 hours)	Temporary (Interim/Intern )	Total
Extent WAO post-Covid-	I expect to go to the office	Count	1	1	0	2
19	more than before the Covid-19 outbreak	% within Employment	0,7%	0,9%	0,0%	0,7%
	I expect to go to the office as much as before the Covid-19 outbreak	Count	22	19	2	43
		% within Employment	15,9%	16,2%	15,4%	16,0%
	I expect to go to the office	Count	115	97	11	223
	less than before the Covid-19 outbreak	% within Employment	83,3%	82,9%	84,6%	83,2%
Total		Count	138	117	13	268
		% within Employment	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	,128ª	4	,998
Likelihood Ratio	,224	4	,994
Linear-by-Linear Association	,000	1	,984
N of Valid Cases	268		

a. 4 cells (44,4%) have expected count less than 5. The minimum expected count is ,10.

		Value	Approximate Significance
Nominal by Nominal	Phi	,022	,998
	Cramer's V	,015	,998
N of Valid Cases		268	

## Employment (nominal/independent) and WPD preference post-covid-19 (nominal/dependent)

### Crosstab

		Employment				
			Fulltime (36 hours or more)	Parttime (less than 36 hours)	Temporary (Interim/Intern )	Total
WPD preference post-	Traditional office	Count	42	27	2	71
Covid-19		% within Employment	30,9%	23,9%	15,4%	27,1%
	Open-plan office	Count	14	11	0	25
		% within Employment	10,3%	9,7%	0,0%	9,5%
	Activity Based Working	Count	80	75	11	166
		% within Employment	58,8%	66,4%	84,6%	63,4%
Total		Count	136	113	13	262
		% within Employment	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4,661 <sup>a</sup>	4	,324
Likelihood Ratio	5,928	4	,205
Linear-by-Linear Association	3,436	1	,064
N of Valid Cases	262		

a. 2 cells (22,2%) have expected count less than 5. The minimum expected count is 1,24.

		Value	Approximate Significance
Nominal by Nominal	Phi	,133	,324
	Cramer's V	,094	,324
N of Valid Cases		262	

## Composition household

Composition household (nominal/independent) and the extent of going back to the office post-Covid-19(nominal/dependent)

# Case Processing Summary

Cases

		Cases				
	Va	lid	Miss	Missing		tal
	N	Percent	N	Percent	N	Percent
Extent WAO post-Covid- 19 * Household	270	84,6%	49	15,4%	319	100,0%
Days going back WAO post-Covid-19 * Household	295	92,5%	24	7,5%	319	100,0%
WPD preference post- Covid-19 * Household	264	82,8%	55	17,2%	319	100,0%

### Crosstab

		Household					
			Living alone, without children	Living together, without children	Single, with children	Living together, with children	Total
19 more than Covid-19  I expect to as much: Covid-19  I expect to less than	I expect to go to the office	Count	0	1	0	1	2
	more than before the Covid-19 outbreak	% within Household	0,0%	1,2%	0,0%	0,8%	0,7%
	I expect to go to the office as much as before the Covid-19 outbreak	Count	11	15	3	14	43
		% within Household	25,6%	17,4%	16,7%	11,4%	15,9%
	I expect to go to the office	Count	32	70	15	108	225
	less than before the Covid-19 outbreak	% within Household	74,4%	81,4%	83,3%	87,8%	83,3%
Total		Count	43	86	18	123	270
		% within Household	100,0%	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5,653ª	6	,463
Likelihood Ratio	5,864	6	,439
Linear-by-Linear Association	3,535	1	,060
N of Valid Cases	270		

a. 5 cells (41,7%) have expected count less than 5. The minimum expected count is ,13.

		Value	Approximate Significance
Nominal by Nominal	Phi	,145	,463
	Cramer's V	,102	,463
N of Valid Cases		270	

# Composition household (nominal/independent) and WPD preference post-covid-19 (nominal/dependent)

### Crosstab

				Household				
			Living alone, without children	Living together, without children	Single, with children	Living together, with children	Total	
WPD preference post-	Traditional office	Count	11	23	4	33	71	
Covid-19		% within Household	26,8%	27,1%	22,2%	27,5%	26,9%	
	Open-plan office	Count	4	9	3	10	26	
		% within Household	9,8%	10,6%	16,7%	8,3%	9,8%	
	Activity Based Working	Count	26	53	11	77	167	
		% within Household	63,4%	62,4%	61,1%	64,2%	63,3%	
Total		Count	41	85	18	120	264	
		% within Household	100,0%	100,0%	100,0%	100,0%	100,0%	

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1,380ª	6	,967
Likelihood Ratio	1,256	6	,974
Linear-by-Linear Association	,004	1	,948
N of Valid Cases	264		

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is 1,77.

		Value	Approximate Significance
Nominal by Nominal	Phi	,072	,967
	Cramer's V	,051	,967
N of Valid Cases		264	

Having a private home office (location at the house)

Having a private home office (nominal/independent) and the extent of going back to the office post—

Covid-19 (nominal/dependent)

## Case Processing Summary

Cases Valid Total Missing Ν Percent Ν Percent Ν Percent Extent WAO post-Covid-270 84,6% 15,4% 319 100,0% 49 19 \* Location in the house Days going back WAO 295 92,5% 24 7,5% 319 100,0% post-Covid-19 \* Location in the house WPD preference post-264 82,8% 55 17,2% 319 100,0%

#### Crosstab

		CIOSSIAD				
			Lo	cation in the hous	se	
			Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/childr en) also use this space to work/study	No, I don't have the option to work secluded	Total
Extent WAO post-Covid-	I expect to go to the office	Count	1	0	1	2
19	more than before the Covid-19 outbreak	% within Location in the house	0,5%	0,0%	2,2%	0,7%
	I expect to go to the office as much as before the Covid-19 outbreak	Count	23	8	12	43
		% within Location in the house	12,0%	24,2%	26,7%	15,9%
less than before	I expect to go to the office	Count	168	25	32	225
	Covid-19 outbreak	% within Location in the house	87,5%	75,8%	71,1%	83,3%
Total		Count	192	33	45	270
		% within Location in the house	100,0%	100,0%	100,0%	100,0%

## **Chi-Square Tests**

Covid-19 \* Location in the

house

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9,708ª	4	,046
Likelihood Ratio	8,964	4	,062
Linear-by-Linear Association	8,518	1	,004
N of Valid Cases	270		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,24.

		Value	Approximate Significance
Nominal by Nominal	Phi	,190	,046
	Cramer's V	,134	,046
N of Valid Cases		270	

# Having a private home office (location at the house) (nominal/independent) and days going back to the office post-Covid-19 (nominal/dependent)

#### Crosstab

			Lo	cation in the hous	se	
			Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/childr en) also use this space to work/study	No, I don't have the option to work secluded	Total
Days going back WAO	Yes, on my full-time day	Count	111	15	17	143
post-Covid-19	(s)	% within Location in the house	52,1%	45,5%	34,7%	48,5%
	Yes, on my part-time day (s)	Count	21	7	10	38
		% within Location in the house	9,9%	21,2%	20,4%	12,9%
	Yes, both on my part-time and full-time days	Count	62	10	18	90
		% within Location in the house	29,1%	30,3%	36,7%	30,5%
	No, I don't expect to go	Count	19	1	4	24
ba	back to the office	% within Location in the house	8,9%	3,0%	8,2%	8,1%
Total		Count	213	33	49	295
		% within Location in the house	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9,985ª	6	,125
Likelihood Ratio	9,994	6	,125
Linear-by-Linear Association	1,552	1	,213
N of Valid Cases	295		

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is 2,68.

		Value	Approximate Significance
Nominal by Nominal	Phi	,184	,125
	Cramer's V	,130	,125
N of Valid Cases		295	

Having a private home office (location at the house) (nominal/independent) and WPD preference post-covid-19 (nominal/dependent)

С	ro	s	s	ta	b

			Lo	cation in the hou	se	
			Yes, I can work completely secluded in a separate room	Yes, but my housemates (partner/childr en) also use this space to work/study	No, I don't have the option to work secluded	Total
WPD preference post- Covid-19	Traditional office	Count	49	6	16	71
		% within Location in the house	26,2%	18,8%	35,6%	26,9%
	Open-plan office	Count	15	7	4	26
		% within Location in the house	8,0%	21,9%	8,9%	9,8%
	Activity Based Working	Count	123	19	25	167
		% within Location in the house	65,8%	59,4%	55,6%	63,3%
Total		Count	187	32	45	264
		% within Location in the house	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8,139ª	4	,087
Likelihood Ratio	6,955	4	,138
Linear-by-Linear Association	1,486	1	,223
N of Valid Cases	264		

a. 2 cells (22,2%) have expected count less than 5. The minimum expected count is 3,15.

		Value	Approximate Significance
Nominal by Nominal	Phi	,176	,087
	Cramer's V	,124	,087
N of Valid Cases		264	

## Commute distance

Commute distance (ordinal/independent) and the extent of going back to the office post-Covid-19 (nominal/dependent)

## Case Processing Summary

Cases Valid Missing Total Ν Percent Percent Ν Ν Percent Extent WAO post-Covid-270 84,6% 49 15,4% 319 100,0% 19 \* Commute distance Days going back WAO 295 92,5% 24 7,5% 319 100,0% post-Covid-19 \* Commute distance WPD preference post-264 82,8% 55 17,2% 319 100,0% Covid-19 \* Commute distance

	Crosstab											
			Commute distance									
			0-5 kilometer	6-10 kilometer	11-15 kilometer	16-20 kilometer	21-25 kilometer	26-30 kilometer	31-40 kilometer	41-50 kilometer	more than 50 kilometer	Total
Extent WAO post-Covid-	I expect to go to the office	Count	0	2	0	0	0	0	0	0	0	2
19	more than before the Covid-19 outbreak	% within Commute distance	0,0%	7,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,7%
	I expect to go to the office	Count	14	7	4	4	4	1	2	2	5	43
	as much as before the Covid-19 outbreak	% within Commute distance	13,3%	25,0%	18,2%	17,4%	21,1%	7,7%	11,1%	15,4%	17,2%	15,9%
	I expect to go to the office	Count	91	19	18	19	15	12	16	11	24	225
	less than before the Covid-19 outbreak	% within Commute distance	86,7%	67,9%	81,8%	82,6%	78,9%	92,3%	88,9%	84,6%	82,8%	83,3%
Total		Count	105	28	22	23	19	13	18	13	29	270
		% within Commute distance	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

## Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	21,633ª	16	,155
Likelihood Ratio	13,400	16	,643
Linear-by-Linear Association	,106	1	,744
N of Valid Cases	270		

a. 17 cells (63,0%) have expected count less than 5. The minimum expected count is ,10.

		Value	Approximate Significance
Nominal by Nominal	Phi	,283	,155
	Cramer's V	,200	,155
N of Valid Cases		270	

# Commute distance (ordinal/independent) and days going back to the office post-Covid-19 (nominal/dependent)

			Crosstab									
						(	Commute distance					
			0-5 kilometer	6-10 kilometer	11-15 kilometer	16-20 kilometer	21-25 kilometer	26-30 kilometer	31-40 kilometer	41-50 kilometer	more than 50 kilometer	Total
Days going back WAO	Yes, on my full-time day	Count	50	15	14	10	8	7	10	7	22	143
post-Covid-19	post-Covid-19 (s)	% within Commute distance	45,5%	50,0%	58,3%	41,7%	38,1%	46,7%	43,5%	43,8%	68,8%	48,5%
Yes, on my part-time da (s)	Yes, on my part-time day	Count	20	6	3	6	0	1	1	1	0	38
	(s)	% within Commute distance	18,2%	20,0%	12,5%	25,0%	0,0%	6,7%	4,3%	6,3%	0,0%	12,9%
	Yes, both on my part-time	Count	35	7	5	7	12	5	7	5	7	90
	and full-time days	% within Commute distance	31,8%	23,3%	20,8%	29,2%	57,1%	33,3%	30,4%	31,3%	21,9%	30,5%
	No, I don't expect to go	Count	5	2	2	1	1	2	5	3	3	24
back t	back to the office	% within Commute distance	4,5%	6,7%	8,3%	4,2%	4,8%	13,3%	21,7%	18,8%	9,4%	8,1%
Total		Count	110	30	24	24	21	15	23	16	32	295
		% within Commute distance	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	37,370ª	24	,040
Likelihood Ratio	40,911	24	,017
Linear-by-Linear Association	,301	1	,583
N of Valid Cases	295		

a. 18 cells (50,0%) have expected count less than 5. The minimum expected count is 1,22.

		Value	Approximate Significance
Nominal by Nominal	Phi	,356	,040
	Cramer's V	,205	,040
N of Valid Cases		295	

## Commute distance (ordinal/independent) and WPD preference post-covid-19 (nominal/dependent)

			Crosstab									
						(	Commute distanc	e				
			0-5 kilometer	6-10 kilometer	11-15 kilometer	16-20 kilometer	21-25 kilometer	26-30 kilometer	31-40 kilometer	41-50 kilometer	more than 50 kilometer	Total
WPD preference post-	Traditional office	Count	26	11	6	7	4	2	2	7	6	71
Covid-19 Op		% within Commute distance	24,5%	39,3%	28,6%	33,3%	21,1%	15,4%	12,5%	53,8%	22,2%	26,9%
	Open-plan office	Count	12	3	0	1	2	1	2	2	3	26
		% within Commute distance	11,3%	10,7%	0,0%	4,8%	10,5%	7,7%	12,5%	15,4%	11,1%	9,8%
	Activity Based Working	Count	68	14	15	13	13	10	12	4	18	167
		% within Commute distance	64,2%	50,0%	71,4%	61,9%	68,4%	76,9%	75,0%	30,8%	66,7%	63,3%
Total		Count	106	28	21	21	19	13	16	13	27	264
		% within Commute distance	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15,567ª	16	,484
Likelihood Ratio	17,649	16	,345
Linear-by-Linear Association	,009	1	,925
N of Valid Cases	264		

a. 11 cells (40,7%) have expected count less than 5. The minimum expected count is 1,28.

		Value	Approximate Significance
Nominal by Nominal	Phi	,243	,484
	Cramer's V	,172	,484
N of Valid Cases		264	