

MASTER THESIS

ADDRESSING PSYCHOLOGICAL NEEDS IN REMOTE WORK IN THE PUBLIC SECTOR THROUGH LAISSEZ-FAIRE AND DIGITAL LEADERSHIP BEHAVIOUR

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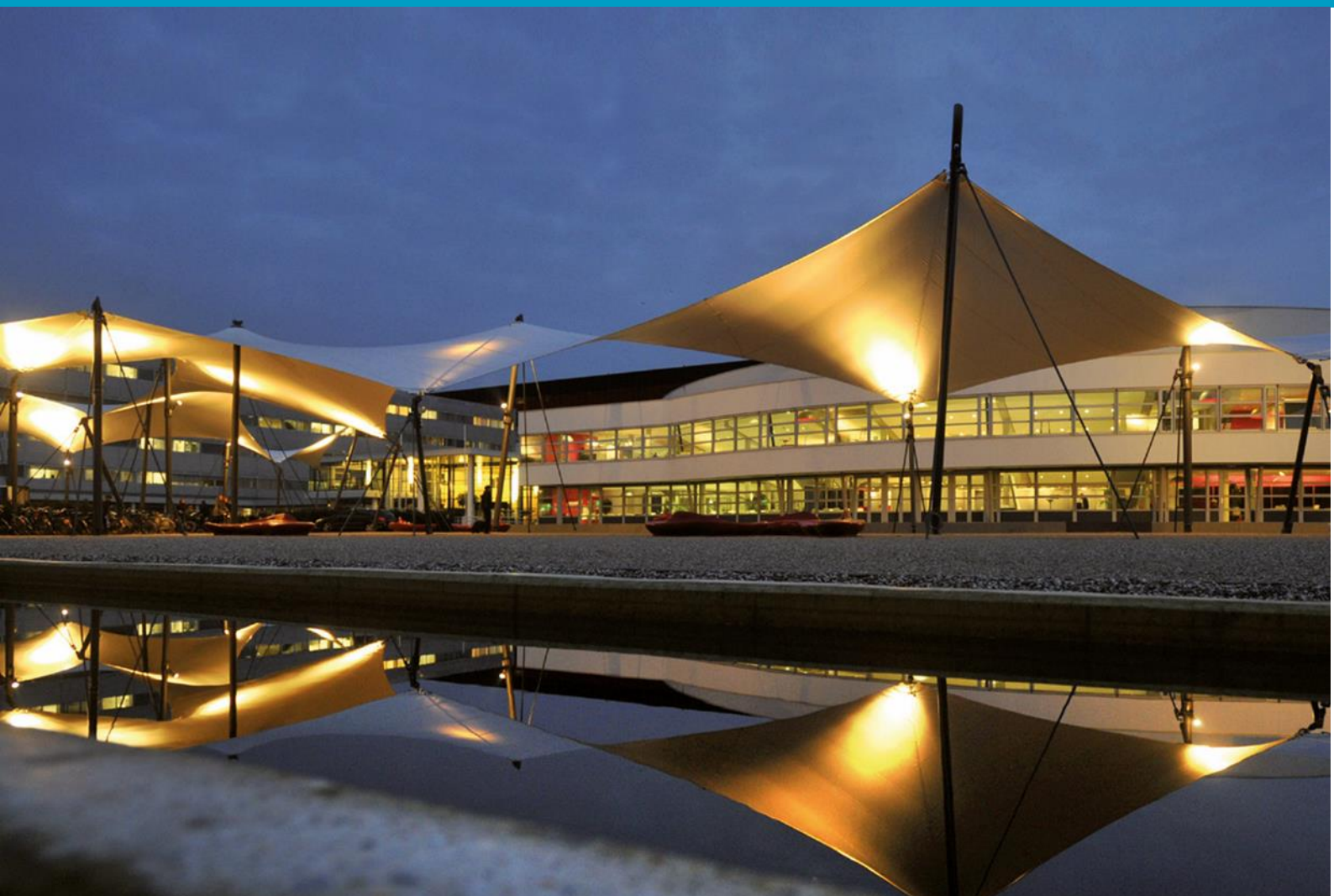
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ABSTRACT

The covid-19 pandemic has been the driver of an increase in remote work and due to the integration of remote work into organisations, this type of work will stay important. Additionally, the integration of remote work into the public sector may be more difficult as this sector experiences barriers to technological change. This study aims to investigate the relationship between leadership behaviour and the fulfilment of psychological needs to understand how this leadership behaviour can be used to shape the remote work context in the public sector. Eighteen employees of a Dutch municipality were asked about displayed leadership behaviour, psychological need fulfilment and employee experience through semi-structured interviews. The results show how both laissez-faire leadership behaviour and digital leadership behaviour address psychological need fulfilment in employees. Furthermore, the paper highlights the employee experiences that happen as a result of psychological need fulfilment, rather than focusing on employee motivation as the only outcome of psychological need fulfilment. Specifically looking at the public sector context, this paper suggests remote work to be an explanation for sufficient autonomy support in a public sector organisation.

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1. Introduction

During the covid-19 pandemic, the SARS-CoV-2 virus created an immense health risk with the deaths of many humans as a result of catching the virus (Sagnelli et al., 2020). Different policies were introduced to limit the risk of infection, including working from home (Buchanan et al., 2021). This change to more remote work drives digital transformation of the workforce (Savić, 2020) to one that allows for a successful remote work environment. Gifford (2022) highlights that due to the increased incorporation of remote work during the covid-19 pandemic, it is likely that this type of work will stay an integral part of the organisation. Thus, it is important to understand how companies can best respond to this type of environment.

Additionally, understanding how to respond to the remote context is of particular importance in the public sector because those organisations experience barriers to digital transformation such as bureaucratic norms and institutionalized cultures (Norling, 2024) which may hinder the successful implementation of remote work. These bureaucratic norms tend to favour the status quo, which can make it difficult to implement changes in such an organisation (Norling, 2024). In addition, changes can take time to be implemented as decisions are made at government level (Bjerke-Busch & Aspelund, 2021). Because of the existing barriers in the public sector, there is no rapid digital transformation observed in that sector (Bjerke-Busch & Aspelund, 2021). This makes it difficult for public sector organisations to keep up with the changes necessary for responding to the remote context.

The reason why focusing on changes caused by remote work in the public sector is important is because this new context could influence employee performance. An important indicator for employee performance is employee motivation (Shahzadi et al., 2014), which is the underlying reason for how people behave (Lai, 2011). According to Self-Determination Theory (SDT), this employee motivation is a result of the fulfilment of three different

psychological needs (Deci & Ryan, 2008) which include the need for autonomy, the need for competence and the need for relatedness (Ryan & Deci, 2000). It has also been found that both the remote context and the public sector context can have an influence on this need fulfilment. For example, the context of remote work can influence need fulfilment through the characteristics this context brings with it (Gagné et al., 2022) such as less informal social contact (Becker & Tennessen, 1995) which could lead to lower fulfilment of relatedness needs within employees. Additionally, the public sector context could influence need fulfilment through its characteristics as well, such as strict rules (Wimalasari, 1993) which could result in less freedom and lower perceived autonomy (Chen et al., 2018). Because these contexts have been found to influence psychological need fulfilment, employee motivation and employee performance could consequently decrease. Thus, understanding changes that occur in remote work is important as these changes may influence employee performance.

Current research shows that leadership behaviour can influence motivation through its effect on psychological need fulfilment (Hetland et al., 2011), in the non-remote context. Consequently, the importance of leadership behaviour for psychological need fulfilment suggests that this behaviour will change in response to the remote public sector context. For the remote context, current research has mainly highlighted the relationship between leadership styles and need fulfilment in a non-remote context (i.e. Gagné et al., 2022; Hetland et al., 2011; Kovjanic et al., 2013) as well as possible changes in need fulfilment in the remote context (i.e. Baumann & Sander, 2021; Charalampous et al., 2018; Sewell & Taskin, 2015), but it does not focus on how leadership behaviour responds to employee needs in the remote context. A focus on this relationship between leadership behaviour and psychological need fulfilment in the remote context can help understand how leaders address psychological needs in remote work.

In addition to the remote context, it is then important to understand whether and how the public sector context will influence the relationship between leadership behaviour and psychological needs. The context of the public sector seems to influence need fulfilment because of the characteristics that are thought to be inherent to that sector (Imamoğlu & Beydoğan, 2011; Wimalasiri, 1993) as well as characteristics of public sector employees (Duerrenberger & Warning, 2023). For example, public sector organisations tend to provide less autonomy support (Imamoğlu & Beydoğan, 2011) which could mean there is lower autonomy fulfilment in public sector employees. Similarly to leadership behaviour responding to changes in the remote context, changes in need fulfilment caused by the public sector context also warrant a response by leadership. This means that the public sector context also influences the relationship between leadership behaviour and employee need fulfilment.

Thus, both the remote context and public sector context can influence psychological need fulfilment in employees. Current research helps highlight changes to psychological need fulfilment but lacks a focus on how leadership behaviour addresses this changed need fulfilment. Because leadership behaviour will have to change in response to these contexts to ensure need fulfilment, this study focuses on understanding how leadership behaviour responds to the new remote public sector context. This leads to the following research question:

How does leadership behaviour address employees' psychological needs in remote workplace arrangements in the public sector?

The data for this study was gathered through face-to-face semi-structured interviews with eighteen employees from an anonymous municipality in the Netherlands. The interviews focused on perceived leadership behaviour, psychological need fulfilment and employee experiences related to need fulfilment. Results show that laissez-faire leadership and digital leadership help address employee need fulfilment through specific behaviours that ensure an

environment where needs can be met in the remote public sector context. The relationships between these behaviours and need fulfilment is influenced by several factors. Additionally, the paper contributes to the literature by focusing on employee experiences that happen because of psychological need fulfilment rather than just focusing on motivation as an outcome. Lastly, the paper suggests that the combination of remote work and the public sector context can lead to sufficient autonomy support in public sector organisations.

The following section will focus on the current literature and highlight what we currently know about remote work, leadership behaviour, psychological needs, and employee motivation. After this, section 3 will show the methodology used in this study and section 4 will highlight the results of this research. Lastly, section 5 will emphasize the theoretical and academic contributions of this research. Furthermore, it will highlight research limitations and provide some concluding remarks to the study.

2. Literature Review

2.1 Remote Work

When discussing remote work, it is important to define what this term means. This section highlights several definitions of remote work and concludes with the definition of remote work that is used for this specific study.

The term telecommuting started being used around the 1970s and was focused on bringing work to people rather than people to work (Allen et al., 2015). The introduction of computer technologies into the workplace has allowed for these jobs to be executed from a remote place, due to the communication possibilities related to those technologies (Olson, 1983). Allen et al. (2015) highlight that many different terms are used to describe someone that works from a different location than the organisation itself, including *telework*, *virtual work* and *remote work*. Other terms may include *home-based work*, *flexible work*, *mobile work*, *distance work*, *multilocal work*, or *crowdwork* (Vartiainen, 2021). Due to the use of different terms and conceptualizations, it is difficult to ensure a proper summarisation of literature on this topic (Allen et al., 2015). Some definitions of remote work specifically, in literature, include:

Table 1 – Definitions of remote work	
Author(s):	Definition:
Vartiainen (2021, p.4)	“Remote work is a more comprehensive concept and does not require visits to the main workplace or the use of electronic personal devices, leaving open many types and places of work”
Mokhtarian (1991, p.3)	"work done by an individual while at a different location than the person(s) directly supervising and/or paying for it"

Olson (1983, p.182).	“Remote work generally refers to organisational work performed outside of the normal organisational confines of space and time”
Gareis et al. (2006, p.52)	“remote work is being (implicitly) defined as meaning different sites, locations and addresses”

Thus, remote work categorises work that is performed by an employee in a different physical location than the organisation itself. This physical distance comes with the decreased face-to-face interaction (Zimmerman et al., 2008) and an increase in technology enabled communication. Remote work can take different forms, based on for example the number of hours working remotely and the location in which remote work is performed. For this specific research, remote work is ‘work performed by employees in any location different from the organisation itself, for any amount of time’.

Categorizing remote work in this study helps understand to which type of work the results will be attributable. In the end, the scope of remote work in this study pertains to work performed in a location different from the organisation, for any time.

2.2 Psychological Needs and Motivation in the workplace

After defining what remote work pertains to in this study, it is possible to start looking at the effect of the remote public sector context on the relationships that are relevant to this study. Before we do this however, it is important to understand what psychological needs are and why they are important. Thus, this section focuses on explaining psychological needs, in the context of Self-Determination Theory (SDT), and the effect of these needs on motivation.

Current research highlights the importance of psychological needs in work in the context of Self-Determination Theory (SDT) (Busque-Carrier et al., 2021; Olafsen et al.,

2021; Kim & Allan, 2019). SDT applies to many different areas including parenting, education, health, and work (Vallerand et al., 2008) but the purpose of this study is to focus on SDT in an organisational context. Within SDT, humans are assumed to act in ways that enhance personal growth and well-being, regardless of context (Ryan & Deci, 2000). It has been found that several factors may enhance or undermine these goals, such as the fulfilment of psychological needs (Ryan & Deci, 2000). SDT then introduces three psychological needs, namely *autonomy*, *relatedness*, and *competence*, as the main inducers of self-motivation and personal well-being and highlights the importance of the level of internalization and integration of external motivation (Ryan & Deci, 2000).

The three psychological needs in SDT are defined as follows. First, “Competence refers to feeling effective in one's ongoing interactions with the social environment and experiencing opportunities to exercise and express one's capacities” (Ryan & Deci, 2002, p.7). Thus, competence is about how able someone feels to perform certain activities well. Second, “Relatedness refers to feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one's community” (Ryan & Deci, 2002, p.7). Relatedness focuses on the social relationships one has with their environment. Third, “Autonomy refers to being the perceived origin or source of one's own behaviour” (Ryan & Deci, 2002, p.8). Autonomy is about how someone perceives their actions to be motivated by their own willingness to do those activities. These three needs have been found to play an important role in influencing motivation.

Within the context of SDT, this motivation is highlighted to have two forms, namely intrinsic and extrinsic motivation. First, intrinsic motivation is “the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn” (Ryan & Deci, 2000, p.70). Thus, intrinsic motivation is the natural tendency of humans to act in ways that enhance growth and well-being, without any outside motivators. Intrinsic

motivation is influenced by need fulfilment of the three psychological needs (Ryan & Deci, 2000; Kuvaas, 2009). This is highlighted in Cognitive Evaluation Theory (CET) where intrinsic motivation is a result of different levels of psychological need fulfilment (Ryan & Deci, 2000). For example, within CET feelings of competence can increase intrinsic motivation for a specific act, and the combination of autonomy with competence can also enhance intrinsic motivation. The same results were found for the need for relatedness. Thus, psychological need fulfilment plays an important role in intrinsic motivation, acting as a predictor of how motivated people will be.

Next to intrinsic motivation, extrinsic motivation is “the performance of an activity in order to attain some separable outcome” (Ryan & Deci, 2000, p.71). This is about motivation that is induced by outside rewards or pressure, and not by the act being rewarding in itself. An important aspect to understand is how people internalize and integrate (make part of themselves) this extrinsic motivation. Thus, the aim is to understand how intrinsic motivation is affected by extrinsically motivated rewards and pressures (Ryan & Deci, 2002) to understand how outside rewards can influence motivation. For this Ryan and Deci (2000; 2002) highlight the Organismic Integration Theory (OIT) which explains different types of extrinsic motivation and the factors that promote or hinder integration and internalization of these motivators. It was found that the internalization of a behaviour depends on the autonomy of the extrinsic motivation (Ryan & Connell, 1989). Accordingly, Ryan and Deci (2000; 2002) highlight four types of extrinsic motivation that range from least autonomous to most autonomous: *External Regulation*, *Introjected Regulation*, *Identified Regulation*, and *Integrated Regulation*. Within this model it becomes evident that the higher the level of autonomy associated with an external motivator, the more intrinsic the motivation becomes. Thus, people internalize external motivations and experience a higher level of autonomy in

executing behaviour (Ryan & Deci, 2000). In this way it is possible to use outside motivations to increase intrinsic motivation.

Both OIT and CET are important parts of Self-Determination Theory that emphasize the importance of the satisfaction of the needs for *competence*, *autonomy*, and *relatedness* to experience motivation (Ryan & Deci, 2000). Specifically, need fulfilment can enhance autonomous motivation, a combination of intrinsic and highly internalized extrinsic motivation, (Deci & Ryan, 2008; Manganelli et al., 2018) and this autonomy can also lead to increased performance (Deci & Ryan, 2008). Gagné et al. (2014) found similar results where motivation predicted well-being and performance through the satisfaction of competence, autonomy, and relatedness.

Thus, psychological needs are important because they help motivate people. Within an organisation the fulfilment of psychological needs can thus be an important indicator of how motivated employees are to work.

2.3 Psychological needs in the Remote context

Because psychological need fulfilment is so important for employee motivation, it is important to understand what could cause changes in the need fulfilment. In this section the focus will be on explaining changes to need fulfilment after introducing the remote context, and how this can change the satisfaction of individual needs. These effects are highlighted below.

Autonomy

First, the lack of routines and social cues within the remote work environment could lead to increased feelings of autonomy due to the necessity of employees to self-regulate (Gagné et al., 2022). However, remote work is sometimes paired with strict control and monitoring by leaders (Fana et al., 2022) which can lead to decreased feelings of autonomy

(Gagné et al., 2022; Sewell & Taskin, 2015). In addition to this, remote workers may feel the need to respond to work matters outside of traditional work hours (Charalampous et al., 2018). Overall, autonomy fulfilment in remote work seems to be guided by how leaders respond to this context and the level of monitoring and control they execute.

Competence

Second, within the remote work context the occurrence of spontaneous feedback is lower than in a traditional work environment, which can lead to decreased feelings of competence (Baumann & Sander, 2021) as feedback is essential to ensure feelings of competence (Butler & Nisan, 1986). The remote work context can also inhibit the visibility of achievements, which can further reduce feelings of competence within employees (Baumann & Sander, 2021). In addition to this, due to fewer opportunities for networking that are related to remote work, employees could experience professional isolation (Cooper & Kurkland, 2002). This could make them feel as if their possibility to progress their career is inhibited, which could mean feelings of competence are reduced further (Gagné et al., 2022). Overall, the remote work context has several aspects that may limit the satisfaction of the need for competence.

Relatedness

Third, within remote work the abilities to build meaningful relationships with co-workers and engage with them is limited (Baumann & Sander, 2021). This means there is limited social interaction (Barron, 2007) which could lead to social isolation (Cooper & Kurkland, 2002). The increase in remote work may then also lead to degradation of the social office environment, as less people will be present in the office (Gagné et al., 2022) and there is limited contact remotely. In addition to this, remote workers may experience that they are forgotten because they may not be informed of everything, as they are not physically present

(Sewell & Taskin, 2015). These factors contribute to reduced fulfilment of the need for relatedness. In contrast to these studies, one study highlights the transition of one firm into a virtual work environment, where remote workers were more satisfied with organisational communication than on-site workers (Akkirman & Harris, 2005). These findings are suggested to be the result of several aspects that were applied by the company, including management support, social support, and ensuring fitting technology systems (Akkirman & Harris, 2005). In addition to this, the company was restructured to fit the virtual workspace and continuous training was applied (Akkirman & Harris, 2005). Similarly to autonomy fulfilment, the response of leadership to changes caused by the remote context are important to fulfilling the need for relatedness. Overall, fulfilment of the need for relatedness tends to be decreased within the remote work environment, but specific standards and processes could help in ensuring higher levels of this need satisfaction.

Overall, the remote context can have a varying influence on the fulfilment of the three individual psychological needs that are highlighted by SDT. The fulfilment of autonomy can increase or decrease based on the level of freedom that employees are given within their remote work. Competence fulfilment can be influenced by a number of factors and can be related to professional isolation. The need for relatedness is usually not fulfilled in the remote work context due to for example less social contact, but study shows it is possible to ensure fulfilment of relatedness needs.

In summary, the changes in need fulfilment in the remote context seems to be due to the inherent characteristics of working remotely. In general, the introduction of the remote context negatively affects psychological need fulfilment. According to the relationship of psychological need fulfilment and motivation (Ryan & Deci, 2000), introducing the remote context will lead to lower employee motivation. However, as shown by Akkirman and Harris (2005), efforts by organisations to respond to these changes can be helpful in ensuring need

fulfilment in remote work. Thus, it is important for organisations to respond to the switch to more remote work by implementing strategies that help encourage psychological need fulfilment in this remote context. These strategies should be used to address the characteristics of remote work that influence employee need fulfilment.

2.4 Psychological needs and the Public Sector

In addition to the influences that the remote work context has on the fulfilment of psychological needs, sector type could also have an influence on this fulfilment within employees (Imamoğlu & Beydoğan, 2011). Because context influences intrinsic motivation within employees through its effect on perceptions of psychological needs (Grouzet, 2004), the public sector context could influence psychological needs differently from a private sector context. Specifically, Deci et al. (2001) highlight that the level of perceived autonomy-support within a work context can be associated with psychological need satisfaction. A context that supports autonomy can lead to increased fulfilment of autonomy, competence, and relatedness needs (Deci et al, 2001) which in turn may increase motivation.

First, Wimalasiri (1993) highlights differences between private and the public organisational climates and how this climate provides the context for how people behave. For example, 70% of the private sector companies within the study experienced a supportive environment, in contrast to 50% of the public sector companies (Wimalasari, 1993). In addition to this, private sector companies were viewed as less structured than public sector companies, the latter having more strict rules and regulations (Wimalasiri, 1993). The specific characteristics that belong to either the public or the private sector can thus influence perceptions of the organisation, which provides the reasoning for why people behave certain ways.

Specifically looking at the characteristics of both sectors, the private sector is perceived as being more supportive of autonomy- and relatedness-needs, meaning those needs

are more likely to be fulfilled within that sector (Imamoğlu & Beydoğan, 2011). In contrast, companies in the public sector tend to have more constrained work contexts (Imamoğlu & Beydoğan, 2011) which may be due to the need to stick to specific rules and regulations (Wimalasiri, 1993) and hierarchical control (Chen et al., 2018). Because of these characteristics employees may experience reduced feelings of autonomy in a public sector organisation, which can decrease autonomous motivation (Chen et al., 2018).

In addition to the sector characteristics that may influence psychological need fulfilment, there is also a difference in psychological needs when it comes to public sector workers in comparison to private sector workers. As Baumann and Sander (2021) argue, psychological need fulfilment is dependent on individual differences in the needs for autonomy, competence, and relatedness. Duerrenberger and Warning (2023) further develop this finding by highlighting the differences in needs between public sector and private sector employees. Fulfilling psychological needs seems to be less important for job satisfaction in the public sector compared to the private sector, as job meaning is a more important indicator of this satisfaction (Duerrenberger & Warning, 2023). Contrary to expectations, autonomy is a more important indicator of job satisfaction in the public sector than in private sector organisations (Duerrenberger & Warning, 2023). This is in contrast with the lower support of autonomy needs that seems to be present in the public sector (Imamoğlu & Beydoğan, 2011).

Thus, it seems that the context of an organisation and the individual needs of an employee affect the perception of the organisation, specifically the perceptions of need satisfaction. Private sector organisations seem to be more autonomy-supportive, while public sector organisations may experience a reduction in perceived autonomy-support. Because autonomy-support plays an important role in need fulfilment of all three needs (Deci et al., 2001), organisations with contexts that have lower perceived autonomy-support may also experience a decrease in need satisfaction. From the literature it seems that public sector

organisations are associated with less autonomy-support, and thus these organisations might experience lower psychological need fulfilment.

In conclusion, because the public sector context influences need fulfilment organisations need to respond to this context differently than when operating in the private sector. Thus, within this study psychological need fulfilment is not only influenced by the remote context but also by the public sector context. This means organisations needs to consider both characteristics from the remote context as well as the public sector context when it comes to ensuring need fulfilment in employees. Following this, it is interesting to see in what way organisations respond to changes in psychological need fulfilment in the remote public sector context, and thus how they address need fulfilment in this context.

2.5 Leadership Styles and Psychological Needs

A combination of both the remote and public sector contexts leads to the assumption that organisations need to implement strategies that increase the support of all three needs. As mentioned before, the remote context may influence the fulfilment of all three needs negatively or positively depending on the characteristics of the context. In addition, the public sector context often has a lower autonomy support than the private sector context. Thus, the influences of both the remote and the public sector context on the needs for autonomy, competence and relatedness warrant an organisational response to those to those influences to ensure need fulfilment.

For this study specifically, leadership behaviour is seen as a tool to respond to changes in psychological need fulfilment in the remote public sector context. This is because it has been found that leadership can influence employee motivation through the effect they have on psychological needs (Hetland et al., 2011). In this way, leadership behaviour can be used to create an environment in which employee needs are fulfilled within the remote public sector context.

Current research mainly highlights the role of transformational leadership for psychological need fulfilment (Gagné et al., 2022; Hetland et al., 2011; Kovjanic et al., 2013). However, as need fulfilment in the remote public sector context changes, this leadership style might not be as successful. Because of this, the aim of this research is to understand which leadership styles are used to address psychological need fulfilment in remote work in the public sector and how they address these needs. To do this, the focus is on displayed leadership behaviour as perceived by the employee. These displayed behaviours can then be compared to current leadership literature to understand what leadership styles are used by leaders in this context.

Overall, the displayed behaviours in this study will highlight how leadership addresses employee psychological needs in the remote public sector context. Based on these displayed behaviours, it is possible to find out which leadership styles are most successful in the remote public sector context.

3. Methodology

3.1 Research design

To understand in what way leadership behaviour can best support the fulfilment of psychological needs within their employees in a remote work environment, a qualitative approach will be taken. Qualitative research's strength lies in helping to understand and explain social relations and their dynamics and is applicable to research that is not easily quantifiable (Queirós et al., 2017). This specific study investigates the social relation between leader and employee, focusing on displayed leadership behaviour and the effect of this on fulfilment of psychological needs. As this study is more about exploring possible relationship than it is about quantifying these relationships, a qualitative approach seems to be a better fit. Furthermore, Newman (2000) highlights that qualitative research is used to describe data rather than test hypothesis.

In this specific research the aim is to understand which displayed leadership behaviours can best support the fulfilment of employees' psychological needs in remote work environments. Data will eventually help describe the way in which employers should act, rather than provide quantifiable answers to a specific hypothesis. The approach taken in this research is more inductive than deductive. There are some predefined concepts used in this research, such as SDT and employee motivation, but data will be analysed without pre-existing hypotheses and concepts will be formed based on the data only. This study will take a case study approach, where interviews will be executed within one public organisation.

3.2 Research instruments

The instrument used to help investigate leadership behaviour, employee motivation, and employee experience in the remote work context will be semi-structured interviews. The interviews were in-depth face-to-face interviews to be able to gain more detailed information

(Showkat & Parveen, 2017) about leadership behaviour, employee psychological needs, and the relationship between these. The interviews were semi-structured, meaning there was a set of specific questions (interview guideline in Appendix A) but there also was a possibility for a conversation to take shape (Osborne & Grant-Smith, 2021). In this way, the interviews kept a common structure based on the interview guideline, but it also allowed interviewees to focus on the topics they found important (Osborne & Grant-Smith, 2021). This led to more rich data where specific topics that were more important to employees came up, in addition to the information asked from them in the interview questions.

Interviews took place at a Dutch public organisation. The interviews were performed in Dutch, as interviewees were Dutch, and this allowed for a more natural conversation to take place. The interview guideline was created in English and had been translated to Dutch prior to the start of the interview process.

3.3 Participants

The sample consists of eighteen participants who have been interviewed. These participants are from an anonymous municipality in the Netherlands. Participants had some experience with long-term remote work, for at least a standard part of their work week. Participants were selected by way of purposeful sampling, where specific participants are chosen based on the required characteristics for the study (Moriarty, 2011). Participants consisted of employees rather than employers. Participants volunteered to join the research after an organisation-wide invitation was distributed.

For the specific characteristics to join the research, employees needed to work (partially) remotely and needed to have some experience with remote work. Felstead and Henseke (2017) use the quantification of remote workers also used by the UK Labour Force Survey, where people who work from a place different from their organisation for at least 1

day out of their 5-day work week, are considered to be remote workers. The same assumption is used in this study, meaning employees from the municipality needed to work at least 20% of their full work week in a remote workplace. Furthermore, to ensure that employees have a good understanding of the actual leadership behaviour, they needed to have at least six months of remote work experience within the organisation.

3.4 Data collection

Data collection took place through semi-structured interviews, based on the interview guideline (Appendix A). In the first two interviews the order of questions was different than the rest of the interviews, as interviewees tended to skip towards talking about relatedness. In the remaining sixteen interviews, employees were thus asked about relatedness first such that the answers about competence and autonomy did not include answers about relatedness.

Questions focused on displayed leadership behaviour, employee psychological needs, and the relationship between them. Employees were asked about the leadership behaviours they observe in the remote work context, and how these behaviours are connected to their feelings of autonomy, competence, and relatedness. In addition to this, they were asked about the differences between remote and non-remote work environments. Lastly, employees were asked for their experience when it relates to need fulfilment. Answers to the questions were recorded and automatically transcribed through Amberscript software. Transcriptions were checked and corrected manually and made anonymous, after which they were automatically translated within the Amberscript software. Automatic transcriptions were then checked and corrected manually. Data was stored anonymously.

3.5 Data analysis

After data transcription and translation, interview data was analysed to be able to translate it into meaningful results. Data was analysed through inductive coding, meaning

codes are based on what the interviewees have said specifically (Gioia et al., 2012). Quotes were selected from the interview transcripts which were then labelled with a representative sentence, a first-order code, in order to summarize the transcripts (Linneberg & Korsgaard, 2019). One first-order code could be used to label a number of different quotes. For example, the first-order code ‘Manager does not check if employees are actually working’ is used to summarize different instances where employees mentioned that their manager would not check on them. After this, the overlap and similarities between different codes and categories was analysed, and these were summarized into second-order themes (Gioia et al., 2012). This meant, for example, that first-order codes on displayed leadership behaviour were summarized into behaviours that fit specific leadership styles. In this case it meant that leadership behaviours were categorized into laissez-faire and digital leadership behaviour. These second-order themes were further defined into aggregate dimensions, based on the similarities between these second-order concepts. In this way, both laissez-faire leadership and digital leadership can be aggregated into the ‘leadership styles’ dimension. In the end, all first-order codes, second-order themes, and aggregated dimensions are displayed in a data structure which is provided in the results section.

Based on this data structure, a grounded theory model was made which “shows the dynamic relationships among the emergent concepts that describe or explain the phenomenon of interest and one that makes clear all relevant data-to-theory connections” (Gioia et al., 2012, p.22). Thus, the grounded theory model is an overview of the relationships and variables that have emerged from this specific study. In this case, the grounded theory model shows the relationship between leadership behaviour and psychological need fulfilment, and some moderating factors. Furthermore, the grounded theory model shows the relationship between psychological need fulfilment and employee experience. The grounded theory model is in the conclusion of this paper.

4. Results

This section highlights the results of this study. The data structure below highlights the three different levels of coding, first-order codes, second-order themes, and aggregate dimensions.

The following section highlights the occurring relationships in this data.

Table 2: Data structure		
First-order codes	Second-order themes	Aggregate dimensions
Manager does not check if employees are actually working	Laissez-faire leadership behaviour	Leadership behaviour
Manager does not control how or when work is done		
Manager not involved at home		
Company gives facilities to work well from home	Digital leadership behaviour	
Manager is available when needed while WFH		
Managers ensures people who WFH are not forgotten		
Manager facilitates informal contact through WhatsApp while WFH		
Manager holds hybrid moment for team connection		
Manager is easy to contact while WFH		
Manager encourages sharing of relevant news on WhatsApp for everyone		
Having more work experience may make you want more autonomy	Work experience	Moderators psychological need fulfilment
Individual need for autonomy influences satisfaction with leadership behaviour	Individual need for autonomy	
Technological restraints hinder ease of doing remote work	Technological restraints	
There is less informal/social contact while WFH	Formality of contact	
WFH is more businesslike than social contact		
Different people will feel different needs for connection	Individual need for relatedness	Fulfilment of psychological needs
Feeling appreciated	Feeling autonomous	
Feeling energized		
Feeling peace		
Feeling free		
Feelings of competence		
Feeling trusted		
Feeling seen	Feeling competent	
Feeling proud		
Feeling peace		
Feeling significant		

Feeling good	Feeling related	
Feelings of autonomy		
Feeling appreciated		
Feeling enthusiastic		
Feeling involved		
Feeling happy with work		
Feeling supported by team		
The possibility for growth and development	Experience when feeling autonomous	Employee experience
The opportunity to execute work well		
The possibility to provide own input		
Feeling responsible for work		
Self-confidence in the work executed		
Reciprocity towards the organisation		
Work enjoyment		
Job satisfaction		
Private-work life balance		
Becoming better at work	Experience when feeling competent	
More ease in doing work		
Work enjoyment		
Job satisfaction		
Willingness to do extra work		
More ease in executing work	Experience when feeling related	
Reduced work stress		
Willingness to do something extra for the organisation		

4.1 Fulfilment of psychological needs

Before focusing on the leadership behaviours used in this study and their effect on psychological needs, it is important to understand what the fulfilment of these needs means for employees. To understand this, employees were asked for their feelings related to need fulfilment in their remote work.

4.1.1 Autonomy fulfilment

Employees report different feelings related to having their need for autonomy fulfilled. These include feeling appreciated, feeling energized, feeling peace, and feeling free. In addition to this, fulfilment of autonomy seems to lead to increased feelings of competence “...The idea that you, that I'm doing a good job...” (I16) “that I feel that I am doing a good job, that I have that confidence, that I am really seen as the professional in my field...” (I12). Furthermore, many employees recorded that fulfilment of needs for autonomy lead to feeling

trusted *“The fact that I, you know, you are autonomous, so that means you get trusted, that's how I translate it.”* (I18).

4.1.2 Competence fulfilment

Fulfilment of competence is related to different feelings in employees. This includes feeling seen, feeling proud, feeling peace, and feeling good. In addition to this, fulfilment of competence needs can lead to feeling significant at work *“Yes, no, that's a nice feeling, I think we all sometimes feel like yeah, how do you say that? We're actually all just doing something and we think we're doing it well, and then it's nice to get that feedback of: yes you are indeed doing it well”* (I12). Furthermore, feeling competent can increase feelings of autonomy *“Well a sense of autonomy...”* (I4) *“Yes, that, at least that I am still in control for myself”* (I6).

4.1.3 Relatedness Fulfilment

Relatedness fulfilment is linked to feeling appreciated, feeling enthusiastic and feeling involved. Furthermore, it is related to feeling happy at work *“but it does something to your happiness at work, simple as that, if you have that feeling of belonging,”* (I9). Additionally, feeling related helps employees feel supported by their team *“Yes, it does of course give a feeling that you work in a team and that you don't have to solve everything independently. And well that you are always there for each other.”* (I4) *“Feeling that you do still belong to a team. That you can also fall back on each other the moment you run into something....”* (I18).

4.2 Leadership behaviour

After understanding what it means for employees to have the need for autonomy, competence and relatedness fulfilled, the focus is on understanding how leadership behaviours ensure that these needs are fulfilled. Two styles that seem prominent when reviewing displayed leadership behaviours are laissez-faire leadership and digital leadership. The behaviours were matched to these two styles based on the characteristics of the behaviour and how these fit to the different styles.

4.2.1 Laissez faire leadership

The results of this study have found that laissez-faire leadership behaviour can enhance the fulfilment of the psychological need for autonomy within the remote work environment. This leadership behaviour ensures that employees feel the freedom to organize their own work “*Being able to do your work independently, you can make your own decisions, you prioritise yourself, things like that.*” (I4). It is important for employees to feel in control of which work they do and when they do it. In addition to this, there is an absence of constant checking whether and how employees do their work which helps this autonomous feeling as well. Employees do not feel as if their manager is constantly checking whether they are working and if their work is up to management standards, which ensures they feel autonomous. “*Well, look, with me she isn’t checking me all the time.*” (I7) “*They don't check hours, they don't check progress unless I, that that comes back in conversations but not, they will never ask: how far along are you with that? Are you working enough? ...*” (I10). Thus, the absence of management control or rules in the remote work environment can lead to the fulfilment of the need for autonomy which means a positive relationship can be argued between laissez-faire leadership behaviour and satisfaction of autonomy needs.

4.2.2 Digital leadership

Digital leadership behaviour can influence both the fulfilment of competence and relatedness needs. Some specific leadership behaviours mentioned in the interviews are helpful to the fulfilment of the psychological need for competence. First, it is important that manager provide the necessary facilities to work from home “*From work, everything is actually well organised to be able to work well from home. You can request all kinds of things from the municipality to, yes, facilitate that as well as possible*” (I6). This ensures that working from home becomes easier as employees have the necessary tools to make it work. Second, manager ensure that people working remotely are not forgotten “*... So yes, even*

though you are not visible, you are in their system, that is.” (I9). This means employees do not miss out on certain opportunities just because they are working remotely. Third, manager ensures that they are available to people working remotely “So basically for me, she is just as approachable and reachable...” (I9) “If you, I don't experience much guidance from him, but if I need him he's always there. I find that important too.” (I13). If employees do need help or contact with their manager they can reach them easily, which consequently allows them to continue their work “Yes, but I am also someone who sometimes e-mails him if I want to discuss something, but then I immediately schedule an online meeting or something like that, like: gosh let's discuss this quickly, then I can keep working afterwards” (I13). Thus, these digital leadership behaviours seem to increase feelings of competence in employees while working remotely.

In addition to meeting the needs for competence, digital leadership behaviour can influence the feelings of relatedness in employees working remotely. To start, managers should facilitate the participation of employees working remotely within all meetings “*and if I want to call and WhatsApp that we are allowed to call and Teams- and we sometimes have team meetings remotely and then I'm just as involved or I'm just as involved in the conversation as anyone else*” (I9). In addition to this, manager should hold a regular team meeting where the whole team meets to talk “*And then we discuss, well, we don't have an agenda, just everything we do, you can throw something into the group ... it doesn't matter whether it's that or something work-related.*”(I1). “*... so then we have a bit more connection: what's going on with you? And we make a kind of tour, to see what everyone is doing...* ” (I11). The goal of these meetings should thus not necessarily be to talk about content related matters, but it should be about ensuring connection between employees while they work remotely. What further increases feeling of connection while working remotely is the presence of informal contact through WhatsApp “*... So it's not like I'm sitting in a room now,*

so I don't talk to anyone anymore, but you are still in contact with each other.” (I12) as well as the sharing of relevant news through WhatsApp. In this way manager ensures employees keep the informal social contact that is necessary for feeling connected as well as keeping employees up to date with relevant news. Lastly, it is important for manager to be easy to contact to ensure connection between the manager and their employees.

Overall, these specific behaviours related to digital leadership seems to be helpful in fulfilling both the need for competence and the need for relatedness with the remote public sector context.

4.3 Moderators psychological need fulfilment

The relationship between leadership behaviour and the fulfilment of psychological needs seems to be influenced by different characteristics, according to the results of this study. This is true for the individual relationships between leadership styles and the three psychological needs.

4.3.1 Work experience and Individual need for Autonomy

There are two factors that specifically influence the relationship between laissez-faire leadership and the fulfilment of autonomous needs. First, work experience could strengthen the relationship between laissez-faire leadership and autonomy fulfilment *“I'm already a bit older, I also have a lot of experience and knowledge ... I no longer need someone to hold my hand or tell me what to do” (I17)*. People with more experience tend to feel more comfortable working autonomously when remote. People who have less experience could feel the opposite *“...but if you actually have to do something you don't do very often, then I think that can also give you a bit of an unpleasant feeling...” (I14)*.

The second factor that influences the relationship between laissez-faire leadership behaviour and fulfilment of need for autonomy is the individual need for autonomy. Several

employees indicate that the need for autonomy is different depending on personality “...that has to do with personality...” (I15) and “...that's better with one type of person...”(I10).

People who experience a higher need for autonomy will also experience a higher fulfilment of autonomy needs through laissez-faire leadership. This means the individual need for autonomy has a strengthening effect on the relationship between laissez-faire leadership and autonomy fulfilment, where the fulfilment of the need for autonomy through laissez-faire leadership is higher when individual autonomy needs are also higher.

4.3.2 Technological Restraints

For the relationship between digital leadership behaviour and the fulfilment of competence the presence of technological restraints is an influencing aspect. This ranges various aspects from exchanging data “...you can't exchange data as quickly...” (I4) to accessibility of technology “...you can't access your work environment with Teams when you work at home...” (I17). These restraints create a strain on the relationship between digital leadership behaviour and competence fulfilment due to limiting effects on digital leadership itself. Thus, technological restraints weaken the relationship between digital leadership behaviour and the fulfilment of competence needs.

4.3.3 Formality of Contact and Individual Needs for Relatedness

There are two influences on the relationship between digital leadership behaviour and fulfilment of relatedness. The first is regarding the formality of contact, whether contact is more businesslike or whether contact is more informal. Contact while working remotely tends to be more formal and businesslike “...working remotely, is more businesslike...” (I3) and “...the moment I work at home I mainly have contact about content-related things...” (I9) meaning the social contact with colleagues is lower. Even with efforts to ensure relatedness while employees work from home, the formality of that contact plays a significant role in how

related they feel. Thus, the formality of contact weakens the relationship between digital leadership behaviour and the fulfilment of relatedness needs.

Second, individual needs for relatedness influence the effect of digital leadership behaviour on relatedness fulfilment. People who feel lower relatedness needs may feel less inclined to find connection while working remotely, meaning digital leadership efforts can be perceived negatively. Individual relatedness needs have a positive effect on the relationship between digital leadership behaviour and relatedness fulfilment.

4.4 Employee experience

After understanding the relationships between specific leadership behaviours and their effect on need fulfilment, employees also highlight different experiences that happen as a result of this need fulfilment.

4.4.1 Employee experience fulfilment of autonomy

The fulfilment of autonomy through laissez-faire leadership can create different employee experiences. First, employees experience the possibility of **growth and development** “...you also allow your employee to grow better in that role...” (I5). Autonomy allows employees to feel the freedom to experiment and make mistakes “*That’s also a nice idea that: you won’t be judged on personal mistakes. Of course it’s not the intention that you just do something random, but that you can experiment within your job,*” (I14). Second, autonomy allows employees to **execute their work well** “...to be able to actually do my work as well as possible and be restricted as little as possible. That’s how I get the best out of myself.” (I8). By having the freedom to do the work in the way employees see fit, they can ensure the best results. In addition to this, autonomy allows for employees to **provide their own input** into the work they execute “...leaves you very free to choose your own approach to things a bit” (I7) “...But yes, it is of course also that you then very often might come up with things in a piece, or think of things that your supervisor himself would not have thought

of...” (I7). This not only allows employees to perform work as best as they can but also allows for new creative outcomes than when autonomy is lower. Fourth, employees **experience a feeling of responsibility** towards the work they do when they are autonomous. Additionally, trust in employees that is signalled through autonomy leads to **self-confidence**. Furthermore, feeling autonomous can lead to **reciprocity towards the organisation** “...reciprocity, you take care of me I take care of you.” (I10) “You get the freedom, but then you also feel that the moment you get the freedom, you also expect that there, yes, that there is just something in return, so for example, just do something after working hours, you just do that” (I12). Employees are more inclined to do something extra for the organisation because they receive freedom and trust from the organisation. Additionally, autonomy leads to employees experiencing **work enjoyment** “I actually also like having variety in things... But that, yes, that just makes you enjoy your work a lot more.” (I13). Employees are freer to decide how to approach work and what work to do which ensures they can choose to work in ways they experience as pleasant. Autonomy fulfilment also allows employees to experience **job satisfaction** “I really enjoy feeling that freedom and that has the effect of allowing me to do my work relaxed and focused. So that, and that you also get work done that is a piece of satisfaction” (I18). Lastly, results show the facilitation of a **private-work life balance** through the autonomy present in remote work “And that's what my supervisor finds particularly important that there is a good living, yes, private-work balance. So she facilitates that especially with the fact that we are given the opportunity to work from home, at least for me.” (I9) and “the effect is that you can coordinate private life and work very well, because you can arrange that yourself.” (I10).

4.4.2 Employee experience fulfilment of competence

The fulfilment of competence through digital leadership can lead to several different results for employees. First, feeling competent can help employees experience they **become**

better at their work. Employees know what they can do well but also know which areas of expertise could be improved upon *“the moment you are aware of what is or is not going well, yes, because of that you work better obviously”* (I4). Second, feeling competent can ensure employees experience more **ease in doing work** as they know what they are doing at that moment is good *“...if I'm doing well or something like that, and that just gives you the feeling that you're just on the right track, that you can just carry on that way.”* (I13). Similarly to autonomy fulfilment, the fulfilment of competence also leads to self-confidence *“I think it just gives you more self-confidence”* (I4). Furthermore, it also leads to employees experiencing **work enjoyment** *“So the fact that you end up being able to do all your work yourself in a quick way, that makes me enjoy doing my work”* (I4) which may also result in **willingness to do extra work** *“I think if you enjoy your work, you get wings, I mean you are willing to go the extra mile, you don't mind coming in more often or doing something...”* (I9). Lastly, employees who feel competent tend to experience **job satisfaction** *“I'm doing well now, satisfaction I think, first thing that comes to mind. When you know, yes, satisfaction”* (I8) *“and if you've done your job well, then you've contributed to achieving the goal or achieving a nice result, and that gives me satisfaction”* (I18).

4.4.3 Employee experience fulfilment of relatedness

The fulfilment of relatedness needs though digital leadership behaviour can impact a few different employee experiences. To start off, increased relatedness **makes doing work easier** because it is easier to contact your colleagues, but also because social chats can be very helpful in executing work *“...you hear information that you otherwise wouldn't know at all, that you actually need for your work...”* (I5) *“I do think the social aspects make you get more information on a file than if you just talk about something in business terms.”* (I3). This more informal conversation that can be part of feeling related to other employees is thus beneficial to the ease of work execution. Second, relatedness fulfilment can help employees experience

reduced work stress “*It also works to reduce work stress, because you are not alone, but you can spar about it....*” (I5) as they feel like they can count on their team to help them when needed. Lastly, feeling related also ensures a **willingness to do something extra for the organisation.**

5. Discussion and Conclusion

The main question for this research was: *How does leadership behaviour address employees' psychological needs in remote workplace arrangements in the public sector?* For this specific organisation laissez-faire leadership behaviour and digital leadership behaviour ensure that psychological needs of employees are met. First, laissez-faire leadership specifically influences the need for autonomy positively, with work experience and individual autonomy strengthening this relationship further. Additionally, digital leadership behaviour has a positive relationship with both competence and relatedness fulfilment. Technological restraints weaken the relationship between digital leadership behaviour and competence fulfilment, which is especially relevant in the public sector. The relationship between digital leadership behaviour and relatedness fulfilment is weakened by the formality of contact but strengthened by the individual relatedness needs. The following sections highlight the contributions both theoretically and practically and will introduce the limitations of this research. Furthermore, it will highlight some avenues for future research.

5.1 Theoretical implications

Figure 1 highlights the grounded theory model that results from the study. The model displays the relationships between leadership behaviour, psychological needs, and employee experience within remote work in the public sector.

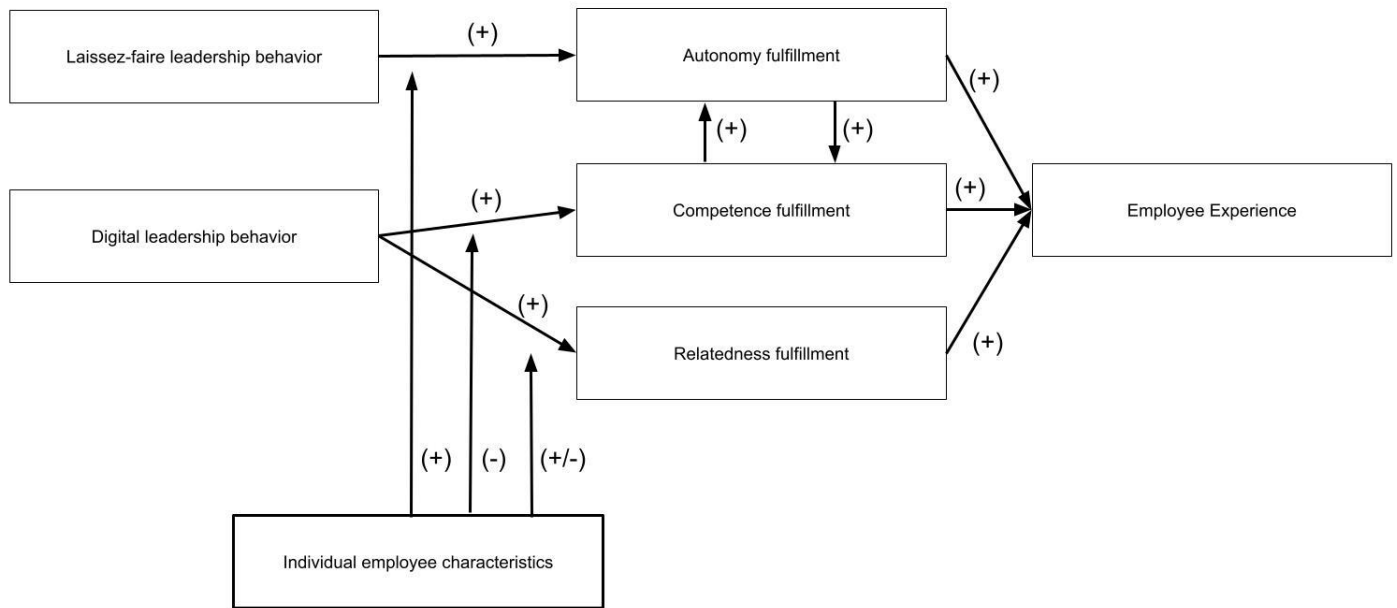


Figure 1: Grounded theory model

5.1.1 How Need Fulfilment leads to Employee Experience

Research shows how psychological need fulfilment is important for employee motivation. In this study, rather than just leading to motivation, psychological need fulfilment has also been found to lead to specific experiences for employees. First, autonomy fulfilment positively influences employee experience through the feelings that employees highlight to be related to autonomy fulfilment. For example, autonomy fulfilment is related to feeling appreciated and feeling energized. Feeling appreciated helps employees feel like they do work well, thus allowing employees to experience self-confidence. These feelings may also provide employees with work enjoyment and job satisfaction. Additionally, employees feel free to make their own choices and it gives them peace of mind. This feeling of freedom allows employees to experience that they can execute their work well, and that they can provide their own input. Additionally, this feeling of freedom in remote work helps them experience a private-work life balance.

In addition to this freedom, autonomy fulfilment is found to be related to feelings of trust. Similar to this finding, Jackson (2004) suggests autonomy can be perceived as an indicator of trust from the organisation in employees' abilities. In this vein, granting employees with autonomy can be seen as an expression of the trust in them. When feeling trusted, employees experience responsibility for their work as well as the possibility for growth and development. Because of the trust that employees feel from the organisation, they are more comfortable in experimenting within their work and trying new things which can help them develop as employees. Feelings of trust can also create reciprocity towards the organisation because employees feel like the organisation gives them something that goes beyond the contractual relationship, which in turn leads to employees being willing to do something in return. This is exemplary of research that shows the important effect of trust on employee reciprocity (Sharkie, 2009) where building trust is important when wanting employees to take on work beyond the contractual relationship. Overall, trust is an important factor when it comes to creating positive employee experiences.

Furthermore, autonomy fulfilment seems to lead employees to experience the feeling of doing their work well or feeling competent. This result is indicative of the importance of autonomy support for the fulfilment of competence needs, as found in previous research (Baard et al., 2004; Deci et al., 2001). Feeling competent helps employees feel self-confident. Overall, the feelings that employees relate to autonomy fulfilment form the connection between autonomy fulfilment and employee experience and help explain their relationship.

Second, similar to autonomy fulfilment, competence fulfilment comes with a number of feelings that help explain the different experiences by employees. Employees highlight that when they feel competent, they feel seen. Furthermore, employees reiterate that they feel peace in their work when competence is fulfilled. This feeling allows them to experience more ease in doing work as they feel relaxed and do not have to worry whether they are doing

well. Another feeling related to competence fulfilment is that of feeling proud of their work. This proud feeling about how they do their work allows them to experience work enjoyment, as they feel positive about the work they execute. Feeling good is another aspect of competence fulfilment which also influences work enjoyment. Employees feel good because they do their work well, which in turn increases work enjoyment. Similarly to autonomy fulfilment, competence fulfilment has also been found to lead employees to experience job satisfaction. Similar results can be found in research (Battaglio et al., 2021), which specifically highlights competence as the most important indicator for job satisfaction. This job satisfaction is connected to work enjoyment in employees and could be a result of them feeling good or feeling proud of their work.

Additionally, competence fulfilment can lead employees to feel more autonomous. When employees have the idea that they are executing their work well they are more likely to take on independent tasks, because they feel capable of doing so. As a result of this, similar to autonomy fulfilment, employees experience they become better at their work, and they are willing to do extra work.

Third, relatedness fulfilment is connected to a number of feelings which can help explain why employees have positive employee experiences. For example, employees express feelings of involvement and feeling supported by the team. These feelings explain the importance of relatedness fulfilment for employees to experience more ease in executing work. This is because these feelings of involvement and support make it easier to contact colleagues and that there is less of a barrier to contact. This results in work becoming easier as asking for help or interacting with other colleagues has also become easier.

Another important aspect is the relationship between relatedness fulfilment and reduced work stress. Employees indicate that feeling related helps them experience reduced work stress because it makes them feel appreciated, enthusiastic, happy with work, and supported

by the team. For example, people feel more comfortable with their colleagues and feel like they can rely on these colleagues if necessary. This means challenges that arise in work are experienced as less stressful because employees understand they can rely on their colleagues for help. These different feelings showcase why feeling related can help employees experience less work stress.

Additionally, employees may experience a willingness to do something extra for the organisation when relatedness needs are met. This relationship is explained through feelings of involvement that are associated with relatedness fulfilment. When employees feel like their leader and colleagues make an effort to connect with them, they are more likely to respond by being willing to take on extra tasks. In this way, being willing to do something extra for the organisation is a response to the extra effort by others to stay connected.

Summarizing the results from this research it seems that autonomy fulfilment, competence fulfilment and relatedness fulfilment are all related to specific positive employee experiences. These relationships can be explained through the feelings that are related to the fulfilment of all these three needs. This leads to the following proposition.

Proposition 1: The relationship between need fulfilment and employee experience is explained through the feelings that are related to the fulfilment of that need.

5.1.2 How Leadership Behaviour addresses Psychological Needs

To ensure need fulfilment and the consequent employee experiences in remote work in the public sector, it is important for leaders to behave in a way that fulfils employees' needs. First, the results of this study show the importance of laissez-faire leadership behaviour in autonomy fulfilment. Surprisingly however, laissez-faire leadership has been recognized in leadership literature as a destructive leadership style with inherently negative outcomes (i.e. Judge & Piccolo, 2004; Skogstad et al., 2007). In contrast to this belief, the freedom and

control which employees experience through laissez-faire leadership enables them to **feel more autonomous**. For example, with this leadership style employees have more control over how to schedule their work and thus feel less hindered in performing their work. Furthermore, they experience that freedom as a form of trust from the organisation in their capabilities. Overall, managers should be involved with controlling and checking employees as little as possible, leaving them free to be in control of their own work.

The positive relationship between laissez-faire behaviour and autonomy fulfilment illustrates the suggestion by Yang (2015) who hypothesized that laissez-faire leadership could positively affect feelings of autonomy. Furthermore, this finding is exemplary of calls by Fischer and Sitkin (2023) who argue that labelling styles as negative and equating them to negative outcomes, will lead to incorrect conclusion on the effects of leadership behaviour. Overall, it seems like the classification of laissez-faire leadership as a negative leadership style is contradicted by the results of this research. In the end, the positive relationship between laissez-faire leadership and autonomy fulfilment leads to the following proposition.

Proposition 2: Laissez-faire leadership behaviour leads to the fulfilment of need for autonomy when leaders do not control or check employees or are not involved with employees.

The relationship between laissez-faire leadership behaviour and autonomy fulfilment seems to be moderated by two variables, namely work experience and the individual need for autonomy. First, employees express that work experience could strengthen this relationship. Work experience has been found to (partially) explain perceptions of leadership (Budur & Demir, 2019). In this study, employees with more work experience indicate that they are more comfortable with working autonomously as they feel more confident in the skills they have. In addition, it was expressed that having less work experience may make autonomy feel less pleasant while working remotely. Although it seems natural that people who have more knowledge through their years of working are more comfortable working autonomously,

previous empirical research has found evidence that supports a negative relationship between age and desire for autonomy (Vecchio & Boatwright, 2002). According to those results, as people become older and have more work experience their desire for autonomy diminishes, which would mean their perception of laissez-faire leadership would be negative. The results of this study thus contradict previous empirical evidence on the effect of work experience. Here, the perception of laissez-faire leadership is indicated to be positive when employees have **more work experience**, as they are more comfortable with working autonomously because of the knowledge they have built over their years of work.

Second, the individual need for autonomy seems to strengthen the relationship between laissez-faire leadership and autonomy fulfilment as well. In general, the fulfilment of psychological needs can depend on individual differences in needs in remote work (Baumann & Sander, 2021). Specifically looking at autonomy, employees with a stronger desire for autonomy in work are more successful in remote working environments (Van Yperen et al., 2014). In this study specifically, employees express that they are comfortable with laissez-faire leadership because they have a **higher need for autonomy** themselves. Their perception of the effect of laissez-faire leadership behaviour on their autonomy fulfilment is positive because they are comfortable with this autonomy. Thus, employees' individual autonomy needs positively influences the relationship between laissez-faire leadership and autonomy fulfilment.

Summarizing the effects of work experience and individual need for autonomy on the relationship between laissez-faire leadership and autonomy fulfilment, the following proposition arises.

Proposition 3: The relationship between laissez-faire leadership and autonomy fulfilment is strengthened when there is a higher individual need for autonomy in employees, and when employees have more work experience.

Besides laissez-faire leadership, digital leadership has been found to be the main leadership style that has an influence on both competence and relatedness fulfilment. This confirms the idea from research that digital leadership responds to the digital environment by implementing measures that ensure need fulfilment. What is interesting in this study however is the understanding of how digital leadership behaviour influences need fulfilment exactly. The focus here is on the behaviours of digital leadership which influence both competence and relatedness fulfilment.

First, it is interesting to see how leadership behaviour influences the fulfilment of competence needs. Employees express the importance of **providing the facilities to work from home**. This regards, for example, providing employees with a work laptop, but could also pertain to things like a keyboard or other facilities. Pokojski et al. (2022) found similar results where an important part of remote work support by organisations was expressed to be about providing office equipment to employees. Providing these means for employees not only ensures that working from home is possible and convenient but also ensures that working remotely does not come with a decline in work ability. Thus, providing employees with the necessary equipment to work remotely helps makes it easier to work from home, which means employees are more likely to feel competent in the work they do.

Besides providing the facilities to work from home, it is important for leaders to ensure that people who work from home **remain involved** when it comes to competence fulfilment. It is possible for employees who work remotely to feel forgotten because they are not part of the daily life at the office (Sewel & Taskin, 2015). This negatively affects connection and thus feelings of relatedness but can also influence competence fulfilment because employees may feel they miss out on career opportunities because they are less visible (Gagné et al., 2022). By ensuring remote employees are given the same opportunities as non-remote employees because they are involved in all work activities, the leader can make

sure that employees who work from home do not feel forgotten. In this way, remote employees express the importance of leadership behaviour that helps them feel involved with daily work activities, in order to fulfil competence needs.

Additionally, employees have expressed the importance of **availability of the manager** for their competence fulfilment. Although research focuses on the effect of less contact and more difficult contact on relatedness fulfilment (i.e. Baumann & Sander, 2021; Barron, 2007), employees in this study highlight the effect of ease of contact on competence fulfilment. Specifically, employees state that when a leader is available to them while they are working remotely, they feel an increase in competence as this allows them to, for example, solve problems faster. The easy communication as a result of an available manager then leads to competence fulfilment.

By combining the results of this study on digital leadership behaviour and competence fulfilment the following proposition can be constructed.

Proposition 4: Digital leadership behaviour leads to the fulfilment of need for competence when leaders provide facilities to work from home as well as ensuring availability of the manager and continuous involvement of employees.

The relationship between digital leadership behaviour and competence fulfilment is found to be moderated by **technological restraints**. Employees indicate that although the facilitation of for example office equipment helps them feel competent, there are some limitations that arise when it comes to remote work such as limited access to databases when working remotely. Even though digital leadership behaviour aims to ensure employees feel like they can do their work well, the technological changes which are necessary to make remote work successful are not implemented which leads to difficulties with executing remote

work. Overall, technological restraints weaken the effects that digital leadership behaviours have on competence fulfilment.

This finding is especially relevant within the public sector, as these technological restraints are a result of barriers to change that this sector experiences. The slow digital transformation that is evident in public sector organisations (Bjerke-Busch & Aspelund, 2021) highlights that there is difficulty with adopting technological changes. One reason for this slow digital transformation may be the focus on the status quo that is characteristic of public sector organisations (Norling, 2024), which means change can be met with resistance. Additionally, change takes a long time as decisions are made at government level and need to move down to employee level (Bjerke-Busch & Aspelund, 2021). In addition to the time it takes for change to happen and the resistance change is met with, public sector organisations tend to also lack the resources and architecture to support digital transformation (Jonathan, 2019). For example, public sector organisations tend to have established routines which could inhibit change (Magnusson et al., 2022) or they have cultural or structural barriers to digital transformation (Wilson & Mergel, 2022). All these factors may create barriers to the technological change that is necessary for public sector organisations to support successful remote work. Thus, public sector organisations experience a number of barriers which are specific to that sector. Technological restraints happen as a result of these barriers because public sector organisations have difficulty implementing the changes necessary to make remote work successful. In this way, technological restraints happen because of public sector characteristics, which makes this finding especially interesting in a public sector context.

Thus, the barriers to technological change that are inherent to the public sector create technological restraints for employees in their remote work. As digital leadership is argued to be a response to digital innovation (Tumbas et al., 2020), and thus focuses on shaping leadership behaviour in response to changes in the work environment, the use of technologies

is an important aspect of this style in responding to remote work in order to ensure employee motivation. However, if the use of these technologies is hindered by technological restraints that happen because of the public sector context, digital leadership becomes less effective in ensuring competence fulfilment. This leads to the following proposition.

Proposition 5: The relationship between digital leadership behaviour and competence fulfilment is weakened by technological restraints.

Additional to the effect of digital leadership on competence fulfilment, digital leadership behaviour also influences relatedness fulfilment. The first way in which digital leadership addresses relatedness is through ensuring there is a **regular hybrid moment for team connection**. Working from home is usually paired with a reduction of contact with colleagues (Barron, 2007) which can lead to a lower fulfilment of relatedness needs as there are less moments to connect. By ensuring there is a regular moment where people from a team come together, both employees who are working in the office and remotely, leaders ensure there is more contact among employees and that remote workers stay involved. This contact moment creates a way for remote workers to engage with their colleagues and makes it possible for them to feel a connection with others while working from home. In this way, by providing a regular hybrid contact moment leaders make it possible for employees to connect with their colleagues, which increases feelings of relatedness.

Second, employees express the presence of **informal contact through WhatsApp** to be helpful to relatedness fulfilment. It is difficult to build a relationship with coworkers of socialize (Baumann & Sander, 2021) because of the limited interaction that is characteristic of remote work (Barron, 2007). However, the introduction of a WhatsApp group that allows employees to interact with one another, in an informal manner, helps create a space where colleagues can be in contact and possibly build a connection. Thus, implementing informal contact through WhatsApp can be used as a tool to encourage employee contact and allow for

a connection to form. In this way, relatedness can increase through using digital leadership behaviour.

Third, digital leadership behaviour encourages relatedness fulfilment through the **sharing of news on WhatsApp**. Because relatedness is also about a sense of belonging to a group (Ryan & Deci, 2002) it is important that leaders behave in a way that allows employees to feel that belonging. However, the introduction of the remote context to an organisation can lead to degradation of the social environment that is present in the office (Gagné et al., 2022). This means the environment or group that employees feel a part of may disappear when working remotely, due to for example lower contact while working remotely. Through the sharing of news in a WhatsApp group, it is possible for leaders to create a space where people experience that news together. It could for example be news about something that unit or team has achieved, which helps bring a sense of togetherness as there is a shared responsibility for that outcome. In this way, WhatsApp is used as a platform to create a sense of belonging to the group or team you work with, which can in turn lead to relatedness fulfilment.

Overall, the ways in which digital leadership behaviour leads to relatedness fulfilment leads to the following proposition:

Proposition 6: Digital leadership behaviour leads to the fulfilment of need for relatedness when leaders ensure communication remotely is easy as well as encouraging informal contact.

The relationship between digital leadership and relatedness fulfilment was found to be influenced by the formality of contact as well as the individual need for relatedness. When it comes to the **formality of contact**, employees express that more formal contact weakens the relationship between digital leadership and relatedness fulfilment. Although leaders may make efforts to be in regular contact with employees, it matters how they approach this

contact. For example, where office meetings might start with a short informal conversation, remote meetings tend to immediately get to the issue at hand. In this way, employees report that remote work tends to involve businesslike conversations rather than social informal contact. This is in line with research that show that remote work comes with limited social interaction (Becker & Tennessen, 1995). The results of this study show that it is not only important for leaders to have regular contact with employees, but that the formality of that contact also needs to be considered. Thus, if leaders want to increase the effectiveness of digital leadership on relatedness fulfilment, they need to ensure that there is also informal contact with employees.

Second, the individual need for relatedness seems to strengthen the relationship between digital leadership and relatedness fulfilment. Because people have different individual needs (Baumann & Sander, 2021) it seems logical that employees will have different needs for relatedness. Van Yperen et al. (2014) find that people with lower relatedness needs will be more likely to enjoy remote work, because there is less interaction while working remotely (Becker & Tennessen, 1995). For these people, digital leadership behaviour that tries to stimulate relatedness fulfilment will be less effective, because the need for relatedness is lower. Leader efforts to create connection might even be perceived as annoying because they deem these efforts to be unnecessary. In contrast, leadership efforts to increase connection will be received more positively for people that have higher relatedness needs. In this way, the **individual need for relatedness** strengthens the effectiveness of digital leadership behaviour on relatedness fulfilment. This leads to the following proposition.

Proposition 7: The relationship between digital leadership and relatedness fulfilment is weakened when contact is more formal and strengthened when there is a higher individual need for relatedness.

5.1.3 Fulfilment of Autonomy Needs in the Public Sector

From the results of the study it seems interesting that employees in this study indicate that their need for autonomy is mostly supported within the organisation. This is in contrast with research that argues that a public sector organisation tends to be less supportive of autonomy needs (Imamoğlu & Beydoğan, 2011). The rigid structure of a public sector organisation would lead to lower autonomy support because employees experience less freedom in how and when they do their work. Perhaps a reason for the autonomy support that is experienced in this study is the **introduction of remote work to the public sector context**.

The idea that remote work brings autonomy to employees is supported throughout literature (i.e. Gagné et al., 2022; Gajendran & Harrison, 2007). For example, Gajendran and Harrison (2007) find that remote increases the perception of autonomy in employees. This might be because people who work remotely experience more control in their work (Jamaludin & Kamal, 2023). Thus, the idea that remote work increases autonomy in this specific organisation is supported by literature.

The interesting contribution this research makes is the specific effect of implementing remote work in the public sector context. Although research supports the idea that remote work brings autonomy, it is especially important in the public sector context due to the lack of autonomy support that usually characterizes this sector (Imamoğlu & Beydoğan, 2011). Thus, the introduction of remote work in this specific organisation seems to contradict the idea that public sector organisations tend to be low in autonomy support. In this specific case, the introduction of remote work to the public sector organisation may even signal efforts to increase autonomy support in an environment that usually inhibits this support. The freedom and lack of control that characterize remote work may thus be an explanation of why this

public sector organisation is sufficiently autonomy supportive. This leads to the following proposition:

Proposition 8: The remote context increases autonomy support in public sector organisations.

5.2 Practical implications

5.2.1 Which leadership style to use?

The results of this study suggest that using a combination of two leadership styles ensures the fulfilment of psychological needs within remote work in the public sector. Displaying laissez-faire leadership behaviour specifically helps for fulfilling the need for autonomy, as it gives employees the freedom and control they need to feel autonomous. Digital leadership behaviour is helpful for both the need for competence and the need for relatedness because it focuses on ensuring connection and providing employees with the necessary facilities they need while working remotely. Thus, when it comes to leadership behaviour in the remote public sector, it seems like combining laissez-faire leadership behaviour and digital leadership behaviour will ensure the fulfilment of psychological needs in employees. However, the results of this study seem contradictory, with on the one hand stating that employees need to have a lot of freedom to enhance their autonomy while on the other hand proposing strategies that limit the freedom necessary for autonomy, in order to meet competence and relatedness needs. This makes it difficult for leaders to utilize the results of the study in an efficient manner. As a solution, the following scenarios propose a guideline to choosing a leadership style based on which psychological needs are valued most by employees. In this way, laissez-faire leadership and digital leadership can be used in combination to address psychological need fulfilment.

According to the results of this study, one way of distinguishing which psychological needs are most valued by employees is by looking at work experience. The two scenarios

below will highlight which leadership style is proposed with different levels of work experience, based on how that work experience influences the psychological needs that are valued most by employees.

Scenario 1: Leading employees with a lot of work experience in their current field.

In this first scenario, employees have a lot of work experience in the field they currently work in. Results of this study show that people with more work experience tend to value autonomy. For example, with increased work experience employees tend to be more confident in the work they do as they have likely encountered similar work before. This means that they could experience autonomy as pleasant, as they feel confident that they can do well in executing their work and feel like they possess the ability to do the work. Additionally, employees with a lot of work experience have established the way in which they like to do their work and limiting autonomy may restrict them in executing the work in the best way they can. Overall, it seems that employees with a lot of work experience tend to value autonomy.

In contrast to the high value attached to autonomy needs, employees with a lot of work experience may attach less value to competence and relatedness needs. First, people with a lot of work experience tend to need less help from their colleagues with executing their daily work because they possess more knowledge on how to do the work. Consequently, the necessity for connecting with other colleagues is lower and thus barriers to communication affect these employees less. Second, employees with a lot of work experience tend to either know they do well, regardless of leadership feedback, or they experience competence through the autonomy they receive from leaders. For the latter, receiving autonomy signals to employees that the leaders trusts them to do the work well which allows these employees to feel competent. Thus, employees with a lot of work experience tend to value competence and relatedness needs less than they do autonomy needs.

Overall, employees with a lot of work experience seem to value autonomy the most out of the three psychological needs. Because of this it is important to choose a strategy that focuses on the fulfilment of autonomous needs rather than competence and relatedness needs. Through the results of this study, it seems most beneficial to choose for a laissez-faire leadership style as this style ensures the need for autonomy is met.

Scenario 2: Leading employees with little work experience in their current field.

In this scenario, the focus is on employees with little work experience in the field they are currently employed in. Employees in this study indicate that autonomy can make them feel uncomfortable when they have less work experience, as the lack of guidance can make these employees feel lost and insecure whether they are doing a good job. Thus, autonomy is not a highly valued need for employees that have just started working in the field they currently work in.

In contrast to the lower value these employees attach to the need for autonomy, the needs for competence and relatedness tend to be more valued. First, employees who have less work experience can feel less confident in the work they perform and may feel insecure about how well they do their work. Because of this, positive feedback will be more valued by them than by people who are more confident in their ability to do work. Second, employees with little work experience may feel a higher need to rely on their colleagues in order to execute their work. In this way, these employees could feel a higher need to connect in order to be able to ask for help as well as know who to ask for help. Thus, employees with little work experience tend to value competence and relatedness needs above autonomy needs.

Overall, employees with little work experience attach a higher value to competence and relatedness needs than to autonomy needs. According to the results of the study, the use

of digital leadership is the best fit in this scenario as this leadership style is most effective in ensuring the need for competence and relatedness are met.

5.2.2 Benefits for employees and the organisation

In addition to knowing which leadership styles to utilize in which situations, this paper highlights the relevance of fulfilment of psychological needs on employee experience. As highlighted in the results, employees experience positive feelings related to the fulfilment of psychological needs such as feeling appreciated, feeling satisfied, feeling happy. Additionally, the fulfilment of competence and the fulfilment of autonomy enforce on another.

Furthermore, employees experience a number of outcomes that may be beneficial for the organisation. First, fulfilling autonomy needs leads employees to, among other things, be able to do their work well, provide their own input, experience growth and development and feel reciprocity towards the organisation. This means not only does autonomy allow employees to perform the work to the best of their ability, but it also allows them to become even better at their work and to be willing to do extra things for the organisation. Providing autonomy support is thus not only beneficial to the current organisation but it is also an investment into the future of the organisation. Second, support of the need for competence can ensure employees experience more ease in doing their work but also that they become better at their work. Additionally, competence fulfilment leads to work enjoyment as well as experiencing job satisfaction, and willingness to do extra work. Providing competence support can thus lead to higher productivity which could have a positive effect on organisational performance. Third, relatedness fulfilment makes executing work easier as well as it takes less effort to contact colleagues. Furthermore, relatedness support could lead to reduced work stress and a willingness to do more for the organisation. Overall, the fulfilment of autonomy, competence and relatedness can lead to organisational benefits.

Thus, management support for employee psychological needs not only leads to positive feelings for employees but can also provide benefits for the organisation. These benefits include professional growth, higher productivity, and a willingness to take on extra work.

5.3 Limitations and future research

This research has come with some limitations and some future research recommendations. The first limitation regards generalizability of findings. Of course, this research was meant as more explorative than having a goal of quantifying relationships. However, due to the inherent low generalizability of purposeful sampling (Acharya et al., 2013) the research results are limited in their use. This limitation is exemplified by the focus on one organisation.

Another limitation pertains the interviewing of employees who work both in the office and remotely. Although questions were asked specifically regarding leadership behaviour in the remote context, employees may have difficulty separating the effects of leadership behaviour remotely and in the office. This may lead to some causal inconsistencies between leadership behaviour and the effects on psychological need fulfilment in the remote context.

For future research it may be interesting to perform similar research on a larger scale, including multiple public organisations of different sizes in order to create more comprehensive and generalizable results. Furthermore, it might be interesting for future research to focus on researching employees who work fully remotely to leave out the possible effects of office work on the results of the study.

Additionally, future research could focus on a comparison of the public sector and the private sector in the context of psychological needs. There is research on psychological needs and SDT but this research rarely focuses on the sector context (Duerrenberger & Warning,

2023). This specific study provides a more exploratory insight of the remote public sector, showing some insight into the public organisation, but it may be interesting to make a more distinct comparison of the private and public sector. A further distinction in research on psychological needs based on sector type may provide helpful insights for managers in practice.

5.4 Conclusion

This research focused on understanding how leadership behaviour addresses psychological need fulfilment in remote work in the public sector. Both the remote context and the public sector context influence need fulfilment, which warrants a response by the organisation to ensure that needs are fulfilled in those contexts. Both laissez-faire leadership behaviours and digital leadership behaviours are used to address the needs for autonomy, competence, and relatedness in the remote public sector context. Although current research highlights the effects of the remote environment and the public sector environment on need fulfilment, the way in which leadership behaviour addresses need fulfilment in that context is not discussed. Thus, this paper contributes to the literature by showing how specific leadership behaviours address psychological needs within the remote public sector context.

Specifically looking at how leadership styles address psychological needs, employees tend to experience autonomy fulfilment when leaders show laissez-faire behaviours such as not controlling or checking employees and not involving employees. For digital leadership, employees tend to experience competence fulfilment when given the resources to facilitate working remotely, when feeling involved and when manager is available. Furthermore, employees tend to experience relatedness fulfilment through digital leadership when leaders ensure remote communication is easy and informal contact is encouraged. The paper also shows how the relationships between leadership behaviour and need fulfilment can be moderated by individual employee characteristics.

Furthermore, this paper suggests the remote context to be a reason for the autonomy fulfilment that employees in this organisation experience. Additionally, the introduction of this remote work into the public sector could signal efforts by public sector organisations to make their environment more autonomy supportive.

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Appendix A: Interview guideline

Interview guideline – research proposal

I would like to record this interview to use for the results of this study, is that okay with you?

Yes = continues

In this interview I will be asking questions about how able you feel to perform your work, how connected you feel with your colleagues, and how much control you feel in performing your work. In addition to this, the research aims to investigate how leadership behaviour within a company deals with these different needs.

I want to remind you that this interview is purely for academic purposes, for me to understand more about the relationship between leadership behaviours and how these makes you feel.

The questions in this interview do not warrant any specific personal information. All information will also be stored and analysed anonymously.

I also want to remind you that you can stop this interview at any time, or withdraw from participating in the study at all, also after the interview.

The interview will ask questions specifically about your sense of competence, your sense of belonging to the group, and your autonomy. The questions are aimed to find out more about these topics in your remote work specifically.

Questions about experiences with remote work

Past/experiences

1. How long have you worked (at least partially) in a remote work environment?
2. How many hours or days does your current work take place in a remote work environment?

Questions about leadership in remote work

(Competence)

Within this time in your work week that you work remotely (repeat specific time they mention) ...

3.
 - a. Does your manager help you to feel that you can perform well in your daily remote work activities?
 - b. What specific actions by your manager make you feel this way? (If examples mentioned in 3a, ask for more examples)
4. Why does this management behaviour (insert behaviour(s) named) by management help you feel able to perform these activities well?
5. Is there a difference between how able you feel to perform tasks well remotely versus non-remotely?
6. How could management make you feel even more capable of performing your remote work well?
7. How does it make you feel when you know you are doing well in your remote work?

(Relatedness)

I would like to know some more about the way you feel connected to your colleagues. (If they have mentioned this before, link it back to that).

8.
 - a. Does your manager help you to feel connected to colleagues in your remote work?
 - b. What specific actions by your manager make you feel this way? (if examples mentioned in 8a, ask for more examples)
9. Why does this management behaviour (insert behaviour(s) named) help you feel connected to your colleagues?
10. Is there a difference between how connected you feel to your colleagues while working remotely versus non-remotely?
11. How could management support you to feel more connected?

12. How does it make you feel when you are more connected to your colleagues in your remote work?

(Autonomy)

In addition to your sense of belonging and your sense of competence, I want to know if: ...

13.

- a. Does your manager help you to feel autonomous in doing your work remotely?
- b. What specific actions by your manager make you feel this way? (if examples mentioned in 13a, ask for more examples)

14. Why does this management behaviour (insert behaviour(s) named) make you feel autonomous?

15. Is there a difference between how autonomous you feel remotely versus non-remotely?

16. How could management support you feeling more autonomous?

17. How does it make you feel when you are more autonomous within your remote work?

Concluding questions:

18. Overall, what would you say is the biggest difference between remote work and non-remote work?

19. Is there anything you feel I have missed that you would like to add?

Thank you for this opportunity and for your elaborate answers and have a nice rest of your day!

‘Stop recording’