Understanding The Hybrid Work Puzzle

Aspects shaping the choice of work locations in hybrid work environments, and their subsequent relation to employees' perceived support, trust, and social well-being

Ramezani, Asal

Award date:
2024

Understanding The Hybrid Work Puzzle

Aspects shaping the choice of work locations in hybrid work environments, and their subsequent relation to employees' perceived support, trust, and social well-being

Colophon

Understanding The Hybrid Work Puzzle

Aspects shaping the choice of work locations in hybrid work environments, and their subsequent relation to employees' perceived support, trust, and social well-being

A Master's thesis for the requirement of the Master of Science (MSc) degree at the Eindhoven University of Technology - Faculty of the Built Environment
Department of Architecture, Building and Planning – Urban Systems & Real Estate
Chair of Real Estate Management and Development

Course Code: 7Z45M0
Study load: 45 ECTS
Graduation year: 2023-2024

STUDENT

Name: Asal Ramezani
Student ID: 1231102
Contact a.ramezani@student.tue.nl

GRADUATION COMMITTEE

Chairman/First supervisor
Dr.ir. H.A.J.A. (Rianne) Appel-Meulenbroek
Real Estate Management and Development
Eindhoven University of Technology

Second supervisor
Dr.ir. A.G.M. (Lisanne) Bergefurt
Real Estate Management and Development
Eindhoven University of Technology

Third supervisor
Prof. dr. P.M. (Pascale) Le Blanc
Human Performance Management
Eindhoven University of Technology

DATE
29 May 2024

This thesis has been carried out in accordance with the rules of the TU/e Code of Scientific Integrity.

Acknowledgements

This master thesis completes my master's degree in Architecture, Building and Planning: Urban Systems & Real Estate at Eindhoven University of Technology, and marks the end of my academic journey.

First, I would like to express my heartfelt gratitude to my first supervisor: Rianne Appel-Meulenbroek, whose kindness and support has been invaluable not only throughout this thesis but also during my entire master's program. Your passion and dedication to your work has inspired me and led me to discover a new field which I am passionate about. I also wish to extend my sincere thanks to my second supervisor, Lisanne Bergefurt, for the care you showed for my work over the past year and guiding me through the statistical parts of this thesis, besides all else. I would like to thank both of you for your continuous availability and understanding of my personal circumstances. I would also like to thank Pascale Le Blanc for her feedback from a different perspective and her role as a third supervisor. Without the professional expertise, assistance, and feedback of all my supervisors, this thesis would not have reached its current form.

Second, I cannot thank my parents enough for the sacrifices they have made, enabling me to pursue a degree and accumulate knowledge that will serve as a strong foundation for my future. A big thank you goes out to my brother as well, for always having my back and for continuously encouraging me to strive for excellence. I would not be where I am today without my family's care, support, and advice.

Finally, I am deeply grateful to Adam, my friends, and colleagues, who have all been more than amazing. You have pushed me through the challenging times of this thesis and have stood by me regardless of the circumstances, and I thank you all for that.

Executive Summary

The evolution of remote work, initially known as "telecommuting," began in 1975 with efforts to reduce commuting times in California. Over time, driven by advancements in communication and information systems, this term evolved into the broader expression of “telework”. The COVID-19 pandemic accelerated the shift to telework, leading to a significant increase in full-time teleworking across European countries in 2020. This shift varied across different industries, job types, countries, and extended beyond knowledge and ICT intensive sectors. Now that the pandemic has eased, people are returning to the office, but the office is no longer the sole hub of work. Hybrid work emerged as an ideal model, offering employees flexibility in their work location and/or schedule. It offers benefits such as improved job performance, job satisfaction, and reduced stress levels, but challenges such as professional isolation, blurring of work-life boundaries and an “always-on” mindset also exist.

As the COVID-19 pandemic transitions to an endemic phase and employees have a prolonged exposure to hybrid work, understanding their shifting preferences requires research. Current research on hybrid work explores factors which influence employees’ work location preferences such as individual and work characteristics and physical workplace aspects. Previous research also started to explore the impact of hybrid work on employee support, trust, professional isolation, and work-life balance. However, these studies often have gaps, contradictory findings, and varying definitions of hybrid work. Additionally, while many studies focus solely on the main office or employees' homes as hybrid workplaces, this thesis considers more locations. This thesis aimed to comprehensively analyse the combined relationships of personal and work-related characteristics, and physical workplace satisfaction with employees’ chosen hybrid work location, as well as investigate the extent to which the perceived levels of support, trust, and social well-being within a hybrid work setup are related to such characteristics and work-location choices. Therefore, this research aimed to answer the following research question:

“What is the relationship of personal and work-related characteristics and physical workplace satisfaction with employees’ chosen hybrid work location, and to what extent are the perceived levels of support, trust, and social well-being related to such characteristics and work-location choices?

To answer the research question, an existing dataset, comprising of 10,491 valid responses was used for quantitative analysis. This dataset was obtained from online surveys among Dutch office workers employed in 10 public organizations in the Netherlands, as part of a collaborative effort between the Center for people & buildings in Delft, Delft University of Technology, and Eindhoven University of Technology.

The bivariate analyses together with the effect sizes of all relationships revealed that employees’ personal characteristics played a minor role in their work location choice. Gender, age, and psychological empowerment did not determine employees’ work location choice, nor did the presence of children in the household determine employees’ decision to work from the main office or home. These findings were unexpected and contradicted multiple existing studies that highlighted relationships between these variables (e.g., Mokhtarian, 1996; Zhang et al., 2020; Drucker and Khattak, 2000). It became evident that work characteristics were the main determinants of employees’ work location choices, in comparison to personal characteristics and physical workplace satisfaction. Moreover, location autonomy did not relate to employees’ work location choices. Although prior research did not specifically study this relationship, it was suggested that perceived location autonomy influenced individuals' choice of work environment to enhance productivity and well-being (Thomas & Velthouse, 1990; Zhang & Bartol, 2010). Therefore, a potential relationship was anticipated here.

Furthermore, prior research had not established a relationship between physical workplace satisfaction and hybrid work location choice. This thesis added to current literature by showing that employees' satisfaction with the physical aspects of their home environment determined their choice for working at home or in the office. Conversely, satisfaction with the physical aspects of their office environment did not relate to their work location choice.

The relationships between perceived support, trust, and social well-being aligned with expectations from pre-hybrid work studies (e.g. Eğriboyun, 2015; Tse & Mitschell, 2010). Perceived support and trust positively related to each other and exhibited a reciprocal effect. Employees' increased perceived support and trust have also shown to relate to reduced experienced professional isolation and work-life conflict, and reduced work-life conflict related to reduced professional isolation. Furthermore, the findings of this thesis revealed that social well-being, especially work-life conflict was related to many personal and work-related characteristics, as well as physical workplace satisfaction, whereas very few of these antecedents shaped employees' perceived trust in the workplace. Additionally, current literature only highlights the influence of workspaces on social well-being, mediated by social interactions (e.g. Stephens et al., 2011, Colenberg, 2022). This thesis added to current literature by showing that office workplace satisfaction was mainly related to social well-being and support from colleagues, while home satisfaction was primarily associated with trust, support, and work-life conflict. Employees' personal characteristics, other than psychological empowerment, had a minor role in shaping levels of perceived support, trust, and social well-being. This thesis added to literature by showing that psychological empowerment had a holistic, and positive impact on these outcomes, but findings regarding age and gender did not align with prior research, which indicated differences in communication styles and strategies within hybrid work settings across different ages and genders (Troemel-Ploetz, 1991; Furumo and Pearson, 2007). Furthermore, increased location autonomy somewhat related to higher perceived levels of support, trust, and social well-being, but other work characteristics did not play a major role in these outcomes. Specifically, work hours and distance to work showed no relationship with these variables, contradicting expectations based on prior literature (e.g. Ömüriş et al., 2020; Marshall et al., 2007).

Last, hybrid work location choice only related to work-life conflict, contrary to the expectation of relationships with perceived support, trust, and professional isolation as well, based on findings of prior research (e.g. Morganson et al., 2010; Fayard et al., 2021). Although the relationships between work location choice and these outcomes were negligible in size, the direction of some were not as expected. For example, employees who primarily worked from home were found to experience less professional isolation than others, whereas numerous studies suggested that working away from the office environment can potentially result in feelings of social and professional isolation (Baruch & Nicholson, 1997). The findings of this thesis also contradict previous research (e.g. Smith et al., 2018; Fayard et al., 2021) by showing that employees who primarily worked at the main office or evenly divided their time across multiple locations perceived less trust among themselves and their colleagues compared to those primarily working from home or splitting their time evenly between home and the main office.

The findings of this thesis highlight several implications for further research, aiming to address the identified limitations and expand understanding in some areas. This thesis found that demographic factors like gender and age do not relate to hybrid work location choices or employees' perceptions of support, trust, and well-being. Understanding the specific conditions under which gender and age influence work location choices and experiences, revealing any mediating variables or contextual factors that alter these relationships in hybrid setups can offer valuable insights. Another critical area for future research is professional isolation. This thesis challenges the widespread belief that hybrid or

remote work increases feelings of professional isolation, showing that employees predominantly working from home experience the lowest levels of professional isolation. Future studies should explore whether this discrepancy arises from the subjective nature of measuring professional isolation or from employees not recognizing missed opportunities for better connections with colleagues. This thesis found that office satisfaction is mainly related to social well-being, while home satisfaction is primarily associated with trust and support. Future research could identify the specific aspects of the home workplace which are linked to perceived levels of support, trust, and social well-being. Identifying these would enable organizations to help employees create optimal home work environments. Additionally, considering psychological or spatial factors that influence workspace satisfaction, beyond the physical elements considered in this thesis, could provide a more holistic view.

The positive relationship between psychological empowerment and perceived support, trust, and well-being in a hybrid work environment suggests an underexplored area that future research could address. Promoting cross-disciplinary research, particularly between fields such as Psychology and Real Estate, can help integrate the concept of psychological empowerment into hybrid work studies and delve deeper into these dynamics. Methodologically, future studies could benefit from performing a path analysis to explore indirect relationships and provide more robust findings. Additionally, adopting a longitudinal approach could identify patterns and changes in employees' work location choices and perceptions over time, offering insights into the dynamics of hybrid work environments. By addressing these areas, future research can further enhance our understanding of hybrid work environments and contribute to more effective work practices and policies.

In terms of practical recommendations, organizations can leverage insights from this thesis to optimize hybrid work environments. By promoting increased autonomy in work location choices, organizations can foster` greater support, trust, and social well-being. Organizations might address distrust in hybrid work settings by offering workshops about building trust and differences in the work preferences of individuals. Ensuring high satisfaction with the physical work environment is as well crucial for supporting employees in hybrid work arrangements. This is especially true for the home office, as it relates to increased perceived levels of support, trust, and social well-being. Organizations should also explore means to reduce or prevent work-life conflict based on employees' work locations and establish clear agreements on hybrid work arrangements to ensure a healthy office presence. Managers could promote face-to-face team check-ins and mandate office days for team meetings, among others, to give employees a reason to come to the office and ensure that their close colleagues are present at the office when they are. Organizations might also benefit from promoting psychological empowerment due to its positive relationship with perceived support, trust, and social well-being. Finally, organizations should recognize and accommodate employees' individual differences and understand their experience across different work locations to be able to retain talent.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

1. Introduction

1.1. Background

The concept of remote working, initially known as “telecommuting,” emerged in 1975 with a focus on reducing commuting times in California (Nilles et al., 1976). Over time, driven by progress in the information industry, this term evolved into the broader expression of “telework” (Nilles, 1988). As communication and information systems advanced, the telework trend gained momentum (Messenger & Gschwind, 2016). The COVID-19 pandemic significantly transformed teleworking, as companies implemented emergency measures in 2020 to minimize the spread of the virus.

According to the European Office of Statistics, the proportion of full-time teleworkers increased from 6.0% to 14.1% between 2019 and 2020 in the initial nineteen countries of the European Union (EU-19) (Eurostat LFS, 2020). However, considerable variations in teleworking prevalence exist among the EU Member States. For instance, in 2020, 17.8% of the employed population in the Netherlands worked full-time from home, a rise from the 14.1% recorded in 2019 (Eurostat LFS, 2020). The degree of change in Northern European countries is smaller compared to other EU-19 nations, largely due to the fact that telecommuting was already more widely practiced prior to the COVID-19 pandemic (European Commission, 2020). Furthermore, the adoption of telework differs considerably across different industries, job types, and countries. While teleworking was historically predominant in knowledge- and ICT-intensive sectors, as well as occupations involving desk-related tasks (European Commission, 2020), the COVID-19 pandemic demonstrated that a broader range of jobs could be conducted remotely compared to previous assumptions. For instance, following the pandemic, sectors such as education, public administration, and financial services embraced telecommuting as their predominant operational approach (ILO, 2020).

The unanticipated and sudden shift to remote working caused by COVID-19 prompted many organizations to shift from being reactive to proactive in shaping the working model that is most suitable for their needs. While all-remote firms are not yet widespread in Europe, a notable number of employers (43%) now allow their on-site employees the flexibility to work remotely or from a different location for a few days each week or month (Ones, 2023). Furthermore, approximately 45% of European companies offer the option for employees to work remotely for up to three days per week (Ones, 2023). Now that the pandemic is no longer a health emergency, people are gradually returning to office spaces; however, the office is no longer the sole hub of work. A shift to hybrid work means that people will be returning to the office both with varying frequencies and for a new set of reasons such as in-person collaborations.

1.2. Problem Analysis

Hybrid working emerged as the ideal model for satisfying employees’ need for flexibility while maintaining company culture and preserving investments made in their work environment (physical workspaces, technology, etc.). Hybrid work can be described as a work arrangement that offers flexibility in terms of when and where the work is performed (temporal and geographical flexibility), whether that is on the employer’s premises, a designated location, or remotely, utilizing digital tools such as laptops, mobile phones, and internet (Vartiainen & Vanharanta, 2023). This arrangement is shaped by the organization’s objectives, the employee’s requirements and responsibilities, and the context. Employees can conduct their tasks either independently or in collaboration with others, as mutually determined by the worker and the organization. Therefore, in a hybrid work setup, an individual operates within a middle ground, not exclusively within a traditional in-person team nor

within a completely virtual one. The existing research on hybrid work has taken various approaches. On the one hand, some studies have investigated the impact of hybrid work on factors such as employee support, trust, social well-being, and other related aspects (Smith et al., 2018; Fayard et al., 2021; McRae and Kropp, 2022). On the other hand, different studies have focused on understanding the factors that influence an employee's preference for or choice of specific hybrid work locations during the week (Munnich, 2022; Clark, 2012; Galanti et al., 2021; Costantini & Weintraub, 2022). These factors consist of a wide range of aspects, including individual characteristics (such as gender, age, education level, personality traits), work-related characteristics (like task interdependence, and commuting distance), and physical workplace design factors. By examining some of the influences of hybrid work on employees or the factors influencing their preference in their work locations, researchers have aimed to gain a comprehensive understanding of this evolving work arrangement.

However, despite the existing growing body of literature, studies have yet to comprehensively analyze the combined relationships of personal and work-related characteristics and physical workplace satisfaction with employees' chosen hybrid work location and the subsequent relationship with support, trust, and social well-being. Moreover, to the author's knowledge, the literature has not yet investigated the extent to which the perceived levels of support, trust, and social well-being within a hybrid work setup are related to personal characteristics of employees. The focus on support, trust, and social well-being in the context of hybrid work is highly important for several reasons. Firstly, trust has been found to positively affect the success of hybrid teams (Furumo, 2009). Trust plays a pivotal role in fostering collaboration and sharing knowledge (Brahm & Kunze, 2012: Peters & Karen, 2009; Pinjani & Palvia, 2013). Additionally, trust between employees and employers, as well as among colleagues, is key to building strong working relationships (Page, 2024). This is especially true in environments where physical proximity and therefore face-to-face interactions may be limited (Fayard et al., 2021). Secondly, support is key for ensuring that employees feel valued, connected, and well engaged to perform their tasks effectively (Osborne & Hammoud, 2017; O'Sullivan, 2023). In hybrid work environments, providing the right support is integral in maintaining job satisfaction and performance (Rhoades & Eisenberger, 2002). Further, understanding how hybrid work locations relate to social well-being is vital for both employees' mental health and an organizations' ability to engage its workforce.

Lastly, most research on hybrid work has either been conducted before or during the COVID-19 pandemic (e.g. Zhang et al., 2020; Sokolic, 2022; Marshal et al., 2007). However, as the current research takes place, COVID-19 is no longer classified as a pandemic and 43% of employees have regained the ability to make their own choices regarding their work location (Ones, 2023). As time has gone by, employees have accumulated more prolonged exposure to hybrid work and have progressed beyond their initial reactions (Appel-Meulenbroek et al., 2022) and experiences tied to the pandemic. For instance, employees are now placing renewed emphasis on factors such as quality of life, human connection, and personal values (JLL, 2020), potentially resulting in shifts in their priorities and preferences of their workplace. As a result, new findings and insights are likely to emerge compared to research conducted during or at the peak of the COVID-19 pandemic.

1.3. Research Question

Given the existing gaps in the research on hybrid working arrangements, it is imperative to develop a comprehensive understanding of various hybrid work styles, their antecedents, and the consequences. The main research question that arises is:

"What is the relationship of personal and work-related characteristics and physical workplace satisfaction with employees' chosen hybrid work location, and to what extent are the perceived levels of support, trust, and social well-being related to such characteristics and work-location choices?"

Based on the main research question, several sub-questions are formulated to provide a more comprehensive exploration as follows:

1. What is hybrid working and how does it differ from traditional work arrangements?
2. What is the relationship between personal and work characteristics, and physical workplace satisfaction of employees, and their choice of work locations within a hybrid work environment?
3. How do support, trust, and social well-being relate to each other within a hybrid work environment?
4. What is the relationship between employees' work locations choice and their perceived support, trust, and social well-being within a hybrid work environment?
5. What is the relationship between personal characteristics and work characteristics, and physical workplace satisfaction of employees and their perceived support, trust, and social well-being?

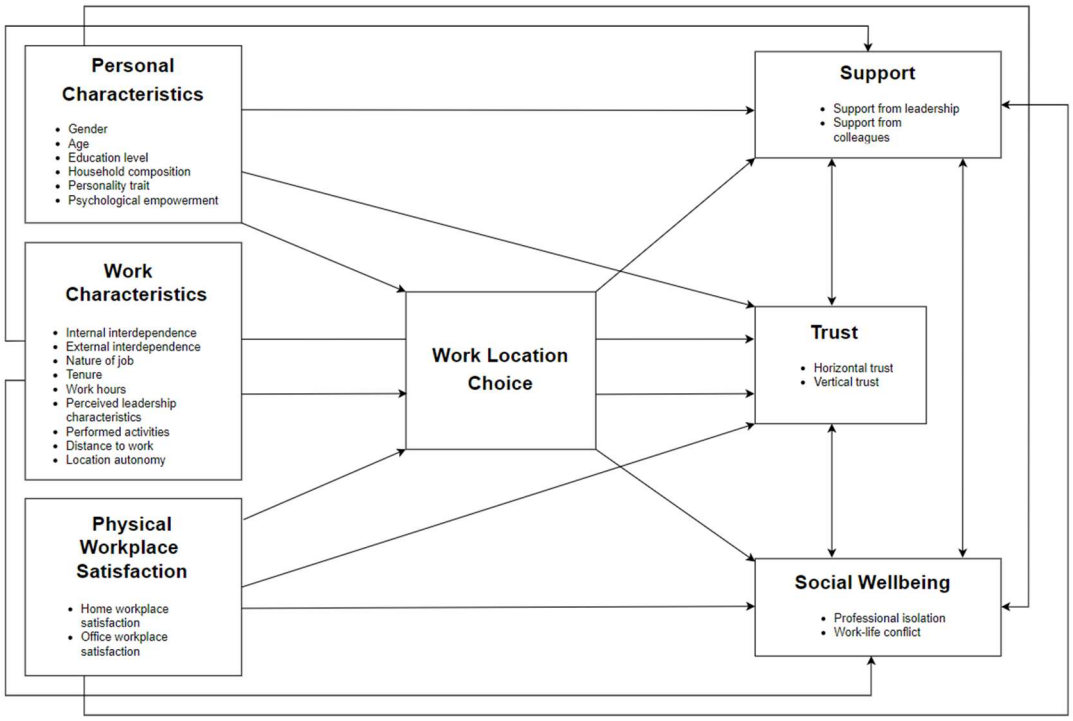


Figure 1 Preliminary conceptual model

1.4. Research Design

This research is structured into two main sections. The first section begins with an extensive literature review focusing on hybrid work. Its objective includes defining the concept, discussing the existing knowledge, and identifying personal, work-related, and physical workplace factors influencing individuals' hybrid work location. This section also explores literature on how these factors influence perceived support, trust, and social well-being among employees across different work locations.

The second part of this research is based on an existing dataset obtained from online surveys among Dutch office workers employed in 10 public organizations in the Netherlands, as part of a collaborative effort between the Center for people & buildings in Delft, Delft University of Technology, and Eindhoven University of Technology. This dataset, comprising 10,491 valid responses, undergoes descriptive and bivariate analysis to determine relationships between the variables. This research also looks further at the effect sizes of the relationships and discusses the main findings in comparison to prior research. The thesis concludes with a summary of the relationships, addresses research limitations, and outlines future research opportunities along with practical recommendations.

1.5. Practical and Academic Relevance

This thesis delves into the factors relating to employees' choices regarding work locations within a hybrid work environment, providing organizations with valuable insights for creating a suitable work environment. For instance, if employees favour the office for collaborative work, prioritizing spaces favourable for teamwork is essential. Additionally, these insights can be used by organizations to refine their hybrid work policies, providing autonomy for employees in their choice for work locations based on their individual and work characteristics. Furthermore, the identification of factors relating to perceived support, trust, and social well-being within the workplace plays a crucial role in ensuring employees feel valued, connected, and are satisfied with their job performance (Rhoades & Eisenberger, 2002). Prioritizing social well-being not only contributes to employees' mental health, but also influences retention rates and makes the organization more attractive to top talents (Sears et al., 2013). Additionally, as this research digs into the relationship between work locations and these factors, it provides insights essential for organizations in developing strategies that ensure consistent levels of support, trust, and social well-being across all work locations. By comprehensively addressing these factors, this research contributes to an overall understanding of the dynamics involved in hybrid work setups and contributes to overall organizational success.

This research also stands out as it explores post-pandemic work location choices, recognizing the shift towards hybrid work as a lasting change. Unlike studies conducted prior or during the pandemic, this research looks into the experiences of individuals who have become accustomed to hybrid work. Additionally, this thesis benefits from an extensive data collection, drawing from ten organizations with 10,491 valid responses. Furthermore, this research combines the factors from previous studies into one unified research, resulting in a better holistic understanding of factors influencing employees' experiences in a hybrid work setting. This research also addresses a gap in existing research by investigating the relationship between employees' satisfaction with the physical elements of their workspaces in both office and home and their choice of work locations, rather than only exploring the physical factors influencing employee satisfaction. At last, acknowledging the lack of consistency in current terminologies and definitions, this thesis aims to establish a clear and comprehensive definition, ensuring a solid foundation for the subsequent parts of the research.

2. Literature Review

2.1. Flexible Workplace Arrangements

Prior to investigating the relationships highlighted in the research sub-questions, it is essential to establish a clear and precise definition of what hybrid work entails. However, this task is particularly challenging for two main reasons. First, hybrid work is a relatively new and complex concept. Second, it can be quite challenging to distinguish it from other pre-existing work approaches such as 'flexible working', 'remote working', 'teleworking', 'virtual working', 'distributed working', etc. (Sailer et al., 2023). In response to the increasing need for greater clarity within this research domain, Schäfer et al., (2023) explored the diverse conceptualizations and terminologies used in the analysis of workplace arrangements as distinct research streams. Below, an overview of the key findings from their research is described.

Telework serves as a broad term for the following work arrangements:

- ***Future of work:*** Conduct work where and when employees are most effective. Technology as main enabler of employee effectiveness (Khanna & New, 2008).
- ***Telecommute:*** Use of communication technologies to perform all or part of their work during regular working hours outside the employing organization's physical boundaries (Olszewsky et al., 1994).
- ***Remote Work:*** Geographical and temporal flexibility, but detailed description of work location (Van Zoomen & Sivunen, 2021).
    - ***Home office:*** Temporal flexibility, and home as the primary work location (Hill et al., 2003).
    - ***Working from home:*** Temporal flexibility, but no switching between more remote work locations (Venkatraman et al., 1999).
    - ***New Ways of Work:*** Geographical and temporal flexibility while using new technological tools. Having control over the work content and having access to organizational knowledge (Aroles et al., 2021; Assarlind et al., 2013).
    - ***Distributed Work:*** Geographical and temporal flexibility (Vlaar et al., 2008).
    - ***Mobile Work:*** Geographical and temporal flexibility, also including work that requires physical movement from one place to another, with a strong focus on mobile devices (Chatterje et al., 2022; Jo & Lee, 2022).
    - ***Smart Work:*** Geographical and temporal flexibility, with maximum degree of flexibility and autonomy (Cellini et al., 2021).
    - ***Virtual Work:*** Temporally and spatially dispersed and described as working remotely (Robey et al., 2003; Raghuram, 2001)

As seen above, flexible work arrangements are characterised by two key dimensions: time and place. These arrangements vary in the degree of flexibility they offer along each of these dimensions. For instance, smart work grants the highest level of flexibility in both time and place, whereas working from home provides flexibility in time but restricts flexibility in place by limiting employees to working from either their home or their traditional office and no other location. Furthermore, the extent of flexibility within each work approach can be negotiated at different levels, including the team, individual, or between managers and employees (Mauch, 2022).

However, the study by Schäfer et al. (2023) did not delve into the hybrid work stream. The term hybrid is a commonly used label that encompasses a range of concepts related to work, such as hybrid

workplaces, hybrid work, and hybrid team, and is frequently linked with flexible work arrangements (Fayard et al., 2021; Setty, 2021; Appel-Meulenbroek et al., 2022; De Souza Santos & Ralph, 2022). Much like the other terminologies, the term 'hybrid' exhibits variability, lacks clear definition, and overlaps with the explanations of specific telework categories mentioned above.

According to Sailer et al. (2023), the term "hybrid work" seems to have initially appeared in academic literature in 1994, as a side note in a US-based research report focused on distributed work. In this report, the authors make the following argument:

"The United States is catching up to worldwide interest in satellite offices, rural telework centers, and other hybrid work sites intermediate between the home and the central office" (National Research Council, 1994).

The initial reference connects it with distributed work and specifically excludes home-based work. However, other research has taken different angles on this concept. For example, Halford's (2005) study explicitly focuses on transitioning between home and office environments. In contrast, other researchers have explored the broader idea of 'hybrid' work, delving into aspects like the interplay between physical space, social space, and technologically afforded spaces (Bakke & Yttri, 2003; Vartiainen et al., 2007; Vartiainen & Hyrkkänen, 2010).

This thesis follows the definition of Allen et al. (2015), characterizing hybrid work as an arrangement where individuals work outside the traditional office for part of the workweek and maintain connectivity through information and communications technology. This approach can coexist with other flexible work arrangements like flexible work hours.

Hence, hybrid work also operates across two axes: place and/or time, as illustrated in Figure 2 on the right. The matrix outlines that companies falling within the lower left quadrant provide minimal flexibility in both aspects, requiring employees to work in the office during fixed hours. Those granting greater flexibility in terms of working hours are situated in the lower right quadrant. Companies situated in the top left quadrant extend flexibility to employees regarding their work location but maintain strict hour requirements. Finally, organizations positioned in the upper right quadrant provide employees maximum flexibility, allowing them to work from any location and at any time. In this research, the top two quadrants are categorized as hybrid work arrangements.

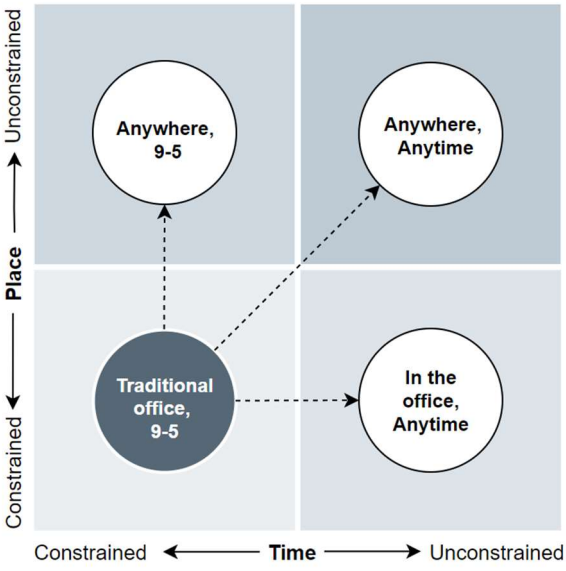


Figure 2 Hybrid work dimensions (Gratton, 2023)

2.2. Opportunities and Risks of Hybrid Working

When the pandemic began, restrictions prohibited on-site work within companies, leading to a large portion of the workforce adopting remote work from their homes. As the opportunity to work beyond the office setting expanded, many employees seized this chance to engage in remote work from various locations, including different countries, which was facilitated by digital means (Wendt et al., 2021).

There are benefits to these hybrid work settings and schedules, including improved job performance, job satisfaction, reduced work-family conflict, lowered stress levels, and diminished turnover intentions (Contreras et al., 2020). Working hybridly also positively affects corporate reputation and image, particularly for environmentally conscious companies aiming to address issues like traffic and air pollution (Giovanis, 2018; Nilles, 1998). Furthermore, autonomy in work location and time boosts productivity (Pavlova, 2019). Hybrid working also allows for personalized work schedules, fosters commitment, reduces coworker interruptions and employee absenteeism (Kłopotek, 2017; Nakrošiene et al., 2019).

However, managerial, coworker, and technological support are essential to mitigate potential negative impacts (Bentley, 2014). Remote work settings could also lead to potential drawbacks in terms of feedback, networking, access to mentoring, and informal learning opportunities (Carillo, et al., 2020; Madsen 2003; Pyöriä, 2011). This can contribute to feelings of professional isolation and hinder career advancement prospects, leading to increased anxiety among employees (Filardi et al., 2020; Kurland & Cooper, 2002; Maruyama and Tietze, 2012). Furthermore, telecommuting necessitates strong organizational skills (Kłopotek, 2017), making it only suitable for individuals who excel at self-management. Moreover, the blurring of boundaries between work and personal life can have repercussions for both employees and their families (Chung and van der Horst, 2018; Kossek et al., 2006). A study by Tavares et al. (2021) conducted in Portugal during the pandemic when childcare facilities were often closed, revealed that 27.5% of respondents admitted that their attention was diverted from work to household chores or childcare responsibilities. This suggests that while working from home may reduce work-related stress, it could potentially amplify stress arising from household and family responsibilities, possibly due to challenges in effectively balancing both spheres (Andrade & Lousã, 2021; Mustafa & Gold, 2013; Nakrošienė et al., 2019). Finally, telecommuting nurtures an "always-on" mindset, making it difficult for employees to detach from work (Andrade & Lousã, 2021; Ipsen et al., 2021). This leads to an extension of working hours, as the time saved from commuting often gets redirected towards work-related tasks (Maillot et al., 2022; Sousa-Uva et al., 2021).

2.3. Person-Environment Fit

Person-environment fit (P-E fit) refers to the alignment between individuals (abilities, needs) and the broader environment (demands, supplies) (Edwards & Cooper, 1990; Kristof-Brown et al., 2005). P-E fit theory argues that individuals seek out environments that align with their characteristics and needs (e.g. Edwards et al., 1998; van Vianen, 2018). Research indicates that a good fit between the work environment and an employee's needs and abilities leads to positive outcomes such as increased job satisfaction, performance, productivity, and mood (Wu et al., 2023; Appel-Meulenbroek & Danivska, 2021). P-E fit can be viewed objectively, where attributes are derived from external sources, or subjectively, based on employees' perceptions (Appel-Meulenbroek & Danivska, 2021).

The Job Demands-Resources (JD-R) model classifies factors affecting work outcomes into job demands and job resources, irrespective of the specific context (Bakker & Demerouti, 2007). Job demands encompass the physical, psychological, social, or organizational aspects of a job that require sustained cognitive and emotional effort or skills, leading to physiological and/or psychological costs. Job resources refer to the physical, psychological, social, or organizational aspects of a job that help achieve work goals, reduce job demands, or stimulate personal growth, learning, and development. These resources can be found at the levels of interpersonal and social relations (e.g. supervisor and coworker support), and task-specific aspects (e.g. skill variety, task identity, task significance, autonomy, performance feedback). The characteristics of the work environment as job resources or demands significantly impact strain, motivation, and organizational outcomes (Hoendervanger, 2022).

Wessels et al. (2019) introduced the concept of 'time-spatial job crafting,' highlighting that in flexible work contexts, employees need to actively adjust their work in terms of locations and other aspects. Time-spatial job crafting can enhance P-E fit and work-life balance, leading to improved work engagement, performance, and organizational commitment. Hoendervanger (2022) integrated these ideas into a P-E fit model, which identifies two routes to perceived P-E fit through time-spatial job crafting: (1) aligning personal needs with environmental supplies/resources, and (2) aligning personal abilities with environmental demands. This model considers that, in flexible work settings, personal needs and abilities are influenced by job characteristics (e.g. job autonomy, task complexity, task variety, mobility) and environmental supplies/resources are influenced by personal home situations (e.g. home work settings, distance to work, household composition).

Combining this model with Holland's theory of vocational choice, which suggests that people select work environments congruent with their personality and interests (Appel-Meulenbroek & Danivska, 2021), and research by Edwards et al. (1998) indicating that people gravitate to environments matching their characteristics and needs, it becomes clear that employees' personal and work characteristics, among others, should be considered in their work location choices.

2.4. Work Location Choice

This section consists of a literature review on personal characteristics, work characteristics, and physical workplace satisfaction. These factors could play a critical role in individuals' choice of hybrid work locations.

2.4.1. Personal Characteristics

Gender

Research shows that women generally exhibit stronger motivation for hybrid work compared to men (Mokhtarian, Bagley, & Salomon, 1998; Mokhtarian, 1996). Among those who favour working hybridly, women tend to lean towards this option for reasons associated with family responsibilities, stress reduction, and having more personal time, whereas men often view hybrid working as a means to enhance work output (Mokhtarian et al., 1998). A survey study by Positive Group (2023) revealed contradicting reasons for this gender-based motivation. Their findings reveal that female employees reportedly experience significantly higher productivity, task engagement, and effective workload management while working remotely, in contrast to male employees who do not indicate any significant differences in these aspects between office and remote work settings. Lastly, research by Drucker and Khattak (2000) shows a difference in the likelihood of working hybridly between males and females depending on the presence of a child, where males are more likely to work hybridly than females if they do not have children. Conversely, for individuals with children, females are more likely to work hybridly than males. Nevertheless, despite certain studies suggesting that females show a greater propensity for hybrid working and do so for varied reasons, other research has yielded contrary results (Zhang et al., 2020; Clark, 2012). As a result, the relationship between employees' gender and their choice of hybrid work location remains uncertain.

H1a: Gender relates to choice of hybrid work locations

Household Composition

Research by Zhang et al. (2020) shows that individuals with children are less likely to work hybridly compared to those without children, contrary to the widely held assumption that having children would increase the likelihood of hybrid working due to childcare responsibilities (Asgari et al., 2014; Drucker & Khattak, 2000; Popuri & Bhat, 2003; Sener & Bhat, 2011; Singh et al., 2012). This finding is not entirely unexpected, as previous studies have also shown that entering parenthood reduces the likelihood of hybrid working (Walls et al., 2007; Singh et al., 2012). It implies that having children not only increases work-to-family conflict but also family-to-work conflict (Zhang et al., 2020), causing potential distractions during work. For individuals without children, single individuals are more likely to work hybridly compared to married individuals, while partnered parents are more likely to work hybridly than single parents (Drucker & Khattak, 2000) aligning with findings by Jin and Wu (2011). These studies suggest that individuals' household compositions relate to their work location choice.

H1b: Household composition relates to choice of hybrid work locations

Age

According to a study conducted by Rothe et al. (2012), age plays a significant role in shaping employees' preference for his or her work environment. Zhang et al. (2020) reveals a positive correlation between age and hybrid working. Specifically, individuals aged over 35 years are more likely to participate in hybrid working compared to those between 18 and 34 years old. Younger employees tend to prioritize work settings that foster teamwork, social interaction, and innovation more than their older counterparts. Moreover, younger generations, such as Gen Z and Millennials, are particularly eager to connect with senior leadership and their immediate managers in person (Microsoft, 2021). One probable explanation for this difference is that older employees usually have more advanced careers, leading to more experience in working independently. They also have established social networks within the company, which may diminish their need for a highly interactive work environment (Westerman & Yamamura, 2007; Drucker & Khattak, 2000; Popuri & Bhat, 2003; Sener & Bhat, 2011; Zhang et al., 2020). Moreover, older employees might have distinct preferences and adopt different approaches due to their proximity to retirement (Kniffin et al., 2021). As retirement approaches, they may seek a more stable and less disruptive work environment, which could influence their preferences for less collaborative and innovative settings. However, while some studies show that older people are more inclined to work hybridly, another study by Clark (2012) suggests otherwise. As a result, the relationship between age and employees' choice of hybrid work location remains uncertain.

H1c: Age relates to choice of hybrid work locations

Education Level

Lyttelton et al. (2020) show that hybrid workers, whether they work part-day or full-day from home, tend to have a higher socioeconomic status (SES) compared to those who work exclusively in the office workplace. This higher SES is reflected in several aspects, such as higher earnings, a greater representation in professional and management positions, and higher educational qualifications. Furthermore, there is a strong correlation between a higher level of education and increased income (Mou, 2023). With a higher income, individuals are more likely to reside in a more suitable and comfortable home environment for working from home. Additionally, a study by Stich (2022) indicates that even during the pandemic, employers showed a preference for higher-educated and more skilled workers to work remotely. This is likely attributed to the fact that individuals with higher levels of education have an advantage when negotiating with their employers to obtain the option to do hybrid work (Zhang et al., 2020). Nonetheless, while studies indicate that individuals with higher levels of

education are more frequently afforded the opportunity to engage in hybrid working, the question of whether employees' educational attainment relates to his or her choice of hybrid work locations remains unanswered.

H1d: Education level relates to choice of hybrid work locations

Personality Traits

Research conducted by Clark (2012) on the Big Five personality traits (Agreeableness, Extraversion, Conscientiousness, Emotional Stability, Openness) indicated that some traits are significantly related to attitudes toward hybrid working. Individuals with higher levels of agreeableness tend to show more positive attitudes toward hybrid working. This can be attributed to their helpful, cooperative, and less competitive nature, as well as their ability to trust others, which are beneficial traits for remote work (Zweig & Webster, 2004; Kowalski & Swanson, 2005). Conversely, emotional stability was found to be positively associated with an unfavourable attitude towards hybrid working. The other three traits; extraversion, conscientiousness, and openness were not found to have significant relationships with overall attitude towards hybrid work. One possible explanation could be that conscientious individuals are known for their diligence in fulfilling work responsibilities, whether they work in an office or from a remote location. Similarly, individuals with high levels of openness are receptive to various work approaches, irrespective of whether they are working in a traditional office or are working hybrid. As for extraversion, it is possible that extraverts readily find ways to interact with others, regardless of their work environment and some may view hybrid working as a chance to increase their social connections beyond their colleagues at work. In this sense, extraverts may perceive hybrid working as a means to fulfil their social interaction needs, regardless of their work location (Clark, 2012).

H1e: Personality traits relates to choice of hybrid work locations

Psychological Empowerment

Psychological empowerment is a motivational idea consisting of 4 dimensions: meaning, competence, impact, and self-determination (Amundsen & Martinsen, 2015). Meaning refers to individual's perception of alignment between their beliefs, work roles, behaviours, and values. Self-determination involves an individual's belief in their work process, reflecting the level of autonomy, which is vital for a sense of empowerment. Impact relates to individual's perception of their influence on operative, administrative, and strategic outcomes at work. Last, competence refers to an individual's ability to perform their job well (Shqerat, 2022).

Tetik (2016) added that psychological empowerment promotes psychological well-being, and it's influenced by person's self-leadership qualities. Self-leadership is defined as a process in which individuals exert influence over their thoughts, feelings, and behaviours in the workplace (Harari et al., 2021). In the context of hybrid work literature, a study by (Annelie et al., 2023) has investigated employee's perceived psychological empowerment based on the hybrid work model, whereas to the author's knowledge, no prior study has investigated the relationship between employee's perceived psychological empowerment and their choice of hybrid work location. However, the topic of self-leadership has been largely studied, particularly concerning its impact on work-related aspects like proactive behaviors, employee productivity, work engagement, stress experienced during remote work, and variations in self-leadership between home and office workdays (Galanti et al., 2021; Costantini & Weintraub, 2022).

Therefore, while existing literature does not explicitly establish a relationship between employees' perceived psychological empowerment and their choice of hybrid work locations, based on findings

from prior studies on self-leadership in the realm of hybrid work, and the influence of self-leadership on psychological empowerment, it is expected that psychological empowerment relates to individual's choice of hybrid work location.

H1f: Psychological empowerment relates to choice of hybrid work locations

2.4.2. Work Characteristics

Task (Internal) Interdependence

Groups are typically established due to interdependence (Mintzberg, 1979). Task interdependence, as described by Campion et al. (1993), represents one form of interdependence. It refers to the extent to which the actions of one team member affect others, and to the level of collaboration required to complete tasks (Thompson, 1967; Van De Ven et al., 1976). Task interdependence plays a crucial role in the context of hybrid work, as it demands increased information exchange and interaction between hybrid workers and their colleagues. Although higher task interdependence often fosters cooperation, communication, and coordination among team members to achieve individual and collective goals (Slocum & Sims, 1980; Susman, 1976), the scenario shifts in the realm of hybrid work. Here, it may hinder collaboration and performance due to the limited range of interactions (Bell & Kozlowski, 2002; Bordia, 1997). For tasks with less interdependence, where individual performance contributes directly to the overall outcome, hybrid working is unlikely to have negative impacts on teamwork, as team members do not require significant direct interaction with each other to successfully perform (Beauregard et al., 2019). Considering these factors, it can be suggested that when employees' jobs involve high task interdependence, they might be more inclined to work in the office rather than from home or elsewhere. The need for close collaboration and face-to-face interactions in such situations could make office work more conducive of achieving team objectives.

H2a: Task (internal) interdependence relates to choice of hybrid work locations

Nature of job

Employees' nature of job may influence their perception of hybrid working, their concerns and challenges related to it, and the opportunities available to work hybridly. The perceptions of employees in managerial roles and non-managerial positions regarding hybrid working can differ significantly. Managers may express concerns about losing control over their subordinates, while employees might fear feelings of isolation and limited access to important information (Kurland & Cooper, 2002; McCloskey & Igbaria, 2003). The reduced face-to-face interaction in remote work can make it difficult to provide and receive immediate feedback and emotional cues (Hallowell, 1999). Moreover, employees who opt for telecommuting may face questions from their managers about their dedication and commitment (Desrosiers, 2001; McCloskey & Igbaria, 2003), whereas those in managerial roles are more prone to have the option to work hybrid (Singh et al., 2013), possibly due to a higher job autonomy.

In the context of career advancement, "face time" or visibility at the main office is often seen as crucial for receiving outstanding performance evaluations, which are essential for progressing in one's career (O'Mahony & Barley, 1999). Consequently, hybrid workers may worry that working away from the main office could hinder their chances of advancing in their careers. They might perceive fewer opportunities to showcase their high performance in a face-to-face setting, leading to concerns that others may view them as less committed and loyal to the organization, prioritizing personal life over professional responsibilities (McCloskey & Igbaria, 2003). This may suggest that employees who are in the early stages of their career; lower job positions, and/or seeking advancement opportunities may

prefer working more in the office. However, according to research by Gajendran and Harrison (2007), hybrid workers do not necessarily perceive reduced career prospects compared to those following traditional work arrangements. As a result, the relationship between employees' nature of job and their hybrid work location choice remains uncertain.

H2b: Nature of job relates to choice of hybrid work locations

Tenure

Tenure refers to the duration of an individual's employment with an organization. According to research by Zhang et al. (2020), seniority (years served within an organization) is negatively linked to hybrid work, which aligns with the findings of Walls et al. (2007). The reason behind this negative association could be that employees in supervisory roles, often correlated with seniority, are more likely to be present at the workplace. However, Turetken et al. (2011) have explored the role of organizational tenure in hybrid work success, leading to contradictory results. Their findings suggest that employees with shorter tenure are generally less satisfied when working from home, possibly due to being less familiar with the organization's expectations, resulting in increased stress. Consequently, for employees with shorter tenure, working from home might negatively impact their well-being. It is therefore reasonable to expect that such employees would prefer spending more time in the office within a hybrid working setup compared to employees with longer tenure (Munnich, 2022). This aligns with the observations of Popuri and Bhat (2003), who found a positive association between the length of service and hybrid work.

H2c: Tenure relates to choice of hybrid work locations

Work Hours

Zhang et al. (2020) found a positive correlation between working hours and the choice for working hybridly. This finding aligns partially with Asgari et al. (2014), who observed a positive association between total weekly working hours and the choice of working hybridly, but a negative association with hybrid work frequency. However, Zhang et al. (2020) emphasizes that it should not be assumed that individuals with full-time work are more likely to work hybrid than those with part-time jobs. According to Felstead and Henseke (2017), part-time jobs, with their greater flexibility and fewer working hours, are conducive to hybrid working. This aligns with previous studies, which have also found a positive association between part-time work and hybrid work, as well as hybrid work frequency (Drucker and Khattak, 2000; Paleti, 2016; Popuri & Bhat, 2003). Therefore, the relationship between employees' working hours and choice of hybrid work locations remains uncertain.

H2d: Working hours relates to choice of hybrid work locations

Leadership Characteristic

Research findings suggest that the attitudes and behaviours exhibited by managers indirectly influence the alignment of individual and organizational aspirations and goals, consequently impacting employees' expectations, performance, and job satisfaction (Pfeffer & Salancik, 1975). Employees perceive managers as representatives of the organization who are responsible for implementing and monitoring the norms and procedures established at the organizational level (Kurtessis et al., 2017; Rouleau & Balogun, 2011). Simultaneously, these managers also play a significant role in shaping organizational control through their leadership style and behaviours (Pianese et al., 2022).

Various forms and styles of leadership applicable to different organizations and teams have been described in numerous studies. These include emergent leadership (Carte et al., 2006), leader-member

exchange (Goh & Wasko, 2012), transformational and transactional leadership (Strang, 2011), cross-cultural leadership (Sarker et al., 2009), inspirational leadership (Joshi et al., 2009), among others. The leadership style that a leader adopts can significantly impact the success and well-being of remote workers (Wang et al., 2020).

Kerrissey and Edmondson (2020) discuss effective leadership during a global pandemic and outline four pillars for leaders to follow. First is to act with urgency, making swift decisions even with limited information. Second is to communicate with transparency, providing honest and accurate descriptions of the current circumstances. Third is to respond productively to eventual missteps, quickly reassessing, listening, acknowledging, and orienting everyone toward solving problems. Lastly, leaders should engage in constant updating, using strategies to elicit new information and keep everyone informed as the situation evolves. Shachaf and Hara (2005) also propose four dimensions of effective virtual team leadership. These include communication, understanding individual team members' schedules, challenges, interests, and opinions, clarity of roles and responsibilities, and maintaining a positive, caring, and collective attitude toward the team.

However, to the author's knowledge, little attention has been given to the leader's characteristics in relation to employees' choices in their hybrid work location, as hybrid working is a relatively new phenomenon in leadership research. Therefore, the relationship between leadership characteristics and choice of work locations remains unknown.

H2e: Perceived leadership characteristics relates to choice of hybrid work locations

Performed Activities

Two of the fundamental yet contrasting needs of office employees are concentration and communication (Deci & Ryan, 2014; Vischer, 2008), both of which necessitate a well-functioning and balanced office environment (Roper & Juneia, 2008). A study by Appel-Meulenbroek et al. (2022) investigated the likelihood of employees choosing between working in the office or from home, based on their specific work activities. Their findings revealed a 74% probability that employees would opt for the office when their workday primarily involves communicative activities, a 57% likelihood when their workday combines both concentrated and communicative activities, and only a 21% chance on days primarily focused on concentrated work. Consequently, it can be concluded that employees engaged in predominantly individual concentrated work may prefer to avoid the office due to its potential distractions, while planned or desired spontaneous communication activities may drive them to choose office-based work (Appel-Meulenbroek et al., 2022).

H2f: Performed activities relates to choice of hybrid work locations

Distance to Work

Initially, reducing commuting time was believed to be the main impetus behind working from home (Munnich, 2022). However, research has presented contradicting views on this matter over time. While some studies, such as Bailey and Kurland (2002), suggest that commuting distance is not a strong motivator for remote work adoption, other research, like that of Helminen and Ristimäki (2007), indicate that a longer commuting distance increases the likelihood of individuals choosing to work from home. Additionally, a survey by Hubble HQ (2024) showed a big increase in the number of people preferring to work remotely more often, especially those with longer commutes, compared to their 2023 survey. Therefore, longer commuting distances are expected to relate to the choice for work locations other than the main office. However, the strength of this relationship remains uncertain.

H2g: Distance to work relates to choice of hybrid work locations

Location Autonomy

Location autonomy has surfaced as a result of the expansion of mobile technologies and the growing accessibility of Wi-Fi. These technological advancements empower knowledge workers to carry out their tasks from various locations beyond the conventional office or home setups. Research by Spivack and Milošević (2018) suggests that as individuals deliberate on where to work, they exhibit a sense of perceived location autonomy. Unlike other autonomy dimensions such as job autonomy (Karasek, 1979) and schedule autonomy (Schieman, Milkie, & Glavin, 2009), perceived location autonomy stands out as it specifically enables individuals to explore diverse work location options and select the most suitable one according to their current requirements. Research also highlights that perceived location autonomy enhances intrinsic motivation among individuals (Thomas & Velthouse, 1990; Zhang & Bartol, 2010), subsequently influencing their choice of work environments that will increase both productivity and well-being. Therefore, a relationship between location autonomy and hybrid work location choice is expected.

H2h: Location autonomy relates choice of hybrid work locations

2.4.3. Physical Workplace Satisfaction

Home Workplace Satisfaction

The feasibility of working from home hinges on the presence of a suitable workspace for employees, ensuring that tasks can be executed smoothly and without interruptions. The limited space at home and constant distractions have proven to be challenging for employees, affecting their ability to concentrate and engage in various cognitive tasks, empathizing with others, considering alternatives, and remaining open-minded, ultimately hindering their learning and growth (Caligiuri et al., 2020). As a result, research indicates that in an unsuitable remote working environment, employees may struggle with autonomy, decision-making, and control over their work tasks (Hackman & Oldham, 1980; Spector, 1986). On the other hand, studies have found that a well-equipped remote workplace tailored to hybrid workers' needs leads to higher concentration levels and reduced need for recovery on home working days compared to office working days (Mann et al., 2000; Nardi & Whittaker, 2002; Konradt et al., 2003; Biron & van Veldhoven, 2016). This enhanced environment enables a higher degree of autonomy and control over work tasks. Therefore, the crucial aspects of an effective hybrid work setup involve minimizing distractions, enabling concentration, and having suitable equipment for efficient task execution (Müller et al., 2022). Studies indicate that employee's satisfaction with their workspace is influenced by the suitability of their workspace (e.g. comfort, functionality, workstation, etc.). Factors such as workspace ergonomics and background noise, temperature and lighting also play a role in shaping their workplace satisfaction. Consequently, individuals who have a well-suited home office environment may be more likely to hold a favourable view of hybrid work and may choose to spend less time working in a traditional office setting.

H3a: Satisfaction with physical factors of home workplace relates to choice of hybrid work locations

Office Workplace Satisfaction

Studies have shown that cleanliness, natural lighting, orientation, and regulation of lighting of the workplace significantly affect employees' satisfaction with their workspace, regardless of the type (Baričič & Salaj, 2014). Additionally, some indoor environmental quality (IEQ) factors, termed "Basic Factors" by Kim and De Dear (2012), may go unnoticed when they meet expectations but can lead to

dissatisfaction when they fall short. These factors are temperature, noise level, amount of space, visual privacy, adjustability of furniture, colours, and textures, and cleanliness. Furthermore, in open-plan office settings, five IEQ factors – office layout, air quality, thermal environment, lighting environment and acoustic environment can directly impact employees' environmental satisfaction and productivity (Kang et al., 2017). Research also highlights that dissatisfaction with acoustics in the workplace can hinder post-workload recovery and that those content with their workspace tend to have a more positive outlook on their future work ability (Lusa et al., 2019). These findings suggest that employees who are satisfied with their physical office space may be more inclined to choose the office as their preferred work location, as opposed to working from home or elsewhere. Additionally, if employees are satisfied with their home workplace, they may set higher standards for their office workplace, influencing their office workplace satisfaction. Conversely, their dissatisfaction with their home workplace may make the office environment more appealing by comparison, or vice versa. Therefore, while to the author's knowledge, current research has not investigated this relationship, there is a potential relationship between home workplace satisfaction and office workplace satisfaction.

H3b: Satisfaction with physical factors of office workplace relates to choice of hybrid work locations

H3c: Home workplace satisfaction relates to office workplace satisfaction

2.5. Support, Trust, and Social Well-being

Trust has been defined as an individuals' acceptance of being vulnerable to another party's actions with the expectation that the latter will take certain actions (Mayer et al., 1995). This psychological state operates in two directions: vertically, involving the establishment of trust between managers and their subordinates, and horizontally, among colleagues. Trust is very closely related to coworker support, meaning an employee must perceive trust from the coworker before reciprocating support (Halbesleben & Wheeler, 2012). Employees also perceive trust from their supervisors, which is defined as "employee assessment of whether or not their managers care about them and value their work" (Gordon et al., 2019). Research indicates that employees' trust in management is positively correlated with supervisor support (Boselie et al., 2001).

Human well-being and health are deeply intertwined with relationships and social interactions and this need for connection does not diminish when individuals enter the office (Baumeister and Leary, 1995; Diener and Seligman, 2004; Ryff and Keyes, 1995; Rath & Harter, 2010). Among the dimensions of well-being, social well-being holds a significant place, alongside physical and mental well-being. Fisher (2014) conceptualizes social well-being as "feeling embedded in meaningful communities and having satisfying short-term interactions and long-term relationships with others". One aspect of social well-being is professional isolation (Golden et al., 2008), defined as a state of mind or belief that one is out of touch with others in the workplace (Diekema, 1992), essentially hindering one's innate drive for social connection in a professional setting (Baumeister & Leary, 1995). Professional isolation can arise from physical separation from colleagues or from perceptions of a lack of emotional and physical support from both colleagues and the organization (Marshal et al., 2007). Research shows a negative relationship between workplace isolation and employee relationships, such as their trust in colleagues and supervisors (Van Zoonen et al., 2023), indicating a relationship between trust and social well-being.

Furthermore, when individuals experience workplace isolation, whether due to physical distance or perceived separation, it can lead to feelings of loneliness (Hawkley & Cacioppo, 2010). This feeling of isolation is especially higher for those living alone (Abgeller et al., 2022). Workplace loneliness is

characterized by distress resulting from an employee's perception of inadequate interpersonal relationships in their work environment. In simpler terms, employees may feel lonelier if they believe they have fewer social connections at work compared to their peers or if they have limited control over opportunities to establish meaningful social relationships in the workplace. Research by D'Oliveira and Persico (2023) supports earlier findings by Marshal et al. (2007), indicating a negative association between supportive behaviours and company isolation and loneliness. However, the study does not establish a significant relationship between colleague isolation and supportive behaviours.

H4a: Support relates to trust

H4b: Support relates to social well-being

H4c: Trust relates to social well-being

When organizations implement remote work options, it sends a positive symbolic message to employees, indicating that management cares about their well-being (Wood & de Menezes, 2010). This symbolic effect fosters a sense of trust in management among employees, reassuring them that their managers are there to assist them in dealing with stressful situations (Rhoades & Eisenberger, 2002). Trust in a workplace environment is a result of repeated positive interactions over time. Minor in-person interactions, such as informal conversations around the "water cooler," can significantly speed up this process, fostering affective bonds among colleagues (Munir et al. 2015). When organizations opt for an approach that requires more frequent office presence for employees, it naturally increases the likelihood of face-to-face interactions with coworkers, which research indicates is the highest form of communication (Smith et al., 2018). This face-to-face interaction is crucial for building and sustaining relationships, ultimately leading to greater trust among colleagues (Fayard et al., 2021).

Additionally, studies indicate that the implementation of hybrid work has resulted in tension between employees who embrace telecommuting and those who do not. For instance, hybrid workers often experience concerns that non-telecommuting colleagues might cast doubts on their commitment, trustworthiness, and level of contribution (Sewell & Taskin, 2015). Furthermore, the dynamics of relationships between hybrid work adopters and non-adopters have shifted, resulting in shallower connections and fears of potential difficulties in cooperation. Therefore, hybrid workers often make efforts to be present in the workplace on the days they are not telecommuting (Sewell & Taskin, 2015; Wilson & Greenhill, 2004), which can help increase the level of trust among coworkers.

Furthermore, individuals engaged in hybrid working voice concerns about feeling excluded from the workplace due to limited interactions (Morganson et al., 2010; Sewell & Taskin, 2015). This feeling of isolation can have various undesirable effects on trust and even contribute to the acceleration of burnout (Dinh et al., 2021). While there is evidence in the literature suggesting that hybrid working could offer opportunities for communication, collaboration, and interaction (Engelen et al., 2019), such arrangements may also lead to less social cohesion among colleagues, resulting in a weaker sense of community within the workplace. The reduced interaction among team members resulting from hybrid working arrangements may consequently limit the availability of social support and feedback (Appel-Meulenbroek et al., 2020). This is supported by a study by Beckel and Fisher (2022), showing that employees who worked more days a week away from the office experienced less social support.

H5: Choice of hybrid work locations relates to support

H6: Choice of hybrid work locations relates to trust

The theory of evolution suggests that humans have an innate need to belong to a group. Historically, group membership was vital for survival, as humans are fundamentally social beings. This social nature explains why substantial evidence shows that individuals are happier and healthier when they experience a sense of social belonging (Newman et al., 2007). In current work environments, group belonging allows employees to share responsibilities and engage with one another. However, hybrid work arrangements can reduce these interactions, potentially impacting social well-being. Furthermore, social well-being also relates to work-life balance, a state in which work-family conflict (which occurs when the demands from one set of roles interferes with the completion of the demands from another set of roles) is considered to be at an acceptable level (Rutkowski & Saunders, 2018). This balance has been identified as a significant factor motivating hybrid work (Haddad et al., 2009; Mokhtarian and Salomon, 1997), driven by the belief that hybrid work, with its inherent flexibility, can at least partially improve work-life balance (Athanasiadou & Theriou, 2021). Yet, opposing viewpoints suggest that hybrid working hinders work-life balance. This standpoint is exemplified by Noonan and Glass (2012), who found that hybrid work not only feels short of enhancing work-life balance but also gives employers a greater leeway to increase work demands. Russel et al. (2009) supported this idea by indicating that hybrid work intensifies work pressure and deteriorates work-life balance. This occurs by not only prolonging working hours but also by blurring the boundaries between work and personal life, leading to work spillover into family time. Furthermore, research suggests that hybrid work arrangements can result in irregular and socially isolated working hours, particularly when remote work hours expand due to working hybrid (e.g. Faulds & Raju, 2021; Laß & Wooden, 2022). Consequently, the impact of hybrid work locations on work-life conflict remains inconclusive. Last, current research shows that employees' work location relates to feelings of isolation (Choudhury et al., 2022). Therefore, a relationship between employees' work location choice and social well-being is expected.

H7: Choice of hybrid work locations relates to social well-being

An employee's personal and work characteristics may also exert an influence on the trust and support encountered within a hybrid work environment. Research has indicated that communication patterns are influenced by gender, where men often employ communication within teams to assert dominance and position, while women use it to foster relationships and build trust (Troemel-Ploetz, 1991). Additionally, a study conducted by Furumo and Pearson (2007) suggests that in virtual teams, females exhibit slightly higher levels of trust compared to males. However, this finding does not reveal whether females inherently possess a higher inclination to trust or if certain interactions within virtual teams contribute to their higher trust levels compared to males. Furthermore, Ibrahim and Ismail (2007) demonstrate that communication styles significantly vary based on an employee's age and educational attainment within an organization. This difference in communication styles has the potential to influence an employee's perceived trust and support within a hybrid work environment. Moreover, age is also linked to an individual's familiarity with and ease of use of computer technology (Elias et al., 2012). As a result, the communication strategies adopted by different age groups within a hybrid work setting can potentially impact the degree of trust established among fellow employees. For instance, those who opt for scheduled video calls as opposed to sending messages via online platforms might build a deeper sense of trust with their colleagues over time.

It is important to consider that personality traits can have an impact on how individuals interact and collaborate as well (Ahmed & Naqvi, 2015). For instance, the trait of agreeableness presents tendencies toward cooperation and social harmony. Individuals who possess this trait tend to exhibit openness, value others' opinions, support and trust their peers. Conversely, for instance, neuroticism is associated with a disposition to readily experience negative emotions such as anger, hostility,

anxiety, etc (Costa & McCrae, 1992). Therefore, an individual's personality could have an influence on the extent to which they place their trust and support in colleagues, as well as the extent to which they receive such from their peers.

Furthermore, research by Ibrahim and Ismail (2007) mention that communication style varies significantly based on employee's tenure and job position within an organization. This is in line with research by Whitener and Cross (2006), who support the idea that trust in coworkers is closely tied to the duration of the relationship, which is comparable with an employee's tenure. Moreover, extended working hours and specific work activities can increase the time spent on informal interactions among employees (Ömüriş et al. (2020). These interactions hold the potential to facilitate the availability of support and the establishment of trust among colleagues. The physical distance to the workplace can also affect the frequency of face-to-face interactions, potentially influencing the perception of trust and support. Moreover, research by De Jong, Van der Vegt and Molleman (2007) reveals that task interdependence is critical in the development of trust. High levels of task interdependence correspond with heightened demands for communication, coordination, mutual adaptation, and collective decision-making (Guzzo & Shea, 1992), thereby creating an environment conducive to cultivating trust within virtual project teams. Last, employees view autonomy as a significant job resource and a social reward provided by their employers or managers, which is essential for coping effectively with their responsibilities (Whitener et al., 1998). Some research suggests that autonomy in jobs can be viewed as a manifestation of trust in employees, as perceived autonomy reflects an organization's and managers' willingness to delegate control, thereby enhancing trust in management (Dirks & Ferrin, 2001; Seppälä et al., 2011; Whitener et al., 1998). The extent of this delegation of control may reflect the level of trust placed in and perceived by the subordinate.

H8a: Personal characteristics relate to support

H8b: Personal characteristics relate to trust

H9a: Work characteristics relate to support

H9b: Work characteristics relate to trust

Moreover, professional isolation is a highly subjective experience (Simpson et al., 2003), and whether this isolation is seen as a disadvantage is based on factors like role nature, personal experiences, personal and work characteristics (Simpson et al., 2003; Wilks & Billsberry 2007). For instance, research by Köse et al. (2021) shows that all Big Five personality traits except agreeableness are related to work-life balance. Research also indicates a relationship between age and work-life balance, where older employees are more likely to prioritize work-life balance (Richert-Kaźmierska & Stankiewicz, 2016). Furthermore, literature indicates that specific job roles are linked to workplace isolation but does not specify these positions (D'Oliveira & Persico, 2023; Simpson et al., 2003). Furthermore, a negative correlation exists between isolation and weekly working hours (Marshall et al., 2007). As employees devote more hours to their work, their chances for interaction rise, fostering the relationships developed with colleagues and supervisors. These connections are anticipated to positively affect the availability of peers and supervisors, ultimately leading to a reduction in perceived isolation.

Research by D'Oliveira and Persico (2023) indicates a significant negative relationship between loneliness and task interdependence. However, the study also reveals a significant positive association between professional isolation and task interdependence. One plausible explanation for these findings is that high task interdependence requires colleagues to rely on each other rather than collaborate or coordinate activities. In such scenarios, the increased interdependency might be perceived as a form

of dependency on others, creating a constraining working environment. Furthermore, individuals who prioritize individualistic outcomes or operate within an organizational culture that promotes individualism might experience negative emotions when they need to depend on colleagues for work tasks. Consequently, in cases of high task interdependence, being isolated from colleagues may be seen as a means to reduce this perceived dependency on others, leading to a strong association between task interdependence and colleague isolation. This finding aligns partially with the research conducted by Rico et al. (2009), which discusses how task interdependence, owing to its relational implications concerning cooperation and interaction requirements, has the potential to mitigate individuals' feelings of isolation. This is achieved by promoting greater social presence and increases attentiveness to the behaviours of others.

H8c: Personal Characteristics relate to social well-being

H9c: Work characteristics relate to social well-being

Furthermore, social well-being in the workplace may be influenced by how satisfied employees are with their physical workspace. Within the context of work, positive interactions play a crucial role in enhancing trust, a sense of vitality, appreciation, usefulness, and aid in nurturing and maintaining relationships (Stephens et al., 2011). These, in turn, influence social well-being. While positive relationships provide emotional and instrumental social support (Dutton & Ragins, 2007), unwanted social interactions can lead to perceived lack of privacy and noise annoyance, which have emerged as prominent concerns in office environments (Colenberg, 2022). An employee's workspace consists of multiple features that have the potential to influence their social well-being mediated by social interactions. For instance, spatial and social density reduce the possibilities to achieve desired privacy and can induce feelings of crowding. Furthermore, the layout and spatial organization of the workspace dictate the flow of people and sound within the office premises. Passers-by can infringe upon an employee's privacy by peering into their workspace or generating noise through their movements and conversations. Even the arrangement of furniture, as highlighted by Colenberg et al (2020) holds significant. This includes, among others, considerations such as whether individuals face each other and their proximity to neighbouring colleagues (Laurence et al., 2013). Moreover, Colenberg et al. (2022) have proposed a conceptual framework where ambiance, comfort, personal space, accessibility, etc. are said to be integral in creating opportunities for social interactions. These factors exert both direct and indirect influence on individuals' social well-being.

Research also shows a significant connection between the perceived comfort of office spaces and employees' feeling of recognition and appreciation. These emotions, in turn, play a role in increasing workers' involvement (Appel-Meulenbroek et al., 2020; Maslach & Leiter, 2008). These findings may imply that employees' satisfaction with their physical office environment may have a direct impact on their perception of social support within the workplace. Last, while to the author's knowledge, there is no existing literature specifically linking satisfaction with the physical workplace to perceived trust, the interconnectedness of trust and support implies a potential relationship. This suggests that employees' satisfaction with their physical workplace may influence their perception of trust.

H10a: Physical workplace satisfaction relates to support

H10b: Physical workplace satisfaction relates to trust

H10c: Physical workplace satisfaction relates to social well-being

2.6. Conclusion

The literature revealed that there most likely exist relationships between gender, age, household composition, education level and employees' hybrid work location. Nevertheless, these findings displayed variability and did not provide clear evidence to draw definitive conclusions about the nature of these relationships. Furthermore, the literature indicated that individuals with specific personality traits are prone to working hybridly, and certain personality traits are advantageous in the context of hybrid work. The literature also revealed that there may exist a relationship between psychological empowerment and employee's choice of hybrid work location.

Existing research revealed likely relationships between job position, working hours, perceived leadership characteristics, distance to work, and hybrid work location of employees as well. However, these findings were inconclusive regarding the nature of these relationships. Furthermore, both internal and external independence, as well as tenure, may positively influence employees' inclination to work from the office. The nature of employees' tasks also plays a significant role in their hybrid work arrangement. Moreover, literature suggests a positive relationship between employees' satisfaction with the physical aspects of their home workplace and their hybrid work location and indicates a potential relationship between employees' satisfaction with their physical workplace and hybrid work location. However, the nature of this relationship remains unclear.

Trust and support are influenced by various personal and work characteristics, as well as physical workplace satisfaction. Differences in the levels of trust and support experienced by individuals may be based on factors such as gender, education level, personality traits, and an employee's tenure, among others. Certain personal and work characteristics, such as working hours and the degree of task interdependence, were found to have an influence on employees' social well-being. While the literature did establish a connection between job position and social well-being, the specific job roles mentioned were not clearly defined, leaving the precise nature of this association uncertain. Finally, literature revealed a relationship between hybrid work arrangements and employees' perceived trust, support, and social well-being.

This chapter's literature review identified factors that relate to or could relate to employees' choice of work locations in a hybrid work environment. In the next chapter, the methodology used in this thesis will be discussed, along with the conceptual model and the hypotheses formulated in this chapter.

3. Methodology

In the previous chapter, the relationships among the personal and work characteristics of hybrid workers, their satisfaction with their workplace, their hybrid work locations choice, perceived support, trust, and social well-being were established. The aim of this chapter is to outline the methodology used in the current research, as a prelude to conducting a quantitative analysis.

To begin with, the chapter provides detailed insight into the research design. It then proceeds to discuss the process of data collection and general research methodology. Following this, the chapter elaborates on the survey design and the included variables.

3.1. Research Design

Through the literature review, it became evident which factors play a role in employees' work location choice, resulting in a preliminary conceptual model, shown in Figure 3 below. According to the model, it is hypothesized that employees' personal characteristics, work characteristics, and physical workplace satisfaction relate to their choice of work locations, as well as to their perceived support, trust, and social well-being. Furthermore, the model suggests that employees' work location choice also relates to their perceived support, trust, and social well-being.

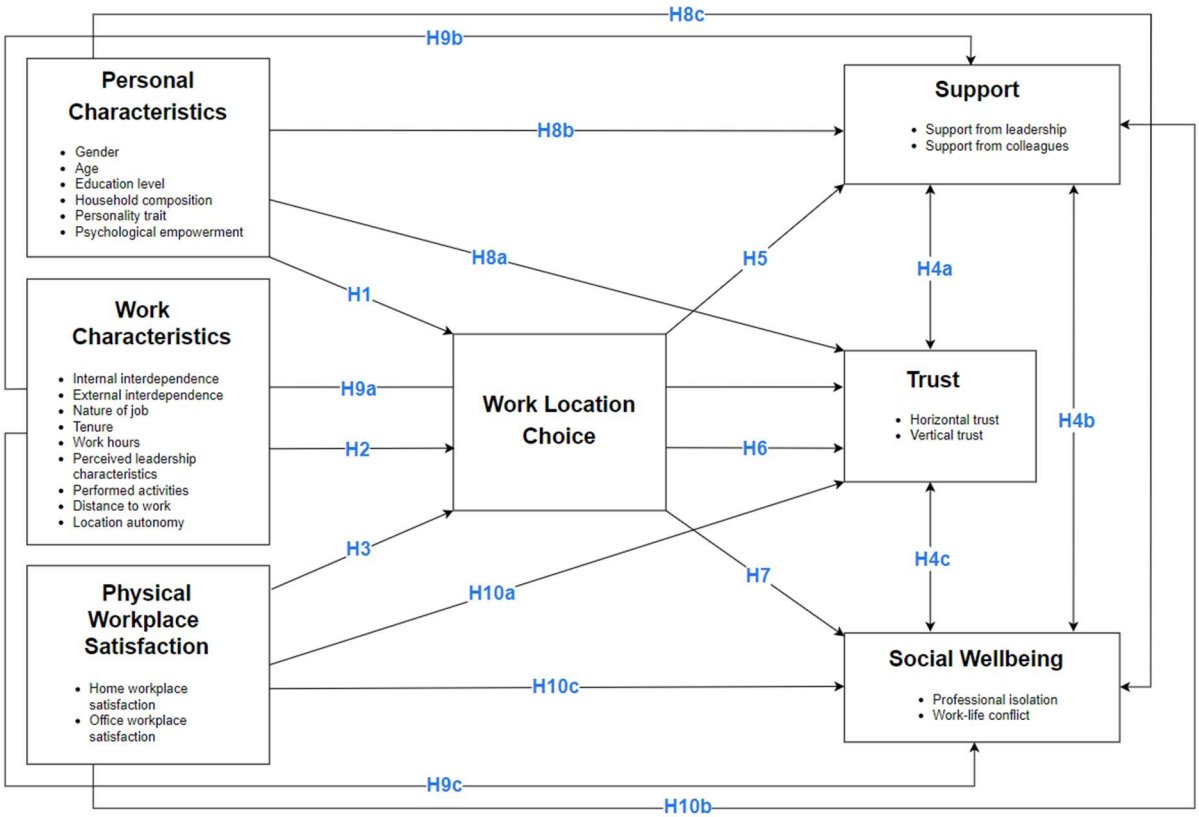


Figure 3 Conceptual model

Earlier, literature delved into the examination of how personal characteristics, work characteristics, and physical workplace satisfaction relate to work location choice. The following hypothesis were formulated:

H1: Personal characteristics relates to choice of hybrid work locations

H2: Work characteristics relate to choice of hybrid work locations

H3: Satisfaction with the physical workplace relates to choice of hybrid work locations

Additionally, literature indicated that trust, support, and social well-being are interlinked. Therefore, the following hypothesis were formulated:

H4: Support, trust, and social well-being relate to each other

Furthermore, the literature revealed a relationship between employees' work location choice and their perceived trust, support, and social well-being. The following hypotheses were formulated:

H5: Choice of hybrid work locations relates to support

H6: Choice of hybrid work locations relates to trust

H7: Choice of hybrid work locations relates to social well-being

Lastly, literature indicated that personal and work characteristics, as well as physical workplace satisfaction, relate to support, trust, and social well-being. The following hypotheses were formulated:

H8: Personal characteristics relate to support, trust, and social well-being

H9: Work characteristics relate to support, trust, and social well-being

H10: Physical workplace satisfaction relates to support, trust, and social well-being

3.2. Data Collection

This research was conducted based on an existing dataset obtained from online surveys, as part of a collaborative effort between the Center for People and Buildings in Delft, Delft University of Technology, and Eindhoven University of Technology, aimed at understanding employees' experience with hybrid working. Data from Dutch office workers employed in 10 public organizations had been collected over different periods in 2023, as highlighted in Table 1 below.

Table 1 Organizations in the dataset

Company	Frequency	Sample %	Duration
DCMR environmental department	306	2.90%	17/01 - 31/01
Ministry of finance / tax department	5415	51.60%	05/06 - 30/06
Ministry of social affairs and employment	144	1.40%	27/06 - 21/09
Ministry of infrastructure and water management	688	6.60%	30/06 - 25/09
Ministry of justice and safety	842	8.00%	03/08 - 01/09
Police	930	8.90%	18/09 - 02/10
Ministry of foreign affairs	1311	12.50%	12/09 - 10/10
Ministry of agriculture, nature, and food safety	253	2.40%	11/09 - 04/11
Ministry of economics	458	4.40%	11/09 - 04/11
Ministry of public health, welfare, and sports	144	1.40%	23/10 - 04/11

3.3. Survey Design

The survey started by inquiring about employees' work aspects (e.g. work hours, tenure, activities, nature of job), process and performance, both at the team and individual levels. Subsequently, the survey distinguished between the workplace in the office and the workplace at home, seeking feedback on employees' satisfaction with these locations for the purpose of work. Following this, the survey explored employees' experiences in collaborating with others by delving into interpersonal processes such as social support and trust. It also examined the leadership style of the supervisors and employees' psychological empowerment. Continuing, the survey addressed aspects of employee health, specifically, social well-being. Finally, the survey concluded with a set of general questions to gather demographic information about the employees (e.g. age, gender, education level, etc.). It is good to note that only a subset of variables included in the survey were used for this thesis.

3.3.1. Personal Characteristics

Data concerning most personal characteristics were collected using straightforward questions (e.g. what is your education level?). However, for the assessment of more complex concepts like personality traits and psychological empowerment, established measurement scales were utilized in the survey. To assess employees' personality traits, the survey employed the Ten Item Personality Inventory (TIPI), a 10-item measure of the Big Five personality dimensions, shown below in Table 2. This inventory is particularly useful in situations where very short measures are needed, and personality is not the primary focus of the study. Furthermore, the survey utilized a multidimensional measure of workplace psychological empowerment, originally developed, and validated by Spreitzer in 1995. This measure is based on scales adapted from prior research and is composed of four distinct subdimensions, spanning across 12 statements, seen in Table 3.

Table 2 Personality scale (TIPI)

Measure	**Scale**
Personality	7-point scale (1=Strongly Disagree to 7= Strongly Agree)
I see myself as: Extraverted, enthusiastic (Extraversion)	
I see myself as: Critical, quarrelsome (Agreeableness) (R)	
I see myself as: Dependable, self-disciplined (Conscientiousness)	
I see myself as: Anxious, easily upset (Emotional Stability) (R)	
I see myself as: Open to new experiences, complex (Openness to New Experiences)	
I see myself as: Reserved, quiet (Extraversion) (R)	
I see myself as: Sympathetic, warm (Agreeableness)	
I see myself as: Disorganized, careless (Conscientiousness) (R)	
I see myself as: Calm, emotionally stable (Emotional Stability)	
I see myself as: Conventional, uncreative (Openness to New Experiences) (R)	

Table 3 Psychological empowerment scale (Spreitzer, 1995)

Measure	**Scale**
Psychological Empowerment	7-point scale (1=Strongly Disagree to 7= Strongly Agree)
Meaning (M)	
M1: The work I do is very important to me	
M2: My job activities are personally meaningful to me	
M3: The work I do is meaningful to me	

Competence (C)	
C1: I am confident about my ability to do my job	
C2: I am self-assured about my capabilities to perform my work activities	
C3: I have mastered the skills necessary for my job	
Self-Determination (SD)	
SD1: I have significant autonomy in determining how I do my job	
SD2: I can decide my own how to go about doing my work	
SD3: I have considerable opportunity for independence and freedom in how I do my job	
Impact (I)	
I1: My impact on what happens in my department is large	
I2: I have a great deal of control over what happens in my department	
I3: I have significant influence over what happens in my department	

3.3.2. Work Characteristics

Regarding work characteristics, most data were acquired through straightforward questions, (e.g. how long have you worked at this organisation?). However, for the measurement of internal and external interdependence, a well-established measurement scale was employed. The measurement of internal interdependence, referred to as task interdependence, is based on a 3-item measure developed by Campion et al. (1993). Similarly, the measurement of external interdependence, which relates to communication and collaboration between groups, also uses a 3-item measure developed by Campion et al. (1993), shown in Table 4 below.

Table 4 Internal and external interdependence scale (Campion et al., 1993)

Measure	Scale
Internal Interdependence	5-point scale (1= Strongly Disagree to 5= Strongly Agree)
I cannot accomplish my tasks without information or materials from other members of my team	
Other members of my team depend on me for information or materials needed to perform their tasks	
Within my team, jobs performed by team members are related to on another	
External Interdependence	
I frequently talk to other people in the company besides the people on my team	
There is little competition between my team and other teams in the company	
Teams in the company cooperate to get the work done	

Last, employee autonomy, particularly in terms of work location, was evaluated using a 5-point scale that ranged from “completely inflexible” to “completely flexible”.

3.3.3. Physical Workplace Satisfaction

To assess physical workplace satisfaction, data was collected by asking employees to rate their satisfaction with various physical aspects of both their home and office workplace. Appendix A provides an overview of these aspects.

3.3.4. Work Location Choice

Information regarding the work location choice of employees was obtained using a straightforward question: “In which locations do you perform your work?". Respondents were required to specify the percentage of their work conducted in different locations per week. These locations included: office, home, on the way, another location within their organization, and another location outside their organization.

3.3.5. Support, Trust, and Social Well-being

To assess support, trust, and work-life conflict, a well-established tool was utilized in the survey. COPSOQ is specifically designed for workplace psychosocial risk assessment and organizational development, consisting of three different levels and varying number of items. In measuring support, a total of six items were used, distributed across two scales: social support from supervisors and social support from colleagues. Trust was evaluated using seven items distributed across two dimensions: horizontal trust, which refers to trust between employees, and vertical trust, which relates to trust between management and employees. Additionally, work-life conflict was assessed using a 5-item scale within the COPSOQ framework. Respondents used a 5-point scale to indicate to what extent they experience support, trust, and work-life conflict, ranging from “to a very small extent” to “to a very large extent”. The COPSOQ III scales that have been utilized in this research are shown in Table 5 below.

Table 5 Support, trust, and work-life conflict scale (COPSOQ)

Item Scales	**Items**	**Scale**
Support		
Social Support from Supervisor	How often is your immediate superior willing to listen to your problems at work, if needed?	5-point scale (1= To a very small extent to 5= To a very large extent)
	How often do you get help and support from your immediate superior, if needed?	
	How often does your immediate superior talk with you about how well you carry out your work?	
Social Support from Colleagues	How often do you get help and support from your colleagues, if needed	
	How often are your colleagues willing to listen to your problems at work, if needed?	
	How often do your colleagues talk with you about how well you carry out your work?	
Trust		
Horizontal Trust	Do the employees in general trust each other?	5-point scale (1= To a very small extent to 5= To a very large extent)
Vertical Trust	Does the management trust the employees to do their work well?	
	Can the employees trust the information that comes from the management?	
	Does the management withhold important information from the employees?	
	Are the employees able to express their views and feelings?	

Work-life Conflict		
Work-life Conflict	Are there times when you need to be at work and at home at the same time?	5-point scale (1= To a very small extent to 5= To a very large extent)
	Do you feel that your work drains so much of your energy that it has a negative effect on your private life?	
	Do you feel that your work takes so much of your time that it has a negative effect on your private life?	
	The demands of my work interfere with my private and family life?	
	Due to work-related duties, I have to make changes to my plans for private and family activities.	

Finally, the degree of professional isolation experienced by employees was assessed using a 7-item measure developed by Golden (2008) shown in Table 6 below.

Table 6 Professional isolation scale (Golden, 2008)

Measure: To what extent do you agree with:	**Scale**
I feel excluded from activities and meetings that could improve my career	5-point scale (1= To a very small extent to 5= To a very large extent)
I miss opportunities to be mentored	
I do not feel informed about what is going on	
I miss face-to-face contact with colleagues	
I feel isolated	
I miss emotional support from colleagues	
I miss informal interaction with others	

3.4. Reliability and Validity

Prior to conducting quantitative analyses, during the data refinement process, additional steps were performed on multiple-item variables to test the reliability and validity of the established scales within the specific population used in this thesis. Validity relates to how accurately an instrument measures what it intends to measure, while reliability concerns the instrument's consistency in measurement (Tavakol & Dennick, 2011).

To evaluate the internal consistency of the scales, Cronbach's Alpha was used, with acceptable values ranging from 0.70 to 0.95, ideally not exceeding 0.90 (Tavakol & Dennick, 2011). As Cronbach's Alpha is recognized as problematic for scales with only two items (Eisinga et al., 2012), for such scales, the mean inter-item correlation was calculated, with an acceptable range of 0.20 to 0.40.

External validity relates to the extent to which the research findings can be generalized and applied in real-world contexts (Baarda et al., 2012). Although the sample differed from the population in some respects such as being slightly male-dominated, older, and more highly educated compared to the Dutch labour population (as described in the following chapter), it is expected that the results are largely generalizable to knowledge workers in both the Dutch public and the Dutch private sector with similar job roles.

3.5. Quantitative Analyses

Bivariate analyses on the data collected from online surveys were performed, but prior to conducting these analyses, it was essential to perform descriptive analyses. This section aims to give a further description of each of these analyses.

3.5.1. Descriptive Analysis

Initiating a statistical analysis begins with conducting a descriptive analysis. This step provides insights into the data distribution, aids in identifying outliers and variables suitable for further analysis in the next steps. As part of the descriptive analysis, principal components analysis (PCA, for short) was conducted for variables: nature of job and leadership characteristics. PCA is a variable-reduction technique, and its aim is to reduce a larger set of variables into a smaller set of 'artificial' variables that account for most of the variance in the original variables (Laerd Statistics, 2023).

3.5.2. Cluster Analysis

Prior to performing bivariate analysis, a K-means cluster analysis was conducted on two variables: work location and performed activities due to the large number of items within each variable (5 and 7 respectively). A non-hierarchical approach was chosen for its suitability and efficiency in rapidly clustering large datasets. These clusters largely improved the interpretability of the data and helped draw meaningful conclusions. For performed activities, the clusters were used for all analyses, instead of the original variable. For hybrid work location choice, the clusters were used only if work location choice was the independent variable. As no statistical tests were available for conducting bivariate analysis that enabled an examination between a continuous independent variable and a nominal dependent variable, the work location clusters could not be utilized when work location choice was the dependent variable. In that case, the original variable was used for analysis.

3.5.3. Bivariate Analysis

Bivariate analysis serves as a fundamental approach in quantitative statistical analysis, focusing on examining the relationship between two variables and offering insights into the significance of these relationships. The choice of a bivariate analysis method is contingent upon the measurement level of each variable.

Additionally, the bivariate test used for each variable is contingent upon the distribution of the population from which the sample was drawn. If the variable is normally distributed, a parametric test is suitable. Conversely, if normality is not met, non-parametric tests should be used. However, in the case of a dataset comprising hundreds of observations, the data distribution can be disregarded, and normality violations are unlikely to pose issues (Ghasemi & Zahediasl, 2012). As the dataset for this thesis includes thousands of observations, only parametric bivariate analysis tests are applied.

Due to the varying metric scales of the variables in this thesis, different parametric tests are used, namely the Pearson correlation test, Independent samples t-test, and Analysis of Variance (ANOVA). Prior to conducting the analyses, it was checked whether the underlying assumptions for each method were met. Using Figure 4, the appropriate bivariate test was determined for each relationship.

Independent Variable	Dependent Variable			
	Nominal 2 categories	Nominal >2 categories	Ordinal	Interval/Ratio
Nominal 2 categories	Chi- square test		Mann–Whitney U test	Independent sample t-test
Nominal >2 categories			Kruskal-Wallis H test	Analysis of Variance (ANOVA)
Ordinal	Mann–Whitney U test	Kruskal-Wallis H test	Wilcoxon T-test Spearman correlation	Wilcoxon T-test Spearman correlation
Ratio	Independent sample t-test	Analysis of Variance (ANOVA)	Wilcoxon T-test Spearman correlation	Paired sample t-test Pearson correlation

Figure 4 Analysis methods (Arentze, 2020)

3.5.3.1. Independent t-test

Independent t-tests, also known as the two-sample t-test, independent-samples t-test, or student's t-test, are executed to determine if a statistically significant relationship exists between a dichotomous and an interval/ratio scale variable (Field, 2013). This test involves examining the difference between the means of two independent groups. An independent samples t-test must meet the following three assumptions:

1. There should be no significant outliers in the two groups of the independent variable in terms of the dependent variable.
2. The dependent variable should be approximately normally distributed for each group of the independent variable.
3. There should be homogeneity of variances.

If the assumption of homogeneity is not met, a Welch t-test is performed instead of an independent samples t-test as it uses separate variances (i.e., non-pooled variances) and corrects for degrees of freedom.

3.5.3.2. Pearson Correlation

The Pearson product-moment correlation calculates a coefficient that describes the strength and direction of a linear relationship between two continuous variables. This coefficient is called the Pearson correlation coefficient and is denoted as 'R'. Its value can range from -1 (a perfect negative linear relationship) to +1 (a perfect positive linear relationship). A coefficient value of 0 (zero) indicates that there is no linear relationship between two continuous variables. This test is also referred to as a Pearson correlation or Pearson's correlation (Laerd Statistics, 2023).

A Pearson correlation test must meet the following three assumptions:

1. There needs to be a linear relationship between the two variables.
2. There should be no significant outliers.
3. There should be bivariate normality.

Upon meeting the assumptions, the test is performed, and the strength of associations is recorded according to the coefficient value. While there are no strict rules for determining the strength of association for specific values, this thesis adheres to the general guidelines outlined by Cohen (1988), seen in Table 7 below.

Table 7 Pearson correlation strength of association (Cohen, 1988)

Coefficient Value	Strength of association
0.1 < | r | < 0.3	Small correlation
0.3 < | r | < 0.5	Medium correlation
| r | > 0.5	Large/strong correlation

3.5.3.3. One-way ANOVA

A one-way analysis of variance is used to determine whether there are any statistically significant differences between the means of two or more independent groups. A one-way ANOVA must meet the following three assumptions:

1. There should be no significant outliers in the groups of the independent variable in terms of the dependent variable.
2. The dependent variable should be approximately normally distributed for each group of the independent variable.
3. There should be homogeneity of variances.

If all assumptions are met, the test is performed and followed by a Tukey post hoc test to determine which specific groups differ from each other. If the assumption of homogeneity of variances is not met, a modified version of the ANOVA is used, namely: the Welch ANOVA. If this test is statistically significant, the results are interpreted using Games-Howell post-hoc test.

3.6. Effect Sizes

The bivariate tests would provide insights into the statistical significance of the relationships among the variables in the model. However, relying solely on the p-value to support the significance for differences between groups or measurements, or significance of a relationship, is insufficient (Tomczak & Tomczak-Łukaszewska, 2014). This would not allow for an assessment of the magnitude and importance of the obtained result. Therefore, this research investigated and reported the effect sizes which represent the strength of the relationships between variables and facilitates the evaluation of their meaningfulness. This enabled the comparison of results from different bivariate tests.

The effect sizes were computed using three distinct formulas corresponding to the three different bivariate tests utilized. These effect sizes include Cohen's D for independent samples t-test, Omega Squared (ω^2) for One-way ANOVA tests, and R Squared (Model R^2) for Pearson correlations. As each test varies, different rules of thumb were used for interpreting the magnitude of the effect, as illustrated in Table 8 below.

Table 8 Rules of thumb for effect sizes

	Cohen's D	Omega Squared	R squared
Negligible	0-.19	0-.01	0-.02
Small	.2-.49	.01-.06	.02-.13
Medium	.5-.79	.06-.14	.13-.26

Large	>.8	>.14	>.26

3.7. Conclusion

This chapter aimed to explain in detail the methodology employed in this thesis, providing an overview of the data collection process, survey design, and the research's validity and reliability. Additionally, it aimed to extensively discuss the quantitative analyses employed in this research. This thesis utilized an existing dataset obtained from the "Work in Transition" (WiT) research project, which is a collaborative initiative between the Center for People and Buildings in Delft, Delft University of Technology, and Eindhoven University of Technology. By employing established scales and conducting Cronbach Alpha reliability analysis, the stud prepared the variables used in the distinct bivariate tests. Ultimately, the research interpreted the effect sizes, indicating the strength of relationships between variables.

4. Data Description

As mentioned earlier, this research is based on an existing survey. However, as the focus of the existing survey is wider than the focus of this research, only the relevant variables were selected and used for this research. To prepare for the descriptive analysis, specific steps were undertaken, and are explained in the following sections. Following these preparations, the descriptive analyses were conducted.

4.2. Data Refinement

4.2.1. Case Removal

The initial step involved examining the dataset with 17,041 respondents for patterns related to missing data. A noticeable observation was that a significant number of respondents did not continue their participation early in the survey, soon after providing their work locations. Subsequently, these cases were excluded, resulting in a remaining 12,100 respondents available for analysis. Additionally, given the research's emphasis on work locations, respondents who did not indicate their work location (n= 19) were further excluded.

To classify a work arrangement as hybrid, a criterion was established: employees should in general not work at a single location for more than 80% of their working time. Consequently, cases exceeding this threshold in any location were eliminated (n=1,495). Additionally, respondents who reported working more than 20% of their time at the office and at home but did not provide satisfaction ratings for the respective workplace variables were removed. Likewise, respondents who did not work from home but submitted satisfaction ratings for the physical aspects of their home workplace were excluded. Lastly, respondents who worked less than 12 hours a week were removed (n=9). This refinement process resulted in a dataset comprising of 10,491 cases for analysis.

4.2.2. Missing Values

The data cleaning process significantly reduced the number of missing values, though complete elimination was not achieved. Consequently, the next step involved replacing these missing values. The following detailed explanation outlines the approach taken for each variable.

The missing values of the continuous variables: age, work hours, and tenure were replaced with the series mean. Location autonomy, and horizontal trust, both Likert-scale variables consisting of only one item with minimal missing values, were treated likewise.

Missing values of nominal variables (education level, distance to work, gender, and household composition) were replaced by the median of the series. Furthermore, missing values related to work location choice and performed activities were present due to a likely error of respondents only providing information for those locations and activities that were relevant to them. Consequently, these were treated as non-missing values and replaced with zero. For the variable ‘nature of job’, there were two types of missing values. One was due to respondents only responding yes to applicable options and leaving the non-applicable options empty. In this case, the missing values were not replaced and were kept as missing values (0.4%). If the respondents did not fill in any value for neither of the “nature of job” options, these missing values were replaced with the series mean. Last, for the leadership characteristics, all missing values were recoded to “Not Applicable”.

For variables consisting of multiple Likert-scale variables, respondents often did not respond to all items, likely selecting those they found applicable. First, Cronbach’s Alpha was computed using all

items of a variable. If the alpha exceeded 0.7, a new variable was created to replace the multiple items. This variable was computed by taking the average of the items for each case, only if the participant responded to at least half the items. However, this meant that there were still cases which had a missing value (i.e. participants who responded to less than half the items for multiple item Likert-scale variables). These missing values were then replaced with the series mean. This process was applied to support from leadership and colleagues, internal interdependence, psychological empowerment, professional isolation, work-life conflict, office and home workplace satisfaction, and vertical trust. An overview of the replacement method for each variable can be found in Appendix B.

4.2.3. Preparation of Variables

Upon further examination, it became evident that certain variable categories within the dataset required refinement to yield more sensible and easily interpretable categories, particularly those with small sample sizes. These variables, along with the modifications made, are detailed in Table 9 below.

Table 9 Variable identification and reduction

Classification	Variable	Original categories	Used/new categories
Personal Characteristics	Gender	1= Male 2= Female 3= Others	1= Male 2= Female, Others (2,3)
	Education level	1= Primary education 2= Secondary education 3= Secondary vocational education 4= Higher vocational education 5= Scientific education 6= Other	1= Primary education, secondary education, others (1,2,3,6) 2= Higher education (4) 3= Scientific education (5)
	Household composition	1= Single household 2= Single-parent household with children living at home 3= Couple without children living at home 4= Couple with children living at home 5= Independent living with roommate 6= Living at home with parents/caregivers	1= Single household 2= Single-parent household with children living at home 3= Couple without children living at home 4= Couple with children living at home 5= Others (5,6)
Work Characteristics	Performed activities	1= General and more routine work 2= Focus work 3= Actively collaborating with colleagues 4= Scheduled consultations (including video-calls) 5= Unscheduled consultations (including video-calls)	1= Mostly focus work 2= Mostly routine work 3= Mostly scheduled consultations 4= Even mix of activities

		6= Telephone 7= Others	
	Distance to work	1= 0-15 minutes 2= 16-30 minutes 3= 31-45 minutes 4= 46-60 minutes 5= 61-90 minutes 6= >90 minutes	1= Up to 30 minutes (1,2) 2= 31-60 minutes (3,4) 3= More than 60 minutes (5,6)
Work Location Choice	Work location clusters*	1= Office 2= On the way 3= Home 4= Another location of organization 5= Another location outside organization	1= Even mix of home and main office 2= Emphasis on home 3= Even mix of all locations 4= Emphasis on main office
	Work location	1= Office 2= On the way 3= Home 4= Another location of organization 5= Another location outside organization	1= Office 2= Others (2,4,5) 3= Home

*Work location clusters are based on the results of the cluster analysis.

4.3. Descriptives

This section consists of a thorough analysis of all variables within the conceptual model. When it comes to nominal variables, the analysis offers insights into the frequency and percentage distribution of each response category. In the case of continuous and ordinal (Likert-scale) variables, the discussion focusses on essential statistical measures, including the mean and standard deviation providing insights into the variability or spread of responses around the mean. Furthermore, the kurtosis and skewness values were recorded for each variable. A skewness value within the range of -2 to +2 and a kurtosis value between -7 to +7 indicate that the data falls within the parameters of a normal distribution (Hair et al., 2010; Bryne, 2010; George & Mallery, 2010). Histograms for Likert-scale and continuous variables used further in bivariate tests are presented in Appendix C.

4.3.1. Personal Characteristics

When examining the gender of the respondents, females and males were nearly equally represented, accounting for 47.0% and 53.0% respectively. Examining the household composition of the respondents revealed that a substantial majority (77.8%) were married, of which 40.8% had children living at home and 37% do not. The next prevalent category consisted of single respondents (14.4%), followed by single parent households with children living at home (5.4%). This indicates that a very limited portion of the respondents did not fall into any of these categories and had other living arrangements (2.4%).

Moreover, when analysing the educational background of the respondents, it was clear that the majority were well-educated, having completed higher vocational or scientific education (41.3% and

37.0%) respectively. This was followed by 21.7% of respondents who had completed primary, secondary, or other levels of education.

Additionally, the assessment of perceived psychological empowerment among the respondents was determined by 12 items, on a 7-point scale (ranging from strongly disagree to strongly agree). As the internal consistency was found to be within acceptable limits ($\alpha = 0.87$), all 12 items were summed and averaged to yield a mean value of 5.50 (SD = 0.74). This suggests that on average, respondents were psychologically empowered. A skewness value of -.635 and kurtosis value of .933 was noted, meaning the distribution was slightly left skewed.

Furthermore, respondents were required to provide ratings on a scale ranging from 1(strongly disagree) to 7(strongly agree) for a set of 10 items that represented five distinct personality traits. Half of these items were reverse coded to accurately reflect the personality trait. Following this, the mean inter-item correlation for the two items on each personality trait was examined, as seen in Table 10 below. The mean inter-item correlation values of four of the items were above 0.3, and therefore, each pair of items were averaged, resulting in a final variable for each trait. However, the mean inter-item correlation for the personality trait of agreeableness did not fall within the threshold and the Cronbach's Alpha was not calculated. As the trait of agreeableness does not demonstrate a reliable result, this variable was not included for further analysis.

Table 10 Descriptive statistics - Personality trait

Personality Trait	**Items**	**Mean Inter-item correlation**
Extraversion	Extraverted, enthusiastic	0.536
	Reserved, quiet (R)	
Agreeableness	Critical, combative (R)	-0.019
	Sympathetic, warm	
Conscientiousness	Reliable, disciplined	0.383
	Sloppy, careless (R)	
Neuroticism	Anxious, easily upset (R)	0.423
	Calm, emotionally stable	
Openness to experience	Open to new experiences, complex	0.314
	Reserved, not creative (R)	

Last, the respondents had an average age of 48 years (SD = 11.07), spanning from the youngest at 19 to the eldest at 70. Furthermore, a skewness value of -.444 and kurtosis value of -.844 was noted, meaning the distribution was slightly left-skewed.

Table 11 Descriptive statistics - Personal characteristics overview

Personal Characteristics		**Frequency**	**Sample %**
Gender	Male	5564	53.0%
	Female	4927	47.0%
Household Composition	Single household	1514	14.40%
	Single-parent household with children living at home	563	5.40%
	Couples without children living at home	3880	37.0%
	Couples with children living at home	4281	40.80%
	Others	253	2.40%
Education Level	Primary, secondary education, other	2281	21.7%
	Higher vocational education	4329	41.3%
	Scientific education	3881	37.0%

		Mean	SD.
Personality Trait	Extraverted	4.75	1.56
	Agreeableness	4.21	0.88
	Conscientiousness	6.10	0.96
	Neuroticism	5.75	1.16
	Openness to experience	5.23	1.16
Psychological Empowerment		5.50	0.74
Age		48.46	11.07

4.3.2. Work Characteristics

The evaluation of the internal interdependence of individuals was based on 3 items, scored on a 5-point scale ranging from "strongly disagree" to "strongly agree". As the internal consistency was found to be within acceptable limits ($\alpha = 0.798$), all 3 items were summed and averaged to yield a mean value of 3.34 (SD = 0.86). This implies that, on average, respondents held a neutral stance regarding their level of internal interdependence. A skewness value of -.364 and a kurtosis value of -.202 was noted, meaning that the distribution was slightly left skewed. The external interdependence of individuals was excluded from further analysis as the internal consistency did not fall within the acceptable limits.

When examining the tenure of employment among the respondents, it became evident that the average duration of employment stood at 14 years (SD = 14.01), ranging from 0-50 years. A skewness value of .771 and kurtosis value of -.738 was noted, meaning that the data was slightly left-skewed. Moreover, the average weekly working hours for the respondents were estimated at 35 hours (SD = 4.20), ranging from 12 to 40 hours. A skewness and kurtosis value of -1.509 and 3.241 were respectively noted, meaning that the data was left-skewed.

Furthermore, when examining the distance respondents commute to their workplace, it was observed that the majority of respondents (43.1%) resided between 31-60 minutes commute from their work. This was followed by respondents who lived less than 30 minutes distance to work (31.2%), leaving 25.7% whose commute to work exceeded an hour.

Additionally, respondents were asked to rate their degree of autonomy in selecting their work location using a 5-point scale, ranging from "totally not autonomous" to "totally autonomous". It was evident that, on average, respondents exhibited a certain degree of autonomy in choosing their work location, as evidenced by the mean value of 3.83 (SD = 1.00). A skewness value of -.837 and a kurtosis value of .221 were noted, meaning that the data was slightly left-skewed.

Moreover, to assess the leadership style/characteristics, employees were tasked with choosing the characteristics that aligned with their leaders. The findings revealed that the most prevalent leadership style, at approximately 46.5%, was characterised by goal-setting. This was closely followed by leadership styles characterized by vision setting (41.1%), proactive approach (40.2%), an absence of authority (39.8%), and steering (39.1%). Conversely, the least prevalent leadership trait was that of indecision, with only 7.9% of respondents associating their leaders with this quality. These leadership characteristics can be seen in Figure 5 below.

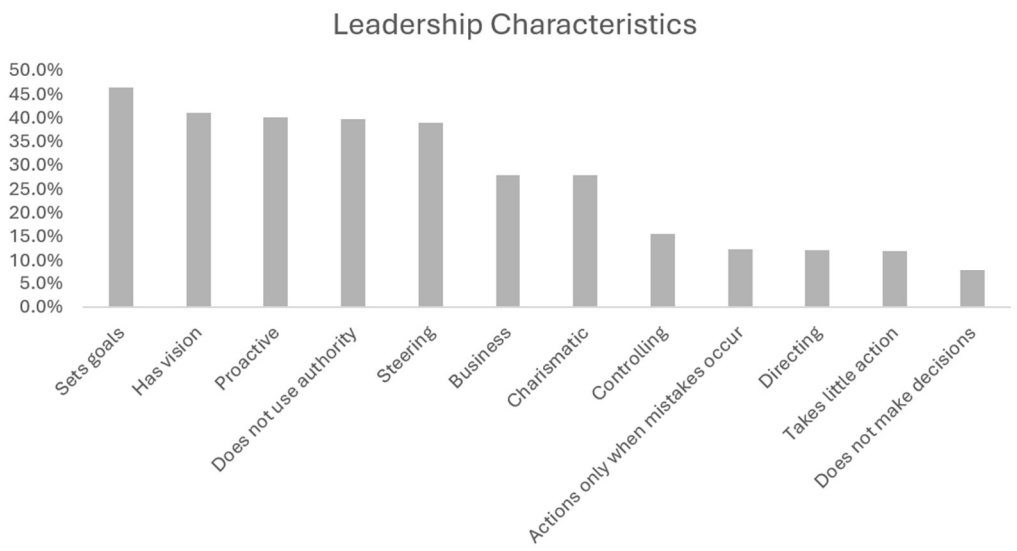


Figure 5 Descriptive statistics - Leadership characteristics

Additionally, a principal component analysis was run on the 12 leadership characteristics. PCA revealed three components that had eigenvalues greater than 1 which explained 15.9%, 13.7%, and 13.3% of the total variance, respectively. The three-component solution explained 42.9% of the total variance. As this value was below 60%, and the original variable consisted of too many items, this variable was excluded from further analysis.

To assess the nature of respondents' jobs, they were presented with a selection of 20 job categories and asked to indicate 1 to 3 categories that best described their position. Figure 6 below shows that the most prevalent job categories were advising and informing, at 52%, closely followed by investigating and analysing, at 39.3%. Subsequently, there was organizing and coordinating at 34%, and administrative work at 21.4%. It is notable that less than 15% of respondents identified with each of the remaining job categories, with the least common roles being receiving and securing at a mere 0.3% and governing at 1.6%.

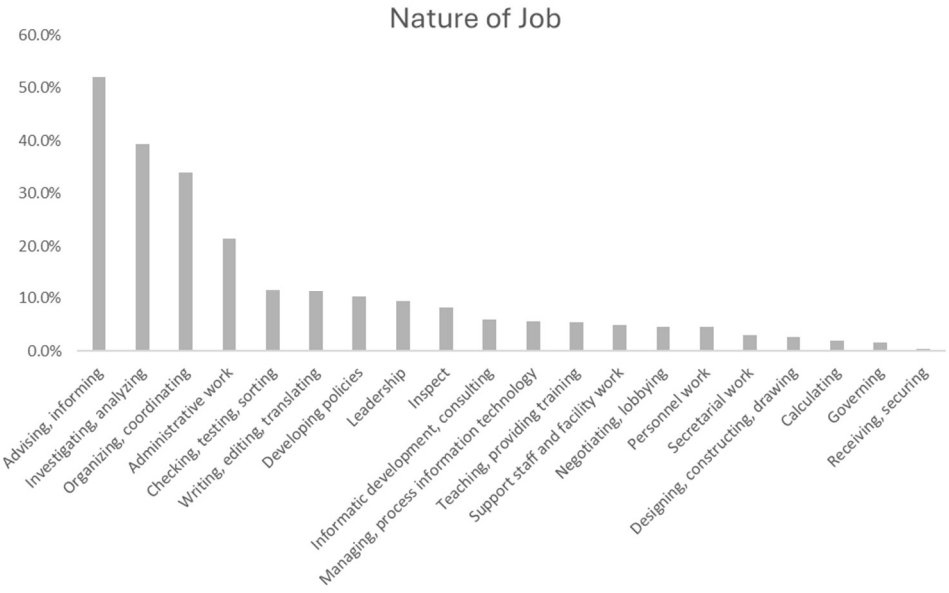


Figure 6 Descriptive statistics - Nature of job

Additionally, a principal component analysis was run on the 20 job categories. PCA revealed eight components that had eigenvalues greater than one. The eight-component solution explained 51.5% of the total variance. As this value was below 60%, and the original variable consisted of too many items, this variable was excluded from further analysis.

To analyse the activities performed by employees during their work hours, they were provided with a list of 6 distinct work-related activities, along with an "others" option. They were asked to allocate the percentage of their weekly work time spent on each activity, ensuring that the sum equalled 100%. Examining the dataset showed that on average, respondents spent 25.39% of their time performing focus work (SD = 17.64). The average time allocation for respondents engaged in general and routine tasks, as well as scheduled consultations, was quite similar, at 21.72% and 18.25% respectively (SD = 19.33, SD = 13.62). This was followed by actively collaborating with colleagues at 14.95% (SD = 10.50). A relatively smaller proportion of employees spent their time on phone calls (8.03%, SD = 9.75), unscheduled consultations (6.84%, SD = 6.24), and other activities (4.51%, SD = 7.57).

Next, a K-Means cluster analysis was conducted on this variable to identify relatively homogeneous groups of cases on the performed activities. Multiple K-means analyses were performed with different numbers of clusters. In total, four cluster groups were selected to find contrasting activity clusters. The results of the cluster frequencies are presented in Table 12 further below.

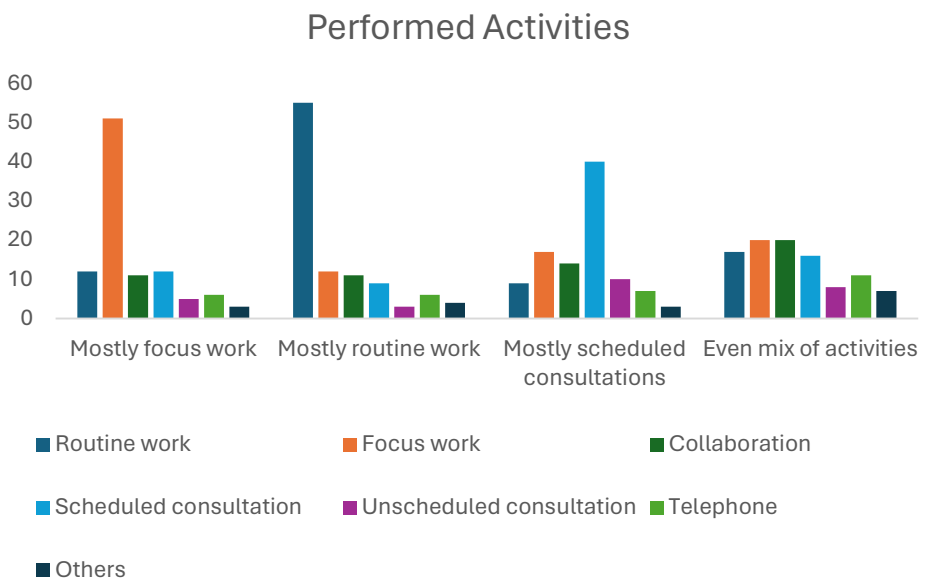


Figure 7 Descriptive statistics - Performed activities clusters

Figure 7 above shows that cluster 1 predominantly included focus work (51% of the time). Cluster 2 included mainly general and routine work (55% of the time). Cluster 3 primarily involved scheduled consultations (40% of the time). The fourth and final cluster exhibited a balanced distribution of various activities: general and routine work (17%), focus work and collaborative tasks, both at 20% each, scheduled consultations (16%), unscheduled consultations (8%), telephone (11%), and other tasks (7%).

Table 12 Descriptive statistics - Work characteristics overview

Work Characteristics	**Mean**	**SD.**
Internal Interdependence	3.34	0.89
Tenure	14.60	14.01

Work hours		35.07	4.20
Location Autonomy		3.83	1.00
		Frequency	**Sample %**
Distance to work	Up to 30 minutes	3273	31.2%
	31-60 minutes	4517	43.1%
	>60 minutes	2701	25.7%
Performed activities	(1) Mostly focus work	2481	23.6%
	(2) Mostly routine work	2002	19.1%
	(3) Mostly scheduled consultations	2093	20.0%
	(4) Even mix of activities	3915	37.3%

4.3.3. Physical Workplace Satisfaction

Employees' satisfaction with their home and office workplace was assessed by their responses on 10 and 15 physical aspects respectively, which were rated on a 5-point scale ranging from "very dissatisfied" to "very satisfied".

For home workplace satisfaction, the internal consistency of the 10 aspects fell within acceptable thresholds ($\alpha = 0.902$). Consequently, the scores for these items were summed, yielding an average value of 4.21 (SD = 0.64). This suggests that, on average, respondents were satisfied with the physical conditions of their home workplaces. A skewness value of -.722 and kurtosis value of .345 was noted, meaning the data is slightly left-skewed.

For office workplace satisfaction, the internal consistency of the 15 items was found to be within acceptable limits as well ($\alpha = 0.887$). Therefore, all 15 items were summed and averaged to yield a mean value of 3.17 (SD = 0.63). This suggests that, on average, respondents were neither satisfied nor dissatisfied with the physical attributes of their office workplace. Therefore, it became clear that respondents were more satisfied with their home workplace than with their office workplace. A skewness value of -.287 and kurtosis value of .371 was noted, meaning the data was slightly left-skewed.

4.3.4. Work Location Choice

Respondents predominantly worked from home, spending 49.88% of their working time at this location on average (SD = 19.33). The office is the second most common work location, accounting for 36.25% of their working time (SD = 20.32). Respondents worked in other locations than the main office and at home for a smaller amount of time (13.87%, SD = 15.53). For main office location, a skewness value of 0.465 and kurtosis value of -.455 was noted, meaning that data was slightly right skewed. For home location, a skewness and kurtosis value of -.375 and -.626 was respectively noted, showing data was slightly left-skewed. For other locations, a skewness value of 1.445 and kurtosis value of 2.069 was noted, meaning data was right skewed.

Additionally, a K-Means cluster analysis was conducted on this variable to identify relatively homogeneous groups of cases on work location. Multiple K-means analyses were performed with different numbers of clusters. In total, four cluster groups were selected to find contrasting work location clusters. The results of the cluster frequencies and final clusters are presented in Table 13 and Figure 8 below.

Table 13 Descriptive statistics – Work location choice

Work Location Choice	Frequency	Sample %
(1) Even mix of home and main office	3604	34.4%
(2) Emphasis on home	3716	35.4%
(3) Even mix of all locations	1483	14.1%
(4) Emphasis on main office	1688	16.1%

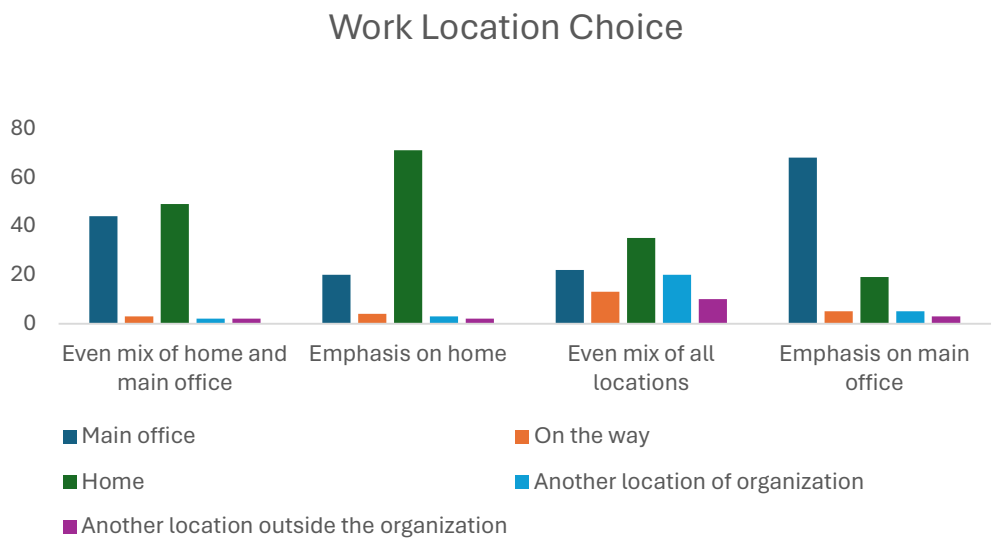


Figure 8 Descriptive statistics – Work location choice clusters

Figure 8 above indicates that in Cluster 1, there was a roughly equal combination of home and office work locations, constituting 49% and 44%, respectively. In Cluster 2, there was a notable preference for the home as the primary work location, accounting for 71%. Cluster 3 displayed an even distribution across various work locations, with office (22%), on the way (13%), home (35%), another location within the organization (20%), and another location outside the organization (10%). Finally, the fourth cluster was predominantly characterized by an office work location, making up 68%.

4.3.5. Support, Trust, and Social Well-being

The assessment of employees' perceived support from their colleagues was based on 3 items, each rated on a 5-point scale ranging from "never" to "always". The internal consistency was found to be within acceptable limits (α = 0.715). These individual items were summed and averaged to yield a mean value of 3.85 (SD = 0.64), suggesting that, on average, respondents often perceived support from their colleagues in the workplace. A skewness value of -.331 and kurtosis value of .345 was noted, meaning the data was slightly left-skewed and within ranges of normal distribution.

Employees' perception of support from their leadership was measured the same way. The internal consistency was determined to be within an acceptable threshold (α = 0.820). These 3 items were summed and yielded an average score of 3.99 (SD = 0.75), indicating that, on average, respondents often perceived support from their leadership within the workplace. A skewness value of -.714 and kurtosis value of .471 was noted, meaning the data was slightly left-skewed.

Furthermore, trust between leadership and employees (vertical trust) within the workplace was assessed based on a 5-point scale ranging from "to a very small extent" to "to a very large extent". The

internal consistency fell within the acceptable threshold (α = 0.837). These individual items were summed, yielding an average score of 3.89 (SD = 0.70), suggesting that, on average, respondents perceived that management exhibits trust in them to a large extent. A skewness value of -.912 and kurtosis value of 1.905 was noted, meaning the data was left-skewed.

Moreover, trust between colleagues (horizontal trust) was experienced slightly more, with a mean value of 3.95 (SD = 0.66), indicating that respondents perceived that their colleagues exhibit trust in them to a large extent. A skewness value of -.732 and kurtosis value of 2.065 was noted, meaning the data was slightly left-skewed.

The assessment of employees' work-life conflict was based on their responses to 5 items scored on a 5-point scale ranging from "to a very small extent" to "to a very large extent". The internal consistency fell within acceptable limits (α = 0.820). All 5 items were summed to yield an average value of 1.85 (SD = 0.67), suggesting that on average, respondents experienced work-life conflict to a small extent. A skewness value of 1.004 and kurtosis value of .948 was noted, meaning the data was right-skewed.

Last, the evaluation of employees' professional isolation was based on their responses to 7 items scored on a 5-point scale ranging from "never" to "always". The internal consistency was found to be within the acceptable threshold (α = 0.858). All 7 items were summed and averaged to yield a mean value of 2.05 (SD = 0.64). Given the negative wording of these questions, these scores suggest that respondents seldom experienced professional isolation. A skewness value of .449 and kurtosis value of .236 was noted, meaning the data was slightly left-skewed and within ranges of normal distribution.

Table 14 Descriptive statistics - Support, trust, and social well-being

Support	**Mean**	**SD.**
Support from Colleagues	3.85	0.64
Support from Leadership	3.99	0.75
Trust		
Horizontal Trust	3.89	0.70
Vertical Trust	3.95	0.66
Social Well-being		
Work-life Conflict	1.85	0.67
Professional Isolation	2.05	0.64

4.4. Conclusion

This chapter aimed to describe the variables in the dataset. After data cleaning, a total of 10,491 valid responses were available for descriptive analysis. This analysis revealed that few variables, namely personality trait, external interdependence, nature of job, and leadership characteristics were unsuitable for bivariate tests, as explained earlier. Additionally, a K-Means cluster analysis was applied to the hybrid work locations and the performed activities variable to enhance data interpretability in the bivariate tests. The clusters derived from the performed activities variable will replace the original variable in all future tests. However, hybrid work location clusters as described in Figure 8 were only used in bivariate tests if the work location variable serves as the independent variable; otherwise, the original variable was utilized to comply with statistical testing requirements. Last, it is important to note that all variables exhibited a normal distribution.

5. Bivariate Analyses

This chapter aims to examine the relationships between variables and to assess the significance of these relationships, where the relationships considered statistically significant are linked to a p-value of .05 or lower. The results presented in this chapter are as follows (also presented with section numbers in Figure 10). First, the bivariate relationships of personal characteristics, work characteristics, and physical workplace satisfaction with work location choice are discussed. Second, the bivariate relationships between support, trust, and social well-being are explored. Third, the bivariate relationships of work location choice with support, trust, and social well-being are investigated. Last, the bivariate relationships of personal and work characteristics, and physical workplace satisfaction with support, trust, and social well-being are explored.

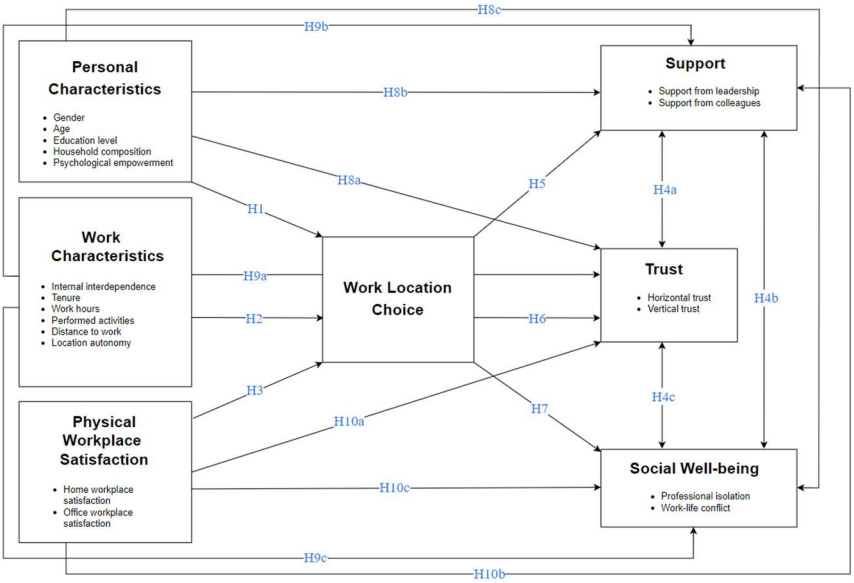


Figure 9 Conceptual model indicating hypotheses

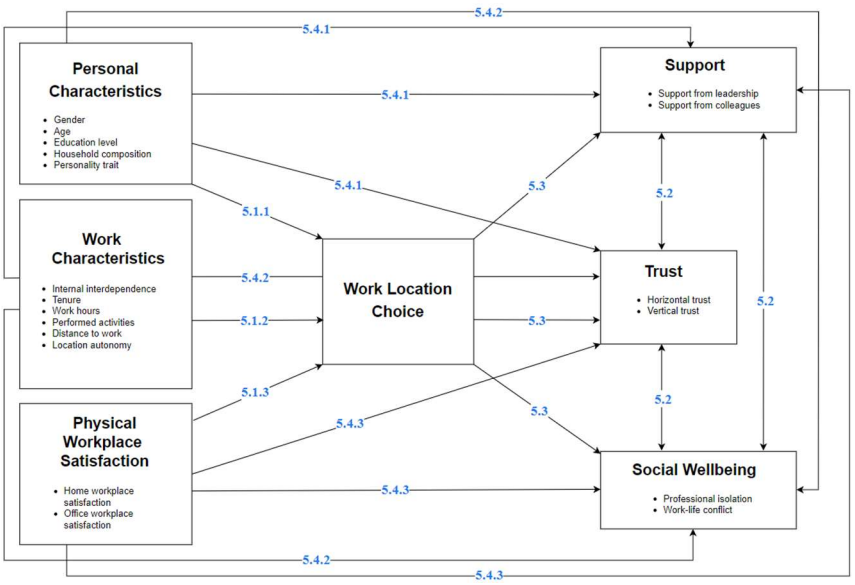


Figure 10 Conceptual model indicating sections that address the different relationships

5.1. Personal and work characteristics, and physical workplace satisfaction in relation to hybrid work location

In the following sections, the bivariate analyses for the relationships in bold in Figure 11 below are elaborated. As the hybrid work location is the dependent variable in the context of these relationships, the hybrid work location clusters could not be used due to the limitations of bivariate tests between continuous independent variables and categorical dependent variables. Therefore, the bivariate analyses in this section were performed using the time spent at the three original work locations: office, home, and others, each presented by a variable in the dataset.

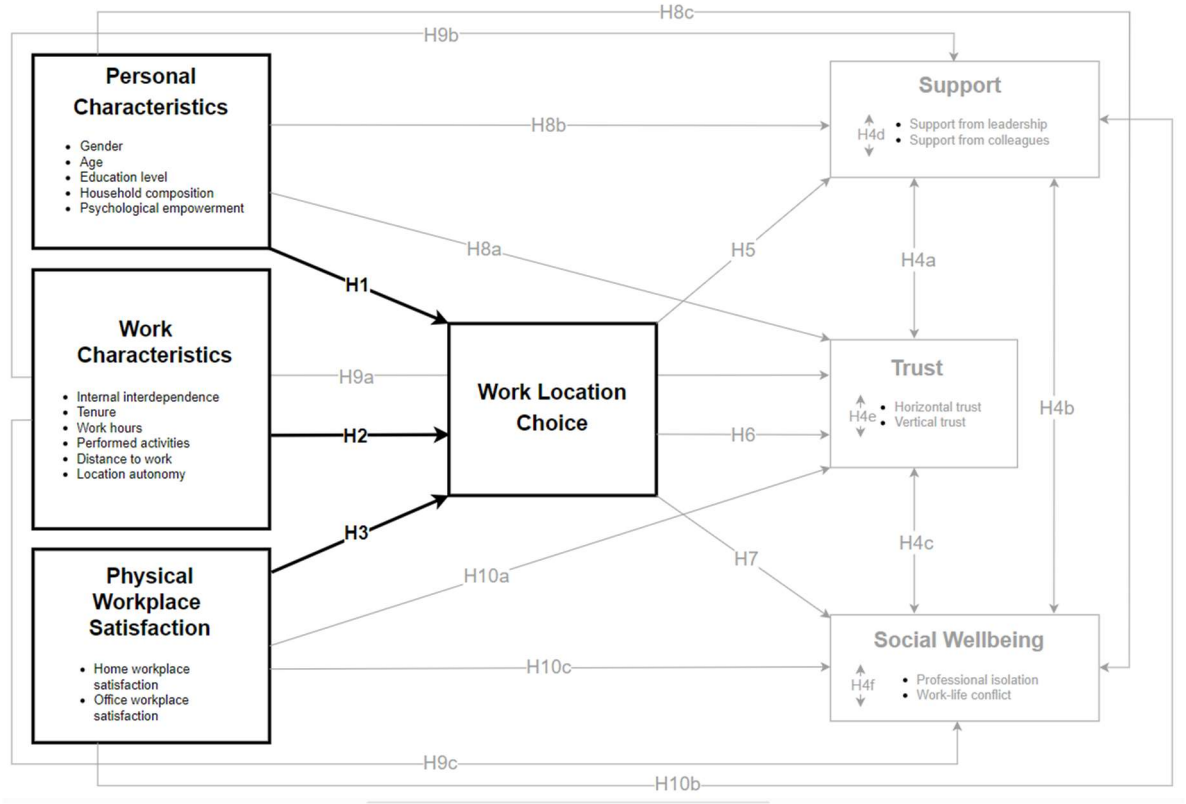


Figure 11 Bivariate tests for H1, H2, and H3

5.1.1. Personal characteristics and work location choice

In this section, the bivariate analyses between personal characteristics and work location choice are discussed. Three distinct types of bivariate analyses were conducted: Independent t-test, One-way ANOVA, and Pearson's correlation.

The following remaining sub-hypotheses were tested:

H1a: Gender relates to choice of hybrid work locations
H1b: Household composition relates to choice of hybrid work locations
H1c: Age relates to choice of hybrid work locations
H1d: Education level relates to choice of hybrid work locations
H1f: Psychological empowerment relates to choice of hybrid work locations

Gender

Table 15 Independent samples t-tests: Gender and Work location choice

Independent Variable	Dependent Variable		
	Office *(t=2.415; p=.016)*	**Home** *(t=3.628; p<.001)*	**Others** *(t=7.740; p<.001)*
Gender	**Mean**		
Male	35.82%	49.21%	14.97%
Female	36.73%	50.65%	12.62%

Independent samples t-test and welch t-test were run to determine if there were differences in the percentage of time spent working from different locations between males and females. The results indicated a statistically significant difference in the percentage of time spent in all locations between the two genders. Table 15 above shows that females spent a larger percentage of their time working at the office and at home than males, whereas males spent a larger percentage of their time working at other locations than home and office. While the differences were significant, the mean percentages spent at each location only differed slightly between the genders, with on average both genders spending about 35% at the office, 50% at home and 13-15% at other locations.

Age and Psychological Empowerment

Table 16 Pearson's correlation tests: Age, Psychological empowerment, and Work location choice

Independent Variable	Dependent Variable		
	Office	**Home**	**Others**
Age	-.101**	.067**	.037**
Psychological empowerment	-.027**	-.061**	.113**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlation was computed to assess the relationship between employees' age and their hybrid work locations. All relationships were statistically significant. The results indicate that younger employees worked less at the office, but more at home and other locations. Additionally, Pearson's product-moment correlations also revealed statistically significant relationships between employees' psychological empowerment and their hybrid work location. Table 16 above shows that, employees with higher perceived psychological empowerment spent a smaller percentage of time working from the office and from home and worked more from other locations.

Education Level

Table 17 One-way ANOVA tests: Education level and Work location choice

Independent Variable	Dependent Variable					
	Office *(F=18.891; p<.001)*		**Home** *(F=15.558; p<.001)*		**Others** *(F=41.997; p<.001)*	
	Mean	**SD.**	**Mean**	**SD.**	**Mean**	**SD.**
Education level						
Primary, secondary, and others	37.77	20.38	50.97	22.76	11.26	15.34
Higher education	34.91	19.23	50.56	20.31	14.53	16.40
Scientific education	36.85	18.72	48.49	18.68	14.66	14.74

One-way Welch ANOVA was conducted to determine if the time spent working at the three locations was different for groups with different education levels. Table 17 above shows that respondents with

primary, secondary, and other educations and scientific education attainments spent more time working from the office than employees with higher vocational education. Furthermore, employees with primary, secondary, and other educations, and those with higher education spent more time working from home than employees with scientific education. Last, employees with higher and scientific education spent more time working from other locations than employees with primary, secondary, and other educational attainments respectively. The differences between the groups for each work location can be seen in Appendix D.1.1.

Household Composition

Table 18 One-way ANOVA tests: Household composition and Work location choice

Independent Variable	Dependent Variable					
	Office (F=10.550, p<.001)		Home (F=3.235, p=.012)		Others (F=17.672; p<.001)	
	Mean	SD.	Mean	SD.	Mean	SD.
Household composition						
Single household	37.69	19.93	50.24	21.07	12.07	15.02
Single-parent household with children living at home	37.80	19.81	49.49	20.64	12.72	14.65
Couple without children living at home	35.62	19.36	50.64	20.33	13.73	15.60
Couple with children living at home	35.76	18.96	49.24	20.10	15.00	16.08
Others	42.09	18.95	18.10	28.10	10.08	12.12

One-way ANOVA and Welch ANOVA were conducted to determine if the time spent working at the three locations was different for groups with different household composition. Table 18 above shows that single households spent a lower percentage of their time working at the office than couples with and without children living at home. Furthermore, employees with 'other' household compositions spent a higher percentage of their time working from the office than the other four household composition groups. Additionally, it is apparent that couples without children living at home spent a higher percentage of their time working from home than couples with children. No other group differences were statistically significant. This implies that the presence of a child results in differences in the percentage of time employees spend working at their home. Looking at other locations, it is seen that people in the single household category and the other household category spent a lower percentage of their time working from other locations than couples with and without children. Last, couples with children living at home spent a higher percentage of time working from other locations than all household groups. The differences between the groups for each work location can be seen in Appendix D.1.1.

5.1.2. Work characteristics and work location choice

In this section, the bivariate analyses between work characteristics and work location choice are discussed. Two distinct types of bivariate analyses were conducted: One-way ANOVA, and Pearson's correlation.

The following remaining sub-hypotheses were tested:

H2a: Internal interdependence relates to choice of hybrid work locations
H2c: Tenure relates to choice of hybrid work locations
H2d: Work hours relates choice of hybrid work locations
H2f: Performed activities relates to choice of hybrid work locations

H2g: Distance to work relates to choice of hybrid work locations
H2h: Location autonomy relates to choice of hybrid work locations

Internal Interdependence, Tenure, Work Hours, and Location Autonomy

Table 19 Pearson's correlation tests: Internal interdependence, Tenure, Work hours, Location autonomy and Work location choice

Independent Variable	Dependent Variable		
	Office	Home	Others
Internal interdependence	.150**	-.175**	.055**
Tenure	-.084**	.026**	.069**
Work hours	-.034**	-.062**	.123**
Location autonomy	-.086**	-.010 *(p=.314)*	.119**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlations were computed to assess the relationship between employees' hybrid work location and their internal interdependence, tenure, work hours, and location autonomy, seen in Table 19 above. Employees with higher internal interdependence worked more at the office, less at home and more at other locations. Looking at tenure, it is seen that employees who had been at the organizations for a longer time spent less time working at the office, and more time working from home and other locations. Furthermore, employees who worked for longer hours, spent less time working at both home and the office, whereas they spent more time working from other locations. Moreover, the results indicated that employees who had more autonomy in choosing their work location spent less time working at the office and more time working at other locations. On the contrary, there was no statistically significant relationship between employees' location autonomy and the percentage of time they spent working from home.

Distance to Work

Table 20 One-way ANOVA tests: Distance to work and Work location choice

Independent Variable	Dependent Variable					
	Office *(F=292.340; p<.001)*		Home *(F=105.853, p<.001)*		Others *(F=49.735; p<.001)*	
	Mean	SD.	Mean	SD.	Mean	SD.
Distance to work						
Up to 30 minutes	41.20	20.23	46.76	21.32	12.03	14.70
31-60 minutes	36.49	19.08	49.61	20.24	13.90	15.88
>60 minutes	29.85	16.62	54.13	18.41	16.03	16.05

One-way Welch ANOVA was conducted to determine if the time spent working at the three locations was different for groups with different commuting distance to work. Games-Howell post hoc analysis as seen in Appendix D.1.2, revealed a statistically significant difference in time spent working at the office, home, and other locations between employees in all work distance groups. Table 20 above shows that with longer commuting distances to work, employees spent a lower percentage of their time working at the office. On the contrary, with increasing commuting distance to work, employees spent a higher percentage of their time working from their home and other work locations.

Performed Activities

Table 21 One-way ANOVA tests: Performed activities and Work location choice

Independent Variable	Dependent Variable					
	Office (F=77.590; p<.001)		Home (F=199.338; p<.001)		Others (F=146.350; p<.001)	
	Mean	SD.	Mean	SD.	Mean	SD.
Performed activities						
(1) Mostly focus work	31.76	17.54	56.85	18.09	11.39	13.19
(2) Mostly routine work	38.34	20.04	52.27	21.86	9.39	13.87
(3) Mostly scheduled consultations	35.53	19.19	46.79	18.66	17.68	16.52
(4) Even mix of activities	38.42	19.61	45.90	20.36	15.79	16.59

A one-way Welch ANOVA was conducted to determine if the time spent working at different locations was different for groups with different performed activities, seen in Table 21 above. Games-Howell post hoc analysis seen in Appendix D.1.2, revealed that all group differences were statistically significant for the office location except between performed activities cluster 2 and 4. This shows that employees spent the lowest percentage of time working from the office when they performed mostly focus work. Further, they spent more time working from the office when they performed mostly routine work rather than primarily scheduled consultations. Employees spent the highest percentage of time working from home when they primarily performed focus work. This is followed by mostly routine work, implying that employees spent more time working from home when they performed mostly routine work in comparison to primarily scheduled consultations or an even mix of activities. Last, it is seen that respondents who performed mostly scheduled consultations spent the highest percentage of time working at other locations in comparison to participants in other activity clusters, followed by an even mix of activities. Respondents who mostly performed routine work spent the lowest percentage of time working at other locations in comparison to other participants. Last, it is good to note that the differences across the activity clusters in percentage of time spent in each work location was less pronounced for the office work location than the others.

5.1.3. Physical workplace satisfaction and work location choice

In this section, the bivariate analyses performed to investigate the relationship between physical workplace satisfaction and work location choice are discussed.

The following sub-hypotheses were tested:

H3a: Satisfaction with physical factors of home workplace relates to choice of hybrid work locations
H3b: Satisfaction with physical factors of office workplace relates to choice of hybrid work locations
H3c: Home workplace satisfaction relates to office workplace satisfaction

Table 22 Pearson correlation tests: Home and Office workplace satisfaction and Work location choice

Independent Variable	Dependent Variable		
	Office	Home	Others
Office workplace satisfaction	.101**	-.084**	-.015 *(p=.133)*
Home workplace satisfaction	-.168**	.197**	-.048**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlations were computed to assess the relationship between employees' home and office workplace satisfaction, and their hybrid work location. It is seen in Table 22 above that employees who were more satisfied with their office workplace spent more time working from the office, and less time working from home. However, there was no statistically significant relationship between employees' satisfaction with their office workplace and time spent working at other locations than their main office and home. Similarly, employees who were more satisfied with their home workplace spent less time working from their office and other locations, and more time working from home.

Additionally, a Pearson's product-moment correlation was computed to assess the relationship between employees' home workplace satisfaction and office workplace satisfaction. There was no statistically significant correlation between home workplace satisfaction and office workplace satisfaction, as seen in Table 23 below.

Table 23 Pearson's correlation test: Home workplace satisfaction and Office workplace satisfaction

Independent Variable	Dependent Variable
	Office workplace satisfaction
Home workplace satisfaction	-.018 *(p=.060)*

5.2. Support, trust, and social well-being

In this section, the bivariate analyses performed to investigate the relationships between support, trust, and social well-being are discussed. Here, additional bivariate tests were performed to investigate the relationships within support, trust, and social well-being.

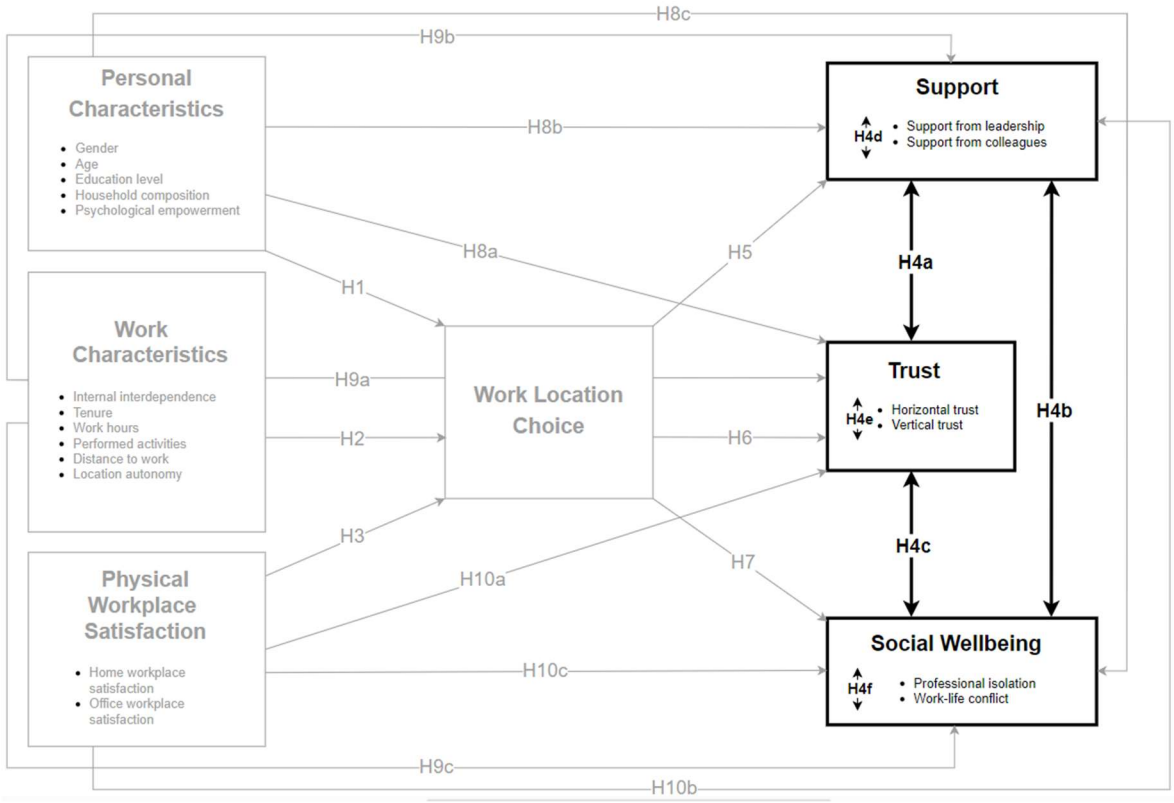


Figure 12 Bivariate tests for H4

The following sub-hypotheses were tested:

H4a: Support relates to trust
H4b: Support relates to social well-being
H4c: Trust relates to social well-being
H4d: Support from leadership relates to support from colleagues
H4e: Vertical trust relates to horizontal trust
H4f: Professional isolation relates to work-life conflict

Table 24 Pearson's correlation tests: Support and Trust, and Social well-being

Variable	Variable			
	Vertical trust	**Horizontal trust**	**Professional isolation**	**Work-life conflict**
Support from leadership	.500**	.295**	-.323**	-.194**
Support from colleagues	.333**	.395**	-.340**	-.188**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlations were computed to assess the relationship between support from leadership and vertical trust, horizontal trust, professional isolation, and work-life conflict. All relationships were statistically significant, seen in Table 24 above. A strong correlation was found between support from leadership and vertical trust, indicating that with an increase in support from leadership, trust between management and employees increased as well. As employees perceived greater support from leadership, trust among colleagues also increased, but to a lesser extent than vertical trust. Additionally, employees experienced less professional isolation and work-life conflict when they perceived more support from leadership. These correlations were medium and small, respectively.

Similar outcomes were observed for the correlations between support from colleagues and vertical trust, horizontal trust, professional isolation, and work-life conflict. A medium correlation was found between an increase in support from colleagues and an increase in vertical and horizontal trust. Notably, the correlation with horizontal trust was slightly higher, as it relates to trust between employees. Furthermore, professional isolation and work-life conflict reduced with increased support from colleagues.

Looking further at Table 24 above, it is seen that with an increase in perceived support from leadership, respondent's perceived vertical trust increased to a larger extent than horizontal trust. The opposite was true for an increase in perceived support from colleagues. Additionally, the results imply that more support from colleagues had a slightly more positive correlation with experienced professional isolation than higher levels of support from leadership, whereas this is the opposite for work-life conflict experienced by employees.

Table 25 Pearson's correlation tests: Trust and Social well-being

Variable	Variable	
	Professional isolation	**Work-life conflict**
Horizontal trust	-.264**	-.164**
Vertical trust	-.295**	-.219**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlation was computed to assess the relationship between horizontal trust and professional isolation, and work-life conflict. All correlations were statistically significant, but small, seen in Table 25 above. The findings indicated that an increase in trust, whether perceived between management and employees, or among colleagues, was significantly related to a decrease in

both experienced professional isolation and work-life conflict. It is also seen that an increase in vertical trust related to a decrease in experienced professional isolation and work-life conflict, but to a lesser extent than horizontal trust.

Table 26 Pearson's correlation test: Support from leadership and Support from colleagues

Variable	Variable
	Support from colleagues
Support from leadership	.410**

** Significant at the 0.01 level (2-tailed)

Additionally, Pearson's product-moment correlation was computed to assess the relationship between support from leadership and support from colleagues, seen in Table 26 above. A medium positive correlation is seen between the two variables, meaning that with higher perceived support from leadership, employees perceived more support from their colleagues as well.

Table 27 Pearson's correlation test: Vertical trust and Horizontal trust

Variable	Variable
	Horizontal trust
Vertical trust	.476**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlation was computed to assess the relationship between vertical trust and horizontal trust, seen in Table 27 above. A medium positive correlation is seen between the two variables, meaning that employees who perceived more trust between themselves and their management, perceived more trust between themselves and their colleagues as well.

Table 28 Pearson's correlation test: Work-life conflict and Professional isolation

Variable	Variable
	Professional isolation
Work-life conflict	.289**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlation was computed to assess the relationship between professional isolation and work-life conflict, seen in Table 28 above. A small positive correlation is seen between the two variables, showing that employees who experienced more work-life conflict also felt more professionally isolated.

5.3. Work location choice and support, trust, and social well-being

In this section, the bivariate analyses performed to investigate the relationships between employee's work location choice and their perceived support, trust, and social well-being are explained.

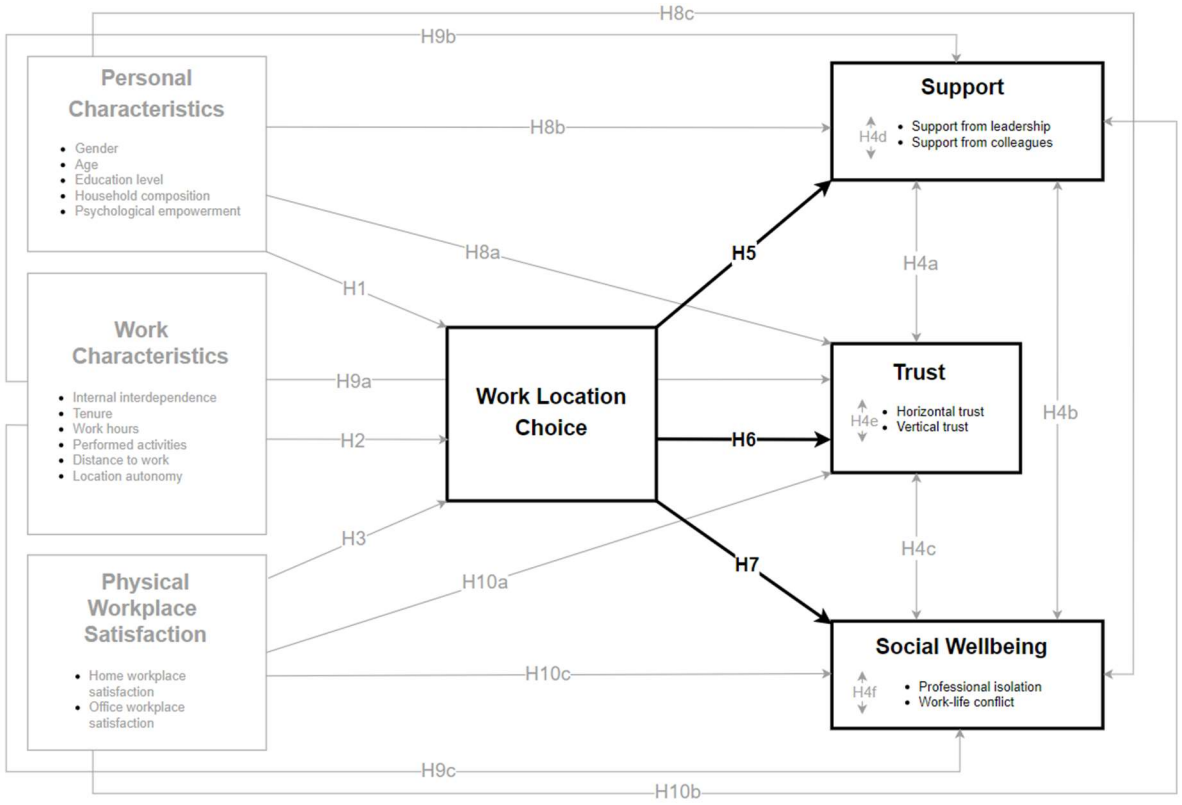


Figure 13 Bivariate tests for H5, H6, and H7

The following hypotheses were tested:

H5: Choice of hybrid work locations relates to support
H6: Choice of hybrid work locations relates to trust
H7: Choice of hybrid work locations relates to social well-being

Support

Table 29 One-way ANOVA tests: Work location choice and Support

Independent Variable	Dependent Variable			
	Support from leadership *(F=7.249; p<.001)*		Support from colleagues *(F=3.449; p=.016)*	
	Mean	**SD.**	**Mean**	**SD.**
Work location choice				
(1) Even mix of home and main office	4.01	0.74	3.87	0.63
(2) Emphasis on home	4.00	0.76	3.84	0.66
(3) Even mix of all locations	3.93	0.77	3.81	0.63
(4) Emphasis on main office	3.93	0.78	3.84	0.65

One-way ANOVA was performed to assess the relationship between employees' work location and their perceived support, trust, and social well-being using the clusters described earlier for work location, seen in Table 29 above. The results of Games-Howell post hoc analysis seen in Appendix D.2 revealed that respondents perceived more support from leadership when they divided their time evenly between office and home or worked primarily at home than when they primarily worked from the office or divided their time evenly across all locations. Furthermore, the analysis showed that respondents who divided their time evenly between their main office and home perceived more support from colleagues than those who divided their time evenly across all work locations.

Trust

Table 30 One-way ANOVA tests: Work location choice and Trust

Independent Variable	Dependent Variable			
	Vertical trust *(F=6.165; p<.001)*		Horizontal trust *(F=13.576; p<.001)*	
	Mean	**SD.**	**Mean**	**SD.**
Work location choice				
(1) Even mix of home and main office	3.92	0.67	3.97	0.64
(2) Emphasis on home	3.90	0.71	3.98	0.65
(3) Even mix of all locations	3.85	0.69	3.89	0.65
(4) Emphasis on main office	3.85	0.72	3.88	0.71

The results indicated that respondents perceived statistically significant different levels of vertical and horizontal trust across the four work location clusters. Games-Howell post hoc analysis seen in Appendix D.2, revealed that employees who worked primarily in the main office perceived less vertical trust than those who worked primarily from home and those who divided their time evenly across home and the main office. Further, Table 30 above shows that employees who divided their time evenly across all locations perceived less vertical trust than those who divided their time evenly across the two locations: home and office. Last, it is seen that employees who worked primarily at the main office or divided their time evenly across all locations perceived less horizontal trust than those who primarily worked from home or divided their time evenly between their home and the office. No other group differences were statistically significant.

Social Well-being

Table 31 One-way ANOVA tests: Work location choice and Social well-being

Independent Variable	Dependent Variable			
	Professional isolation *(F=12.699; p<.001)*		Work-life conflict *(F=25.928; p<.001)*	
	Mean	**SD.**	**Mean**	**SD.**
Work location choice				
(1) Even mix of home and main office	2.05	0.64	1.84	0.65
(2) Emphasis on home	2.01	0.63	1.79	0.65
(3) Even mix of all locations	2.12	0.64	1.95	0.69
(4) Emphasis on main office	2.08	0.66	1.92	0.71

The results indicated that respondents perceived statistically significant different levels of professional isolation and work-life conflict across the four work location clusters. Tukey and Games-Howell post hoc analysis seen in Appendix D.2 revealed that employees experienced the lowest level of professional isolation when they worked primarily from home. Additionally, Table 31 above shows that

employees experienced more professional isolation when they divided their work hours evenly across all work locations than when they worked primarily from home or divided their time evenly between their office and home. Furthermore, they experienced more professional isolation when they primarily worked from the office than when they primarily worked from home. Looking at work-life conflict, the same pattern is seen. Those who divided their time evenly between home and the office or primarily worked from home experienced lower levels of work-life conflict than those in cluster 3 and 4. Last, they experienced more work-life conflict when they primarily worked from the office than when they primarily worked from home.

5.4. Personal and work characteristics, and physical workplace satisfaction in relation to support, trust, and social well-being

In the following sections, the bivariate analyses performed to investigate the relationships between personal characteristics, work characteristics, physical workplace satisfaction and support, trust, and social well-being are discussed.

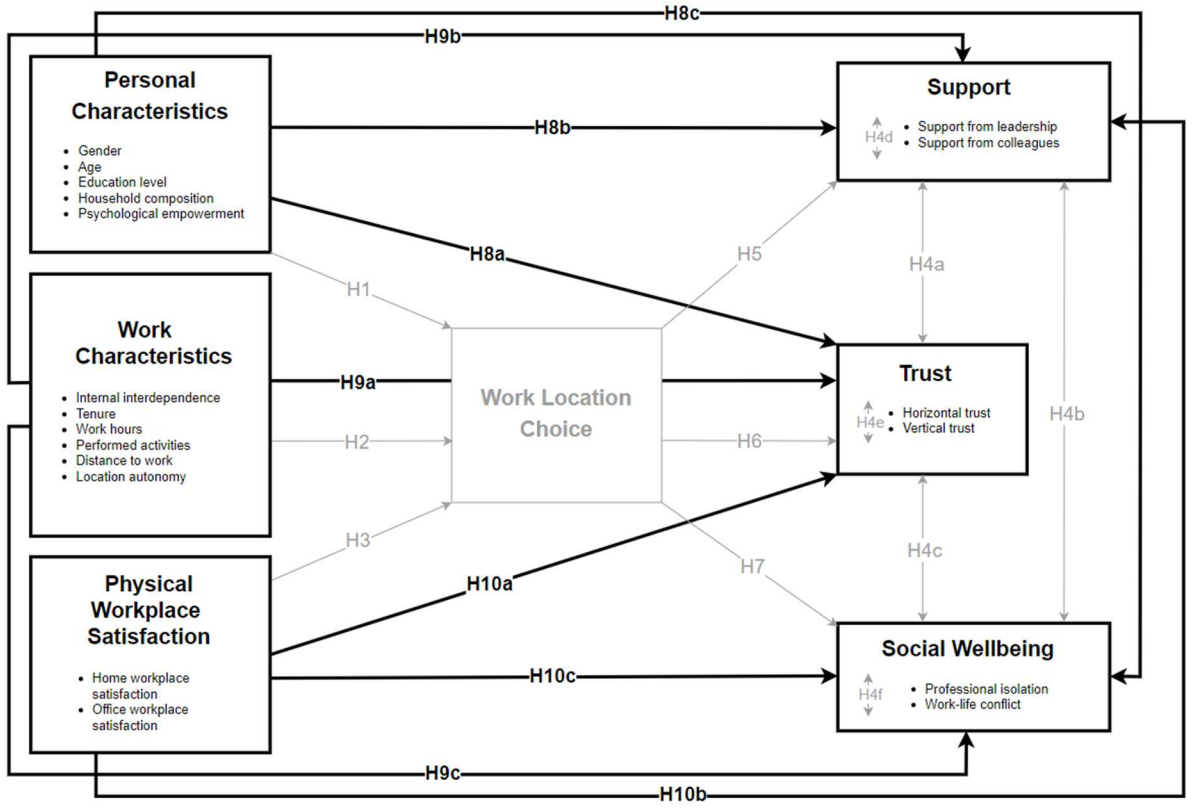


Figure 14 Bivariate tests for H8, H9, and H10

5.4.1. Personal Characteristics and support, trust, and social well-being

In this section, the bivariate analyses between personal characteristics and support, trust, and social well-being are discussed. Three distinct types of bivariate analyses were conducted: Independent t-test, One-way ANOVA, and Pearson's correlation. The following sub-hypotheses were tested:

H8a: Personal characteristics relate to support
H8b: Personal characteristics relate to trust
H8c: Personal characteristics relate to social well-being

Gender

Table 32 Independent samples t-tests: Gender and Support, Trust, and Social well-being

Independent Variable	Dependent Variable					
	Support from leadership *(t=.141; p=.888)*	**Support from colleagues** *(t=4.677; p<.001)*	**Vertical trust** *(t=1.379 ; p=.168)*	**Horizontal trust** *(t=5.650; p<.001)*	**Professional isolation** *(t=2.077; p=.038)*	**Work-life conflict** *(t=1.126; p=.260)*
Gender	**Mean**					
Male	3.98	3.82	3.88	3.98	2.06	1.86
Female	3.98	3.88	3.90	3.91	2.03	1.84

Welch t-test was run to determine if there were differences in perceived support from leadership and colleagues between males and females. There was no statistically significant difference in support from leadership between males and females. The results indicated a statistically significant difference in support from colleagues between males and females. Table 32 above shows that female employees perceived more support from their colleagues than male employees.

Additionally, Welch t-test was conducted to determine if there were differences in perceived vertical and horizontal trust between the two genders. There was no statistically significant difference in vertical trust between males and females. The results indicated a statistically significant difference in trust experienced among colleagues between males and females. Table 32 above shows that male employees perceived more horizontal trust than female employees.

Last, independent samples t-test was run to determine if there were differences in professional isolation and work life conflict, between males and females. There was no statistically significant difference in work-life conflict experienced between the two genders. The results indicated a statistically significant difference in professional isolation between males and females. Table 32 above shows that males experienced slightly more professional isolation than females.

Age and Psychological Empowerment

Table 33 Pearson's correlation tests: Age, Psychological empowerment and Support, Trust, and Social well-being

Independent Variable	Dependent Variable					
	Support from leadership	**Support from colleagues**	**Vertical trust**	**Horizontal trust**	**Professional isolation**	**Work-life conflict**
Age	.011 *(p=.277)*	-.080**	-.015 *(p=.131)*	-.004 *(p=.667)*	-.049**	-.114**
Psychological empowerment	.280**	.266**	.331**	.259**	-.303**	-.169**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlations were computed to assess the relationship between age and support from leadership, support from colleagues, vertical trust, horizontal trust, professional isolation, and work life conflict. The results shown in Table 33 above indicated that with an increase in age, employees perceived less support from colleagues, and experienced less professional isolation and work-life conflict. No other correlations were statistically significant.

Additionally, the relationships between psychological empowerment and support from leadership, support from colleagues, vertical trust, horizontal trust, professional isolation, and work life conflict

were assessed. The results shown in Table 33 above indicated that employees with higher perceived psychological empowerment perceived more support and trust at work. Furthermore, they experienced less professional isolation and work-life conflict. It is important to note that all correlations except between psychological empowerment and vertical trust were small/negligible.

Education Level

Table 34 One-way ANOVA tests: Education level and Support

Independent Variable	Dependent Variable			
	Support from leadership *(F=15.445; p<.001)*		Support from colleagues *(F=14.644; p<.001)*	
	Mean	SD.	Mean	SD.
Education level				
Primary, secondary, and others	4.05	0.77	3.89	0.67
Higher education	3.99	0.77	3.87	0.66
Scientific education	3.94	0.74	3.81	0.60

One-way ANOVA and One-way Welch ANOVA were conducted to determine if the perceived level of support from leadership and colleagues were different for groups with different education levels. Employees with primary, secondary, and other education levels perceived the most support from leadership followed by employees with higher education, as seen in Table 34 above. Support from leadership was least perceived by employees with scientific education. This implies a negative linear relationship between education level and support from leadership. Last, support from colleagues was perceived more by employees with primary, secondary, and other education attainments or higher education than employees with scientific education. The differences in support perceived by employees from different education level groups can be seen in Appendix D.3.1.

Table 35 One-way ANOVA tests: Education level and Trust

Independent Variable	Dependent Variable			
	Vertical trust *(F=2.926; p=.054)*		Horizontal trust *(F=22.581; p<.001)*	
	Mean	SD.	Mean	SD.
Education level				
Primary, secondary, and others	3.87	0.68	3.87	0.68
Higher education	3.88	0.72	3.95	0.68
Scientific education	3.91	0.69	3.99	0.62

One-way Welch ANOVA was run to determine if vertical trust and horizontal trust were perceived differently for groups with different education levels. The differences between the education level groups were not statistically significant for vertical trust, as seen in Table 35 above. However, employees with scientific education perceived highest levels of horizontal trust, and those with primary, secondary, and other education levels perceived the least horizontal trust. This implies a positive linear relationship between education level and horizontal trust. The differences in trust perceived by employees in different education level groups can be seen in Appendix D.3.1.

Table 36 One-way ANOVA tests: Education level and Social well-being

Independent Variable	Dependent Variable			
	Professional isolation *(F=73.254; p<.001)*		Work-life conflict *(F=108.85; p<.001)*	
	Mean	**SD.**	**Mean**	**SD.**
Education level				
Primary, secondary, and others	1.92	0.63	1.72	0.62
Higher education	2.05	0.64	1.82	0.65
Scientific education	2.12	0.63	1.97	0.70

One-way ANOVA and One-way Welch ANOVA were conducted to determine if professional isolation and work-life conflict levels were different for groups with different education levels. Employees with scientific education experienced the most professional isolation, and those with primary, secondary, and other education experienced the least professional isolation, seen in Table 36 above. This was the same for work-life conflict. This implies a positive linear relationship between education level and both professional isolation and work-life conflict. The differences in professional isolation and work-life conflict in different education level groups can be seen in Appendix D.3.1.

Household Composition

Table 37 One-way ANOVA tests: Household composition and Support

Independent Variable	Dependent Variable			
	Support from leadership *(F=2.560; p=.037)*		Support from colleagues *(F=5.562; p<.001)*	
	Mean	**SD.**	**Mean**	**SD.**
Household composition				
Single household	3.93	0.76	3.79	0.66
Single-parent household with children living at home	3.95	0.82	3.82	0.71
Couple without children living at home	3.99	0.77	3.85	0.64
Couple with children living at home	4.00	0.74	3.86	0.62
Others	3.96	0.8	3.96	0.65

One-way Welch ANOVA was conducted to determine if support from leadership and support from colleagues were different for groups with different household composition. The post hoc analysis seen in Appendix D.3.1 revealed that single household respondents perceived more leadership support than couples with children living at home. No other group differences were statistically significant although the One-way Welch ANOVA was statistically significant.

Looking at support from colleagues, it is seen that respondents with partners perceived more colleague support than single household respondents, regardless of the presence of a child at their home. Furthermore, post hoc analysis seen in Appendix D.3.1 revealed that other household compositions perceived more colleague support than all other types of household compositions except couples with children living at home. No other group differences were statistically significant.

Table 38 One-way ANOVA tests: Household composition and Trust

Independent Variable	Dependent Variable			
	Vertical trust (F=3.716; p=.005)		Horizontal trust (F=3.963; p=.002)	
	Mean	SD.	Mean	SD.
Household composition				
Single household	3.84	0.71	3.91	0.67
Single-parent household with children living at home	3.84	0.74	3.88	0.70
Couple without children living at home	3.90	0.71	3.97	0.65
Couple with children living at home	3.91	0.67	3.95	0.64
Others	3.89	0.73	3.95	0.77

One-way Welch ANOVA was conducted to determine if vertical and horizontal trust were perceived differently for groups with different household composition. The post hoc analysis as seen in Appendix D.3.1 revealed that single household respondents perceived less vertical support than couples with or without children living at home. No other group differences were statistically significant. Furthermore, Table 38 above shows that single households and single parent households with children living at home perceived less horizontal trust than couples without children living at home. This implies that having a partner plays a role in the levels of perceived trust between colleagues. No other group differences were statistically significant.

Table 39 One-way ANOVA tests: Household composition and Social well-being

Independent Variable	Dependent Variable			
	Professional isolation (F=8.557; p<.001)		Work-life conflict (F=15.106; p<.001)	
	Mean	SD.	Mean	SD.
Household composition				
Single household	2.13	0.69	1.84	0.72
Single-parent household with children living at home	2.05	0.65	1.89	0.67
Couple without children living at home	2.02	0.62	1.79	0.64
Couple with children living at home	2.04	0.64	1.90	0.67
Others	2.09	0.60	1.83	0.68

One-way Welch ANOVA was conducted to determine if experienced professional isolation and work-life conflict were different for groups with different household composition. The results of the post hoc analysis seen in Appendix D.3.1 indicated that single households experienced more professional isolation than couples with and without children. Looking at work-life conflict, the results revealed that couples without children living at home experienced less work-life conflict than single-parent households with children living at home and couples with children living at home, as seen in Table 39 above. This implies that the presence of children at home increases work-life conflict. Last, single households experienced less work-life conflict than couples with children living at home.

5.4.2. Work Characteristics and support, trust, and social well-being

In this section, the bivariate analyses performed to investigate the relationships between work characteristics and support, trust, and social well-being are discussed. Two distinct types of bivariate analyses were conducted: One-way ANOVA, and Pearson's correlation.

The following sub-hypotheses were tested:

H9a: Work characteristics relate to support
H9b: Work characteristics relate to trust
H9c: Work characteristics relate to social well-being

Internal Interdependence, Tenure, Work Hours, Location Autonomy

Table 40 Pearson's correlation tests: Internal interdependence, Tenure, Work hours, Location autonomy and Support, Trust, and Social well-being

Independent Variable	Dependent Variable					
	Support from leadership	**Support from colleagues**	**Vertical trust**	**Horizontal trust**	**Professional isolation**	**Work-life conflict**
Internal interdependence	.019*	.062**	.046**	.044**	.077**	.089**
Tenure	-.013 *(p=.169)*	-.068**	-.076**	-.020*	-.042**	-.057**
Work hours	-.008 *(p=.393)*	-.001 *(p=.912)*	.009 *(p=.349)*	.028*	.013 *(p=.167)*	.061**
Location autonomy	.147**	.123**	.153**	.110**	-.057**	-.130**

** Significant at the 0.01 level (2-tailed)
* Significant at the 0.05 level (2-tailed)

Pearson's product-moment correlations were computed to assess the relationship between multiple work characteristics and support, trust, and social well-being. Looking at internal interdependence in Table 40 above, all relationships were statistically significant. As employees' internal interdependence increased, they perceived more support, trust, professional isolation, and work-life conflict. Looking at tenure, it is seen that employees who have been at the organizations for a longer time, perceived less support from their colleagues, as well as less vertical and horizontal trust. Employees also experienced less professional isolation and work life conflict if they have been employed at the organization for a longer amount of time. Furthermore, employees who worked for longer hours experienced more work-life conflict and more trust between themselves and their colleagues. Moreover, it is seen that when employees had autonomy in choosing their work location, they perceived more support and trust from both leadership and colleagues. They also experienced less professional isolation and work-life conflict when given more autonomy in their choosing their work location.

Distance to Work

Table 41 One-way ANOVA tests: Distance to work and Support

Independent Variable	Dependent Variable			
	Support from leadership *(F=.904; p=.405)*		**Support from colleagues** *(F=1.217; p=.296)*	
	Mean	**SD.**	**Mean**	**SD.**
Distance to work				
Up to 30 minutes	3.99	0.76	3.86	0.64
31-60 minutes	3.98	0.76	3.84	0.64
>60 minutes	3.97	0.77	3.84	0.64

One-way Welch ANOVA was conducted to determine if perceived support from leadership and support from colleagues were different for groups with different distances to work. However, the differences between these distance groups were not statistically significant, as seen in Table 41 above.

Table 42 One-way ANOVA tests: Distance to work and Trust

Independent Variable	Dependent Variable			
	Vertical trust *(F=1.691; p=.184)*		Horizontal trust *(F=5.000; p=.007)*	
	Mean	SD.	Mean	SD.
Distance to work				
Up to 30 minutes	3.89	0.69	3.94	0.66
31-60 minutes	3.88	0.71	3.93	0.66
>60 minutes	3.91	0.68	3.98	0.01

One-way Welch ANOVA was conducted to determine if vertical and horizontal trust were different for groups with different distances to work. The differences between these commuting distance groups were not statistically significant for vertical trust, seen in Table 42 above. Regarding horizontal trust, the post hoc analysis seen in Appendix D.3.2 revealed that employees who travelled more than an hour to work perceived more horizontal trust than those who commuted shorter distances. No other group differences were statistically significant.

Table 43 One-way ANOVA tests: Distance to work and Social well-being

Independent Variable	Dependent Variable			
	Professional isolation *(F=.417; p=.659)*		Work-life conflict *(F=23.457; p=<.001)*	
	Mean	SD.	Mean	SD.
Distance to work				
Up to 30 minutes	2.05	0.65	1.80	0.64
31-60 minutes	2.04	0.64	1.85	0.67
>60 minutes	2.05	0.62	1.92	0.69

One-way Welch ANOVA was conducted to determine if professional isolation and work-life conflict experienced were different for groups with different distances to work. The differences between these distance groups were not statistically significant for professional isolation, seen in Table 43 above. Employees who travelled more than an hour to work, experienced the most work-life conflict. This was followed by employees who travelled between 31-60 minutes to work, and by employees who travelled less than 30 minutes to work. This implies that there is a positive linear relationship between distance to work and work-life conflict. These differences can be seen in Appendix D.3.2.

Performed Activities

Table 44 One-way ANOVA tests: Performed activities and Support

Independent Variable	Dependent Variable			
	Support from leadership *(F=3.450; p=.016)*		Support from colleagues *(F=8.783; p<.001)*	
	Mean	SD.	Mean	SD.
Performed activities				
(1) Mostly focus work	3.95	0.78	3.81	0.67
(2) Mostly routine work	4.01	0.78	3.85	0.68
(3) Mostly scheduled consultations	3.96	0.74	3.82	0.61
(4) Even mix of activities	4.00	0.74	3.89	0.62

One-way Welch ANOVA was performed to determine if experienced support from leadership was different for different performed activities clusters. However, Games-Howell post hoc analysis seen in Appendix D.3.2 revealed no statistically significant difference across the clusters in terms of leadership support. Looking at support from colleagues, Table 44 shows that employees perceived more support from colleagues when they divided their time evenly across a mix of activities than when they performed mostly focus work or primarily had scheduled consultations. No other group differences were statistically significant.

Table 45 One-way ANOVA tests: Performed activities and Trust

Independent Variable	**Dependent Variable**			
	Vertical trust *(F=8.952; p<.001)*		**Horizontal trust** *(F=5.977; p<.001)*	
	Mean	**SD.**	**Mean**	**SD.**
Performed activities				
(1) Mostly focus work	3.88	0.73	3.98	0.67
(2) Mostly routine work	3.86	0.71	3.89	0.69
(3) Mostly scheduled consultations	3.96	0.65	3.95	0.6
(4) Even mix of activities	3.88	0.69	3.95	0.66

One-way Welch ANOVA was performed to determine if experienced vertical and horizontal trust were different between different performed activities clusters. The results shown in Table 45 indicated that respondents perceived statistically significant different levels of perceived vertical and horizontal trust across the four performed activities clusters. The results of the post hoc analysis revealed that employees who mainly had scheduled consultations perceived more vertical trust than respondents in other activity clusters. Additionally, it is seen that employees who primarily performed routine work perceived less horizontal trust than employees in other activity clusters. These results can be seen in Appendix D.3.2.

Table 46 One-way ANOVA tests: Performed activities and Social well-being

Independent Variable	**Dependent Variable**			
	Professional isolation *(F=7.300; p<.001)*		**Work-life conflict** *(F=70.706; p<.001)*	
	Mean	**SD.**	**Mean**	**SD.**
Performed activities				
(1) Mostly focus work	2.02	0.65	1.89	0.69
(2) Mostly routine work	2.02	0.67	1.69	0.61
(3) Mostly scheduled consultations	2.09	0.61	1.97	0.69
(4) Even mix of activities	2.06	0.63	1.85	0.66

One-way Welch ANOVA was performed to determine if experienced professional isolation and work-life conflict were different between different performed activities clusters. The post hoc analysis revealed that respondents who mainly had scheduled consultations experienced more professional isolation than those who primarily performed focus work or routine work. Looking at work-life conflict, it is seen in Table 46 above that those who mainly had scheduled consultations experienced most work-life conflict, and those who primarily performed routine work the least. Last, those who primarily performed focus work experienced more work-life conflict than those who primarily performed routine work. These differences can be seen in Appendix D.3.2.

5.4.3. Physical workplace satisfaction and support, trust, and social well-being

In this section, the bivariate analyses performed to investigate the relationships between physical workplace satisfaction and support, trust, and social well-being are discussed. The following sub-hypotheses were tested:

H10a: Physical workplace satisfaction relates to support
H10b: Physical workplace satisfaction relates to trust
H10c: Physical workplace satisfaction relates to social well-being.

Table 47 Pearson's correlation tests: Office and Home workplace satisfaction and Support, Trust, and Social well-being

Independent Variable	Dependent Variable					
	Support from leadership	**Support from colleagues**	**Vertical trust**	**Horizontal trust**	**Professional isolation**	**Work-life conflict**
Office workplace satisfaction	.156**	.126**	.217**	.160**	-.104**	-.196**
Home workplace satisfaction	.106**	.121**	.096**	.088**	-.318**	-.152**

** Significant at the 0.01 level (2-tailed)

Pearson's product-moment correlations were computed to assess the relationships between office workplace satisfaction and support, trust, and social well-being. All relationships, although small, were statistically significant, seen in Table 47 above. As employees' satisfaction with their office workplace increased, their perceived support and trust increased. Additionally, with higher levels of satisfaction with their office workplace, they experienced less professional isolation and work-life conflict.

Similar outcomes were observed in the correlation analysis between home workplace satisfaction and support, trust, and social well-being. As employees' satisfaction with their home workplace increased, their perceived support and trust increased. Furthermore, with higher levels of satisfaction with their home workplace, they experienced less professional isolation and work-life conflict. Last, it is important to note that the correlations with trust were negligible, whereas other correlations were small, except for professional isolation.

5.5. Conclusion

This chapter aimed to examine the relationships between various variables and assess their significance of these relationships, with statistically significant relationships defined by a p-value of .05 or lower. The analyses revealed that all personal and work characteristics, as well as employees' physical workplace satisfaction, were related to the percentage of time they spent working across all three work locations, except for location autonomy, which did not correlate with the time spent working from home. Additionally, support, trust, and social well-being were related to each other and perceived differently depending on employees' choice of work location. Last, the analysis showed that employees' perceived support, trust, and social well-being significantly varied based on some personal and work characteristics and their satisfaction with the physical aspects of their workplace.

6. Discussion of Effect Sizes

Relying solely on the p-values of bivariate tests to assess the statistical significance of relationships between the variables is insufficient in the case of such a large dataset. Therefore, this section reports on the effect sizes to identify which of the significant relationships are meaningful in practice. Moreover, it includes a discussion that compares the findings of this thesis with previous research. An overview of the effect sizes is seen in Table 48 below. An example showing how the effect sizes for each of the three different tests are calculated can be seen in Appendix E.

Table 48 Effect sizes overview

		Personal Characteristics					Work Characteristics						Physical Workplace Satisfaction		Work Location Choice				Support		Trust		Social well-being	
		1	2	3	4	5	6	7	8	9	10	11	13	14	15	15	15	16	17	18	19	20	21	22
Personal Characteristics	1 Gender	1																						
	2 Age	-	1																					
	3 Education level	-	-	1																				
	4 Household composition	-	-	-	1																			
	5 Psychological empowerment	-	-	-	-	1																		
Work Characteristics	6 Internal interdependence	-	-	-	-	-	1																	
	7 Tenure	-	-	-	-	-	-	1																
	8 Work hours	-	-	-	-	-	-	-	1															
	9 Performed activities	-	-	-	-	-	-	-	-	1														
	10 Distance to work	-	-	-	-	-	-	-	-	-	1													
	11 Location autonomy	-	-	-	-	-	-	-	-	-	-	1												
Physical Workplace Satisfaction	13 Home workplace satisfaction	-	-	-	-	-	-	-	-	-	-	-	1											
	14 Office workplace satisfaction	-	-	-	-	-	-	-	-	-	-	-	.000	1										
Work Location Choice	15 Office	.047	.010	.004	.004	.000	.023	.007	.001	.020	.049	.007	.028	.010	1									
	15 Home	.071	.004	.003	.001	.004	.031	.001	.004	.049	.018	.000	.039	.007	-	1								
	15 Others	.151	.001	.008	.005	.013	.003	.005	.015	.038	.009	.014	.002	.000	-	-	1							
	16 Work location clusters	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	1						
Support	17 Support from leadership	.003	.000	.003	.001	.078	.000	.000	.000	.001	.000	.022	.024	.011	-	-	-	.002	1					
	18 Support from colleagues	.092	.006	.003	.002	.071	.004	.005	.000	.002	.000	.015	.016	.015	-	-	-	.001	.168	1				
Trust	19 Horizontal trust	.011	.000	.004	.001	.067	.002	.000	.001	.002	.001	.012	.026	.008	-	-	-	.001	.087	.156	1			
	20 Vertical trust	.000	.000	.000	.001	.110	.002	.006	.000	.002	.000	.023	.047	.009	-	-	-	.004	.250	.111	.227	1		
Social Well-being	21 Professional isolation	.041	.002	.014	.003	.092	.006	.002	.000	.002	.000	.003	.011	.101	-	-	-	.003	.104	.116	.070	.087	1	
	22 Work-life conflict	.000	.013	.020	.005	.029	.008	.003	.004	.018	.004	.017	.038	.023	-	-	-	.007	.038	.035	.027	.048	.084	1

*Bivariate tests have not been performed for cells labelled with '-'

LEGEND			
	Cohen's D	Omega Squared	R squared
Negligible	0-.19	0-.01	0-.02
Small	.2-.49	.01-.06	.02-.13
Medium	.5-.79	.06-.14	.13-.26
Large	>.8	>.14	>.26

Figure 15 Effect sizes legend

6.1. Support, Trust, and Social Well-being

Upon examination of the effect sizes overview shown in Table 48 above, predominantly negligible, and small relationships were observed, with only four medium size relationships identified (between and within perceived support and trust). These indicate that higher perceived support from leadership related to increased perceived vertical trust and perceived support from colleagues. Such increased perceived support from colleagues was also related to increased perceived horizontal trust. And last, horizontal and vertical trust had a medium size positive relationship, so these all seem to be intertwined. These findings align with prior research indicating that when employees perceive support from supervisors in their tasks and feel valued, their trust in their supervisors increases (Eğriboyun, 2015). Additionally, a study by Tse and Mitschell (2010) suggests that positive supervisor-subordinate relations can influence colleague relations, creating an environment where employees feel supported and motivated to commit more.

These same pre-Covid studies also suggested a direct link between perceived support from leadership and trust between colleagues (Eğriboyun, 2015; Tse & Mitschell, 2010). The small effect size of this relationship in this thesis confirmed this but suggests a less strong relationship than these studies. This could potentially be due to the nature of hybrid work, with a considerable part of interactions among colleagues now taking place online, rather than in the physical presence of leaders at the office. Therefore, these interactions may not be directly observed by leaders, which was not the case for these earlier studies which were conducted in a non-hybrid work setting, allowing for more direct oversight.

The current results further indicated that both forms of perceived trust negatively correlated with professional isolation and work-life conflict, aligning with the findings of Raghuram and Wiesenfeld (2004), suggesting that the isolation experienced by remote workers, coupled with their reliance on communication media increases the probability of miscommunication and distrust. Mulki et al. (2008) also suggest that increased isolation (among salespeople) leads to a decline in supervisor and coworker trust. Van Zoonen et al. (2023) showed that within a remote work setting, the quality of communication within an organization influences vertical trust, and the quality of information sharing, horizontal trust. Besides professional isolation, the results of this thesis indicated that employees who perceived more support from their supervisors and colleagues experienced less work-life conflict. This aligns with research by Siddiqi et al. (2023), showing that perceived supervisor and colleague support had a significant negative relationship with work-family conflict. Other older studies (e.g. Allen, 2001, Behson, 2002) have also emphasized the crucial role of supervisor or managerial support in reducing work-family conflict. Last, higher professional isolation related to increased work-life conflict, aligning with literature suggesting that workplace isolation during the COVID-19 pandemic contributes to increased work-family conflict (Shagirbasha et al., 2023). Therefore, organizations can consider the influence of supervisors on employee workload, work-family conflict, and overall well-being. They can set clear goals, create a safe environment for employees to raise their concerns, keep track of their performance, etc. Supervisors should also ensure that employees receive support from their coworkers, as this thesis showed that the increased support from supervisors and colleagues relate to reduced professional isolation. Based on the findings, the sub-hypotheses of hypothesis 4 were accepted/rejected as seen in Table 49 below.

Table 49 (Sub)Hypotheses overview – Support, Trust, and Social Well-being

Hypothesis	Sub-hypothesis	Accepted/Rejected
H4: Support, trust, and social well-being relate to each other	***H4a:*** Support relates to trust	Accepted
	H4b: Support relates to social well-being	Accepted
	H4c: Trust relates to social well-being	Accepted

6.2. Work Location Choice

Regarding the relationships of employees' choice of hybrid work location and their perceived support, trust, and social well-being, previous research shows significant yet contradicting relationships. This thesis found only one relationship, contrary to the expectation of at least a small effect size for all relationships between the respective work location and support, trust, and social well-being. The only small relationship found, shows that employees experienced less work-life conflict when they evenly split their time between home and the office or predominantly work from home, in relation to those who primarily work at the office or divide their time evenly across all hybrid work locations. While this finding contradicts a substantial body of existing research (e.g. Noonan & Glass, 2012; Russell et al., 2009; Faulds & Raju, 2021), which emphasizes that hybrid work diminishes work-life balance, it aligns with Athanasiadou and Theriou's (2021) findings, suggesting that the flexibility of hybrid work may enhance work-life balance to some extent. The results of this thesis could potentially be due to a shift in how employees perceive work-life conflict, with commuting to the office interfering with employees' personal and family time, while working from home may reduce commuting stress (Bailey & Kurland, 1999) and provide increased family support.

Relationships of work location choice with perceived support, and professional isolation were found but were negligible in size. However, it is unexpected, that employees who evenly split their time between home and the office or predominantly work from home, experienced less professional isolation to those who primarily work at the office or divide their time evenly across all hybrid work locations. This thesis showed that work location choice related to professional isolation and work-life conflict in the same way, where primarily working from home showed positive outcomes on employee's professional isolation and work-life conflict. Numerous empirical studies suggest that working away from the office environment can potentially result in feelings of social and professional isolation (Baruch & Nicholson, 1997). However, professional isolation is a subjective experience and could be perceived differently by employees and under current hybrid working contexts than before. For example, working away from the office environment can also reduce unwanted distractions/interruptions from colleagues and provide employees more autonomy, thereby giving them more time to focus on work, avoid office politics, etc. (Bailey & Kurland, 1999). The lower experienced professional isolation while working from home may also be due to employees putting more effort in connecting with their coworkers. This is different when they are in the office, where interactions occur casually or spontaneously, requiring less intentional effort to initiate or engage in conversations. Additionally, those who divide their time among multiple work locations may struggle to establish relationships with colleagues in each setting, thus increasing feelings of professional isolation. This is particularly evident with the rise of hybrid work setups, where employees divide their time between working from home and other locations. As a result, the likelihood of colleagues meeting at the main office during the workweek is considerably reduced, which may not sufficiently reduce feelings of isolation compared to working primarily from home.

Relationships with perceived trust were also existing but negligible in size. Again, it is unexpected that employees who primarily work at the main office or evenly split their time across multiple locations perceived less trust among themselves and their colleagues compared to those primarily working from home or splitting their time evenly between home and the main office. However, it seems in line with the other analyses, that people working from home have more positive perceptions. Prior studies suggest that a more frequent office presence increases the likelihood of face-to-face interactions with coworkers, likely leading to greater trust among colleagues (Smith et al., 2018; Fayard et al., 2021). One reason for this difference is that those who primarily work from the office might question the commitment, trustworthiness, and level of contribution of those who work from home or other locations (Sewel & Taskin, 2015) due to the lack of a visual oversight, leading to feelings of distrust towards their colleagues. Additionally, those who primarily work in the office may feel exposed, especially in open-plan offices, and feel that their privacy is violated (Frank, 2023). Employees may also feel monitored or observed in the office, which can result in them feeling as though they are not trusted (Sims, 2012). Based on these findings, the hypotheses seen in Table 50 below were accepted/rejected.

Table 50 Hypotheses overview – Work Location Choice

Hypothesis	**Accepted/Rejected**
H5: Choice of hybrid work locations relates to support	Rejected
H6: Choice of hybrid work locations relates to trust	Rejected
H7: Choice of hybrid work locations relates to social well-being	Accepted

6.3. Personal Characteristics

The relationships between personal characteristics and employees' choice of hybrid work location, and their perceived support, trust, and social well-being were predominantly negligible with only a few small relationships. Prior research has shown that individuals with higher levels of education are more often afforded the opportunity to work hybridly (Zhang et al., 2020). This thesis adds to existing research by investigating whether employees with different educational attainments make significantly different choices in regard to their hybrid work location, independent of the afforded opportunity. The current results show that employees' choices only differ for the time they chose to spend working from 'other' locations and not for working from the main office or home, where those with higher and scientific education chose to spend more time working from 'other' locations than individuals with primary, secondary, and other educational attainments. Employees with higher education levels were also found to experience more work-life conflict. This result was anticipated as individuals with higher levels of education typically earn more and occupy professional jobs with greater pressure. This can lead to employees bringing work home, which may result in increased work-family conflict (Glavin, 2011).

This thesis also showed a small effect size indicating that couples with children living at home spent a higher percentage of time working from 'other' locations than all other household groups. Existing studies have also shown mixed relationships between household composition and hybrid working. These studies suggest that having children can significantly impact employees' choice of work location due to their influence on work-life conflict (e.g. Zhang et al., 2020; Drucker & Khattak, 2000). However, although the bivariate tests in this thesis indicated that couples without children tend to work from home more often than those with children, this relationship was found to be negligible in size. This could be because household composition involves a variety of factors beyond just the presence or absence of children, such as the ages of children and the roles of other household members, etc.

Moreover, as hybrid work models have become more normalized, employees and organizations may have developed effective strategies to manage work-life conflict, blurring the relationship between household composition and work location choices.

In addition, the results indicated that increased psychological empowerment related to increased perceived support, trust, and social well-being. Although existing research, to the best of the author's knowledge, has not explored such relationships, these findings align with expectations. Employees who are more psychologically empowered, perform their jobs better and perceive more meaning in their work, in addition to believing that they have an influence at work (Amundsen & Martinsen, 2015). Therefore, they may be more inclined to take initiatives in building positive relationships, leading to perceptions of greater trust and support in the workplace. These individuals may also experience less work-life conflict as they are capable of monitoring the standards they set for themselves.

Furthermore, multiple prior studies have explored the relationships between gender, age, and employees' preference for hybrid work, often with contradictory findings (e.g. Mokhtarian, 1996; Zhang et al., 2020; Drucker and Khattak, 2000). This thesis, however, found these relationships to be negligible in size. Regarding gender and employees' choice of work location, the negligible effect size could be due to the wide range of individual preferences and reasons for choosing different work locations within each gender group, making it difficult to identify a clear, direct relationship. For instance, literature suggests that women may choose to do hybrid work due to family responsibilities or stress reduction, while some men might opt for it to enhance productivity (Mokhtarian et al., 1998). However, not all males or females fit within these generalizations. Some women may prioritize career advancement and prefer the office environment for better interaction with senior leadership (Fortune, 2023), while some men may prefer working from home for various personal reasons. Regarding the relationship between age and choice of work location, previous research has highlighted differences in social networks, preferences, and independent working experience among employees of different ages (e.g. Westerman & Yamamura, 2007; Kniffin et al., 2021). The negligible effect size found in this thesis may be because age alone may not strongly relate to employees' chosen work location due to the influence of career stages. For example, younger employees in leadership roles may have similar preferences to older employees. Last, although previous literature has not extensively examined all relationships between employees' gender, age, and their perceived support, trust, and social well-being, it was hypothesized that gender and age would influence these perceptions based on differences in communication styles/strategies and familiarity with computer technology (Elias et al., 2012; Ibrahim and Ismail, 2007). However, this thesis found negligible or no relationships between these variables.

The sub-hypotheses of hypothesis 1 were accepted if the relevant personal characteristic was related to a choice for at least one work location. The sub-hypotheses of hypothesis 8 were accepted if at least one personal characteristic related to at least one aspect of the dependent variable (support, trust, or social well-being). An overview is provided in Table 51 below.

Table 51 (Sub)Hypotheses overview – Personal Characteristics

Hypothesis	Sub-hypothesis	Accepted/Rejected
H1: Personal characteristics relate to choice of hybrid work locations	***H1a:*** Gender relates to choice of hybrid work locations	Rejected
	H1b: Household composition relates to choice of hybrid work locations	Accepted
	H1c: Age relates to choice of hybrid work locations	Rejected

	H1d: Education level relates to choice of hybrid work locations	Accepted
	H1f: Psychological empowerment relates to choice of hybrid work locations	Rejected
H8: Personal characteristics relate to support, trust, and social well-being	***H8a:*** Personal characteristics relate to support	Accepted
	H8b: Personal characteristics relate to trust	Accepted
	H8c: Personal characteristics relate to social well-being	Accepted

6.4. Work Characteristics

It was seen that all work characteristics showed a small relationship with at least one hybrid work location choice except for location autonomy with only negligible/insignificant relationships. The analyses showed that the home is perceived most suited for focus work whereas the office is perceived better suited for routine work and a mix of activities. This was in line with prior research suggesting employees with predominantly concentrated work may prefer to avoid the office with its noise distractions (Appel-Meulenbroek et al., 2022). This thesis also showed that 'other' work locations were primarily used for scheduled consultations and video-calls. The 'other' work location choice in this thesis includes on the way, another location within the organization, and another location outside the organization, two of which refer to an office space. Therefore, this finding aligns with the prior study by Appel-Meulenbroek et al. (2022), which showed a high probability that employees would opt for the office rather than their home, when their workday primarily involves communication activities.

This thesis also showed that individuals experienced more work-life conflict when they primarily had scheduled consultations or focus work, in comparison to when they performed routine work. One possible reason for this could be that scheduled calls impose rigidity on employees' work schedule, thus reducing perceived schedule flexibility which results in higher levels of work-life conflict (Hill et al., 2010). Moreover, employees primarily performing focus work experiencing more work-life conflict may be due to potential exhaustion from prolonged or intense periods of concentration (Pillay, 2023). This may leave them with insufficient energy to meet personal/family obligations or spend quality time with their family after work.

Additionally, a longer commuting distance was shown to relate to employees working less at the office, and more at home and other locations. This is also in line with prior literature indicating that a longer commuting distance increases the likelihood of individuals choosing to work from home (Ristimäki, 2007). The relationships between commuting distance and perceived support, trust, and social well-being were found to be negligible in size. This negligible effect may be attributed to the rise of hybrid work setups and remote working, where employees no longer commute to the main office daily. As a result, commuting distance is less relevant to their daily experience and likely has less impact on their perceived levels of support, trust, and social well-being. In contrast, if employees worked solely at the office, longer commute distances could lead to increased fatigue, stress, and reduced availability, thereby influencing workplace relationships more significantly.

Furthermore, employees with more internal interdependence spent more time working from the office and less from home. This finding is as expected due to prior research stating that for tasks with less interdependence, hybrid working is unlikely to have negative impacts on teamwork (Beauregard et al., 2019) thus resulting in the hypothesis that with higher levels of internal interdependence, employees would be more inclined to work in the office rather than from home or elsewhere. Internal interdependence also showed a small negative relationship with professional isolation and work-life

conflict. Prior research on this topic has shown mixed results. For instance, research by D'Oliveira and Persico (2023) suggested a negative relationship between internal interdependence and professional isolation, whereas Cowles (2023) found no relationship between the two. This highlights a need for further research on the relationship between internal interdependence and professional isolation in the context of hybrid work. The finding of this thesis may be explained by internal interdependence contributing to a sense of inclusion within the team through fostering better team collaboration and communication (Slocum & Sims, 1980; Susman, 1976), thus lowering the feelings of isolation. Furthermore, as better 'within-team' collaboration leads to higher levels of productivity and efficiency in work (Vitasek, 2022), work-life conflict could potentially be perceived lower as well.

The analyses in this thesis revealed that employees with longer tenure worked less at the office, and more at home and other locations. On the one hand, this finding aligns with observations by Popuri and Bhat (2003), who also found a positive association between the length of service and engaging in hybrid work. On the other, it contradicts findings by Walls et al (2007), who suggest a negative correlation between seniority and hybrid work. Additionally, it was seen that employees with longer tenure perceived less colleague support and supervisor trust. Research shows that job tenure determines work competence and experience (Veltrop et al., 2015), where longer tenure employees benefit from a larger skill set and experience with the organization. Therefore, colleagues who perceive their coworkers as more competent may not feel the need to provide them with support, thus resulting in reduced perceived support from coworkers by such workers. Moreover, existing literature indicates that employees with longer tenure show less motivation to carry out their core tasks diligently and are more prone to making mistakes in their core tasks. This is due to lower engagement and attentiveness to detail (Ng & Feldman, 2013), which is likely to result in lower perceived supervisor trust.

Furthermore, while prior research has only investigated the association between the choice of working hybrid, hybrid working frequency and employee's total weekly hours (e.g. Asgari et al., 2014, Popuri & Bhat, 2003, Drucker and Khattak, 2000), this thesis provided new insights, showing that employees who worked more hours per week, worked less at the office and home, and more at other locations. In addition, prior research suggested that longer working hours could potentially facilitate availability of support and foster trust between employees due to longer times spent on informal interactions (Ömüriş et al., 2020). Longer working hours have also shown to reduce professional isolation (Marshall et al., 2007). In this thesis, relationships between employees' work hours and their perceived support, trust, and social well-being were negligible, which is not in line with findings of past studies.

It is important to highlight that although location autonomy only had a negligible relationship with work location choice, the bivariate tests showed that employees who had more autonomy in choosing their work location spent less time working from the office and more time working at other locations. The negligible effect size observed in this thesis may be due to the high level of autonomy that most employees in the dataset had when choosing their work location, with an average score of 3.83 (SD = 1). Consequently, the minor differences in location autonomy likely did not alter employee's choice of work location. Location autonomy was shown to be related to increased perceived support and trust and reduced work-life conflict. Previous studies supported this notion, by suggesting that autonomy in jobs can be viewed as a manifestation of trust in employees, as perceived autonomy reflects an organization's and managers' willingness to delegate control. This perceived autonomy increases trust in management (Dirks & Ferrin, 2001; Seppälä et al., 2011; Whitener et al., 1998), and correlates positively with supervisor support (Boselie et al., 2001). Additionally, prior studies also argue for a positive relationship between levels of job autonomy and experiences of work-life balance (Vaquero Presa, 2018). As job autonomy refers to the degree to which employees can control and decide on

their own method of work, work arrangements, and work standards (Breaugh, 1985), the relationships found in this thesis were as expected.

The sub-hypotheses of hypothesis 2 were accepted if the relevant work characteristic was related to a choice for at least one work location. The sub-hypotheses of hypothesis 9 were accepted if at least one work characteristic related to at least one aspect of the dependent variable (support, trust, or social well-being). An overview is provided in Table 52 below.

Table 52 (Sub)Hypotheses overview – Work Characteristics

Hypothesis	Sub-hypothesis	Accepted/Rejected
H2: Work characteristics relate to choice of hybrid work locations	***H2a:*** Internal interdependence relates to choice of hybrid work locations	Accepted
	H2c: Tenure relates to choice of hybrid work locations	Accepted
	H2d: Working hours relates to choice of hybrid work locations	Accepted
	H2f: Performed activities relates to choice of hybrid work locations	Accepted
	H2g: Distance to work relates to choice of hybrid work locations	Accepted
	H2h: Location autonomy relates choice of hybrid work locations	Rejected
H9: Work characteristics relate to support, trust, and social well-being	***H9a:*** Work characteristics relate to support	Accepted
	H9b: Work characteristics relate to trust	Accepted
	H9c: Work characteristics relate to social well-being	Accepted

6.5. Physical Workplace Satisfaction

The data showed that higher levels of home workplace satisfaction related to more time that employees spent working from home and less time from the office (for other locations it was negligible). Prior research has not established a relationship between physical workplace satisfaction and hybrid work location choice yet, but suggests that the suitability of employees' workspace plays a role in shaping their workplace satisfaction. Workspace suitability is one of the crucial aspects of an effective hybrid work setup (Mann et al., 2000), allowing for higher concentration levels due to lowered distractions (Müller et al., 2022). Based on this, it was expected that individuals who have a well-suited home office environment may choose to spend more time working from home and less from the office, which the findings of this thesis indeed showed. Additionally, in comparison to previous studies (e.g. Stephens et al., 2011, Colenberg, 2022) which highlight the influence of workspaces on social well-being mediated by social interactions, this thesis added to literature by including additional social factors: support, trust, and social well-being. By doing so, it found that employees who were more satisfied with their home workplace, perceived more trust and support, as well as less work-life conflict. This implies that organizations should think of ways to help employees create a suitable home workspace within a hybrid work setup. In addition, individuals who experienced more satisfaction with their office environment, perceived more support from colleagues and benefitted from a higher social well-being as well. Otherwise, predominantly negligible relationships were found relating to the office workplace satisfaction. It is especially unexpected that the relationship between office workplace satisfaction and hybrid work location choice is negligible. This could be attributed to the employers'

expectation for employees to work from the office, even if they are not satisfied with the workplace there. In contrast, when given the option to work from home, individuals can make their own decisions regarding their preferred work location.

Based on the findings, the sub-hypotheses of hypothesis 3 were accepted if physical workplace satisfaction, whether at home or the office, was related to at least one work location choice. The sub-hypotheses of hypothesis 10 were accepted if physical workplace satisfaction at home or the workplace related to at least one aspect of the dependent variable (support, trust, or social well-being). This can be seen in Table 53 below.

Table 53 (Sub)Hypotheses overview - Physical Workplace Satisfaction

Hypothesis	Sub-hypothesis	Accepted/Rejected
H3: Satisfaction with the physical workplace relates to choice of hybrid work locations	***H3a:*** Satisfaction with physical factors of home workplace relates to choice of hybrid work locations	Accepted
	H3b: Satisfaction with physical factors of office workplace relates to choice of hybrid work locations	Rejected
	H3c: Home workplace satisfaction relates to office workplace satisfaction	Rejected
H10: Physical workplace satisfaction relates to support, trust, and social well-being	***H10a:*** Physical workplace satisfaction relates to support	Accepted
	H10b: Physical workplace satisfaction relates to trust	Accepted
	H10c: Physical workplace satisfaction relates to social well-being	Accepted

6.6. Conclusion

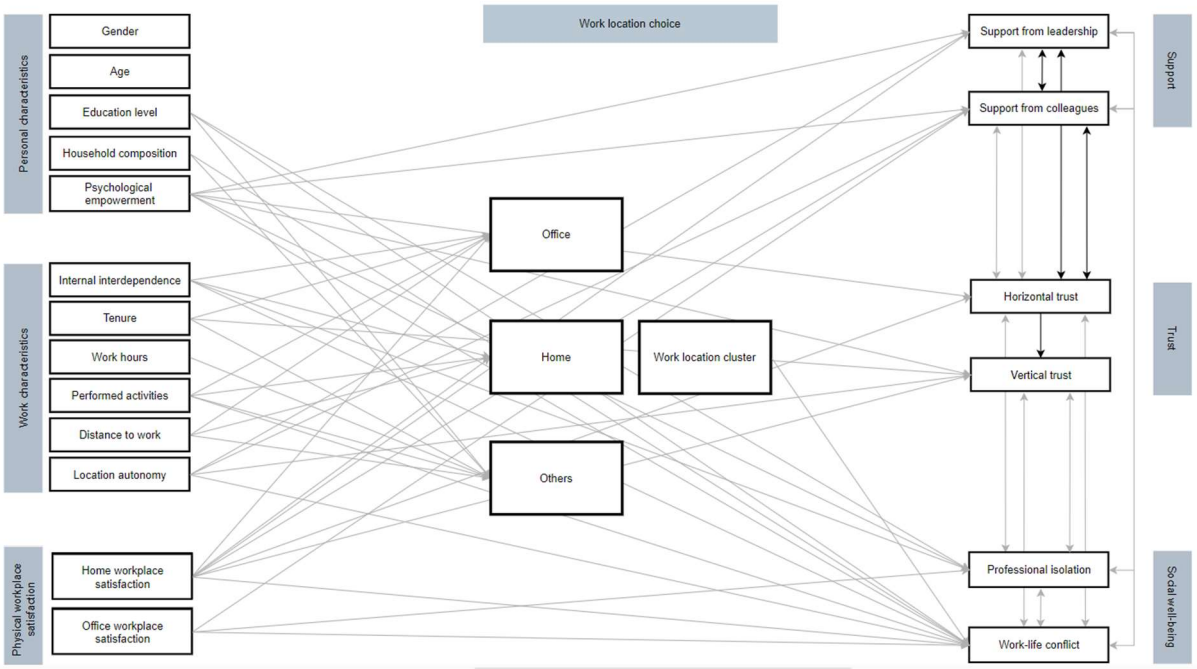


Figure 16 Detailed overview of all small (grey lines) and medium (black lines) relationships

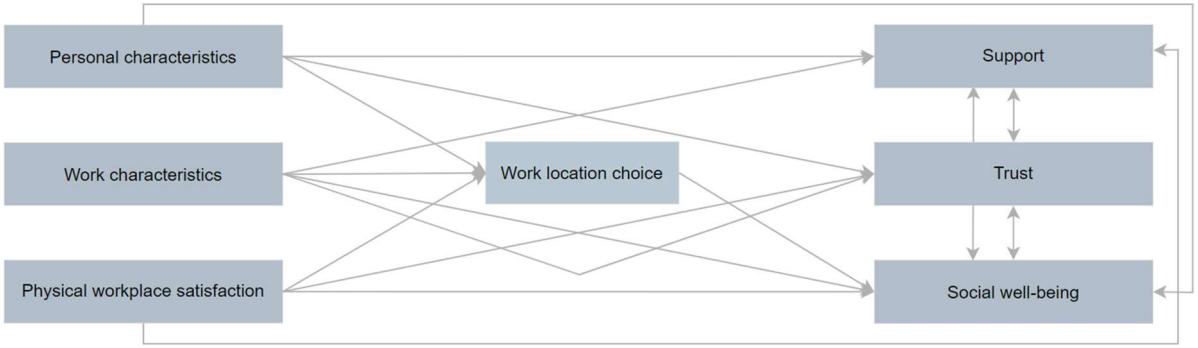


Figure 17 General overview of all relationships

To conclude, while the bivariate tests have shown significant relationships between most variables, the effect sizes indicated that many of these relationships were negligible in size. The analyses showed very few relationships between personal characteristics and employees' choice of hybrid work locations (not supporting H1), while more relationships were seen between individuals' work characteristics and their choice of hybrid work location (partially supporting H2). Additionally, this thesis found relationships between employees' home workplace satisfaction and their choice of hybrid work location, while no relationship was found between this choice and satisfaction with their main office (partially supporting H3). Furthermore, this thesis fully supports H4 by having found small and medium relationships between support, trust, and social well-being.

Looking at the relationship between hybrid work location and support, trust, and social well-being, only one small relationship was found with work-life conflict (partially supporting H7), thereby rejecting H5 and H6, suggesting that the choice of hybrid work locations does not relate to perceived support or trust. Moreover, there were only a few small relationships between employee's personal characteristics and their perceived support, trust, and social well-being, mostly pronounced in psychological empowerment (partially supporting H8), as well as between employees' work characteristics and their perceived support, trust, and social well-being (partially supporting H9). Last, employees' satisfaction with the physical aspects of their home and office work locations also related to perceived support, trust, and social well-being, where these relationships were more pronounced in regard to home workplace satisfaction (partially supporting H10).

7. Conclusion, Limitations, and Recommendations

The previous chapter aimed to identify significant and meaningful relationships among the variables within the model using bivariate tests and discussing the results by interpreting the effect sizes. This chapter aims to highlight its contribution to the existing literature as well as findings which were not expected or contradicted prior research. Additionally, it explores its limitations and provides implications for future research and practice.

7.1. Conclusion

This thesis aimed to identify the relationships of employees' personal and work characteristics, and physical workplace satisfaction with both the office and home workspace with their hybrid work location choices, and the subsequent relationship with perceived support, trust, and social well-being.

To achieve this, initially, literature review was performed to get a better understanding of the diverse terminologies and concepts which are currently used in the analysis of workplace arrangements and define hybrid work for the purpose of this thesis. Based on that, this thesis followed the definition of Allen et al. (2015), defining hybrid work as an arrangement where individuals work outside the traditional office for part of the workweek and maintain connectivity through information and communications technology. This approach can coexist with other flexible work arrangements like adjustable work hours. Afterwards, several research sub-questions were answered.

What is the relationship between personal and work characteristics, and physical workplace satisfaction of employees, and their choice of work locations within a hybrid work environment?

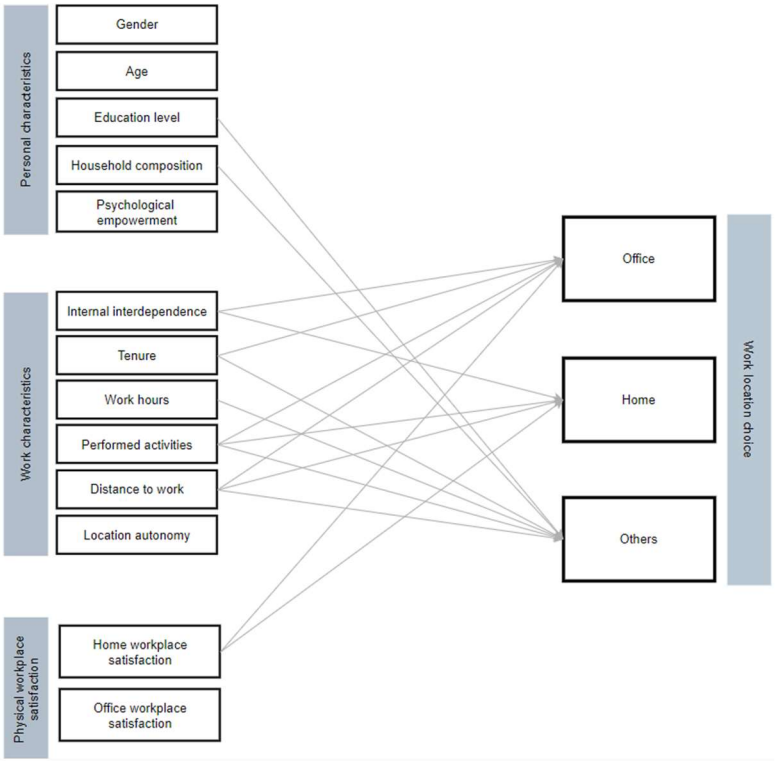


Figure 18 Small relationships (grey lines) between personal and work characteristics, physical workplace satisfaction and work location choice

Figure 18 above shows that employee's personal characteristics played a minor role in their work location choice. Gender, age, and psychological empowerment did not determine employees' work location choice, nor did the presence of children in the household determine employees' decision to work from the main office or home. These findings were unexpected and contradicted multiple existing studies that highlighted relationships between these variables (e.g. Mokhtarian, 1996; Zhang et al., 2020; Drucker and Khattak, 2000).

Further, prior research had not established a relationship between physical workplace satisfaction and hybrid work location choice. This thesis added to current literature by showing that with increased satisfaction with home workplace, employees spent more time working from home, and less from the office or other locations. Conversely, satisfaction with the physical aspects of their office environment did not relate to their work location choice.

It became evident that work characteristics were the main determinants of employees' work location choices, in comparison to personal characteristics and physical workplace satisfaction. Moreover, location autonomy did not relate to employees' work location choice. Although prior research did not specifically study this relationship, it suggested that perceived location autonomy influenced individuals' choice of work environment to enhance productivity and well-being (Thomas & Velthouse, 1990; Zhang & Bartol, 2010). Therefore, a potential relationship was anticipated here.

How do support, trust, and social well-being relate to each other within a hybrid work environment?

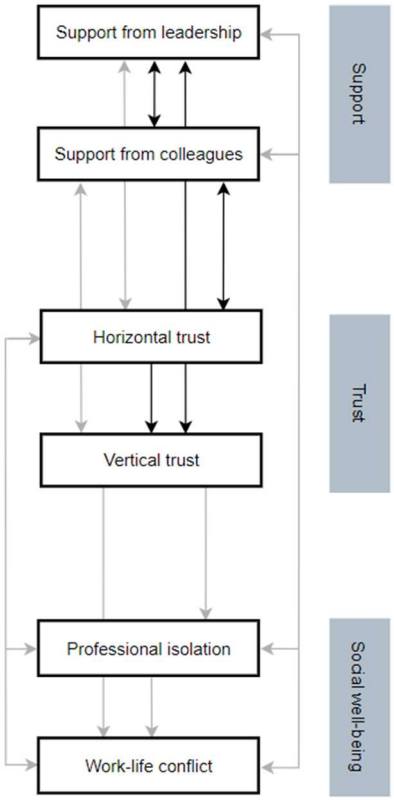


Figure 19 Small (grey lines) and medium (black lines) relationships between support, trust, and social well-being

The relationships between perceived support, trust, and social well-being depicted in Figure 19 aligned with expectations from pre-hybrid work studies (e.g. Eğriboyun, 2015; Tse & Mitschell, 2010). Between and within perceived support and trust, only two of the relationships were found to be small, in comparison to others which were medium. These were between perceived leadership support and colleague trust, and between perceived colleague support and trust in leadership, as shown in Figure 19. This could potentially be due to the nature of hybrid work, with a considerable part of interactions taking place online, rather than in the physical presence of colleagues and leaders at the office. Furthermore, positive relationships between and within perceived support and trust exhibited a reciprocal effect, indicating that employees only reciprocate support and trust after perceiving these from coworkers or leadership. Employees' increased perceived support and trust have also shown to relate to reduced experienced professional isolation and work-life conflict. Last, reduced work life conflict also related to reduced professional isolation.

What is the relationship between employees' work locations choice and their perceived support, trust, and social well-being within a hybrid work environment?

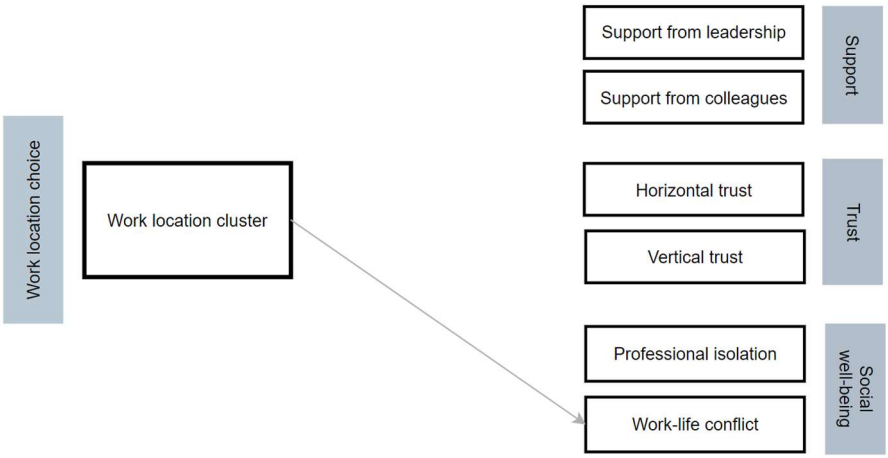


Figure 20 Small (grey line) relationship between work location choice and support, trust, and social well-being

This thesis found only one small relationship – between hybrid work location choice and work-life conflict, seen in Figure 20 contrary to the expectation of at least a small effect size for all relationships based on findings of prior research in regard to support, trust, and social well-being. It was seen that employees who primarily work from home experienced less work-life conflict than those who primarily work at the office. Additionally, although almost all relationships were negligible in size, the direction of some were not as expected. For example, employees who primarily worked from home were found to experience less professional isolation than others, whereas numerous studies suggested that working away from the office environment can potentially result in feelings of social and professional isolation (Baruch & Nicholson, 1997). The same holds true for the relationships between employees' work location and their perceived trust where the findings of this thesis contradict previous research (e.g. Smith et al., 2018; Fayard et al., 2021) by showing that employees who primarily worked at the main office or evenly divided their time across multiple locations perceived less trust among themselves and their colleagues compared to those primarily working from home or splitting their time evenly between home and the main office.

What is the relationship between personal characteristics and work characteristics, and physical workplace satisfaction of employees and their perceived support, trust, and social well-being?

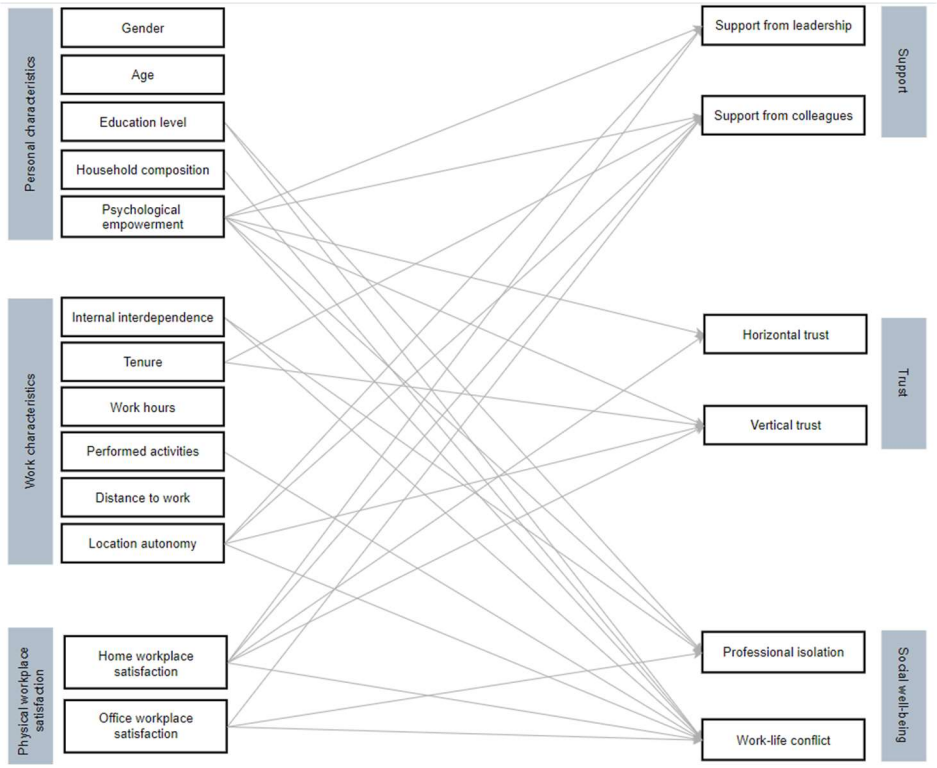


Figure 21 Small (gey lines) relationships between personal and work characteristics, physical workplace satisfaction and support, trust, and social well-being

The relationships between personal and work characteristics, physical workplace satisfaction and perceived support, trust and social well-being, depicted in Figure 21, showed that social well-being, especially work-life conflict, was related to many antecedents from all three independent variable categories, whereas very few antecedents shaped employees' perceived trust in the workplace. Additionally, current literature only highlights the influence of workspaces on social well-being, mediated by social interactions (e.g. Stephens et al., 2011, Colenberg, 2022). This thesis added to current literature by showing that office satisfaction was mainly related to social well-being, while home satisfaction was primarily associated with trust and support.

Moreover, employees' personal characteristics, other than psychological empowerment, had a minor role in shaping levels of perceived support, trust, and social well-being. Psychological empowerment had a holistic, and a positive correlation with all dependent variables, but findings regarding age and gender did not align with prior research, which indicated differences in communication styles and strategies within hybrid work settings across different ages and genders (Troemel-Ploetz, 1991; Furumo and Pearson, 2007).

Last, while location autonomy somewhat determined employees' perceived levels of support, trust, and social well-being, other work characteristics did not play a major role in the outcomes of these dependent variables. Specifically, work hours and distance to work showed no relationship with the dependent variables, contradicting expectations based on prior literature (e.g. Ömüriş et al., 2020; Marshall et al., 2007).

7.2. Implications for Further Research and Practice

7.2.1. Implications for Further Research

This research explored post-pandemic work location preferences, recognizing the shift towards hybrid work as a lasting change and delved into the experiences of individuals who have become accustomed to hybrid work. Overall, this thesis contributes to a better understanding of the sometimes-contradictory choice of hybrid work locations based on various aspects, and how these aspects together with employees' choice of work location relate to employees' perceived support, trust, and social well-being.

Further research should prioritize addressing the limitations of this thesis as discussed in section 7.3, including sampling both from the private and public sectors. Future research should investigate the relationships between personal and work characteristics in a hybrid work setup and extend beyond the Netherlands as diverse cultures view hybrid working differently due to variations in values, norms, and communication styles (Linea, 2023). Future research should address the topics that have shown mixed results compared to prior literature. For instance, despite the widespread belief that hybrid or remote work increases feelings of professional isolation, this thesis challenged these findings by demonstrating that employees predominantly working from home experience the lowest levels of professional isolation. Future research should explore whether this discrepancy results from the subjective nature of measuring professional isolation or from employees not recognizing missed opportunities for better connections with colleagues. Investigating employees' effort to connect virtually through examining the quality, frequency, and type of virtual interactions such as video calls and instant messaging could also provide valuable insights into understanding the nature of this relationship.

Moreover, while existing studies suggest that work location influences support, trust, and social well-being, this thesis found that these outcomes are more dependent on employees' personal and work characteristics, as well as physical workplace satisfaction, in comparison to their work location. Future studies should aim to gather knowledge on creating work environments where all employees feel supported, trusted, and enjoy a hight level of social well-being. Additionally, research should investigate why demographic factors like gender and age, which usually play a significant role in physical workplace research, do not determine hybrid work location choices, nor employees' perceived support, trust, and social well-being. Comparative studies between various hybrid work models and traditional office environments could help identify the specific conditions under which gender and age influence work location choices and experiences, revealing any mediating variables or contextual factors that alter these relationships in hybrid setups.

This thesis also found that office satisfaction was mainly related to social well-being, while home satisfaction was primarily associated with support and trust. Future research could determine whether specific aspects of the home workplace relate to perceived levels of support, trust, and social well-being, or if overall satisfaction is the key factor. Identifying specific aspects would allow organizations to help employees create the optimal home work environment. Further research could also consider additional aspects of employees' workspaces, such as psychological or spatial factors, which could influence workspace satisfaction. These aspects go beyond the physical elements considered in this thesis.

Considering the positive relationship between psychological empowerment and perceived support, trust, and well-being in a hybrid work environment, and recognizing that this area is underexplored, Eindhoven University of Technology can promote cross-disciplinary research. By fostering

collaboration between disciplines such as Psychology and Real Estate, the university can integrate the concept of psychological empowerment into hybrid work studies and delve deeper into these dynamics.

Moreover, autonomy in work location can exist at different levels: at an individual level, where employees make independent decisions without consulting others; at a team level, where agreements may be reached regarding specific days or arrangements for office presence; or through negotiations between employees and their managers. Further research can integrate such a variable to allow for examination of differences in perceived trust, support, and social well-being between employees following different levels of agreements on their hybrid work arrangement.

Further research could be performed by using a multinomial logistic regression, in order to utilize the clustered version of the hybrid work location variable as both dependent and independent variable. Moreover, as the conceptual model considered both the relations between personal characteristics, work characteristics, physical workplace satisfaction and hybrid work location and support, trust, and social well-being, as well as relations between hybrid work location and support, trust, and social well-being, indirect relationships were not explored within this thesis. Consequently, future research will benefit from conducting path analysis to gather insights into the presence and impact of potential indirect relationships, therefore providing more robust findings. Last, this research could benefit from a longitudinal approach, identifying patterns of change and the dynamics of individual behaviour. This could potentially provide insights into changes in employees' work location choices and perceived support, trust, and social well-being over an extended period of time.

7.2.2. Implications for Practice

The analyses in this thesis suggest that individuals who primarily worked from home or divide their time evenly between home and office tend to perceive greater levels of trust, support, and social well-being compared to those who primarily work in the office. Given these attractive potential outcomes, organizations may want to consider increasing the degree of autonomy they provide their employees with, in choosing their work location. Organizations should address concerns of distrust in hybrid work environments and create supportive work environments where colleagues can rely on each other and build trust, regardless of their work location. To do this, organizations or managers could offer workshops about building trust and how employees can vary in individual work preferences. Additionally, they could ensure employees are highly satisfied with the physical aspects of their work environment, for example through providing ergonomic and comfortable office setups, among others. This is especially important in their home environment as higher satisfaction might increase employees' perceived levels of support, trust, and social well-being. Furthermore, given the different levels of work-life conflict experienced by employees across different work locations, as seen in this thesis, organizations that care strongly about employees' perceived support, trust, and social well-being can explore means to reduce work-life conflict based on employees' work location. Organizations or managers can establish agreements with employees regarding their hybrid work arrangements to ensure a healthy balance between being present at the office and working remote from it.

Furthermore, this thesis has shown how different work locations are utilized for different activities. Therefore, corporate real estate and workplace managers can use the insights gained from this thesis to understand employee experience across different work locations and the aspects influencing their choices regarding their work location in a hybrid work arrangement. Managers may benefit from encouraging face-to-face communication through regular check-ins with the team where employees have dedicated time to discuss their projects, share updates, and discuss any concerns. In addition,

organizations can also mandate office days for team meetings as well as arrange regular team-building activities and events to promote interaction among employees and give them reasons for coming to the office and make their trips worthwhile. Otherwise, given the potential for employees to work from various locations, face-to-face interactions may remain limited, limiting team communication and collaboration.

Last, the positive relationship between psychological empowerment and perceived support, trust, and social well-being suggests the importance of psychological empowering of employees. Organizations can build employee confidence through employee reward and recognition programmes and provide incentives such as sponsored courses to enhance knowledge and skills. Organizations can also provide more autonomy to their employees to improve employees' psychological empowerment. Furthermore, organizations should be more considerate of the changes in the work of longer tenure employees, such as potential decreased motivation to carry out their core tasks diligently, being more prone to making mistakes due to lower engagement and attentiveness to detail (Ng & Feldman, 2013), likely leading to reduced perceived supervisor trust. Organizations should implement strategies to re-engage employees with longer tenure and promote shorter tenured employees to provide support for their longer tenured employees regardless of their competence or experience levels. All in all, organizations should consider employees' differences on a personal and work level and discover how they experience working at different locations to attract and retain employees.

7.3. Limitations

As the research was conducted among Dutch office workers in the public sector, the generalizability of the findings of this thesis was initially considered to be limited to public organizations. A number of studies and surveys have suggested differences between the private and public sector organizations at the individual level, available support, flexibility in hybrid working, organizational commitment and job satisfaction, etc. (Hobbs & Mutebi, 2024; Mind, n.d.; Lyons et al., 2006; Steel & Warner, 1990). However, other studies (e.g. Bas and Wilderom, 2011) found no consistent pattern of significant differences. Almost every individual-level variable examined in the literature showed mixed and inconclusive results. Therefore, the widespread idea that employees in public-sector organizations behave differently from those in private-sector contexts lacks empirical evidence, which might make the findings of this thesis also more generalisable to non-public sector organisations.

Furthermore, while validated scales were used for the measurement of support, trust, and social well-being, caution is needed in interpreting the findings. These scales measure perceived, and thus subjective, levels of support, trust, and social well-being. Therefore, while they offer valuable insights into the topic, employees' perception may differ from the intended/provided support and trust by their colleagues and supervisors. It is also crucial to recognize that employees' perceptions of support, trust, and social well-being can vary over time and may be highly specific to moments in time. For example, something as simple as employees' emotions and moods can influence their perceptions (Zadra & Clore, 2011; Vanlessen et al., 2016) and how they view different matters. Therefore, these findings should be interpreted with careful consideration.

The findings of this thesis are subject to methodological constraints, particularly concerning the hybrid work location variable. The work location clusters provided more interesting insights compared to the original hybrid work location variables. However, their applicability was limited to cases where hybrid work location was the independent variable. If the work location clusters could have been used across the entirety of this thesis, a higher level of consistency would have been kept. Moreover, two variables, namely nature of job and leadership characteristics could not be included in the bivariate tests as they

consisted of many items which could not be reduced into fewer factors due to their low explained variance. Additionally, respondents likely misinterpreted the agreeableness dimension of the personality trait variable, resulting in unreliable results and a mean inter-item correlation too low for further analysis.

Furthermore, as this thesis focused on hybrid work location choice and support, trust, and social well-being, the relationships between and within personal and work characteristics were not taken into consideration in the scope of this thesis. The relationships investigated in this thesis, while statistically significant, were mostly characterized by small effect sizes. Nonetheless, this is common in social and behavioural sciences, where even small effect sizes can be impactful (Anvari et al., 2022). One potential explanation for this observation is the complex nature of human behaviour within a work environment, which is influenced by numerous factors including individual differences, organizational culture, and external variables (Duong et al., 2005). Last, the large number of significant but negligible relationships may be attributed to the large sample size used in this thesis. In large samples, even small differences are likely to show as statistically significant, despite their insignificance (Faber & Fonseca, 2014).

References

Ahrendt D, Cabrita J, Clerici E, et al. Living, Working and COVID-19. Luxembourg: Publications Office of the European Union; 2020, 1–80.

Al-Jammal, K., & Ghamrawi, N. (2015). Leading the Self: Self-Leadership Skills of Lebanese Private School Principals. International Journal of Social Science and Economics Invention. https://doi.org/10.23958/ijssei/vol01-i02/02

Allen, T. D. (2001). Family-Supportive Work Environments: The role of organizational perceptions. Journal of Vocational Behavior, 58(3), 414–435. https://doi.org/10.1006/jvbe.2000.1774

Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. Psychological Science in the Public Interest, 16(2), 40–68. https://doi.org/10.1177/1529100615593273

Amundsen, S., & Martinsen, L. O. (2015). Linking empowering leadership to job satisfaction, work effort, and creativity: The role of self-leadership and psychological empowerment. Journal of Leadership & Organizational Studies, 22(3), 304-323. https://doi.org/10.1177/1548051814565819

Annelie, Ä. F., Sevandersson, R., & Jybrink, A. (2023). The Relation between Hybrid Work and Perceived Empowerment : A cross-sectional survey. DIVA. https://www.diva portal.org/smash/record.jsf?pid=diva2%3A1761328&dswid=3849

Anvari, F., Kievit, R. A., Lakens, D., Pennington, C. R., Przybylski, A. K., Tiokhin, L., Wiernik, B. M., & Orben, A. (2022). Not all effects are indispensable: psychological science requires verifiable lines of reasoning for whether an effect matters. Perspectives on Psychological Science, 18(2), 503–507. https://doi.org/10.1177/17456916221091565

Appel-Meulenbroek, R., & Danivska, V. (2021). A Handbook of Theories on Designing Alignment between People and the Office Environment. In Routledge eBooks. https://doi.org/10.1201/9781003128830

Appel-Meulenbroek, R., Kemperman, A., Van De Water, A., Weijs-Perrée, M., & Verhaegh, J. (2022). How to attract employees back to the office? A stated choice study on hybrid working preferences. Journal of Environmental Psychology, 81, 101784. https://doi.org/10.1016/j.jenvp.2022.101784

Appel-Meulenbroek, R., Kemperman, A., Van De Water, A., Weijs-Perrée, M., & Verhaegh, J. (2022). How to attract employees back to the office? A stated choice study on hybrid working preferences. Journal of Environmental Psychology, 81, 101784. https://doi.org/10.1016/j.jenvp.2022.101784

Appel-Meulenbroek, R., Van Der Voordt, D., Aussems, R., Arentze, T., & Blanc, P. (2020). Impact of activity-based workplaces on burnout and engagement dimensions. Journal of Corporate Real Estate, 22(4), 279–296. https://doi.org/10.1108/jcre-09-2019-0041

Ariani, D. W. (2015). Relationship with Supervisor and Co-Workers, Psychological Condition and Employee Engagement in the Workplace. Journal of Business & Management, 4(3), 34–47. https://doi.org/10.12735/jbm.v4i3p34

Asgari, H., Jin, X., & Mohseni, A. (2014). Choice, frequency, and engagement. Transportation Research Record, 2413(1), 101–109. https://doi.org/10.3141/2413-11

Athanasiadou, C., & Theriou, G. (2021). Telework: systematic literature review and future research agenda. Heliyon, 7(10), e08165. https://doi.org/10.1016/j.heliyon.2021.e08165

Aub´e, C., Rousseau, V. (2005). Team goal commitment and team effectiveness: the role of task interdependence and supportive behaviors. Group Dynam.: Theory, Research, and Practice 9, 189. https://doi.org/10.1037/1089-2699.9.3.189

ayard, A., Weeks, J., & Khan, M. (2021). Designing the Hybrid Office: From workplace to “culture” Space. ResearchGate. https://www.researchgate.net/publication/358167320_Designing_the_Hybrid_Office_From_workplace_to_culture_Space

Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. Journal of Organizational Behavior, 23(SPEC. ISS.), 383– 400. https://doi.org/10.1002/job.144

Bailey, N. B. K. D. E., & Kurland, N. B. (1999). The advantages and challenges of working here, there, anywhere, and anytime. Organizational dynamics, 28(2), 53-68.

Bakker, A.B., Demerouti, E. (2007), The Job Demands-Resources model: state of the art, Journal of Managerial Psychology, 22(3), 309-328. https://doi.org/10.1108/02683940710733115

Baričič, A., & Salaj, A. T. (2014). The impact of office workspace on the satisfaction of employees and their overall health-research presentation. Zdravniški vestnik, 83(3), 217-231.

Bartel, C. A., Wrzesniewski, A., & Wiesenfeld, B. M. (2012). Knowing Where You Stand: Physical Isolation, Perceived Respect, and Organizational Identification Among. . . ResearchGate. https://doi.org/10.2307/23252086

Baruch, Y., & Nicholson, N. (1997). Home, sweet work: Requirements for effective home working. Journal of General Management, 23(2), 15-30

Beauregard, T. A., Basile, K. A., & Canónico, E. (2019). Telework: outcomes and facilitators for employees. In R. N. Landers (Ed.), The Cambridge Handbook of Technology and Employee Behavior (pp. 511–543). Cambridge University Press.

Beauregard, T. A., Basile, K., & Canonico, E. (2019). Telework. In Cambridge University Press eBooks (pp. 511–543). https://doi.org/10.1017/9781108649636.020

Beauregard, T. Alexandra and Basile, K.A. and Canónico, E. (2019) Telework: outcomes and facilitators for employees. In: Landers, R.N. (ed.) The Cambridge Handbook of Technology and Employee Behavior. Cambridge, UK: Cambridge University Press, pp. 511-543. ISBN 9781108649636.

Beckel, J. L. O., & Fisher, G. G. (2022). Telework and Worker Health and Well-Being: A review and recommendations for research and practice. International Journal of Environmental Research and Public Health, 19(7), 3879. https://doi.org/10.3390/ijerph19073879

Behson, S. (2002). Which dominates? the relative importance of Work–Family organizational support and general organizational context on employee outcomes. Journal of Vocational Behavior, 61(1), 53–72. https://doi.org/10.1006/jvbe.2001.1845

Bell, B., & Kozlowski, S. (2002). A typology of virtual teams: Implications for effective leadership. Group and Organizational Management, 21, 14–49.

Belle, S. M., Burley, D., & Long, S. D. (2015). Where do I belong? High-intensity teleworkers' experience of organizational belonging. Human Resource Development International, 18(1), 76–96. https://doi.org/10.1080/13678868.2014.979006

Biron, M. and van Veldhoven, M. (2016) When Control Becomes a Liability Rather than An Asset Comparing Home and Office Days among Part-Time Teleworkers. Journal of Organizational Behavior, 37, 1317-1337. https://www.scirp.org/(S(lz5mqp453edsnp55rrgjct55.))/reference/referencespapers.aspx?referenceid=2860196

Bordia, P. (1997). Face-to-face versus computer-mediated communication: A synthesis of the experimental literature. The Journal of Business Communication, 34(1), 99-118. https://doi.org/10.1177%2F002194369703400106

Boselie, P., Hesselink, M., Paauwe, J., & Van Der Wiele, T. (2001). Employee perception on commitment-oriented work systems. ResearchGate. https://www.researchgate.net/publication/4864112_Employee_Perception_on_Commitment_Oriented_Work_Systems

Brandão, S., & Ramos, M. (2023). Teleworking in the context of the Covid-19 pandemic: advantages, disadvantages and influencing factors – the workers' perspective. Revista Brasileira De Gestão De Negócios, 25(2), 253–268. https://doi.org/10.7819/rbgn.v25i2.4221

Breaugh, J. A. (1985). The Measurement of Job Autonomy. Human Relations, 38, 551-570. https://doi.org/10.1177/001872678503800604

Byrne, B. M. (2010). Structural equation modeling with AMOS: Basic concepts, applications, and programming. New York: Routledge.

Cacioppo, J. T., Hawkley, L. C., Ernst, J. M., Burleson, M. H., Berntson, G. G., Nouriani, B., & Spiegel, D. (2006). Loneliness within a nomological net: An evolutionary perspective. Journal of Research in Personality, 40(6), 1054–1085. https://doi.org/10.1016/j.jrp.2005.11.007

Caligiuri, P., Cieri, H. D., Minbaeva, D., Verbeke, A., and Zimmermann, A. (2020). International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. J. Int. Bus. Stud. 51, 697–713.doi: 10.1057/s41267-020-00335-9

Carte, T. A., Chidambaram, L., & Becker, A. T. (2006). Emergent Leadership in Self-Managed Virtual Teams. Group Decision and Negotiation, 15(4), 323–343. https://doi.org/10.1007/s10726-006-9045-7

CBRE. (2021). The next normal. https://www.cbre.nl/insights/reports/the-next-normal-how-hybrid-work-will-transform-commercial-real-estate

Choudhury, P., (Raj), Khanna, T., Makridis, C., & Schirmann, K. (2022). Is Hybrid Work the Best of Both Worlds? Evidence from a Field Experiment. In Working Paper 22-063. https://www.hbs.edu/ris/Publication%2520Files/22-063_639195cc-e7b5-47d3-9281-62d192c5b916.pdf

Clark, L. (2012). Telecommuting Attitudes and the "Big Five" Personality Dimensions. https://www.semanticscholar.org/paper/Telecommuting-Attitudes-and-the-%27Big-Five%27-Clark-Karau/37ac20804b5b968043b913ed0f3020586a1e07b2

Colenberg, S. (2022). Interior design features predicting satisfaction with office workspace privacy and noise. TU Delft Repositories. https://repository.tudelft.nl/islandora/object/uuid:3e3c6023-8093-400d-9433-e53045ec02cd?collection=research

Colenberg, S. E., Romero Herrera, N. A., & Keyson, D. V. (2022). Workplace affordances of social wellbeing: a conceptual framework. In A. Ciaramella, C. Tagliaro, I. Mariotti, & C. Rossi-Lamastra (Eds.), Proceedings of the 3rd Transdisciplinary Workplace Research Conference, 2022 Milan (pp. 247-257). Politecnico di Milano

Colenberg, S., Jylhä, T., & Arkesteijn, M. (2020). The relationship between interior office space and employee health and well-being – a literature review. Building Research and Information, 49(3), 352–366. https://doi.org/10.1080/09613218.2019.1710098

Commitment of Private Sector, Public Sector, and Parapublic Sector Employees. Public Administration Review, 6:4, pp. 605-618.

Costantini, A., & Weintraub, J. A. (2022). The benefits of being proactive while working remotely: leveraging Self-Leadership and job crafting to achieve higher work engagement and task significance. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.833776

Cowles, E. L. (2023). EXAMINING THE RELATIONSHIP BETWEEN PERSONALITY, TASK INTERDEPENDENCE, AND REMOTE WORK ISOLATION. https://jewlscholar.mtsu.edu/items/0ba19b77-ced8-4417-820d-d44a16b63796

Cushman & Wakefield. (2021). Office of the Future Revisited. https://www.cushmanwakefield.com/en/insights/office-of-the-future-revisited

D'Oliveira, T., & Persico, L. (2023). Workplace isolation, loneliness and wellbeing at work: The mediating role of task interdependence and supportive behaviours. Applied Ergonomics, 106, 103894. https://doi.org/10.1016/j.apergo.2022.103894

De Souza Santos, R. E., & Ralph, P. (2022). A grounded theory of coordination in remote-first and hybrid software teams. Proceedings of the 44th International Conference on Software Engineering. https://doi.org/10.1145/3510003.3510105

Desrosiers, E. I. (2001). Telework and work attitudes: The relationship between telecommuting and employee job satisfaction, organizational commitment, perceived organizational support and perceived co-worker support. Unpublished doctoral dissertation, Purdue University, West Lafayette, IN.

Dinh, J., Reyes, D. L., Kayga, L., Lindgren, C., Feitosa, J., & Salas, E. (2021). Developing team trust. Organizational Dynamics, 50(1), 100846. https://doi.org/10.1016/j.orgdyn.2021.100846

Dinnocenzo, D. A. (1999). 101 Tips for Telecommuters. San Francisco: Berrett-Koehler.

Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. Organization Science, 12(4), 450–467. https://doi.org/10.1287/orsc.12.4.450.10640

Drucker, J., & Khattak, A. J. (2000). Propensity to Work from Home: Modeling Results from the 1995 Nationwide Personal Transportation Survey. Transportation Research Record, 1706(1), 108–117. https://doi.org/10.3141/1706-13

Duong, T. V., Bui, H. H., Phung, D. Q., & Venkatesh, S. (2005). Activity Recognition and Abnormality Detection with the Switching Hidden Semi-Markov Model. Computer Vision and Pattern Recognition, Vol. 1 (p. DOI:10.1109/CVPR.2005.61). IEEE Computer Society Conference.

Edwards, J. R., & Cooper, C. L. (1990). The person-environment fit approach to stress: Recurring problems and some suggested solutions. Journal of Organizational Behavior, 11(4), 293–307. https://doi.org/10.1002/job.4030110405

Effect size in Statistics - the Ultimate guide. (n.d.). https://www.spss-tutorials.com/effect-size/#pearson-correlations

Eğriboyun, D. (2015). The relation between organizational trust, organizational support and organizational commitment. African Journal of Business Management, 9(4), 134–156. https://doi.org/10.5897/ajbm2014.7623

Eisinga, R., Grotenhuis, M. T., & Pelzer, B. (2012). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? International Journal of Public Health, 58(4), 637–642. https://doi.org/10.1007/s00038-012-0416-3

Errichiello, L., & Pianese, T. (2021). The Role of Organizational Support in Effective Remote Work Implementation in the Post-COVID Era. In Advances in human resources management and organizational development book series (pp. 221–242). IGI Global. https://doi.org/10.4018/978-1-7998-6754-8.ch013

Faber, J., & Fonseca, L. M. (2014). How sample size influences research outcomes. Dental Press Journal of Orthodontics (Impresso), 19(4), 27–29. https://doi.org/10.1590/2176-9451.19.4.027-029.ebo

Fayard, A. L., Weeks, J., & Khan, M. (2021). Designing the hybrid office. Harvard Business Review, 2021 (March-April), 1–11.

Felstead, A., Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. New Technol. Work Employ. 32 (3), 195–212. https://doi.org/10.1111/ntwe.12097.

Field, A. (2013) Discovering Statistics Using IBM SPSS Statistics: And Sex and Drugs and Rock “N” Roll, 4th Edition, Sage, Los Angeles, London, New Delhi.

Fortune. Working in the office is worth the commute—if you’re looking to climb the corporate ladder. (2023, April 11). https://fortune.com/2023/04/11/in-office-workers-improve-career-advancement-mentorship-professional-development/

Frank, J. (2023, August 25). Open office spaces: The negative impact to employees and productivity. STRATAFOLIO. https://stratafolio.com/open-office-spaces-negative-impacts/

Gajendran, R. S., & Harrison, D. A. (2007). The Good, the Bad, and the Unknown About Telecommuting: Meta-Analysis of Psychological Mediators and Individual Consequences. Journal of Applied Psychology, 92(6), 1524–1541. https://doi.org/10.1037/0021-9010.92.6.1524

Galanti, T., Guidetti, G., Mazzei, E., Zappala, S., & Toscano, F. (2021). Work from home during the COVID-19 outbreak. Journal of Occupational and Environmental Medicine, 63(7), e426–e432. https://doi.org/10.1097/jom.0000000000002236

George, D. & Mallery, M. (2010). SPSS for Windows Step by Step: A Simple Guide and Reference, 17.0 update (10a ed.) Boston: Pearson.

Ghasemi, A., & Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non Statisticians. International Journal of Endocrinology and Metabolism, 10(2), 486–489. https://doi.org/10.5812/ijem.3505

Gilson, L., Maynard, M. T., Young, N. A., Vartiainen, M., & Hakonen, M. (2014). Virtual Teams research. Journal of Management, 41(5), 1313–1337. https://doi.org/10.1177/0149206314559946

Glavin, S. S. a. P. (2011). Education and Work-Family Conflict: Explanations, contingencies and mental health consequences. Social Forces, 89(4), 1341–1362. https://www.jstor.org/stable/41290132

Global workforce expectations are shifting due to COVID-19. (2020, November 17). https://www.jll.nl/nl/trends-inzichten/onderzoek/global-workforce-expectations-shifting-due-to-covid-19

Goh, S., & Wasko, M. (2012). The Effects of Leader-Member Exchange on Member Performance in Virtual World Teams. Journal of the Association for Information Systems, 13(10), 861–885. https://doi.org/10.17705/1jais.00308

Gordon, S., Adler, H., Day, J., & Sydnor, S. (2019). Perceived supervisor support: A study of select-service hotel employees. Journal of Hospitality and Tourism Management, 38, 82–90. https://doi.org/10.1016/j.jhtm.2018.12.002

Gratton, L. (2021). How to do hybrid right. Harvard Business Review. https://hbr.org/2021/05/how-to-do-hybrid-right

Griffith, T. L., & Meader, D. K. (2004). Prelude to Virtual Groups. IGI Global eBooks, 231–254. https://doi.org/10.4018/978-1-59140-166-7.ch010

Griffith, T. L., & Neale, M. A. (2001). 8. Information processing in traditional, hybrid, and virtual teams: From nascent knowledge to transactive memory. Research in Organizational Behavior, 23, 379–421. https://doi.org/10.1016/s0191-3085(01)23009-3

Hackman, J. R., and Oldham, G. R. (1980). Work Redesign. Menlo Park, CA: Addison-Wesley.

Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2010) Multivariate data analysis (7th ed.). Upper Saddle River, New Jersey: Pearson Educational International.

Halbesleben, J. R. B., & Wheeler, A. R. (2012). To invest or not? The role of coworker support and trust in daily reciprocal gain spirals of helping behavior. Journal of Management, 41(6), 1628–1650. https://doi.org/10.1177/0149206312455246

Halford, Susan. (2005). Hybrid Workspace: Re-Spatialisations of Work, Organisation and Management. New Technology, Work and Employment. 20. 10.1111/j.1468-005X.2005.00141.x.

Hallowell, E. M. (1999). The human moment at work. Harvard Business Review, 77(1), 58 – 64.

Hansika, W., & Amarathunga, P. (2016). Impact of Office Design on Employees' Productivity; A Case Study of Banking Organizations of North Western Province in Sri Lanka. Social Science Research Network. https://doi.org/10.2139/ssrn.2910255

Harari, M. B., Williams, E. A., Castro, S. L., & Brant, K. K. (2021). Self-leadership: A meta-analysis of over two decades of research. Journal of Occupational and Organizational Psychology, 94(4), 890–923. https://doi.org/10.1111/joop.12365

Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms. Annals of Behavioral Medicine, 40(2), 218–227. https://doi.org/10.1007/s12160-010-9210-8

Helminen, V., & Ristimäki, M. (2007). Relationships between commuting distance, frequency and telework in Finland. Journal of Transport Geography, 15(5), 331–342. https://doi.org/10.1016/j.jtrangeo.2006.12.004

Hill, E. J., Erickson, J. J., Holmes, E. K., & Ferris, M. (2010). Workplace flexibility, work hours, and work-life conflict: Finding an extra day or two. Journal of Family Psychology, 24(3), 349–358. https://doi.org/10.1037/a0019282

Hill, N. S., & Bartol, K. M. (2015). Empowering Leadership and Effective Collaboration in Geographically Dispersed Teams. Personnel Psychology, 69(1), 159–198. https://doi.org/10.1111/peps.12108

Hobbs, A., & Mutebi, N. (2024, April 6). The impact of remote and hybrid working on workers and organisations - POST. POST. https://post.parliament.uk/research-briefings/post-pb-0049/

Hoendervanger, J. G. (2022). The role of individual differences in flexible ways of working. In Valeria CROCE (Ed.), European Commission (No. JRC129937). European Commission. https://jghadvies.nl/wp-content/uploads/2022/10/The-role-of-individual-differences-in-flexible-ways-of-working-JCR-report.pdf

How to Do Hybrid Right – Lynda Gratton. (2021, April 13). https://lyndagratton.com/latest-news/new-hbr-article-how-to-do-hybrid-right

Hubble HQ. (2024, February 8). The Problem Isn't The Office – It's The Commute. https://hubblehq.com/blog/impact-of-commute-time-on-work-preferences

Huws, U., Korte, W. B., and Robinson, S. (1990). Telework: Towards the Elusive Office. Chichester: John Wiley & Sons

Hybrid working: what do employees want?: Exploring hybrid working preferences of government employees using conjoint analysis : At the Dutch Ministry of the Interior and Kingdom Affairs. Munnich, A. C. J. (Author). 30 Jun 2022.

Jex, S.M. and Britt, T.W. (2014) Organizational Psychology: A Scientist-Practitioner Approach. John Wiley and Sons, New York, 706.

Jin, X., & Wu, J. (2011). Propensity to telecommute. Transportation Research Record, 2231(1), 110–119. https://doi.org/10.3141/2231-14

Joshi, A., Lazarova, M., & Liao, H. (2009). Getting Everyone on Board: The Role of Inspirational Leadership in Geographically Dispersed Teams. Organization Science, 20(1), 240–252. https://doi.org/10.1287/orsc.1080.0383

Kaas-Ojavere, K. (2021). Leadership in the hybrid working model: challenges and solutions of Estonian managers. https://digikogu.taltech.ee/en/Item/a7c2c4a4-450c-44a6-a335-da3f90e67da8?_ga=2.25272891.70842919.1643008984-1122030283.1624700179

Kang, S., Ou, D., & Mak, C. M. (2017). The impact of indoor environmental quality on work productivity in university open-plan research offices. Building and Environment, 124, 78–89. https://doi.org/10.1016/j.buildenv.2017.07.003

Kelly, J.R., McGrath, J.E. (1985). Effects of time limits and task types on task performance and interaction of four-person groups. J. Pers. Soc. Psychol. 49, 395–407. https://doi.org/10.1037/0022-3514.49.2.395.

Kerrissey, M. & Edmondson, A. (2020) What Good Leadership Looks Like During This Pandemic. Harvard Business Review Retrieved from https://hbr.org/2020/04/what-goodleadership-looks-like-during-this pandemic.

Kim, J., & De Dear, R. (2012). Nonlinear relationships between individual IEQ factors and overall workspace satisfaction. Building and Environment, 49, 33–40. https://doi.org/10.1016/j.buildenv.2011.09.022

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., Bamberger, P., Bapuji, H., Bhave, D. P., Choi, V. K., Creary, S. J., Demerouti, E., Flynn, F. J., Gelfand, M. J., Greer, L. L., Johns, G., Kesebir, S., Klein, P. G., Lee, S. Y., . . . Van Vugt, M. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. American Psychologist, 76(1), 63–77. https://doi.org/10.1037/amp0000716

Konradt, U., Hertel, G., & Schmook, R. (2003). Quality of management by objectives, task-related stressors, and non-task-related stressors as predictors of stress and job satisfaction among teleworkers. European Journal of Work and Organizational Psychology, 12(1), 61–79. https://doi.org/10.1080/13594320344000020

Köse, S., Baykal, B., Köse, S., Çuhadar, S. G., Turgay, F., & Bayat, I. K. (2021). Role of personality traits in Work-Life Balance and life satisfaction. In Eurasian studies in business and economics (pp. 279–295). https://doi.org/10.1007/978-3-030-63149-9_18

Kowalski, K. B. & Swanson, J. A. (2005). Critical success factors in developing teleworking programs. Benchmarking: An International Journal, 12, 236-249.

Kristof-Brown, A., Zimmerman, R. D., & Johnson, E. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. https://www.semanticscholar.org/paper/CONSEQUENCES-OF-INDIVIDUALS%27-FIT-AT-WORK%3A-A-OF-AND-Kristof%E2%80%90Brown-Zimmerman/4ba012b788abe8f9141ca892c7fa9d66361ff5b9

Kurland, N. B., & Cooper, C. D. (2002). Manager control and employee isolation in telecommuting environments. Journal of High Technology Management Research, 13, 107–126.

Kurtessis, J.N., Eisenberger, R., Ford, M.T., Buffardi, L.C., Stewart, K.A. & Adis, C.S. (2017) Perceived organizational support: a meta-analytic evaluation of organizational support theory. Journal of Management, 43(6), 1854–1884. Available from: https://doi.org/10.1177/0149206315575554

L. Rhoades and R. Eisenberger (2002). Perceived organizational support: A review of the literature. Journal of Applied Psychology; 87(4):698-714. Department of Psychology, University of Delaware, USA.

Linea. (2023, September 22). Embracing Diversity: Hybrid Work Views from Around the World. Linea. https://www.linea.net/insights/embracing-diversity-hybrid-work-views-from-around-the-world/

Living, working and COVID-19. (2020b). Eurofound. https://www.eurofound.europa.eu/publications/report/2020/living-working-and-covid-19

Lusa, S., Käpykangas, S., Ansio, H., Houni, P., & Uitti, J. (2019). Employee Satisfaction with working Space and its association with Well-Being—A Cross-Sectional study in a Multi-Space office. Frontiers in Public Health, 7. https://doi.org/10.3389/fpubh.2019.00358

Lyons, S.T., Duxbury, L.E. And Higgins, Ch.A. (2006). A Comparison of the Values and

Lyttelton, Thomas & Zang, Emma & Musick, Kelly. (2020). Gender Differences in Telecommuting and Implications for Inequality at Home and Work. 10.31235/osf.io/tdf8c.

Mann, S., Varey, R., and Button, W. (2000). An exploration of the emotional impact of tele-working via computer-mediated communication. J. Manag. Psychol. 15, 668–690. doi: 10.1108/02683940010378054

Mariani, M. (2000). Telecommuters. Occupational Outlook Quarterly, Fall, 10-17.

Marshall, G. W., Michaels, C. E., & Mulki, J. P. (2007). Workplace isolation: Exploring the construct and its measurement. Psychology & Marketing, 24(3), 195–223. https://doi.org/10.1002/mar.20158

Maruyama, T., and Tietze, S. (2012). From anxiety to assurance: concerns and outcomes of telework. Pers. Rev. 41, 450–469. doi: 10.1108/00483481211229375

Mauch, G. (2022). How Can You Build Visibility into a Hybrid Workplace? Harvard Business Review. https://hbr.org/2022/06/how-can-youbuild-visibility-into-a-hybrid-workplace

Maynard, M. T., & Gilson, L. L. (2014). The role of shared mental model development in understanding virtual team effectiveness. Group & Organization Management, 39(1), 3-32.

McCloskey, D. W., & Igbaria, M. (2003). Does “out of sight” mean “out of mind”? An empirical investigation of the career advancement prospects of telecommuters. Information Resources Management Journal, 16(2), 19 –34.

McRae, E. R. and Kropp, B. (2022), 11 Trends that Will Shape Work in 2022 and Beyond, HBR. Available at: https://hbr.org/2022/01/11-trends-that-will-shape-work-in-2022-and-beyond

Messenger, J. C., & Gschwind, L. (2016). Three generations of Telework: New ICTs and the (R)evolution from Home Office to Virtual Office. New Technology, Work and Employment, 31(3), 195–208. https://doi.org/10.1111/ntwe.12073

Microsoft. (2021). Work Trend Index. The Next Great Disruption Is Hybrid Work – Are We Ready? Retrieved, September 16, 2022, from https://www.microsoft.com/en-us/worklab/

Mind reveals shocking differences in mental health support for public & private sector workers. (n.d.). Mind. https://www.mind.org.uk/news-campaigns/news/mind-reveals-shocking-differences-in-mental-health-support-for-public-private-sector-workers/

Mokhtarian, P. L., Bagley, M. N., & Salomon, I. (1998). The impact of gender, occupation, and presence of children on telecommuting motivations and constraints. Journal of the American Society for Information Science, 49(12), 1115-1134

Moktharian, P. (1996). Modelling the choice of telecommuting: 2. A case of the preferred impossible alternatives. Environment and Planning A, 28, 1859-1876.

Mou, W. (2023). A Quantitative Analysis of the Relationship between Education Level and Income. Journal of Education Humanities and Social Sciences, 12, 160–166. https://doi.org/10.54097/ehss.v12i.7617

Mulki, J. P., Locander, W. B., Marshall, G. W., Harris, E. G., & Hensel, J. W. (2008). Workplace isolation, salesperson commitment, and job performance. Journal of Personal Selling & Sales Management, 28(1), 67–78. https://doi.org/10.2753/pss0885-3134280105

Müller, T., & Niessen, C. (2019). Self-leadership in the context of part-time teleworking. Journal of Organizational Behavior, 40(8), 883–898. https://doi.org/10.1002/job.2371

Müller, T., Schuberth, F., Bergsiek, M., and Henseler, J. (2022). How can the transition from office to telework be managed? The impact of tasks and workplace suitability on collaboration and work performance. Front. Psychol. 13:987530. doi: 10.3389/fpsyg.2022.987530

Munir, Y., Khan, S. U. R., Sadiq, M., Ali, I., Hamdan, Y., & Munir, E. (2015). Workplace Isolation in Pharmaceutical Companies: Moderating Role of Self-Efficacy. Social Indicators Research, 126(3), 1157–1174. https://doi.org/10.1007/s11205-015-0940-7

Nardi, B. A., and Whittaker, S. (2002). “The place of face-to-face communication in distributed work,” in Distributed Work, eds P. Hinds and S. Kiesler (Cambridge, MA: MIT Press), 83–110.

Newman, B. M., Lohman, B. J., & Newman, P. R. (2007). Peer group membership and sense of belonging: Their relationship to adolescent behavior problems. ResearchGate. https://www.researchgate.net/publication/5990459_Peer_group_membership_and_sense_of_belonging_Their_relationship_to_adolescent_behavior_problems

Ng, T. W. H., & Feldman, D. C. (2013). Does longer job tenure help or hinder job performance? Journal of Vocational Behavior (Print), 83(3), 305–314. https://doi.org/10.1016/j.jvb.2013.06.012

Nilles, J. M. (1988). Traffic reduction by telecommuting: A status review and selected bibliography. Transportation Research Part A: General, 22(4), 301–317. https://doi.org/10.1016/0191-2607(88)90008-8

Nilles, J. M. (1994). Making telecommuting happen. New York: Van Nostrand Reinhold.

Nilles, J. M., Carlson F. R., Gray J., P., & Hanneman, G. J. (1976). The Telecommunications Transportation Tradeoff: Options for Tomorrow. New York: John Wiley and Sons.

O’Mahony, S., & Barley, S. R. (1999). Do digital telecommunications affect work and organizations? The state of our knowledge. Research in Organizational Behaviour, 21, 125–161.

OECD (2020), "Productivity gains from teleworking in the post COVID-19 era: How can public policies make it happen?", OECD Policy Responses to Coronavirus (COVID-19), OECD Publishing, Paris, https://doi.org/10.1787/a5d52e99-en.

Olson, M. H. (1983). Remote office work. Communications of the ACM, 26(3), 182–187. https://doi.org/10.1145/358061.358068

Ones. (2023, April 25). The state of hybrid working in Europe for 2023 - ONEs Blog. ONEs Blog - Smart Office, Building the Future. https://ones.software/blog/2023/04/26/the-state-of-hybrid-working-in-europe-for-2023/

Osborne, S., & Hammoud, M. S. (2017). Effective employee engagement in the workplace. International Journal of Applied Management and Technology, 16(1). https://doi.org/10.5590/ijamt.2017.16.1.04

O'Sullivan, C. (2030, December 12). Employee Engagement: Strategies, programs & benefits. https://www.piggy.eu/nl/glossary/employee-engagement

Page, M. (2024, February 7). The relationship between trust and performance. Michael Page. https://www.michaelpage.com.au/advice/management-advice/staff-development/relationship-between-trust-and-performance

Paleti, R., 2016. Generalized Extreme Value models for count data: Application to worker telecommuting frequency choices. Transp. Res. Part B 83 (Supplement C), 104–120. https://doi.org/10.1016/j.trb.2015.11.008.

Pfeffer, J. & Salancik, G.R. (1975) Determinants of supervisory behavior: a role set analysis. Human Relations, 28(2), 139–154. Available from: https://doi.org/10.1177/001872677502800203

Pianese, T., Errichiello, L. & da Cunha, J.V. (2022) Organizational control in the context of remote working: A synthesis of empirical findings and a research agenda. European Management Review, 1–101. https://doi.org/10.1111/emre.1251

Pillay, S. (2023, December 11). Your brain can only take so much focus. Harvard Business Review. https://hbr.org/2017/05/your-brain-can-only-take-so-much-focus

Piskurich, G. M. (1996). Traits of successful telecommuters. Training & Development, 50, 25.

Popuri, Y., & Bhat, C. R. (2003). On Modeling Choice and Frequency of Home-Based Telecommuting. Transportation Research Record, 1858(1), 55–60. https://doi.org/10.3141/1858-08

Positive Group. (2023). Remote working: gender gap or just different preferences? Positive. https://www.positivegroup.org/loop/articles/remote-working-gender-gap-or-just-different-preferences

Raghuram, S., & Wiesenfeld, B. M. (2004). Work-nonwork conflict and job stress among virtual workers. Human Resource Management, 43(2–3), 259–277. https://doi.org/10.1002/hrm.20019

Rhoades, L., and, Eisenberger, R. (2002). Perceived organizational support: A review of the literature. Journal of Applied Psychology, 87(4), 698–714. https://doi.org/10.1037/0021-9010.87.4.698

Richert-Kaźmierska, A., & Stankiewicz, K. (2016). Work–life balance: Does age matter? Work, 55(3), 679–688. https://doi.org/10.3233/wor-162435

Rico, R., De La Hera, C. M. A., Sánchez-Manzanares, M., & Gil, F. (2009). The joint relationships of communication behaviors and task interdependence on trust building and change in virtual project teams. Social Science Information, 48(2), 229–255. https://doi.org/10.1177/0539018409102410

Rosen, B., and Thomas, H. Jerdee. (1978). Influence of Subordinate Characteristics on Trust and Use of Participative Decision Strategies in a Management Simulation. Journal of Applied Psychology,1977, 62, 628-631. Group & Organization Studies, 3(2), 247–248. https://doi.org/10.1177/105960117800300214

Rothe, P., Lindholm, A., Hyvönen, A., & Nenonen, S. (2012). Work environment preferences – does age make a difference? Facilities, 30(1/2), 78–95. https://doi.org/10.1108/02632771211194284

Rouleau, L. & Balogun, J. (2011) Middle managers, strategic sensemaking, and discursive competence. Journal of Management Studies, 48(5), 953–983. Available from: https://doi.org/10.1111/j.1467-6486.2010.00941.x

Sailer, K., Thomas, M., & Pachilova, R. (2023). The challenges of hybrid work: an architectural sociology perspective. Buildings & Cities, 4(1), 650–668. https://doi.org/10.5334/bc.350

Sardeshmukh, S. R., Sharma, D., & Golden, T. D. (2012). Impact of telework on exhaustion and job engagement: a job demands and job resources model. New Technology Work and Employment, 27(3), 193–207. https://doi.org/10.1111/j.1468-005x.2012.00284.x

Sarker, S., Sarker, S., & Schneider, C. (2009). Seeing remote team members as leaders: A study of US-Scandinavian teams. IEEE Transactions on Professional Communication, 52: 75-94. 10.1109/TPC.2008.2007871

Schäfer, B., Koloch, L., Storai, D., Gunkel, M., & Kraus, S. (2023). Alternative workplace arrangements: Tearing down the walls of a conceptual labyrinth. Journal of Innovation & Knowledge, 8(2), 100352. https://doi.org/10.1016/j.jik.2023.100352

Schieman, S., Milkie, M. A., & Glavin, P. (2009). When work interferes with life: Work– nonwork interference and the influence of work-related demands and resources. American Sociological Review, 74, 966-988.

Sears, L. E., Shi, Y., Coberley, C., & Pope, J. E. (2013). Overall Well-Being as a predictor of health care, productivity, and retention outcomes in a large employer. Population Health Management, 16(6), 397–405. https://doi.org/10.1089/pop.2012.0114

Sener, I. N., & Bhat, C. R. (2011). A Copula-Based sample selection model of telecommuting choice and frequency. Environment and Planning A, 43(1), 126–145. https://doi.org/10.1068/a43133

Seppälä, T., Lipponen, J., Pirttilä-Backman, A., & Lipsanen, J. (2011). Reciprocity of trust in the supervisor–subordinate relationship: The mediating role of autonomy and the sense of power. European Journal of Work and Organizational Psychology, 20(6), 755–778. https://doi.org/10.1080/1359432x.2010.507353

Setty, P. (2021, November 16). The results of our global hybrid work survey. Google Workspace Blog. https://workspace.google.com/blog/future-of-work/insights-from-our-global-hybrid-work-survey

Shachaf, P., & Hara, N. (2005). Team effectiveness in virtual environments: An ecological approach. INFERRIS, P.A.G., S., (Ed.) Teaching and Learning with Virtual Teams. Idea Group Publishing.

Shqerat, E. A. (2022). The role of Self-Leadership and Psychological Empowerment of the faculty members at Tafila Technical University. International Education Studies, 15(1), 166. https://doi.org/10.5539/ies.v15n1p166

Sims, T. (2012, January 17). The feeling of being watched while you work - Platform magazine. Platform Magazine. https://platformmagazine.org/2012/01/17/the-feeling-of-being-watched-while-you-work/

Singh, P., Paleti, R., Jenkins, S. E., & Bhat, C. R. (2012). On modeling telecommuting behavior: option, choice, and frequency. Transportation, 40(2), 373–396. https://doi.org/10.1007/s11116-012-9429-2

Slocum, J.W., Sims, H.P. (1980). A typology for integrating technology, organization, and job design. Hum. Relat. 33, 193–212. https://doi.org/10.1177/001872678003300304

Smite, D., Christensen, E. L., Tell, P., & Russo, D. (2023). The Future Workplace: Characterizing the spectrum of hybrid work arrangements for software teams. IEEE Software, 40(2), 34–41. https://doi.org/10.1109/ms.2022.3230289

Smith, S. A., Patmos, A., & Pitts, M. J. (2018). Communication and teleworking: A study of communication channel satisfaction, personality, and job satisfaction for teleworking employees. International Journal of Business Communication, 55(1), 44–68. https://doi.org/10.1177/2329488415589101

Sokolic, D. (2022). REMOTE WORK AND HYBRID WORK ORGANIZATIONS. ResearchGate. https://www.researchgate.net/publication/359056200_REMOTE_WORK_AND_HYBRID_WORK_ORGANIZATIONS

Spector, P. E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. Hum. Relat. 39, 1005–1016. doi: 10.1177/001872678603901104

Spivack, A. J., & Milošević, I. (2018). Perceived location autonomy and work environment choice: the mediating influence of intrinsic motivation. The Journal of Applied Behavioral Science, 54(3), 325–348. https://doi.org/10.1177/0021886318764353

Standen, P., Daniels, K., and Lamond, D. (1999). The home as a workplace: Work–family interaction and psychological well-being in telework. J. Occup. Health Psychol. 4, 368–381. doi: 10.1037/1076-8998.4.4.368

Steel, B.S. And Warner, R.L. (1990). Job Satisfaction among Early Labor Force Participants: Unexpected Outcomes in Public and Private Sector Comparisons. Review of Public Personnel Administration, 10:3, pp. 4-22.

Stewart, G. L., Courtright, S. H., & Manz, C. C. (2010). Self-Leadership: A multilevel review. Journal of Management, 37(1), 185–222. https://doi.org/10.1177/0149206310383911

Stich, M. (2022). Making hybrid work work: a systematic literature review on hybrid working teams: eine systematische Literaturanalyse über hybride Arbeitsteams / submitted by Mario Stich, BSc. https://epub.jku.at/obvulihs/content/titleinfo/8258647hi

Strang, K. D. (2011). Leadership Substitutes and Personality Impact on Time and Quality in Virtual New Product Development Projects. Project Management Journal, 42(1), 73–90. https://doi.org/10.1002/pmj.20208

Sullivan, C. (2003). What's in a name? Definitions and conceptualisations of teleworking and homeworking. New Technology Work and Employment, 18(3), 158–165. https://doi.org/10.1111/1468-005x.00118

Susman, G.I. (1976). Autonomy at Work: A Sociotechnical Analysis of Participative Management. Praeger, New York.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, Vol. 2, 53-55.

Tetik, N. (2016). The effects of psychological empowerment on job satisfaction and job performance of tourist guides. International Journal of Academic Research in Business and Social Sciences, 6(2), 221-239. https://doi.org/10.6007/IJARBSS/v6-i2/2026

Thomas, K. B., & Velthouse, B. A. (1990). Cognition elements of empowerment: An “interpretive” model of intrinsic task motivation. Academy of Management Review, 15, 666-681.

Thompson, J. D. (1967). Organizations in action. New York: McGrawHill.

Tomczak, M., & Tomczak-Łukaszewska, E. (2014). The need to report effect size estimates revisited. An overview of some recommended measures of effect size. ResearchGate. https://www.researchgate.net/publication/303919832_The_need_to_report_effect_size_estimates_revisited_An_overview_of_some_recommended_measures_of_effect_size

Turetken, O., Jain, A., Quesenberry, B., & Ngwenyama, O. (2011). An empirical investigation of the impact of individual and work characteristics on telecommuting success. IEEE Transactions on Professional Communication, 54(1), 56–67. https://doi.org/10.1109/TPC.2010.2041387

Van Bijsterveldt, A., (278514). (n.d.). The effect of flexible working arrangements on employee well-being, moderated by social support (By Karianne Kalshoven & Rob Poell) [Thesis]. https://arno.uvt.nl/show.cgi?fid=136900

Van De Ven, A. H., Delbecq, A. L., & Koenig, R. (1976). Determinants of Coordination Modes within Organizations. American Sociological Review, 41(2), 322. https://doi.org/10.2307/2094477

Van Der Vegt, G. S., & Janssen, O. (2003). Joint Impact of Interdependence and Group Diversity on Innovation. Journal of Management, 29(5), 729–751. https://doi.org/10.1016/s0149-2063_03_00033-3

Van Hoorn, A. (2018). Trust and signals in workplace organization: Evidence from job autonomy differentials between immigrant groups. Oxford Economic Papers, 70(3), 591–612. https://doi.org/10.1093/oep/gpy012

Van Zoonen, W., Sivunen, A., & Blomqvist, K. (2023). Out of sight – Out of trust? An analysis of the mediating role of communication frequency and quality in the relationship between workplace isolation and trust. European Management Journal. https://doi.org/10.1016/j.emj.2023.04.006

Vanlessen, N., De Raedt, R., Koster, E. H. W., & Pourtois, G. (2016). Happy heart, smiling eyes: A systematic review of positive mood effects on broadening of visuospatial attention. Neuroscience & Biobehavioral Reviews/Neuroscience and Biobehavioral Reviews, 68, 816–837. https://doi.org/10.1016/j.neubiorev.2016.07.001

Vaquero Presa, M. (2018). Positive Psychology in the Workplace: The effects of Job Autonomy and Emotional Well-Being on Perceived Work-Life balance [Bachelot Thesis, Tilburg University]. https://arno.uvt.nl/show.cgi?fid=146448

Vartiainen, M., & Vanharanta, O. (2023). Hybrid work: Definition, origins, debates and outlook. ResearchGate. https://doi.org/10.13140/RG.2.2.12847.71844

Veltrop, D., Molleman, E., Hooghiemstra, R., & Van Ees, H. (2015). The relationship between tenure and outside director task involvement: a social identity perspective. Journal of Management, 44(2), 445–469. https://doi.org/10.1177/0149206315579510

Vidhyaa, B., & Ravichandran, M. (2022). A literature review on hybrid work model. International Journal of Research Publication and Reviews, 3(7).

Vitasek, K. (2022, November 8). Why collaboration yields improved productivity (And the science behind it). Forbes. https://www.forbes.com/sites/katevitasek/2022/03/08/why-collaboration-yields-improved-productivity-and-the-science-behind-it/

Voulon, T. J., Appel-Meulenbroek, R., Bergefurt, A. G. M., Arkesteijn, M. H., Hoekstra, B., & Jongens-Van der Schaaf, P. (2022). Professional isolation in the home workplace during the Covid-19 pandemic. Paper presented at 3rd Transdisciplinary Workplace Research Conference, Milan, Italy.

Walls, M., Safirova, E., Jiang, Y. (2007). What drives telecommuting? Relative impact of worker demographics, employer characteristics, and job types. Transp. Res. Rec. 111–120. https://doi.org/10.3141/2010-13.

Wang, M., Liu, S., Lee, J., & Wang, X. (2020). Leadership styles and employee well-being: A moderated mediation model of emotion regulation and work-family balance. International Journal of Environmental Research and Public Health, 17(1), 189.

Wendt, C., Adam, M., Benlian, A., & Kraus, S. (2021). Let's Connect to Keep the Distance: How SMEs Leverage Information and Communication Technologies to Address the COVID-19 Crisis. Information Systems Frontiers, 24(4), 1061–1079. https://doi.org/10.1007/s10796-021-10210-z

Westerman, J. W., & Yamamura, J. H. (2007). Generational preferences for work environment fit: effects on employee outcomes. Career Development International, 12(2), 150–161. https://doi.org/10.1108/13620430710733631

Whitener, E. M., Brodt, S. E., Korsgaard, M. A., & Werner, J. M. (1998). Managers as Initiators of Trust: An Exchange Relationship Framework for Understanding Managerial Trustworthy Behavior. The Academy of Management Review, 23(3), 513–530. https://doi.org/10.2307/259292

Wood, S., & De Menezes, L. M. (2011). High involvement management, high-performance work systems and well-being. International Journal of Human Resource Management, 22(7), 1586–1610. https://doi.org/10.1080/09585192.2011.561967

Wu, C., Davis, M., Collis, H., Hughes, H., & Fang, L. (2023). A diary study on location autonomy and employee mental distress: the mediating role of task-environment fit. Personnel Review. https://doi.org/10.1108/pr-01-2023-0011

Yunas, S and Mostafa, AMS. (2022). Flexible working practices and job-related anxiety: Examining the roles of trust in management and job autonomy. Economic and Industrial Democracy, 43 (3). pp. 1340-1368. ISSN 0143-831X

Zadra, J. R., & Clore, G. L. (2011). Emotion and perception: the role of affective information. Wiley Interdisciplinary Reviews. Cognitive Science, 2(6), 676–685. https://doi.org/10.1002/wcs.147

Zhang, S., Moeckel, R., Moreno, A. T., Shen, B., & Gao, J. (2020). A work-life conflict perspective on telework. Transportation Research Part A-policy and Practice, 141, 51–68. https://doi.org/10.1016/j.tra.2020.09.007

Zhang, X. M., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. Academy of Management Journal, 53, 107-128

Zweig, D. & Webster, J. (2004). What are we measuring? An examination of the relationships between the big-five personality traits, goal orientation, and performance intentions. Personality and Individual Differences, 36, 1693-1708.

Appendix A. Workplace satisfaction aspects

Home workplace satisfaction

- Greenery
- Daylight
- Illumination on workspace
- Ventilation possibilities
- Temperature
- Acoustics (sound attenuation, and reflection of sound)
- Atmosphere and appearance
- View
- Comfort
- Functionality of workspace (including dimension and layout of workplace)

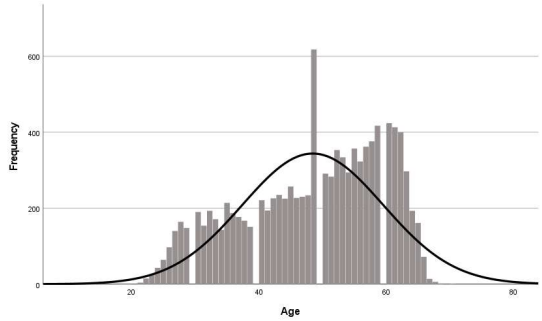
Office workplace satisfaction

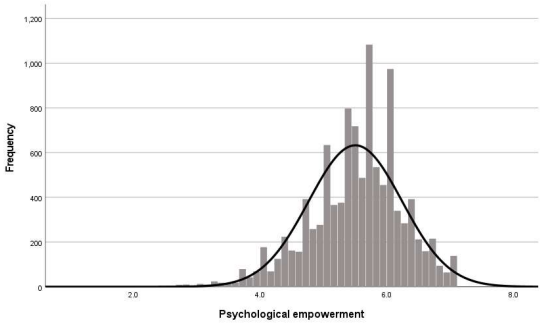
- Greenery
- Daylight
- Illumination on workspace
- Ventilation possibilities
- Temperature
- Acoustics (sound attenuation, and reflection of sound)
- Atmosphere and appearance
- View
- Comfort
- Functionality of workspace (including dimension and layout of workplace)
- Layout of immediate work environment
- Number of available workstations
- Range of different types of available workstations
- Number of available places for meeting and consultation in the immediate work environment
- Supply of different space types for meeting and consultation in the immediate work environment

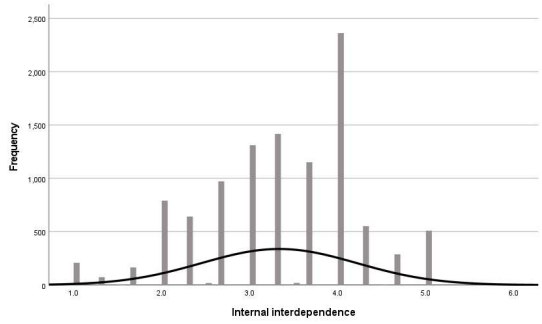
Appendix B. Replacement methods for missing values

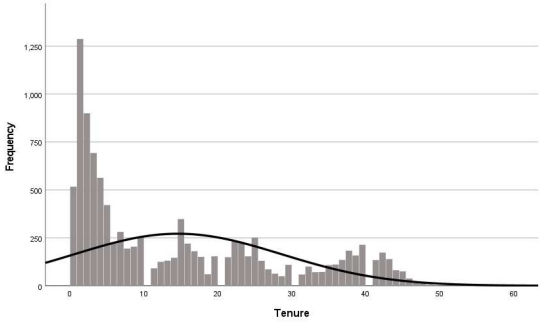
Variable	Missing Values Replacement Method
Age	Series Mean
Work hours	
Tenure	
Location autonomy	
Horizontal trust	
Education level	Series Median
Distance to work	
Gender	
Household composition	
Work location	Replaced with 0
Performed activities	
Support from leadership & support from colleagues	If Cronbach's Alpha was above 0.7, average of all items within a variable was taken, only if the participants responded to at least half the items. If the participants did not respond to at least half the items, missing values were replaced with the series mean.
Professional isolation & work-life conflict	
Internal & external interdependence	
Home & office workplace satisfaction	
Psychological empowerment	
Vertical trust	
Personality	
Nature of job	Mixed approach. Please refer back to page 41
Leadership characteristics	

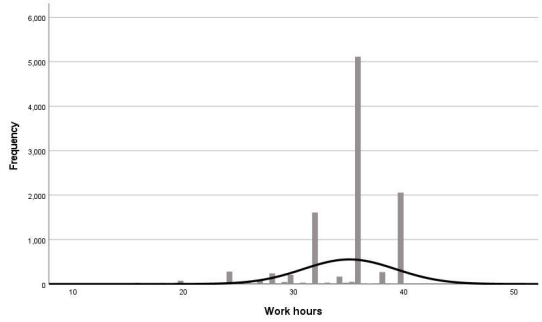
Appendix C. Distribution of Likert-scale and continuous variables

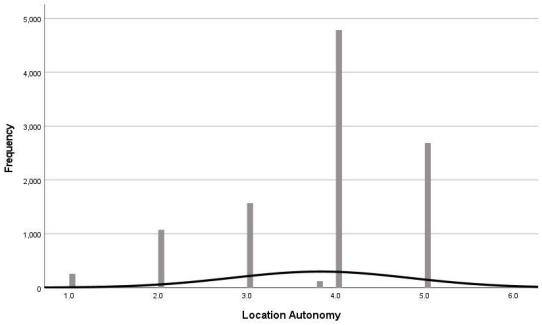


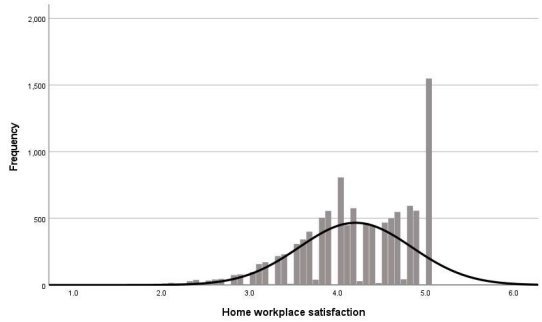


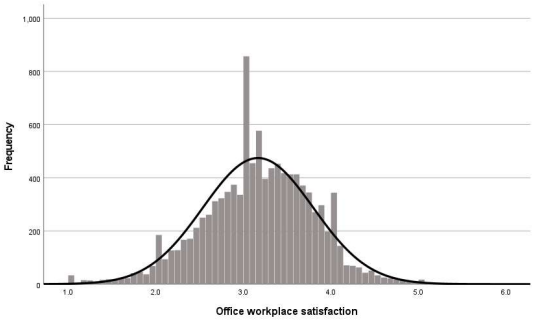


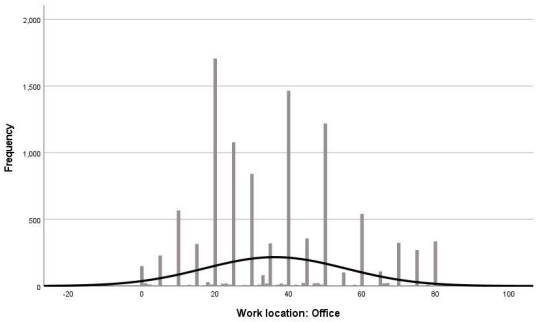


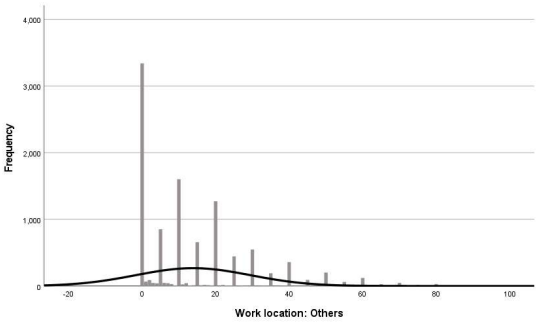


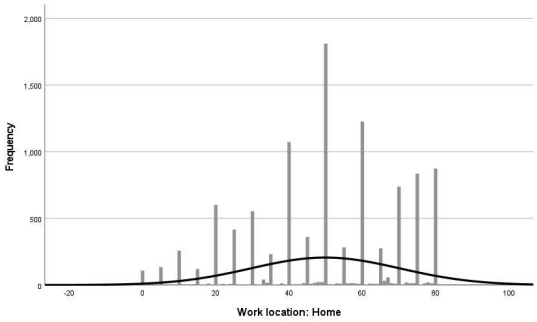


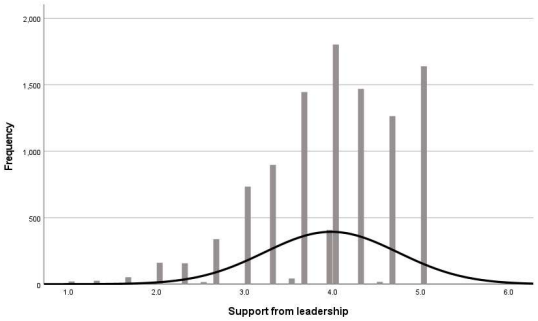


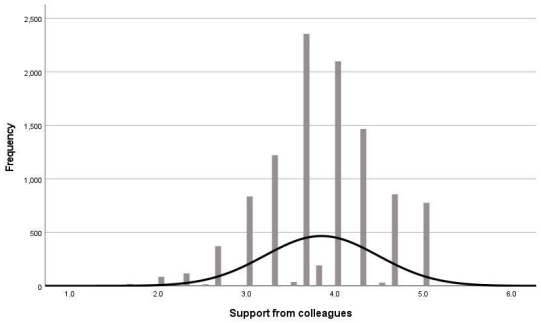


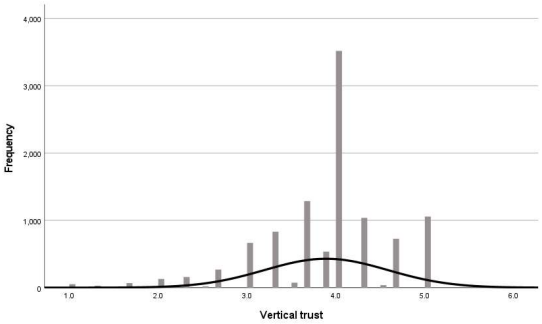

Frequency
Work location: Office

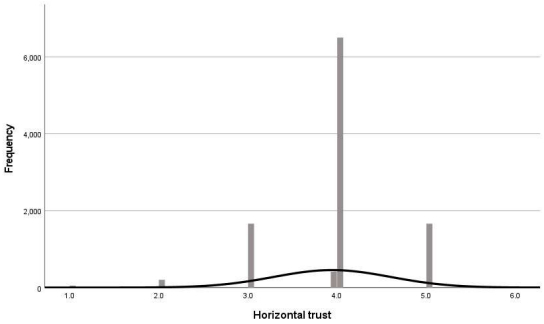

Frequency
Work location: Others

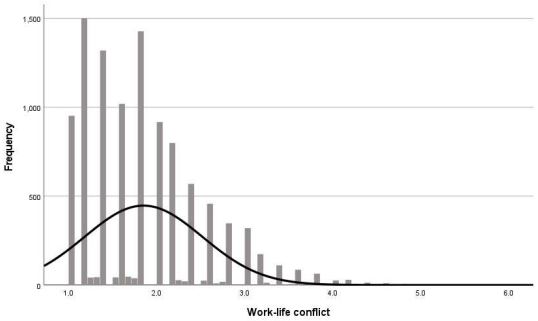

Frequency
Work location: Home

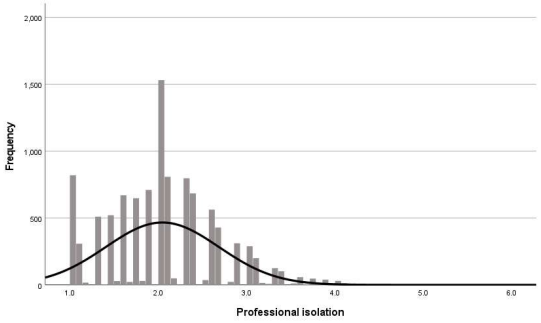

Frequency
Support from leadership


Frequency
Support from colleagues


Frequency
Vertical trust


Frequency
Horizontal trust


Frequency
Work-life conflict


Frequency
Professional isolation

Appendix D. Post hoc analysis tables - Bivariate tests

A.D.1. Personal and work characteristics, and work location choice

A.D.1.1. Personal characteristics and work location choice

Education Level

Multiple Comparisons

Dependent Variable: Office

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Primary, secondary and others	Higher vocational education	2.860*	0.517	0.000	1.65	4.07
		Scientific education	0.913	0.522	0.187	-0.31	2.14
	Higher vocational education	Primary, secondary and others	-2.860*	0.517	0.000	-4.07	-1.65
		Scientific education	-1.947*	0.419	0.000	-2.93	-0.96
	Scientific education	Primary, secondary and others	-0.913	0.522	0.187	-2.14	0.31
		Higher vocational education	1.947*	0.419	0.000	0.96	2.93

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Home

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Primary, secondary and others	Higher vocational education	0.410	0.568	0.751	-0.92	1.74
		Scientific education	2.481*	0.563	0.000	1.16	3.80
	Higher vocational education	Primary, secondary and others	-0.410	0.568	0.751	-1.74	0.92
		Scientific education	2.071*	0.430	0.000	1.06	3.08
	Scientific education	Primary, secondary and others	-2.481*	0.563	0.000	-3.80	-1.16
		Higher vocational education	-2.071*	0.430	0.000	-3.08	-1.06

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Others

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Primary, secondary and others	Higher vocational education	-3.26978*	0.40659	0.000	-4.2230	-2.3166
		Scientific education	-3.39370*	0.39891	0.000	-4.3289	-2.4585
	Higher vocational education	Primary, secondary and others	3.26978*	0.40659	0.000	2.3166	4.2230
		Scientific education	-0.12392	0.34372	0.931	-0.9296	0.6818
	Scientific education	Primary, secondary and others	3.39370*	0.39891	0.000	2.4585	4.3289
		Higher vocational education	0.12392	0.34372	0.931	-0.6818	0.9296

*. The mean difference is significant at the 0.05 level.

Household Composition

Multiple Comparisons

Dependent Variable: Office

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	-0.107	0.980	1.000	-2.78	2.57
		Couple without children living at home	2.065*	0.599	0.005	0.43	3.70
		Couple with children living at home	1.932*	0.589	0.009	0.33	3.54
		Others	-4.397*	1.297	0.007	-7.95	-0.84
	Single-parent household with children living at home	Single household	0.107	0.980	1.000	-2.57	2.78
		Couple without children living at home	2.173	0.891	0.106	-0.26	4.61
		Couple with children living at home	2.039	0.884	0.144	-0.38	4.46
		Others	-4.289*	1.455	0.027	-8.27	-0.31
	Couple without children living at home	Single household	-2.065*	0.599	0.005	-3.70	-0.43
		Single-parent household with children living at home	-2.173	0.891	0.106	-4.61	0.26
		Couple with children living at home	-0.133	0.425	0.998	-1.29	1.03
		Others	-6.462*	1.231	0.000	-9.84	-3.08
	Couple with children living at home	Single household	-1.932*	0.589	0.009	-3.54	-0.33
		Single-parent household with children living at home	-2.039	0.884	0.144	-4.46	0.38
		Couple without children living at home	0.133	0.425	0.998	-1.03	1.29
		Others	-6.329*	1.226	0.000	-9.69	-2.96
	Others	Single household	4.397*	1.297	0.007	0.84	7.95
		Single-parent household with children living at home	4.289*	1.455	0.027	0.31	8.27
		Couple without children living at home	6.462*	1.231	0.000	3.08	9.84
		Couple with children living at home	6.329*	1.226	0.000	2.96	9.69

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Home

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Tukey HSD	Single household	Single-parent household with children living at home	0.758	1.003	0.943	-1.98	3.49
		Couple without children living at home	-0.398	0.616	0.967	-2.08	1.28
		Couple with children living at home	1.001	0.607	0.467	-0.66	2.66
		Others	2.414	1.380	0.403	-1.35	6.18

	Single-parent household with children living at home	Single household	-0.758	1.003	0.943	-3.49	1.98
		Couple without children living at home	-1.156	0.916	0.715	-3.66	1.34
		Couple with children living at home	0.243	0.911	0.999	-2.24	2.73
		Others	1.657	1.538	0.818	-2.54	5.85
	Couple without children living at home	Single household	0.398	0.616	0.967	-1.28	2.08
		Single-parent household with children living at home	1.156	0.916	0.715	-1.34	3.66
		Couple with children living at home	1.399*	0.450	0.016	0.17	2.63
		Others	2.812	1.318	0.206	-0.78	6.41
	Couple with children living at home	Single household	-1.001	0.607	0.467	-2.66	0.66
		Single-parent household with children living at home	-0.243	0.911	0.999	-2.73	2.24
		Couple without children living at home	-1.399*	0.450	0.016	-2.63	-0.17
		Others	1.414	1.314	0.819	-2.17	5.00
	Others	Single household	-2.414	1.380	0.403	-6.18	1.35
		Single-parent household with children living at home	-1.657	1.538	0.818	-5.85	2.54
		Couple without children living at home	-2.812	1.318	0.206	-6.41	0.78
		Couple with children living at home	-1.414	1.314	0.819	-5.00	2.17

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Others

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	-0.65042	0.72768	0.899	-2.6389	1.3381
		Couple without children living at home	-1.66760*	0.46005	0.003	-2.9233	-0.4119
		Couple with children living at home	-2.93274*	0.45758	0.000	-4.1817	-1.6838
		Others	1.98239	0.85440	0.141	-0.3591	4.3239
	Single-parent household with children living at home	Single household	0.65042	0.72768	0.899	-1.3381	2.6389
		Couple without children living at home	-1.01718	0.66576	0.545	-2.8376	0.8032
		Couple with children living at home	-2.28232*	0.66406	0.006	-4.0981	-0.4665
		Others	2.63280	0.98061	0.057	-0.0505	5.3162
	Couple without children living at home	Single household	1.66760*	0.46005	0.003	0.4119	2.9233
		Single-parent household with children living at home	1.01718	0.66576	0.545	-0.8032	2.8376
		Couple with children living at home	-1.26514*	0.35086	0.003	-2.2224	-0.3079
		Others	3.64999*	0.80233	0.000	1.4484	5.8515
		Single household	2.93274*	0.45758	0.000	1.6838	4.1817

	Couple with children living at home	Single-parent household with children living at home	2.28232*	0.66406	0.006	0.4665	4.0981
		Couple without children living at home	1.26514*	0.35086	0.003	0.3079	2.2224
		Others	4.91513*	0.80092	0.000	2.7174	7.1129
	Others	Single household	-1.98239	0.85440	0.141	-4.3239	0.3591
		Single-parent household with children living at home	-2.63280	0.98061	0.057	-5.3162	0.0505
		Couple without children living at home	-3.64999*	0.80233	0.000	-5.8515	-1.4484
		Couple with children living at home	-4.91513*	0.80092	0.000	-7.1129	-2.7174

*. The mean difference is significant at the 0.05 level.

A.D.1.2. Work characteristics and work location choice

Distance to work

Multiple Comparisons

Dependent Variable: Office

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	4.714*	0.453	0.000	3.65	5.78
		>60 minutes	11.358*	0.477	0.000	10.24	12.48
	31-60 minutes	Up to 30 minutes	-4.714*	0.453	0.000	-5.78	-3.65
		>60 minutes	6.644*	0.428	0.000	5.64	7.65
	>60 minutes	Up to 30 minutes	-11.358*	0.477	0.000	-12.48	-10.24
		31-60 minutes	-6.644*	0.428	0.000	-7.65	-5.64

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Home

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	-2.848*	0.479	0.000	-3.97	-1.73
		>60 minutes	-7.363*	0.514	0.000	-8.57	-6.16
	31-60 minutes	Up to 30 minutes	2.848*	0.479	0.000	1.73	3.97
		>60 minutes	-4.515*	0.465	0.000	-5.60	-3.42
	>60 minutes	Up to 30 minutes	7.363*	0.514	0.000	6.16	8.57
		31-60 minutes	4.515*	0.465	0.000	3.42	5.60

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Others

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	-1.86571*	0.34901	0.000	-2.6838	-1.0476
		>60 minutes	-3.99466*	0.40165	0.000	-4.9363	-3.0531
	31-60 minutes	Up to 30 minutes	1.86571*	0.34901	0.000	1.0476	2.6838
		>60 minutes	-2.12894*	0.38875	0.000	-3.0403	-1.2176

	>60 minutes	Up to 30 minutes	3.99466*	0.40165	0.000	3.0531	4.9363
		31-60 minutes	2.12894*	0.38875	0.000	1.2176	3.0403

*. The mean difference is significant at the 0.05 level.

Performed Activities

Multiple Comparisons

Dependent Variable: Office

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	-6.577*	0.570	0.000	-8.04	-5.11
		3	-3.769*	0.548	0.000	-5.18	-2.36
		4	-6.657*	0.471	0.000	-7.87	-5.45
	2	1	6.577*	0.570	0.000	5.11	8.04
		3	2.807*	0.614	0.000	1.23	4.38
		4	-0.080	0.547	0.999	-1.49	1.32
	3	1	3.769*	0.548	0.000	2.36	5.18
		2	-2.807*	0.614	0.000	-4.38	-1.23
		4	-2.887*	0.524	0.000	-4.23	-1.54
	4	1	6.657*	0.471	0.000	5.45	7.87
		2	0.080	0.547	0.999	-1.32	1.49
		3	2.887*	0.524	0.000	1.54	4.23

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Home

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	4.582*	0.609	0.000	3.02	6.15
		3	10.064*	0.546	0.000	8.66	11.47
		4	10.955*	0.488	0.000	9.70	12.21
	2	1	-4.582*	0.609	0.000	-6.15	-3.02
		3	5.482*	0.636	0.000	3.85	7.12
		4	6.373*	0.587	0.000	4.86	7.88
	3	1	-10.064*	0.546	0.000	-11.47	-8.66
		2	-5.482*	0.636	0.000	-7.12	-3.85
		4	0.891	0.522	0.320	-0.45	2.23
	4	1	-10.955*	0.488	0.000	-12.21	-9.70
		2	-6.373*	0.587	0.000	-7.88	-4.86
		3	-0.891	0.522	0.320	-2.23	0.45

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Others

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	1.995*	0.408	0.000	0.95	3.04
		3	-6.294*	0.448	0.000	-7.45	-5.14
		4	-4.298*	0.375	0.000	-5.26	-3.34
	2	1	-1.995*	0.408	0.000	-3.04	-0.95
		3	-8.289*	0.476	0.000	-9.51	-7.07
		4	-6.293*	0.408	0.000	-7.34	-5.24
	3	1	6.294*	0.448	0.000	5.14	7.45

		2	8.289*	0.476	0.000	7.07	9.51
		4	1.996*	0.448	0.000	0.84	3.15
	4	1	4.298*	0.375	0.000	3.34	5.26
		2	6.293*	0.408	0.000	5.24	7.34
		3	-1.996*	0.448	0.000	-3.15	-0.84

*. The mean difference is significant at the 0.05 level.

A.D.2. Work location choice and support, trust, and social well-being

Multiple Comparisons

Dependent Variable: Support from Colleagues

	(I) Work Location Cluster	(J) Work Location Cluster	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	0.02947	0.01501	0.202	-0.0091	0.0680
		3	.05854*	0.01930	0.013	0.0089	0.1082
		4	0.03229	0.01892	0.320	-0.0163	0.0809
	2	1	-0.02947	0.01501	0.202	-0.0680	0.0091
		3	0.02907	0.01950	0.443	-0.0211	0.0792
		4	0.00283	0.01913	0.999	-0.0463	0.0520
	3	1	-.05854*	0.01930	0.013	-0.1082	-0.0089
		2	-0.02907	0.01950	0.443	-0.0792	0.0211
		4	-0.02625	0.02265	0.653	-0.0845	0.0320
	4	1	-0.03229	0.01892	0.320	-0.0809	0.0163
		2	-0.00283	0.01913	0.999	-0.0520	0.0463
		3	0.02625	0.02265	0.653	-0.0320	0.0845

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Support from Leadership

	(I) Work Location Cluster	(J) Work Location Cluster	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	0.00204	0.01758	0.999	-0.0431	0.0472
		3	.07676*	0.02351	0.006	0.0163	0.1372
		4	.07724*	0.02260	0.004	0.0192	0.1353
	2	1	-0.00204	0.01758	0.999	-0.0472	0.0431
		3	.07472*	0.02355	0.008	0.0142	0.1353
		4	.07521*	0.02263	0.005	0.0170	0.1334
	3	1	-.07676*	0.02351	0.006	-0.1372	-0.0163
		2	-.07472*	0.02355	0.008	-0.1353	-0.0142
		4	0.00048	0.02749	1.000	-0.0702	0.0712
	4	1	-.07724*	0.02260	0.004	-0.1353	-0.0192
		2	-.07521*	0.02263	0.005	-0.1334	-0.0170
		3	-0.00048	0.02749	1.000	-0.0712	0.0702

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Vertical Trust

	(I) Work Location Cluster	(J) Work Location Cluster	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	0.01841	0.01614	0.664	-0.0231	0.0599
		3	.06867*	0.02116	0.007	0.0143	0.1231

		4	.07286*	0.02090	0.003	0.0191	0.1266
	2	1	-0.01841	0.01614	0.664	-0.0599	0.0231
		3	0.05026	0.02135	0.087	-0.0046	0.1051
		4	.05445*	0.02109	0.049	0.0002	0.1087
	3	1	-.06867*	0.02116	0.007	-0.1231	-0.0143
		2	-0.05026	0.02135	0.087	-0.1051	0.0046
		4	0.00419	0.02515	0.998	-0.0604	0.0688
	4	1	-.07286*	0.02090	0.003	-0.1266	-0.0191
		2	-.05445*	0.02109	0.049	-0.1087	-0.0002
		3	-0.00419	0.02515	0.998	-0.0688	0.0604

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Horizontal Trust

	(I) Work Location Cluster	(J) Work Location Cluster	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Games-Howell	1	2	-0.0101	0.0151	0.907	-0.049	0.029
		3	.0793*	0.0199	0.000	0.028	0.131
		4	.0914*	0.0203	0.000	0.039	0.144
	2	1	0.0101	0.0151	0.907	-0.029	0.049
		3	.0894*	0.0200	0.000	0.038	0.141
		4	.1015*	0.0204	0.000	0.049	0.154
	3	1	-.0793*	0.0199	0.000	-0.131	-0.028
		2	-.0894*	0.0200	0.000	-0.141	-0.038
		4	0.0121	0.0242	0.960	-0.050	0.074
	4	1	-.0914*	0.0203	0.000	-0.144	-0.039
		2	-.1015*	0.0204	0.000	-0.154	-0.049
		3	-0.0121	0.0242	0.960	-0.074	0.050

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Professional Isolation

	(I) Work Location Cluster	(J) Work Location Cluster	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	1	2	.04064*	0.01496	0.033	0.0022	0.0791
		3	-.07305*	0.01974	0.001	-0.1238	-0.0223
		4	-0.03031	0.01887	0.375	-0.0788	0.0182
	2	1	-.04064*	0.01496	0.033	-0.0791	-0.0022
		3	-.11369*	0.01965	0.000	-0.1642	-0.0632
		4	-.07095*	0.01878	0.001	-0.1192	-0.0227
	3	1	.07305*	0.01974	0.001	0.0223	0.1238
		2	.11369*	0.01965	0.000	0.0632	0.1642
		4	0.04274	0.02277	0.238	-0.0158	0.1012
	4	1	0.03031	0.01887	0.375	-0.0182	0.0788
		2	.07095*	0.01878	0.001	0.0227	0.1192
		3	-0.04274	0.02277	0.238	-0.1012	0.0158

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Work-life Conflict

	(I) Work Location Cluster	(J) Work Location Cluster	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Games-Howell	1	2	.05205*	0.01525	0.004	0.0129	0.0912
		3	-.10953*	0.02094	0.000	-0.1634	-0.0557

	4	-.07223*	0.02035	0.002	-0.1245	-0.0199
2	1	-.05205*	0.01525	0.004	-0.0912	-0.0129
	3	-.16158*	0.02088	0.000	-0.2153	-0.1079
	4	-.12428*	0.02028	0.000	-0.1764	-0.0721
3	1	.10953*	0.02094	0.000	0.0557	0.1634
	2	.16158*	0.02088	0.000	0.1079	0.2153
	4	0.03731	0.02484	0.437	-0.0266	0.1012
4	1	.07223*	0.02035	0.002	0.0199	0.1245
	2	.12428*	0.02028	0.000	0.0721	0.1764
	3	-0.03731	0.02484	0.437	-0.1012	0.0266

*. The mean difference is significant at the 0.05 level.

A.D.3. Personal and work characteristics on support, trust, and social well-being

A.D.3.1. Personal characteristics on support, trust, and social well-being

Education Level

Multiple Comparisons

Dependent Variable: Support from Leadership

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Tukey HSD	Primary, secondary and others	Higher vocational education	.06000*	0.01962	0.006	0.0140	0.1060
		Scientific education	.11046*	0.02001	0.000	0.0636	0.1574
	Higher vocational education	Primary, secondary and others	-.06000*	0.01962	0.006	-0.1060	-0.0140
		Scientific education	.05046*	0.01676	0.007	0.0112	0.0898
	Scientific education	Primary, secondary and others	-.11046*	0.02001	0.000	-0.1574	-0.0636
		Higher vocational education	-.05046*	0.01676	0.007	-0.0898	-0.0112

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Support from Colleagues

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games - Howell	Primary, secondary and others	Higher vocational education	0.02350	0.01730	0.363	-0.0171	0.0641
		Scientific education	.08303*	0.01706	0.000	0.0430	0.1230
	Higher vocational education	Primary, secondary and others	-0.02350	0.01730	0.363	-0.0641	0.0171
		Scientific education	.05953*	0.01387	0.000	0.0270	0.0921
	Scientific education	Primary, secondary and others	-.08303*	0.01706	0.000	-0.1230	-0.0430

		Higher vocational education	-.05953*	0.01387	0.000	-0.0921	-0.0270

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Vertical Trust

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Games - Howell	Primary, secondary and others	Higher vocational education	-0.00885	0.01784	0.873	-0.0507	0.0330
		Scientific education	-0.03872	0.01794	0.079	-0.0808	0.0033
	Higher vocational education	Primary, secondary and others	0.00885	0.01784	0.873	-0.0330	0.0507
		Scientific education	-0.02987	0.01549	0.131	-0.0662	0.0064
	Scientific education	Primary, secondary and others	0.03872	0.01794	0.079	-0.0033	0.0808
		Higher vocational education	0.02987	0.01549	0.131	-0.0064	0.0662

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Horizontal Trust

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Games - Howell	Primary, secondary and others	Higher vocational education	-.0755*	0.0176	0.000	-0.117	-0.034
		Scientific education	-.1164*	0.0173	0.000	-0.157	-0.076
	Higher vocational education	Primary, secondary and others	.0755*	0.0176	0.000	0.034	0.117
		Scientific education	-.0409*	0.0143	0.012	-0.074	-0.007
	Scientific education	Primary, secondary and others	.1164*	0.0173	0.000	0.076	0.157
		Higher vocational education	.0409*	0.0143	0.012	0.007	0.074

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Professional Isolation

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Primary, secondary and others	Higher vocational education	-.12479*	0.01647	0.000	-0.1634	-0.0862
		Scientific education	-.20321*	0.01679	0.000	-0.2426	-0.1639
	Higher vocational education	Primary, secondary and others	.12479*	0.01647	0.000	0.0862	0.1634

		Scientific education	-.07843*	0.01407	0.000	-0.1114	-0.0454
	Scientific education	Primary, secondary and others	.20321*	0.01679	0.000	0.1639	0.2426
		Higher vocational education	.07843*	0.01407	0.000	0.0454	0.1114

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Work-life Conflict

	(I) Education Level	(J) Education Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games - Howell	Primary, secondary and others	Higher vocational education	-.09400*	0.01628	0.000	-0.1322	-0.0558
		Scientific education	-.24565*	0.01715	0.000	-0.2858	-0.2055
	Higher vocational education	Primary, secondary and others	.09400*	0.01628	0.000	0.0558	0.1322
		Scientific education	-.15165*	0.01497	0.000	-0.1867	-0.1166
	Scientific education	Primary, secondary and others	.24565*	0.01715	0.000	0.2055	0.2858
		Higher vocational education	.15165*	0.01497	0.000	0.1166	0.1867

*. The mean difference is significant at the 0.05 level.

Household Composition

Multiple Comparisons

Dependent Variable: Support from Leadership

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	-0.01540	0.03971	0.995	-0.1239	0.0931
		Couple without children living at home	-0.05922	0.02320	0.080	-0.1225	0.0041
		Couple with children living at home	-.06573*	0.02262	0.030	-0.1275	-0.0040
		Others	-0.02430	0.05387	0.991	-0.1721	0.1235
	Single-parent household with children living at home	Single household	0.01540	0.03971	0.995	-0.0931	0.1239
		Couple without children living at home	-0.04382	0.03667	0.754	-0.1441	0.0565
		Couple with children living at home	-0.05034	0.03631	0.637	-0.1496	0.0490
		Others	-0.00890	0.06090	1.000	-0.1756	0.1578
	Couple without children living at home	Single household	0.05922	0.02320	0.080	-0.0041	0.1225
		Single-parent household with children living at home	0.04382	0.03667	0.754	-0.0565	0.1441

		Couple with children living at home	-0.00652	0.01672	0.995	-0.0521	0.0391
		Others	0.03492	0.05167	0.962	-0.1070	0.1768
	Couple with children living at home	Single household	.06573*	0.02262	0.030	0.0040	0.1275
		Single-parent household with children living at home	0.05034	0.03631	0.637	-0.0490	0.1496
		Couple without children living at home	0.00652	0.01672	0.995	-0.0391	0.0521
		Others	0.04143	0.05142	0.929	-0.0997	0.1826
	Others	Single household	0.02430	0.05387	0.991	-0.1235	0.1721
		Single-parent household with children living at home	0.00890	0.06090	1.000	-0.1578	0.1756
		Couple without children living at home	-0.03492	0.05167	0.962	-0.1768	0.1070
		Couple with children living at home	-0.04143	0.05142	0.929	-0.1826	0.0997

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Support from Colleagues

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	-0.03205	0.03428	0.883	-0.1257	0.0616
		Couple without children living at home	-.05486*	0.01992	0.047	-0.1092	-0.0005
		Couple with children living at home	-.07266*	0.01949	0.002	-0.1259	-0.0194
		Others	-.17283*	0.04443	0.001	-0.2947	-0.0510
	Single-parent household with children living at home	Single household	0.03205	0.03428	0.883	-0.0616	0.1257
		Couple without children living at home	-0.02280	0.03149	0.951	-0.1089	0.0633
		Couple with children living at home	-0.04061	0.03122	0.691	-0.1260	0.0448
		Others	-.14078*	0.05068	0.045	-0.2795	-0.0020
	Couple without children living at home	Single household	.05486*	0.01992	0.047	0.0005	0.1092
		Single-parent household with children living at home	0.02280	0.03149	0.951	-0.0633	0.1089
		Couple with children living at home	-0.01780	0.01402	0.710	-0.0561	0.0204
		Others	-.11797*	0.04231	0.045	-0.2341	-0.0018
	Couple with children living at home	Single household	.07266*	0.01949	0.002	0.0194	0.1259
		Single-parent household with children living at home	0.04061	0.03122	0.691	-0.0448	0.1260

		Couple without children living at home	0.01780	0.01402	0.710	-0.0204	0.0561
		Others	-0.10017	0.04211	0.124	-0.2158	0.0155
	Others	Single household	.17283*	0.04443	0.001	0.0510	0.2947
		Single-parent household with children living at home	.14078*	0.05068	0.045	0.0020	0.2795
		Couple without children living at home	.11797*	0.04231	0.045	0.0018	0.2341
		Couple with children living at home	0.10017	0.04211	0.124	-0.0155	0.2158

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Vertical Trust

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	-0.00081	0.03607	1.000	-0.0994	0.0978
		Couple without children living at home	-.05917*	0.02153	0.048	-0.1179	-0.0004
		Couple with children living at home	-.07188*	0.02097	0.006	-0.1291	-0.0146
		Others	-0.05106	0.04924	0.838	-0.1861	0.0840
	Single-parent household with children living at home	Single household	0.00081	0.03607	1.000	-0.0978	0.0994
		Couple without children living at home	-0.05836	0.03310	0.396	-0.1489	0.0322
		Couple with children living at home	-0.07108	0.03274	0.192	-0.1606	0.0185
		Others	-0.05025	0.05528	0.893	-0.2016	0.1011
	Couple without children living at home	Single household	.05917*	0.02153	0.048	0.0004	0.1179
		Single-parent household with children living at home	0.05836	0.03310	0.396	-0.0322	0.1489
		Couple with children living at home	-0.01271	0.01532	0.921	-0.0545	0.0291
		Others	0.00811	0.04711	1.000	-0.1212	0.1374
	Couple with children living at home	Single household	.07188*	0.02097	0.006	0.0146	0.1291
		Single-parent household with children living at home	0.07108	0.03274	0.192	-0.0185	0.1606
		Couple without children living at home	0.01271	0.01532	0.921	-0.0291	0.0545
		Others	0.02082	0.04685	0.992	-0.1078	0.1495
	Others	Single household	0.05106	0.04924	0.838	-0.0840	0.1861

		Single-parent household with children living at home	0.05025	0.05528	0.893	-0.1011	0.2016
		Couple without children living at home	-0.00811	0.04711	1.000	-0.1374	0.1212
		Couple with children living at home	-0.02082	0.04685	0.992	-0.1495	0.1078

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Horizontal Trust

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	0.0317	0.0341	0.886	-0.062	0.125
		Couple without children living at home	-.0624*	0.0202	0.017	-0.117	-0.007
		Couple with children living at home	-0.0403	0.0198	0.250	-0.094	0.014
		Others	-0.0368	0.0516	0.954	-0.178	0.105
	Single-parent household with children living at home	Single household	-0.0317	0.0341	0.886	-0.125	0.062
		Couple without children living at home	-.0941*	0.0313	0.023	-0.180	-0.009
		Couple with children living at home	-0.0720	0.0310	0.140	-0.157	0.013
		Others	-0.0685	0.0569	0.750	-0.224	0.087
	Couple without children living at home	Single household	.0624*	0.0202	0.017	0.007	0.117
		Single-parent household with children living at home	.0941*	0.0313	0.023	0.009	0.180
		Couple with children living at home	0.0221	0.0144	0.539	-0.017	0.061
		Others	0.0256	0.0498	0.986	-0.111	0.162
	Couple with children living at home	Single household	0.0403	0.0198	0.250	-0.014	0.094
		Single-parent household with children living at home	0.0720	0.0310	0.140	-0.013	0.157
		Couple without children living at home	-0.0221	0.0144	0.539	-0.061	0.017
		Others	0.0035	0.0497	1.000	-0.133	0.140
	Others	Single household	0.0368	0.0516	0.954	-0.105	0.178
		Single-parent household with children living at home	0.0685	0.0569	0.750	-0.087	0.224

	Couple without children living at home	-0.0256	0.0498	0.986	-0.162	0.111
	Couple with children living at home	-0.0035	0.0497	1.000	-0.140	0.133

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Professional Isolation

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	0.07861	0.03280	0.117	-0.0110	0.1682
		Couple without children living at home	.11649*	0.02041	0.000	0.0608	0.1722
		Couple with children living at home	.09088*	0.02028	0.000	0.0355	0.1462
		Others	0.04185	0.04165	0.853	-0.0723	0.1560
	Single-parent household with children living at home	Single household	-0.07861	0.03280	0.117	-0.1682	0.0110
		Couple without children living at home	0.03788	0.02931	0.696	-0.0423	0.1180
		Couple with children living at home	0.01227	0.02921	0.993	-0.0676	0.0922
		Others	-0.03677	0.04666	0.934	-0.1645	0.0909
	Couple without children living at home	Single household	-.11649*	0.02041	0.000	-0.1722	-0.0608
		Single-parent household with children living at home	-0.03788	0.02931	0.696	-0.1180	0.0423
		Couple with children living at home	-0.02561	0.01395	0.353	-0.0637	0.0124
		Others	-0.07464	0.03896	0.311	-0.1816	0.0323
	Couple with children living at home	Single household	-.09088*	0.02028	0.000	-0.1462	-0.0355
		Single-parent household with children living at home	-0.01227	0.02921	0.993	-0.0922	0.0676
		Couple without children living at home	0.02561	0.01395	0.353	-0.0124	0.0637
		Others	-0.04904	0.03889	0.715	-0.1558	0.0577
	Others	Single household	-0.04185	0.04165	0.853	-0.1560	0.0723
		Single-parent household with children living at home	0.03677	0.04666	0.934	-0.0909	0.1645
		Couple without children living at home	0.07464	0.03896	0.311	-0.0323	0.1816
		Couple with children living at home	0.04904	0.03889	0.715	-0.0577	0.1558

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Work-life Conflict

	(I) Household Composition	(J) Household Composition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Games-Howell	Single household	Single-parent household with children living at home	-0.04957	0.03385	0.586	-0.1421	0.0429
		Couple without children living at home	0.04756	0.02125	0.166	-0.0104	0.1056
		Couple with children living at home	-.06282*	0.02127	0.026	-0.1209	-0.0048
		Others	0.01197	0.04649	0.999	-0.1155	0.1394
	Single-parent household with children living at home	Single household	0.04957	0.03385	0.586	-0.0429	0.1421
		Couple without children living at home	.09713*	0.03006	0.011	0.0149	0.1794
		Couple with children living at home	-0.01325	0.03008	0.992	-0.0955	0.0690
		Others	0.06154	0.05112	0.749	-0.0785	0.2015
	Couple without children living at home	Single household	-0.04756	0.02125	0.166	-0.1056	0.0104
		Single-parent household with children living at home	-.09713*	0.03006	0.011	-0.1794	-0.0149
		Couple with children living at home	-.11039*	0.01450	0.000	-0.1500	-0.0708
		Others	-0.03560	0.04381	0.927	-0.1559	0.0847
	Couple with children living at home	Single household	.06282*	0.02127	0.026	0.0048	0.1209
		Single-parent household with children living at home	0.01325	0.03008	0.992	-0.0690	0.0955
		Couple without children living at home	.11039*	0.01450	0.000	0.0708	0.1500
		Others	0.07479	0.04382	0.431	-0.0455	0.1951
	Others	Single household	-0.01197	0.04649	0.999	-0.1394	0.1155
		Single-parent household with children living at home	-0.06154	0.05112	0.749	-0.2015	0.0785
		Couple without children living at home	0.03560	0.04381	0.927	-0.0847	0.1559
		Couple with children living at home	-0.07479	0.04382	0.431	-0.1951	0.0455

*. The mean difference is significant at the 0.05 level.

A.D.3.2. Work characteristics on support, trust, and social well-being

Distance to work

Multiple Comparisons

Dependent Variable: Support from Leadership

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	0.01028	0.01737	0.824	-0.0304	0.0510
		>60 minutes	0.02645	0.01981	0.376	-0.0200	0.0729
	31-60 minutes	Up to 30 minutes	-0.01028	0.01737	0.824	-0.0510	0.0304
		>60 minutes	0.01617	0.01855	0.658	-0.0273	0.0597
	>60 minutes	Up to 30 minutes	-0.02645	0.01981	0.376	-0.0729	0.0200
		31-60 minutes	-0.01617	0.01855	0.658	-0.0597	0.0273

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Support from Colleagues

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	0.01954	0.01475	0.381	-0.0150	0.0541
		>60 minutes	0.02308	0.01662	0.347	-0.0159	0.0620
	31-60 minutes	Up to 30 minutes	-0.01954	0.01475	0.381	-0.0541	0.0150
		>60 minutes	0.00355	0.01555	0.972	-0.0329	0.0400
	>60 minutes	Up to 30 minutes	-0.02308	0.01662	0.347	-0.0620	0.0159
		31-60 minutes	-0.00355	0.01555	0.972	-0.0400	0.0329

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Vertical Trust

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	0.00889	0.01607	0.845	-0.0288	0.0466
		>60 minutes	-0.02211	0.01781	0.429	-0.0639	0.0197
	31-60 minutes	Up to 30 minutes	-0.00889	0.01607	0.845	-0.0466	0.0288
		>60 minutes	-0.03100	0.01679	0.155	-0.0704	0.0084
	>60 minutes	Up to 30 minutes	0.02211	0.01781	0.429	-0.0197	0.0639
		31-60 minutes	0.03100	0.01679	0.155	-0.0084	0.0704

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Horizontal Trust

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound

Games-Howell	Up to 30 minutes	31-60 minutes	0.0044	0.0152	0.954	-0.031	0.040
		>60 minutes	-.0432*	0.0169	0.029	-0.083	-0.003
	31-60 minutes	Up to 30 minutes	-0.0044	0.0152	0.954	-0.040	0.031
		>60 minutes	-.0476*	0.0159	0.008	-0.085	-0.010
	>60 minutes	Up to 30 minutes	.0432*	0.0169	0.029	0.003	0.083
		31-60 minutes	.0476*	0.0159	0.008	0.010	0.085

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Professional Isolation

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	0.01311	0.01490	0.653	-0.0218	0.0480
		>60 minutes	0.00427	0.01656	0.964	-0.0345	0.0431
	31-60 minutes	Up to 30 minutes	-0.01311	0.01490	0.653	-0.0480	0.0218
		>60 minutes	-0.00884	0.01532	0.832	-0.0447	0.0271
	>60 minutes	Up to 30 minutes	-0.00427	0.01656	0.964	-0.0431	0.0345
		31-60 minutes	0.00884	0.01532	0.832	-0.0271	0.0447

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Work-life Conflict

	(I) Distance to Work	(J) Distance to Work	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	Up to 30 minutes	31-60 minutes	-.04446*	0.01501	0.009	-0.0797	-0.0093
		>60 minutes	-.11944*	0.01746	0.000	-0.1604	-0.0785
	31-60 minutes	Up to 30 minutes	.04446*	0.01501	0.009	0.0093	0.0797
		>60 minutes	-.07498*	0.01667	0.000	-0.1141	-0.0359
	>60 minutes	Up to 30 minutes	.11944*	0.01746	0.000	0.0785	0.1604
		31-60 minutes	.07498*	0.01667	0.000	0.0359	0.1141

*. The mean difference is significant at the 0.05 level.

Performed Activities

Multiple Comparisons

Dependent Variable: Support from Leadership

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	-0.05253	0.02350	0.114	-0.1129	0.0079
		3	-0.00378	0.02264	0.998	-0.0620	0.0544
		4	-0.04856	0.01969	0.066	-0.0992	0.0021
	2	1	0.05253	0.02350	0.114	-0.0079	0.1129

		3	0.04875	0.02384	0.172	-0.0125	0.1100
		4	0.00397	0.02106	0.998	-0.0502	0.0581
	3	1	0.00378	0.02264	0.998	-0.0544	0.0620
		2	-0.04875	0.02384	0.172	-0.1100	0.0125
		4	-0.04478	0.02010	0.116	-0.0964	0.0069
	4	1	0.04856	0.01969	0.066	-0.0021	0.0992
		2	-0.00397	0.02106	0.998	-0.0581	0.0502
		3	0.04478	0.02010	0.116	-0.0069	0.0964

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Support from Colleagues

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	-0.03561	0.02027	0.294	-0.0877	0.0165
		3	-0.00748	0.01889	0.979	-0.0560	0.0411
		4	-.07382*	0.01672	0.000	-0.1168	-0.0308
	2	1	0.03561	0.02027	0.294	-0.0165	0.0877
		3	0.02813	0.02010	0.500	-0.0235	0.0798
		4	-0.03821	0.01808	0.149	-0.0847	0.0083
	3	1	0.00748	0.01889	0.979	-0.0411	0.0560
		2	-0.02813	0.02010	0.500	-0.0798	0.0235
		4	-.06634*	0.01653	0.000	-0.1088	-0.0239
	4	1	.07382*	0.01672	0.000	0.0308	0.1168
		2	0.03821	0.01808	0.149	-0.0083	0.0847
		3	.06634*	0.01653	0.000	0.0239	0.1088

*. The mean difference is significant at the 0.05 level

Multiple Comparisons

Dependent Variable: Vertical Trust

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	0.01957	0.02165	0.803	-0.0361	0.0752
		3	-.07898*	0.02035	0.001	-0.1313	-0.0267
		4	-0.00623	0.01835	0.987	-0.0534	0.0409
	2	1	-0.01957	0.02165	0.803	-0.0752	0.0361
		3	-.09856*	0.02128	0.000	-0.1533	-0.0439
		4	-0.02580	0.01939	0.543	-0.0756	0.0240
	3	1	.07898*	0.02035	0.001	0.0267	0.1313
		2	.09856*	0.02128	0.000	0.0439	0.1533
		4	.07276*	0.01792	0.000	0.0267	0.1188
	4	1	0.00623	0.01835	0.987	-0.0409	0.0534
		2	0.02580	0.01939	0.543	-0.0240	0.0756
		3	-.07276*	0.01792	0.000	-0.1188	-0.0267

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Horizontal Trust

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	.0847*	0.0205	0.000	0.032	0.137
		3	0.0224	0.0188	0.632	-0.026	0.071

	4	0.0255	0.0171	0.439	-0.018	0.069
2	1	-.0847*	0.0205	0.000	-0.137	-0.032
	3	-.0623*	0.0203	0.012	-0.115	-0.010
	4	-.0592*	0.0188	0.009	-0.107	-0.011
3	1	-0.0224	0.0188	0.632	-0.071	0.026
	2	.0623*	0.0203	0.012	0.010	0.115
	4	0.0032	0.0169	0.998	-0.040	0.046
4	1	-0.0255	0.0171	0.439	-0.069	0.018
	2	.0592*	0.0188	0.009	0.011	0.107
	3	-0.0032	0.0169	0.998	-0.046	0.040

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Professional Isolation

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	0.00548	0.01989	0.993	-0.0456	0.0566
		3	-.07388*	0.01872	0.000	-0.1220	-0.0258
		4	-0.03620	0.01650	0.125	-0.0786	0.0062
	2	1	-0.00548	0.01989	0.993	-0.0566	0.0456
		3	-.07936*	0.02013	0.000	-0.1311	-0.0276
		4	-0.04168	0.01808	0.097	-0.0882	0.0048
	3	1	.07388*	0.01872	0.000	0.0258	0.1220
		2	.07936*	0.02013	0.000	0.0276	0.1311
		4	0.03768	0.01679	0.112	-0.0055	0.0808
	4	1	0.03620	0.01650	0.125	-0.0062	0.0786
		2	0.04168	0.01808	0.097	-0.0048	0.0882
		3	-0.03768	0.01679	0.112	-0.0808	0.0055

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: Work-life Conflict

	(I) Performed Activities	(J) Performed Activities	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Games-Howell	1	2	.19785*	0.01937	0.000	0.1481	0.2476
		3	-.08667*	0.02046	0.000	-0.1393	-0.0341
		4	0.04162	0.01733	0.077	-0.0029	0.0861
	2	1	-.19785*	0.01937	0.000	-0.2476	-0.1481
		3	-.28452*	0.02037	0.000	-0.3369	-0.2322
		4	-.15623*	0.01722	0.000	-0.2005	-0.1120
	3	1	.08667*	0.02046	0.000	0.0341	0.1393
		2	.28452*	0.02037	0.000	0.2322	0.3369
		4	.12829*	0.01845	0.000	0.0809	0.1757
	4	1	-0.04162	0.01733	0.077	-0.0861	0.0029
		2	.15623*	0.01722	0.000	0.1120	0.2005
		3	-.12829*	0.01845	0.000	-0.1757	-0.0809

*. The mean difference is significant at the 0.05 level.

Appendix E. Effect sizes example calculation

A.E.1. Independent samples t-test - Cohen's D

Independent Variable: Gender
Dependent Variable: Support from Leadership

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Support from Leadership	Male	5564	3.9841	0.73883	0.00990
	Female	4927	3.9820	0.78194	0.01114

$$d = \frac{M1 - M2}{\sqrt{\frac{SD_1{}^2 + SD_2{}^2}{2}}}$$

M = Mean of each group
SD = Standard deviations of each group

$$d = \frac{3.9841 - 3.9820}{\sqrt{\frac{0.73883^2 + 0.78194^2}{2}}}$$

$$d = 0.003$$

A.E.2. One-way ANOVA test - Omega Squared (ω²)

Independent Variable: Hybrid Work Location
Dependent Variable: Support from Leadership

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Support from Leadership	Between Groups	12.782	3	4.261	7.403	0.000
	Within Groups	6035.829	10487	0.576		
	Total	6048.611	10490			

$$\omega^2 = \frac{SS_b - df(MS_w)}{SS_t + MS_t}$$

SS_b = Sum of Squares between groups
SS_t = Total Sum of Squares
df_b = Degree of freedom between groups
MS_w = Mean Square within groups

$$\omega^2 = \frac{12.782 - 3(0.576)}{6048.611 + 0.576}$$

$$\omega^2 = 0.003$$

A.E.3. Pearson Correlation test – (Model R^2)

Independent Variable: Age
Dependent Variable: Support from Leadership

Correlations		
		Support from Leadership
Age	Pearson Correlation	0.011
	Sig. (2-tailed)	0.277
	N	10491

**. Correlation is significant at the 0.01 level (2-tailed).

$$R^2 = Correlation\ Coefficient^2$$

$$R^2 = 0.011^2$$

$$R^2 = 0.000121$$