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# **Exploring The Impact of Remote Work on Organisational Identification: A Mediated Moderation of Workplace Isolation and Organisational Support.**

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MSc Organisational and Social Psychology

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## **Abstract**

The COVID-19 viral outbreak prompted an immediate necessity to digitise employment, creating a global experiment in remote work. As we navigate through epidemic recovery, it is anticipated that the future of office work will be predominantly digital, reconfiguring traditional work structures.

Consequently, the boundaries that once defined the spatial and temporal relationship between employees and their respective firms have now expanded to unprecedented proportions, though the literature is yet to explore this new working landscape as a commonly mandated mode of work. This study investigated the influence of remote work on organisational identification, further assessing workplace isolation and organisational support as mediating and moderating variables, respectively. Online survey data gathered from 142 full-time white-collar employees indicated that an increased engagement in remote work is not associated with reduced levels of organisational identification or professional isolation. Instead, an increase in remote work was found to elevate social isolation, an interaction found to be moderated by organisational support. In such manner, this research questions the theoretical relevance of contemporary organisational theories that associate remote work with workplace dissociation, proposing that institutions are learning to leverage professional attributes into organisational structures. Nevertheless, the significance of organisational support extends beyond conventional work environments, emphasising the necessity for organisations to formulate policies that empower virtual employees to uphold social bonds with the workplace.

*Keywords:* remote work; organisational identification; social isolation; professional isolation; organisational support.

### **Acknowledgements**

I would like to begin by thanking my family. I am forever grateful for their continuous support throughout my academic journey, and for their ability to give me the courage to pursue my professional ambitions. Additionally, I am deeply thankful to Dr. Ilka Gleibs, who served as an exemplary mentor throughout the process of conducting this empirical research. Her valuable feedback, expertise, and guidance have played a vital role in the successful completion of this research project. I also want to acknowledge and extend my gratitude to the entire Department of Psychological and Behavioural Sciences at the London School of Economics and Political Science. This department has provided me with the most intellectually demanding year so far, but it has also imparted knowledge beyond imaginable. This year has truly been a transformative period in my life, one that defies description. I am incredibly grateful to all those who have contributed to my personal growth, shaping me into the person I have always aspired to be, thank you.

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## Introduction

Globalisation and technological developments continue to change the nature of office work (Ranjan & Sarma, 2018), increasingly providing opportunities to work from multiple locations, excluding the centralised workplace (Myerson et al., 2010). Indeed, as remote work arrangements have long been provided by many organisations (Lewis & Cooper, 2005), it has sparked a contentious debate among academics and the workforce to date.

Initial assessments into flexible work arrangements present the ramifications of remote work as a double-edged sword (e.g., Butler et al., 2007; Noonan & Glass, 2012; Wheatley, 2012), posing the outcome of this contentious debate to remain inconclusive. Nevertheless, subjects of this discourse pertain to a time when remote working was uncommon (Kossek & Lautsch, 2018; Mutebi & Hobbs, 2022). Yet, it is not surprising that the COVID-19 viral outbreak cause significant disruption to organisational practices, imposing the abrupt need to digitise work (Kniffin, et al., 2021). Although stay-at-home orders have been lifted, organisations are undergoing a lasting structural shift in the way office work is performed (Sytych & Greer, 2020). Consequently, remote work as a frequently imposed working arrangement has not been the focus of the literature thus far (Kaduk et al., 2019), stressing the need to assess the implications of this changing work environment in a contextually-relevant era.

Indeed, such immense organisational change has prompted many institutions to prioritise employee mental health (Bevington et al., 2021), yet employers actually have limited knowledge on how remote working practices and coinciding support initiatives may impact the well-being of their workers preceding the health epidemic (Rudolph, et al., 2021). Of importance, the literature surrounding employees' sense of belonging it yet to be updated amongst a digitised workforce, with only contemporary theories suggesting detrimental outcomes of a dispersed workforce to organisational identification and workplace isolation (e.g., Baumeister & Leary, 1995; Tajfel & Turner, 1979; Wiesenfeld et al., 1999), with perceived organisational support providing the potential to mitigate such adversity (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Although academics have sought to revise affiliated traditional perspectives during the global epidemic of remote working (e.g., Dechênes, 2023; Kossek & van der Berg, 2022), it remains uncertain to distinguish these aligning conclusions independent of a global crisis (e.g., Ebrahimi et al., 2021; Errichiello & Pianese, 2021). Naturally, there is a requirement to derive the theoretical relevance of organisational belonging amongst the expanding virtual workplace, as it creates opportunities for institutions to effectively navigate the evolving implementation of flexible work arrangements to meet the dynamic needs of a dispersed workforce (Kniffin et al., 2021; Rudolph et al., 2021).

In consequence, as employees are exceedingly leveraging their autonomy to determine their own working landscape (Babapour Chafi et al., 2021), focusing on the role of organisational support and it's outcomes for organisational belonging has become a practical necessity (CIPD, 2022).

Thus, by applying Social Identity Theory (Tajfel & Turner, 1979) and the Need-To-Belong Theory (Baumeister & Leary, 1995), this present study aims *to examine the impact of an increased extent of remote work on workplace isolation and subsequent organisational identification of employees who engage in this flexible work arrangement*. Further leveraging Organisational Support Theory (Eisenberger et al., 1986) *to assess the protective role that organisational support plays in shaping this relationship*.

By performing this research, organisations and policymakers will be able to distinguish the contextually-relevant implications of a virtual work environment on employee well-being, including how it evolves in epidemic recovery.

## **Literature Review and Hypotheses Development**

### **Remote Work**

Initially introduced as an organisational incentive to reduce commuting times and alleviate traffic congestion (Allen et al., 2015; Nilles et al., 1976), remote work has evolved from the introduction of telework and its subsequent forms (e.g., Kurland & Egan, 1999; Nilles & Gray, 1975). Consequently, remote work is defined as the practice of completing job-related duties beyond the employer's premises, utilising information and communication technologies (Huws et al., 1990).

Originally, the desired outcome of avoiding long commutes were indeed observed, effectively diminishing the negative impact associated with this daily activity (Kahneman et al., 2004). Instead, teleworkers were provided with opportunities for increased rest and physical activity (Gurstein, 2001; Major et al., 2008). Scholars have since noted the positive outcomes and growing popularity of this flexible work arrangement, prompting further investigation into its effects at an individual level. Indeed, remote workers reported elevated levels of work autonomy, goal progress, and productivity (Brunstein, 1993; DuBrin, 1991; Gajendran & Harrison, 2007), consequently enhancing employee well-being (Bailey & Kurland, 2002; Duxbury, Higgins, & Neufeld, 1998; Haddad et al., 2009).

Hence, the success of remote work is evident, and when combined with the widespread availability of internet access and cloud-based services (Wilkinson, et al., 2017), knowledge workers have become increasingly empowered to perform their tasks regardless of geographical constraints (Riemer & Vehring, 2012). Yet, the sustained growth has also led to a heightened scrutiny of the potential negative effects associated with this work arrangement. In particular, job roles often require interaction with colleagues, and the physical separation that characterises remote work can pose challenges in maintaining such interactions (Mazzi, 1996; Lautsch et al., 2009). Remote workers have thus expressed a longing for office interactions (Grant et al., 2013; Mann & Holdsworth, 2003), facilitating organisations to engage in a structural shift towards 'hybrid' work arrangements instead (Garrett & Danziger, 2007). Such a work arrangement offers employees the autonomy to work both

on-site and at convenient locations remote from their corporate facilities (CIPD, 2022), hence providing an attractive opportunity to cater for individual well-being whilst still being present at work (Hillbrecht et al., 2013). In this way, engagements in remote work are now being used in tandem with working on office premises (Baig et al., 2020); a working landscape this present study seeks to explore by assessing employees' weekly remote work engagement.

Initially, remote working was uncommon, with only twelve percent of the UK workforce engaging in this work arrangement in 2019 (Mutebi & Hobbs, 2022). However, the COVID-19 global pandemic significantly disrupted working practices, unintentionally leading to a worldwide experiment of remote work (Kniffin et al., 2021). While management scholars initially assume they had sufficient evidence to understand the psychological challenges faced by remote employees (Grant et al., 2013; Konradt et al., 2003), it is important to recognise that these studies were not performed during a period when remote work was practiced on such an extraordinary level. As a result, previously gathered insights on this work arrangement might be devoid of contextual significance. Indeed, recent manifestations of remote work indicate that the associated benefits of such models may have diminished during global lockdowns (George et al., 2022; Molino, et al., 2020; Salari, et al., 2020), yet it remains uncertain whether these negative experiences were primarily caused by the global crisis itself, or by the nature of the flexible work arrangement (e.g., Ebrahimi et al., 2021; Salari et al., 2020). Thus, conducting research following the global pandemic is essential to ascertain the employee-specific implications of remote work.

One underexplored area in the literature is workplace isolation and organisational identification, with only outdated literature indicating that transitioning to a virtual environment disrupts the processes involved in creating and verifying organisational identification, resulting in employee detachment (Ahuja & Galvin, 2003; Lipnack & Stamps, 1997; Lundberg & Lindfors, 2002; Thatcher & Zhu, 2006). To address these gaps and ensure a contextually relevant understanding, it is crucial to update the literature in the current era. Thus, by leveraging previous research on remote work, and applying relevant theoretical mechanisms, this present study seeks to gain deeper insights into the sustained norm of remote work and its implications for employee well-being.

### **Remote Work and Organisational Identification**

Individuals' involvement in work activities can lead them to strongly associate themselves with their workplace (van Knippenberg et al., 2007), consequently identifying themselves as part of a social category whereby the company's and individual's goals become increasingly integrated (Ashforth et al., 2008; Hall et al., 1970). This integration not only influences key organisational outcomes (e.g., Cooper & Thatcher, 2010), but fulfils a fundamental human desire for purpose and recognition, further supporting the growth of a profound understanding of oneself, and of others, as part of a coherent whole in which there is mutual reliance for workplace groups (Avanzi et al., 2015; Steffens et al., 2017).

Notably, Social Identity Theory (Tajfel & Turner, 1979) offers a fundamental framework to explain how individuals' membership in social groups shapes their sense of self, postulating that individuals categorise themselves and others into groups as an essential aspect of human social reality (Tajfel, 1974). These social categories then become integral to an individual's self-concept, influencing their beliefs, attitudes, and behaviours, as they embody the norms and values of their respective groups. Consequently, social identity encompasses the degree to which individuals view their ingroup as an emotionally significant element of their self-concept, leading them to define themselves in terms of their social group membership to foster a sense of belonging (Tajfel & Turner, 1979). In this way, Social Identity Theory provides a valuable foundation for understanding how organisational identification is created in institutional contexts, manifesting this concept as the extent to which employees associate themselves based on their affiliation and emotional connection to the organisation (Mael & Ashforth, 1992).

With continued reference to this theory, organisational identification is thus facilitated through the concept of social categorisation, which suggests that individuals psychologically classify themselves as well as other people into different groups depending on the context (Turner et al., 1987). In traditional work contexts, such processes are facilitated through the exposure of tangible markers of social identity, including organisational dress and symbols (Pratt & Raphaeli, 1997), as well as the numerous opportunities for face-to-face interactions (e.g., Dery et al., 2014; Guynn, 2013). Further, given that individuals are driven to uphold a favourable social identity (Tajfel & Turner, 1979), such interactions create a sense of organisational belonging and enhance one's self-esteem, consequently resulting in the formation of a shared organisational identity (Ashforth & Mael, 1989).

Yet, concerns arise when it comes to redefining organisational identities within the realm of remote work (Wiesenfeld et al., 2001), as virtual settings impose limitations on exposure to these organisational structures (Thatcher & Zhu, 2006). In this manner, organisations struggle to foster an environment where employees can develop their own organisational identity (Wiesenfeld et al., 1999). Instead, virtual employees are exposed to identities associated with their homes, posing risks to the social relationships and vital contact with the company to stimulate organisational identification (Brocklehurst, 2001; Tietze & Musson, 2005). As a result, remote work demands individuals to navigate the contradictory nature of being simultaneously "at home and at work" (Alvesson et al., 2008; Watson, 2008), often perceiving themselves as unauthorised employees with limited connections to the organisation (Wiesenfeld et al., 1999). Such autonomy generates uncertainty in how remote employees perceive their identity in relation to both their team, and the broader organisation (DeSanctis & Monge, 1999; Wiesenfeld et al., 1998), posing threats to organisational belonging in an environment where employees are rarely co-located (Ahuja & Galvin, 2003; Chidambaram, 1996; Lipnack & Stamps, 1997).

Nevertheless, scholars argue that the existing literature primarily predates the widespread implementation of tools designed to foster organisational identity (Duarte & Snyder, 2006; Raghuram

& Wiesenfeld, 2004). As technological advancements increasingly reshape the centralised workplace, remote workers are finding ways to leverage various platforms that enhance connection and visibility, ensuring their identity as part of the collective is known (Mutebi & Hobbs, 2022; Ng et al., 2022). Therefore, it is imperative to expand the limited research and explore the factors that predict organisational identification in virtual settings, in an era where it is becoming increasingly normalised. Nonetheless, as physical exposure to organisational structures are crucial to foster organisational identification (Haslam et al., 2005; Hogg & Terry, 2000), this present study builds upon previous reasoning and more recent literature (Dery & Hafermalz, 2016), to develop the following hypothesis:

*H1: An increased extent of remote work decreases employees' organisational identification.*

### **Remote Work and Workplace Isolation**

Humans have long been alarmed by isolation (Bowlby, 1973). Reasons for this tend to the Need-To-Belong Theory (Baumeister & Leary, 1995), which assumes that humans naturally desire consistent personal contact and interaction with others, necessitating the establishment of stable, emotionally invested relationships that endure over time. Accordingly, in organisational contexts, employees recognise the significance of belonging to a workgroup, and view isolation as a challenging and stressful experience (Beehr et al., 2000; House et al., 1988). In this way, workplace isolation encompasses the employees' aspirations to be integrated into a group of co-workers who offer assistance with particular job-related requirements, thus reflecting the employees' perception of the accessibility of co-workers for social support (Golden et al., 2008; Wang et al., 2020).

It is not surprising that technological advancements have determined a new working landscape, as employees have access to work content on several devices, facilitating continuous connections with the workplace (Thörel et al., 2021). Yet, one of the biggest obstacles of remote work is the experience of workplace isolation (Bailey & Kurland, 1999), as the literature has indicated that electronic communication generally lacks the depth and social connection typically found in face-to-face communication (Andres, 2002; Scott & Timmerman, 1999). In this way, virtual communication fails to bridge different diverse perspectives and convey multiple cues (Daft et al., 1987), carrying risks to the frequent interactions with colleagues that motivates one's need to belong (Baumeister & Leary, 1995). Accordingly, scholars conclude that virtual employees are prone to developing feelings of isolation due to their dependence on electronic communication, and the limited social presence such communication entails (Gajendran & Harrison, 2007; Pinsonneault & Boisvert, 2001).

Previous literature has commonly categorised workplace isolation into two distinct types. Firstly, social isolation refers to the concern that remote workers may experience a lack of impromptu discussions that typically occur with colleagues in the office (Mann et al., 2000). Consequently, these employees may feel detached from the informal communication channels within the company

(Wiesenfeld et al., 1999), which, in turn, influences their requirement for social connection (Wiesenfeld et al., 2001). Moreover, professional isolation encompasses the concern that when employees are not physically present, they might be overlooked or forgotten (Bailey & Kurland, 1999; Kurland & Egan, 1999). As a result, remote workers often feel undervalued (Cooper & Kurland, 2002), and perceive restricted possibilities for career development compared to those working in traditional office settings (Bailey & Kurland, 2002; Kurland & Cooper, 2002). Past scholars have long assessed the predictors of these various forms of workplace isolation (Belle et al., 2015; Eby et al., 2005; Lee & Ashforth, 1996), with remote work making a significant contribution (Bartel et al., 2012; Gajendran & Harrison, 2007; Golden, 2006; Wiesenfeld et al., 1999). Although it is uncertain whether more recent conceptualisations are independent of the isolation caused by the global pandemic (e.g., Becker et al., 2022; Muralidhar et al., 2020; Toscano & Zappalà, 2020), studies have sustained this detrimental consequence. This present study therefore hypothesises:

*H2: An increased extent of remote work increases (a) social isolation and (b) professional isolation.*

Further, in organisational contexts, Social Identity Theory and the Need-To-Belong Theory complement each other, with the former elucidating the social and psychological bonds between employees and the organisation (Wiesenfeld et al., 1999), while the latter underscores the significance of these connections (Baumeister & Leary, 1995; Belle et al., 2015). Notably, the experienced organisational detachment in remote settings (McCloskey & Igbaria, 2003) poses threats to mechanisms that commonly trigger social identity, including one's sense of security and self-esteem (Allen et al., 2003). As a result, one develops the apprehension of losing social connections, alarming organisational identification (Kane, 2014). Furthermore, the presence of robust social interaction plays a pivotal role in cultivating organisational identification, as these factors are essential in fostering a profound sense of connection within the workplace (Fay & Kline, 2012). Yet, the virtuality of remote work restricts this effective communication, resulting in organisational disconnection (Bartel et al., 2012). Workplace isolation therefore mediates the relationship between remote work and organisational identification (Kossen & van der Berg, 2022), leading to the following hypotheses:

*H3: The negative influence of an increased extent of remote work on organisational identification is mediated by (a) social isolation and (b) professional isolation.*

### **Remote Work and Organisational Support**

Although remote work arrangements have been found to place constraints on workplace interactions (Baker et al., 2006; Golden et al., 2008), it is important to acknowledge that not all teleworkers experience this phenomenon (Gajendran & Harrison, 2007; Golden et al., 2006; Hinds & Mortensen, 2005), prompting the enquiry of certain organisational conditions that may mitigate such adverse

experiences. Notably, past literature has suggested the importance of supporting employees in stressful situations (Ahmed et al., 2015; Hameed et al., 2019), by administering informational resources and promoting social networks (Eisenberger, et al., 2010; Humphrey et al., 2007). In this way, organisational support entails the belief that the organisation provides employees with psychological and tangible assets to perform their job effectively (Rhoades & Eisenberger, 2002; Shanock & Eisenberger, 2006).

Appropriately, this present research applies Organisational Support Theory (Eisenberger et al., 1986), which indicates that an institutions's readiness to meet socio-emotional needs develops workers' beliefs about whether the organisation acknowledges their effort and prioritises their well-being. Such beliefs contribute to employees' sense of purpose and meaning (Bentley, et al., 2016; Toker et al., 2015), producing a strong sense of organisational belonging (Caesens et al., 2017; Rhoades & Eisenberger, 2002). Consequently, in the absence of virtuality, organisational support has been documented to enhance numerous job characteristics (Kim et al., 2016; Mankanjee et al., 2006; Zumrah & Boyle, 2015), and reduce employee isolation (Bakker et al., 2005; Eby et al., 2005; Grant & Parker, 2009; Kammeyer-Mueller & Wanberg, 2003).

Yet, research has additionally acknowledged favourable working conditions linked to organisational support, including workplace visibility (Wayne et al., 2002). However, in a purely virtual work environment, these conditions become limited (Morrison-Smith & Ruiz, 2020), necessitating the need to cultivate a supportive atmosphere, virtually (Carnevale & Wechsler, 1992; Deschênes, 2023). Indeed, institutions are increasingly seeking to deliver organisational support online (Cascio & Shurygailo, 2003; CIPD, 2022), to offer resources that alleviate isolation and assist employees in coping with stressors linked to prolonged physical distancing (Brooks, et al., 2020). Examples include, equipping employees with tools and innovative technologies to enhance communication with co-workers, as well as allocating resources for technology training (De et al., 2020; Mihalache & Mihalache, 2022; Richter, 2020). In fact, the limited evidence of such support mechanisms have been deemed effective (Usman et al., 2021), yet have not been thoroughly explored independent of a health crisis (Errichiello & Pianese, 2021). Nevertheless, given that organisational support promotes organisational belonging (Chen, et al., 2020), which in turn reduces workplace isolation (Bartel et al., 2012; Kossek et al., 2015), this study hypothesises the following:

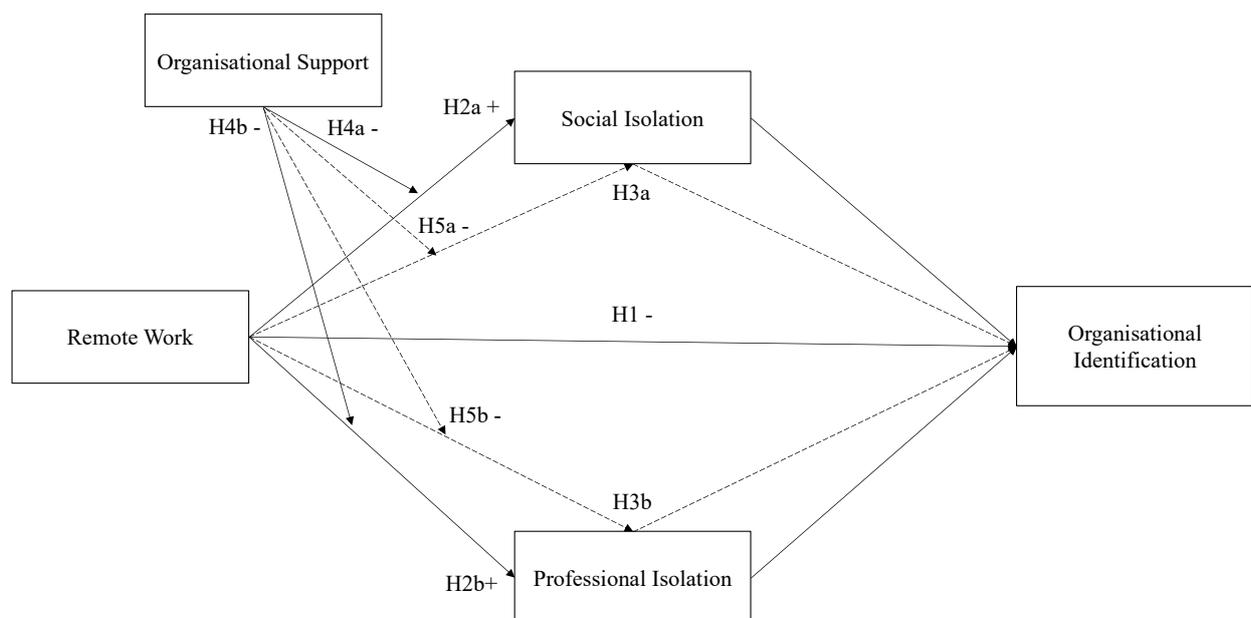
*H4: Organisational support moderates the positive relationship between remote work and (a) social isolation and (b) professional isolation, such that this relationship is positive and stronger when organisational support is low.*

Further, although remote workers may experience limited exposure to these particular aspects of organisational life that reinforce organisational identification (e.g., Dutton et al., 1994; Pratt, 1998), they may encounter alternative cues to ensure workplace affiliation, such as organisational support

(Wiesenfeld et al., 2001). In this way, Organisational Support Theory also addresses the social identity processes underlying the consequences of supportive behaviours (Eisenberger et al., 1986). Namely, as support addresses one’s socio-emotional needs, it enhances employee affiliation and reinforces the integration of their sense of belonging within the organisation, thereby strengthening one’s organisational identification (Rhoades et al., 2001). Additionally, given that humans are driven to uphold or improve their self-esteem, they gravitate towards identifying with teams that are regarded favourably (Tajfel & Turner, 1985; Turner et al., 1987). Naturally then, the socio-emotional needs that organisational support fulfils, enhances the attractiveness of the organisation, augmenting the probability of employees developing a sense of organisational identification (Eisenberger & Stinglhamber, 2011; Sluss et al., 2008). Certainly, several investigations have indicated a positive correlation between organisational support and organisational identification (Bell & Menguc, 2002; Edwards & Peccei, 2010; Ng et al., 2015; Sluss et al., 2008). Thus, when physical contact with the organisation is limited, organisational support enables remote employees to perceive themselves as socially integrated with other members of the organisation, acting as a significant cue that triggers and reinforces the organisational identification of virtual employees (Bartel et al., 2012). Thus, when combining this logic, this study finally hypothesises the following:

*H5: Organisational support moderates the negative indirect effect of remote work on organisational identification via (a) social isolation and (b) professional isolation, such that the indirect effect is negative and stronger when organisational support is low.*

The conceptual research model is shown in Figure 1.



**Figure 1.** *Conceptual Research Model.*

## Methods

### Participants and Design

Ethical approval was obtained from the Department of Psychological and Behavioural Science at the London School of Economics and Political Science prior to the study's pre-registration (Appendix A) and recruitment of participants. Following previous survey research designs (e.g., Qiu & Dauth, 2022), participants were recruited through convenience sampling. Specifically, advertisements for this study were posted on professional networks (e.g., LinkedIn) and distributed among personal connections, whereby interested employees were directed to an online survey. As remote work practices ensuing the COVID-19 pandemic continue to affect a broad range of employees, this method was chosen due to its practicality and efficiency in accessing a large and diverse set of potential participants, whilst avoiding possible selection effects (Kam et al., 2007).

Eligibility for participation included being a full-time employee in a white-collar occupation. Full-time employment was defined as meeting the employer's weekly hour requirement, which typically ranges from 35 to 40 hours per week (Douglas-Hall & Chau, 2007), whilst a white-collar occupation was characterised as an office-based profession (Mills, 2002). This criteria was established to control for the notion that employees that work full-time generally identify more strongly with the company than part-time employees (Rousseau, 1998), and due to the researcher's exclusive interest in clerical employment positions. Further, participants were required to be above the age of 16 to mitigate ethical issues involving vulnerable suspects.

A statistical power analysis performed using Gpower (Faul et al., 2009) revealed that a sample size of at least 85 was necessary to detect a medium effect size in the proposed significant model, with a power level of 80% and a significance level of .05. To account for potential exclusions, a target of recruiting 120 participants was set.

A total of 242 individuals activated the survey link advertised through professional and personal networks, 233 of which commenced with the survey by providing their initial consent to proceed. Yet, 54 participants were excluded for not meeting the pre-registered inclusion criteria. These participants were neither in white-collar occupations ( $N = 11$ ), nor employed full-time ( $N = 43$ ). Accounting for further exclusions due to incomplete responses ( $N = 19$ ), a total of 160 completed responses were recorded. Lastly, participants ( $N = 18$ ) were removed from the study due to a failed attention check. In such manner, the researcher ensured high-quality answers.

Hence, the final sample included 142 individuals (female = 46.5%) aged between 22 and 63, with a mean age of 38.25 years ( $SD = 11.23$ ). A substantial proportion of the participants identified as White (80.3%) and had attained a Bachelor's degree (43.7%), additionally reporting habitual (73.9%) and working (73.2%) locations within Europe. Furthermore, a notable proportion of the respondents were engaged in management and executive positions (19.7%), or information technology and

computer science (15.5%) white-collar professions, demonstrating the diverse occupational distribution within the sample.

This study employed a correlational research design with six levels of the independent variable, representing the weekly amount of remote work. Participants were thus classified into ordered categories based on these variable values. Of importance, analyses indicated that the majority of participants (71.1%) have a hybrid work arrangement, spending a mean number of 2.68 days ( $SD = 1.61$ ) a week working remotely rather than on office premises. Such data indicate a shift in work arrangements in recent years, as respondents predominately did not engage in remote work prior to the COVID-19 pandemic (68.3%).

## Materials

**Remote Work.** The extent of remote work was evaluated by requesting respondents to specify the proportion of a typical workweek they dedicate to working remotely. Remote work in the present survey was defined as a work arrangement where an employee performs their job duties outside of a traditional office environment, such as from their home, a co-working space, or another remote location. Resembling other measurements (e.g., Gajendran & Harrison, 2007; van der Elst, et al., 2017; Wiesenfeld et al., 1999), the extent of remote work was measured on a six-point likert scale with a single item “On average, how many days a week do you work remotely?” (0 = *I never work remotely*, 5 = *5 days a week*). The survey adopted a five-day work week, as this resembles the commonly adopted organisational schedule of white-collar occupations. This generated a “remote work” variable that recorded the number of days that any employee works outside office premises. Greater scores on this measure indicate a higher frequency of working days outside of the office, reflecting a relatively elevated remote work status, whilst the reverse is true for lower scores on this assessment.

**Social Isolation.** Participants’ social isolation was measured using the social isolation facets of Marshall et al.’s (2007) Workplace Isolation Scale (WIS). Participants were asked to indicate their agreement on a 5-point Likert scale with each of the five items (1 = *strongly disagree*, 5 = *strongly agree*). Items included examples such as “I have friends available to me at work”. Scores on the five items were averaged and reverse coded to produce a final score ranging from 1 to 5, with higher scores indicating greater social isolation. In this present study, internal consistency of this scale was good ( $\alpha = .84$ ).

**Professional Isolation.** Professional isolation was further assessed using the professional isolation subscale (WIS; Marshall et al., 2007), in which participants were similarly asked to rate their agreement (1 = *strongly disagree*, 5 = *strongly agree*) with the presented statements. Example items include “I am part of the company network”. The items for each subscale were averaged and reverse coded. Thus, higher scores indicated greater professional isolation. These items had good internal consistency ( $\alpha = .88$ ).

**Organisational Support.** Five items from the Supportive Behaviours at work scale (SB; Aubé & Rousseau, 2005) were adopted for the measurement of organisational support. This scale illustrates the genuine actions performed by co-workers to physically and emotionally help others in the workplace, thus including items such as “We care about team members’ feelings and well-being”. By rating the level of agreement with these items on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*), an overall score for organisational support was calculated, in which higher scores determined elevated levels of organisational support. The internal consistency for these items ( $\alpha = .86$ ) was good.

**Organisational Identification.** The degree to which employees define themselves through the company to which they belong was assessed using Mael and Ashforth’s (1992) Organisational Identification Scale (OIS;  $\alpha = .91$ ). This scale consisted of six items relating to organisational affiliation rated on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). Example items include “My employer’s successes are my successes”. A total score for organisational identification was calculated by averaging the scores on the six items, in which higher scores indicated more identification.

**Control Variables.** To account for potential variations in organisational identification related to certain demographic and employment factors, the present study incorporated several control variables for analysis to provide a more nuanced understanding of the proposed model. Namely, researchers acknowledge that *age* and *gender* can serve an important role in shaping individuals’ organisational identity (Bailey & Kurland, 2002; Fritz & van Knippenberg, 2017; Riketta, 2005), stressing the need to account for these variables in subsequent analysis. In addition, *organisational tenure* is to be considered, as employees who have been employed within an organisation for an extended period of time are considered to hold a stronger sense of identification with that specific workplace (Mael & Ashforth, 1995). As such, participants were required to indicate how long they worked in their current organisation, with responses ranging from 1 (*0-1 years*) to 6 (*10+ years*). Moreover, *job satisfaction* and *experience in remote work* will be taken into account, as correlations between remote work on both job satisfaction and organisational identification have been noted (Allen et al., 2003), whilst previous experience may influence an employee’s sense of organisational affiliation (Golden & Veiga, 2005). Accordingly, the levels of satisfaction (1 = *extremely dissatisfied*, 5 = *extremely satisfied*) and remote work experience (1 = *none at all*, 5 = *a great deal*) were indicated by participants on 5-point Likert scales. Lastly, the proposed generational difference in remote work preference (Wang et al., 2020) highlights the need to examine *personal preference of remote work* as a final control variable. As such, participants were asked to respond to the single item “Do you prefer working remotely?”, whereby *yes*, *no*, *no preference*, and *not applicable* were the predetermined options.

## **Procedure**

Participants were recruited via social media for an online survey on Qualtrics (Qualtrics, 2005) assessing “Employees’ Experience of Remote Work Schemes”. This headline was intentionally kept ambiguous to mitigate potential social desirability biases, thus ensuring that respondents provided honest answers. Once participants accessed the link to the online survey, information sheets and consent forms were provided and subsequently accepted. Participants first completed items measuring age and employment status, to ensure that the preregistered sample of full-time white-collar employees, aged 16 and above, was maintained. Then, measures for general workplace characteristics were presented to gain an insight into the sample’s employment demographics, as well as to ensure that data regarding the proposed control variables was obtained. The universality of such items also proved to be a credible rationale for the study that sought to mitigate the risk of response bias. Embedded into these introductory measures were broad items surrounding remote work experiences, including the extent of remote work variable that this present study has adopted as its independent variable. Following these universal measures, participants responded to organisational identification items to gather the appropriate data for the present study’s proposed dependent variable. Additionally, social isolation and professional isolation were measured as potential mediating variables, whilst organisational support was assessed as a probable moderating variable. It must be noted that participants were consistently informed, prior to the presentation of items, that responses were to be related to their *current* remote work experiences, independent of the COVID-19 pandemic. Finally, demographic questions that did not revolve around the workplace were answered. Once completed, participants were given a written summary of the primary objectives of the study, along with sources of support for workplace isolation. Participants were then thanked for their participation and dismissed. The survey took around 10 minutes to complete. An example of the official questionnaire can be found in Appendix B.

## **Results**

### **Preliminary Analyses**

To ensure the integrity of analyses, several key assumptions were thoroughly examined in the preliminary stages of this present study. Visual representations of these key assumptions are reported in Appendix C.

To inspect the distribution of the data, skewness and kurtosis were computed as these are recognised indicators of normal distribution (George & Mallery, 2010). Encouragingly, these values were within the acceptable range of -2 to +2, lending support to the assumption of normality in the present data.

Seven scores across all measures were identified as outliers, yet were retained in the analyses as the Means do not differ significantly from the 5% Trimmed Means (Tabachnick & Fidell, 2001).

Scatterplots were examined to observe the desired linear relationships amongst the variables of interest (Poole & O'Farrell, 1971). Although remote work exhibited non-linear relationships with outcomes variables, the researcher deviated from this common assumption due to valid empirical justification for capturing comprehensive variable interactions (Osborne & Waters, 2002). Other study variables revealed a clear linear association, indicating no violation of this crucial assumption.

The Durbin-Watson value of 1.74 indicated no significant autocorrelation (Krämer, 2011), confirming the assumption of independence in the present data.

Plots of standardised residuals against the predicted values discerned no identifiable pattern (Issa & Nadal, 2011), confirming homoscedasticity.

Variance inflation factors (VIF) for each predictor variable were computed, with scores ranging from 1.51 to 1.87. As these values were below the critical threshold of 10 (Vatcheva et al., 2016), there is no severe multicollinearity in our data.

### **Descriptive Statistics and Bivariate Correlations**

All data was processed and analysed using the Statistical Programme for Social Science (SPSS; IBM Corp., 2020). Unless specified otherwise, all significant outcome variables in the present study were treated as continuous variables with values ranging from 1 to 5.

To gain preliminary insights into the relationships between the substantive variables, descriptive statistics and bivariate correlations were examined. A summary of the results can be found in Table 1.

No significant correlations were found between remote work and any of the research variables, implying that remote work itself is not directly associated with the measured outcomes of interest. Yet, of important note, job satisfaction demonstrated significant correlations with all of the dependent variables.

### **Effect of Remote Work on Organisational Identification**

To further explore the complex interplay among remote work and organisational identification, a hierarchical multiple regression model was employed. This statistical test enables the desired evaluation of the contributions of remote work, social isolation, and professional isolation, to the prediction of organisational identification, after the previous variables have been controlled for (e.g., Lininger et al., 2015). Regression statistics pertaining to this analysis are presented in Table 2.

Consequently, control variables were introduced in the initial step of the regression analysis. These variables significantly contributed to the regression model, accounting for 26.8% of the variation in organisational identification ( $F(6,135) = 8.22, p < .001$ ). In this model, job satisfaction was the only significant predictor ( $b = 0.47, p < .001$ ), indicating a positive association with organisational identification.

**Table 1.**  
*Descriptive Statistics and Correlations*

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	38.25	11.23										
2. Gender	1.48	0.52	-.24**									
3. Organisational Tenure	3.38	1.80	.50***	-.11								
4. Remote Work Experience	3.72	1.18	.07	-.09	.04							
5. Remote Work Preference	1.87	0.92	.14	-.19*	.10	-.10						
6. Job Satisfaction	3.94	0.99	.08	-.16	-.08	.15*	.07					
7. Remote Work	2.68	1.61	-.08	.01	-.09	.50***	-.25**	.11				
8. Organisational Identification	3.36	1.04	.13	-.20*	-.06	-.01	.16	.47***	-.13			
9. Social Isolation	1.82	0.71	-.15	-.03	-.06	-.05	.02	-.28***	.11	-.20*		
10. Professional Isolation	1.88	0.79	-.12	.14	-.01	-.04	-.08	-.56***	.06	-.54***	.43***	
11. Organisational Support	4.37	0.62	.08	-.01	-.07	.18*	.02	.40***	-.04	.41***	-.56***	-.54***

*Note.*  $N = 142$ . Age is reported in years. Gender, 1 = Male; 2 = Female; 3 = Non-binary; 4 = Prefer not to say. Organisational Tenure, 1 = 0-1 years; 2 = 1-2 years; 3 = 3-5 years; 4 = 5-7 years; 5 = 7-10 years; 6 = 10+ years. Remote Work Preference, 1 = Yes; 2 = No; 3 = No preference; 4 = Not applicable.  
\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

In the subsequent step, social and professional isolation were included as additional predictors, yielding a statistically significant contribution to the overall model,  $F(2,133) = 10.67, p < .001$ . Introducing these variables explained an additional 10.1% of the variance in organisational identification ( $R^2 = .37$ ). Notably, professional isolation ( $b = -0.53, p < .001$ ) was a significant predictor of organisational identification, whilst social isolation was not ( $b = 0.06, p = .63$ ).

In the final model ( $F(9,132) = 8.94, p < .001$ ), adding remote work as an additional predictor explained an extra 1.0% of the variance in organisational identification ( $R^2 = .38$ ), but it did not make a significant contribution to the model,  $F(1,132) = 2.09, p = .15$ . Thus, H1 is rejected.

**Table 2.**  
*Hierarchical Regression Model of Organisational Identification.*

	<i>R</i>	<i>R</i> <sup>2</sup>	<i>b</i>	<i>SE</i>	$\beta$	<i>t</i>
<b>Step 1</b>	.52	.27***				
Age			0.01	0.01	0.11	2.41
Gender			-0.22	0.16	-0.11	-1.42
Organisational Tenure			-0.06	0.05	-0.10	-1.19
Remote Work Experience			-0.07	0.07	-0.08	-1.09
Remote Work Preference			0.10	0.09	0.09	1.18
Job Satisfaction			0.47	0.08	0.45***	5.84
<b>Step 2</b>	.61	.37***				
Age			0.01	0.01	0.09	1.09
Gender			-0.19	0.15	-0.09	-1.27
Organisational Tenure			-0.06	0.05	-0.11	-1.35
Remote Work Experience			-0.05	0.06	-0.06	-0.86
Remote Work Preference			0.09	0.08	0.08	1.14
Job Satisfaction			0.24	0.09	0.23**	2.72
Social Isolation			0.06	0.12	0.04	0.49
Professional Isolation			-0.53	0.12	-0.40***	-4.48
<b>Step 3</b>	.62	.38				
Age			0.01	0.01	0.09	1.03
Gender			-0.19	0.15	-0.09	-1.26
Organisational Tenure			-0.07	0.05	-0.11	-1.42
Remote Work Experience			-0.002	0.07	-0.002	-.03
Remote Work Preference			0.07	0.08	0.06	0.79
Job Satisfaction			0.26	0.09	0.25**	2.90
Social Isolation			0.08	0.12	0.05	0.69
Professional Isolation			-0.52	0.12	-0.39***	-4.38
Remote Work			-0.08	0.06	-0.12	-1.45

Note.  $N = 142$ .

\* $p < .05$ ; \*\*  $p < .01$ ; \*\*\* $p < .001$

### Mediation of Workplace Isolation

Mediation can be observed when the effect of the predictor variable on the outcome variable is reduced upon introducing the mediator in the regression equation, compared to when the predictor variable is entered on its own (Baron & Kenny, 1986). Consequently, present research examined the

role of the workplace isolation subscales as potential mediating variables in the relationship between remote work and organisational identification (see Table 3).

For a true mediation relationship to exist, the independent variable must be a significant predictor of the mediator (Baron & Kenny, 1986). Appropriately, in line with H2a, the relationship between remote work and social isolation was found to be significant,  $b = 0.088$ , 95% CI [.004, .172], reflecting the direct effect of remote work on social isolation within the path model. Yet, the relationship between the remote work and professional isolation was found to be non-significant,  $b = 0.062$ , 95% CI [-.020, .144], suggesting H2b to be rejected. Thus, although professional isolation was found to be negatively related to organisational identification ( $b = -0.518$ , 95% CI [-.752, -.284]), it is unlikely that the mediator in this case would add any significance to the relationship between the predictor variable and the outcome variable. Yet, as mediation analyses was pre-registered for both workplace isolation variables, appropriate analyses were performed.

As such, a series of regression analyses were performed to assess whether the observed effects of remote work on organisational identification was mediated by social and professional isolation separately, using Hayes' (2018) bootstrapping protocol. Accordingly, mediation is significant if the 95% bias-corrected bootstrap confidence interval (CI) for the indirect effect based on 5000 bootstrap samples is entirely above 0.

Consequently, ordinary least squares path analysis indicated that remote work did not indirectly influence organisational identification through its effect of one's social isolation,  $b = 0.007$ , 95% CI [-.018, .042], or professional isolation,  $b = -0.032$ , 95% CI [-.089, .012]. Thus, results from simple mediation analyses reveal that workplace isolation does not significantly mediate the relationship between remote work and organisational identification, leading to a rejection of H3a and H3b.

**Table 3.**  
*Results for Estimated Coefficients of the Mediation Model*

Variables	Mediator: Social Isolation			Mediator: Professional Isolation			DV: Organisational Identification		
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>b</i>	<i>SE</i>	<i>t</i>
Remote work	0.09	0.04	2.07*	0.06	0.04	1.51	-0.08	0.05	-1.45
Social Isolation				0.34	0.08	4.04***	0.08	0.12	0.69
Professional Isolation	0.32	0.08	4.08***				-0.52	0.12	-4.38***
Constant	3.07	0.44	7.00***	3.57	0.43	8.36***	3.45	0.71	2.84***
<i>R</i> <sup>2</sup>	0.14			0.34			0.38		
<i>F</i>	3.00**			9.68***			8.94***		

Note.  $N = 142$ . Unstandardised regression coefficients are reported to two decimals.

\* $p < .05$ ; \*\*  $p < .01$ ; \*\*\* $p < .001$

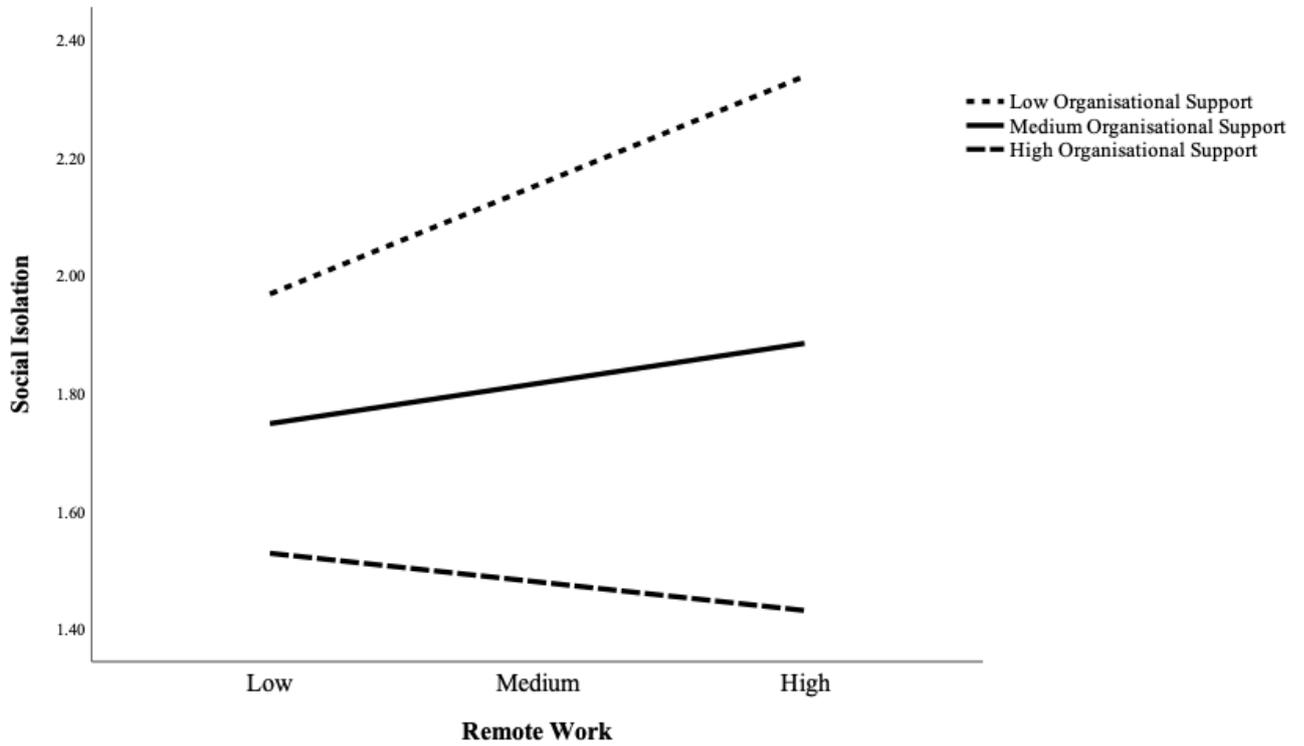
### **Moderation by Organisational Support**

Further analyses aimed to examine the indirect effect of remote work on organisational identification, through both workplace isolation mediators, while considering the moderating effect of organisational support on the mediator-outcome relationship.

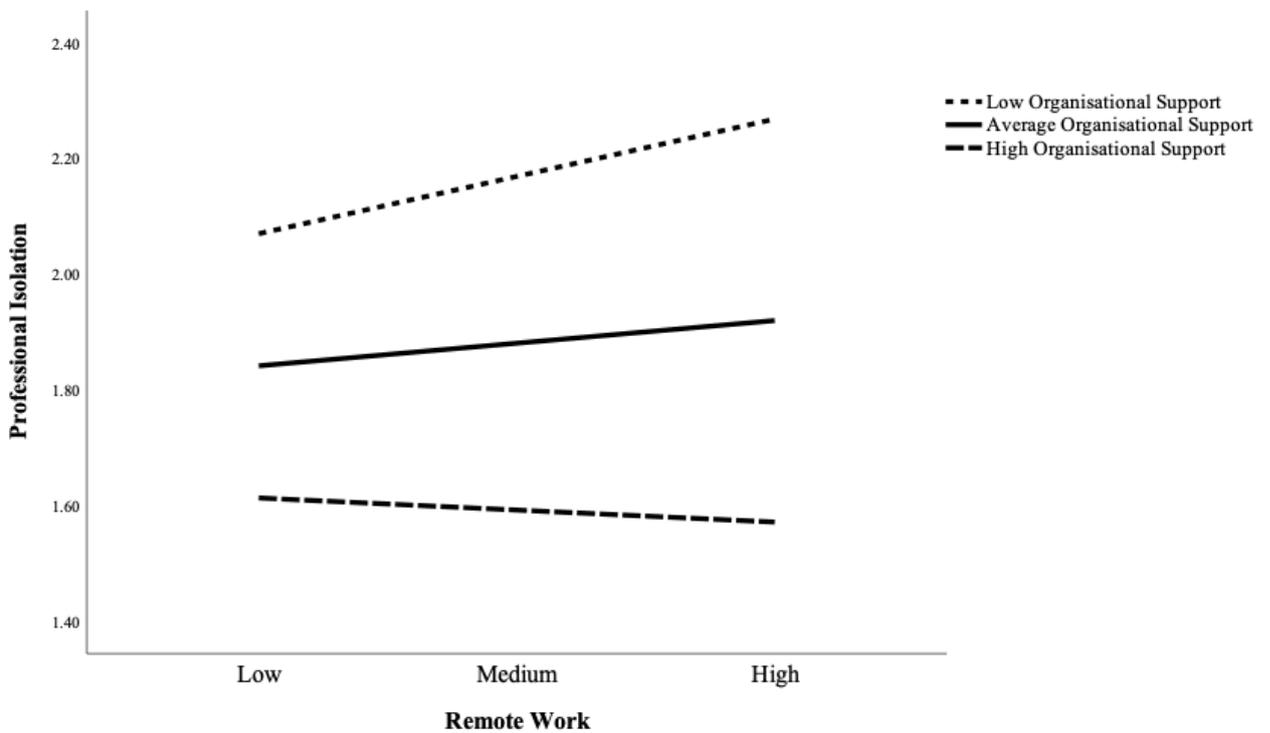
To derive regression coefficients and bootstrap confidence intervals with 5000 iterations, a Simple Slopes analysis was performed utilising Model 7 from the SPSS macro PROCESS (Hayes, 2018). This analysis involved computing regression equations for the predictor and criterion variables at low ( $-1 SD$ ), medium ( $M$ ), and high ( $+1 SD$ ), levels of the moderator (Field, 2013). Moderation is considered established when the association between the independent variable and the dependent variable is contingent on the presence of a third variable, with its effect statistically characterised as an interaction (Cohen et al., 2014).

Organisational support was first observed as a negative and significant predictor of social isolation for cases falling at the mean on remote work ( $b = -.54, t = -5.87, p < .001$ ). Consequently, the interaction of remote work and organisational support was significant and negative in predicting social isolation ( $b = -0.117, t = -2.09, p = .039$ ), suggesting that the slope for the effect of remote work on social isolation varies across levels of organisational support. As seen in Figure 1, Simple Slope tests indicated that the relationship between remote work and social isolation was significant and positive when organisational support was low ( $-1 SD; b = 0.115, t = 2.24, p = .027$ ), but not at mean ( $M; b = 0.042, t = 1.13, p = .260$ ) or high ( $+1 SD; b = -0.030, t = -.59, p = .554$ ) levels of organisational support. In other words, participants with low organisational support reported higher social isolation if they spent more time working remotely than on office premises. Yet, at mean and high levels of organisational support, remote work no longer predicts social isolation, indicating that the relationship between remote work and social isolation becomes weaker, as individuals report higher levels of organisational support. As such, H4a is supported.

Further, organisational support remained a negative and significant predictor of professional isolation for cases falling at the mean on remote work ( $b = -.46, t = -4.89, p < .001$ ). Yet, the interaction between remote work and organisational support was not found to be significant in predicting professional isolation ( $b = -0.060, t = -1.05, p = .298$ ). Accordingly, the Simple Slope for remote work was not statistically significant at low ( $-1 SD; b = 0.062, t = 1.17, p = .245$ ), medium ( $M; b = 0.024, t = .63, p = .529$ ), or high ( $+1 SD; b = -0.013, t = -.25, p = .804$ ) levels of organisational support (see Figure 2). Thus, organisational support does not significantly influence the relationship between remote work and professional isolation, suggesting H4b to be rejected.



**Figure 2.** *The Moderating Role of Organisational Support in the Relationship Between Remote Work and Social Isolation.*



**Figure 2.** *The Moderating Role of Organisational Support in the Relationship Between Remote Work and Professional Isolation.*

To further assess the presence of a moderated-mediation model, results from PROCESS Model 7 were used to analyse whether organisational support moderates the negative indirect effect of remote work on organisational identification via both social and professional isolation. As there is no substantial evidence of mediation by workplace isolation, it is unlikely that a significant moderated-mediation model would be present in this analysis (MacKinnon et al., 2000). Nevertheless, the indexes of moderated mediation were used to test the significance of these models, as per pre-registration.

As expected, analyses suggest that the difference of the indirect effects across levels of organisational support were not significant for social isolation (index = -0.009, 95% CI [-.053; .025]) or professional isolation (index = -0.031, 95% CI [-.048; .107]), as the presence of zero within the confidence intervals indicates the absence of significant effects. Consequently, the indirect effects did not reach statistical significance at lower (-1 SD) and higher (+1 SD) levels of organisational support (see Table 4). As such, H5a and H5b were not supported.

**Table 4.**  
*Summary of Indirect Effects and Conditional Indirect Effects*

Paths and effects	Estimates	SE	95% Confidence Intervals
<b>Remote Work → Social Isolation → Organisational Identification</b>			
Simple indirect effect	.007	.014	[-.018, .042]
Moderated mediation			
Lower organisational support (-1 SD)	.009	.019	[-.023, .054]
Higher organisational support (+1 SD)	-.002	.010	[-.024, .017]
Index of moderated mediation	-.009	.019	[-.053, .025]
<b>Remote Work → Professional Isolation → Organisational Identification</b>			
Simple indirect effect	-.031	.026	[-.089, .012]
Moderated mediation			
Lower organisational support (-1 SD)	-.032	.034	[-.101, .037]
Higher organisational support (+1 SD)	.007	.028	[-.051, .063]
Index of moderated mediation	.031	.039	[-.048, .107]

*Note.*  $N = 142$ .

## Discussion

As the global community anticipates the potential for establishing a new normal in the aftermath of COVID-19, institutions are carefully analysing the ramifications of implementing prolonged flexible work arrangements. Yet, much research to date has not considered the associated challenges of this new working landscape after the epidemic. The purpose of this study was to examine the impact of remote work on organisational identification, further assessing workplace isolation and organisational support as mediating and moderating variables, respectively. Results suggest that remote work is not

associated with organisational identification. Instead, an increase in remote work was found to elevate social isolation; an interaction moderated by organisational support.

Contrary to our first hypothesis, an elevated engagement in remote work did not reduce organisational identification. Such findings challenge previous literature surrounding this relationship (Kossen & van der Berg, 2022; Thatcher & Zhu, 2006; Wiesenfeld et al., 1999).

This discrepancy may be the result of technological diffusion that continues to contribute to workplace flexibilisation (Ranjan & Sarma, 2018). Notably, contemporary perspectives on organisational identification highlight predictors crucial for remote work, including contact frequency and organisational visibility (Wiesenfeld et al., 2001). Although such predictors traditionally relied on workplace proximity (Dutton et al., 1994; Pratt, 1998), developments in technology are primary drivers of altering this dynamic (Asatiani et al., 2021), placing organisations in a situation where they must adapt to sustain workplace affiliation in virtual contexts.

Instead, incorporating communication and collaboration tools into organisational routines enables the sustained communication that fosters employee belonging (Ashforth & Mael, 1989; Kossek & Lautsch, 2018), and creates virtual team environments that ensure continuous and dynamic visibility (Ang et al., 2015; Bortolotti et al., 2015). Indeed, social networking sites and video conferencing tools are being leveraged for workplace identification (Alexander et al., 2021; Deloitte, 2020), as they enable the development of meaningful interactions with other employees (Azaizah et al., 2018; Zhu & Miao, 2021), consequently providing contextual cues that confirm one's organisational membership (Brimrose & Brown, 2019; Kong & Weng, 2019; Pattnaik et al., 2020). Thus, the present study's inability to replicate contemporary research (e.g., Brocklehurst, 2001; Tietze & Musson, 2005), suggests that remote workers are learning how to proactively manage their organisational identities by establishing virtual presence. Additional research is needed to determine the exact mechanisms that predict organisational identification in a new working landscape.

Additionally, the current study's findings contradict Hypothesis 2b, as remote work did not lead to increased professional isolation. Yet, Hypothesis 2a was supported, as this study aligns with previous research to suggest social isolation to be a main drawback of telework (Cooper & Kurland, 2002; Ellis et al., 2020; Montreuli & Lippel, 2003; Wang et al., 2020).

As workplace isolation represents employees' perceptions of co-worker *availability* (Marshall et al., 2007), this research suggests that while remote institutions are leveraging technology for virtual contact (Johnson, 2023), it primarily addresses the perceptions of professional availability. For instance, as institutions increasingly incorporate various platforms, including Microsoft Teams and Slack, into their work routines (Chanana & Sangeeta, 2021; Goyal et al., 2021), employees can continuously showcase work and share updates on career progress. Thus, this research aligns with

more recent literature to imply that professional networking is continued throughout remote work (e.g., Kossek & Lautsch, 2018; Nicks et al., 2021).

Yet, such platforms do not leverage the physical separation that fulfils employees' need to socially belong (Baumeister & Leary, 1995; Wiesenfeld et al., 2001). Indeed, given the cruciality of face-to-face interactions for social cohesion (Mulki et al., 2008; Sacco & Ismail, 2014), our findings suggest that impromptu physical exchanges with colleagues might still be the most valuable way for social connections to occur (Andres, 2002; Fonner, 2015; Scott & Timmerman, 1999). Thus, the affective bonds that mitigate social isolation are not well-defined in virtual work (Fonner & Roliff, 2012; Mann et al., 2000). More research is clearly required to comprehend how social isolation detracts from professional isolation.

With regard to the third hypotheses, this study contradicts previous findings (e.g., Bartel et al., 2012; Kane, 2014), as workplace isolation did not mediate the relationship between remote work and organisational identification.

This distancing from existing conceptualisations may be due to the initial unfamiliarity of this work arrangement prior to the COVID-19 pandemic (Platts et al., 2022), delineating the negative associations with organisational belonging (e.g., Kossen & van der Berg, 2022). Nevertheless, as remote work's acquaintance becomes more prevalent (Baig et al., 2020), this study suggests that it no longer poses threats to the processes that hinder social identity (Kane, 2014). In fact, remote work progressively compliments positive attributes like job satisfaction instead (e.g., Felstead & Henseke, 2017; Kondratowicz et al., 2022). As Social Identity Theory states that individuals seek to elevate their self-esteem (Tajfel & Turner, 1985), affiliating with an organisation that provides such attractive benefits allows employees to perceive themselves as part of a progressive group (Turner et al., 1987), aligning with their motivation to uphold their self-esteem and identify with such a positively regarded institution (Ferrara et al., 2022). Although this study acknowledged the role of job satisfaction in organisational identification, it did not consider its mediating potential with remote work. Future research could explore the interplay between desired characteristics of remote work and organisational identification, enhancing our understanding of this relationship.

Further, Hypothesis 4a was met, as the expected protective effect of organisational support on social isolation was observed in individuals that work remotely (Aboelmaged & El Subbaugh, 2012; Lautsch et al., 2009; Sardeshmukh et al., 2012). Yet, distancing from Hypothesis 4b, this claim does not generalise to professional isolation, suggesting that organisational support addresses the social cohesion aspect of remote work, rather than professional prospects.

Indeed, the dimensions of organisational support and affiliated support schemes are typically designed to address social cohesion in remote work (Eisenberger et al., 1986; Worley et al., 2009). In virtual contexts, this study thus suggests the continued importance of various support initiatives (e.g.,

Graves & Karabayeva, 2020; Newman & Ford, 2021) when addressing the fundamental human need to belong (Eisenberger et al., 1986; Bentley et al., 2016).

However, when it comes to professional isolation, the impact of organisational support schemes is not as pronounced. This may primarily be due to the widespread use of technological resources that facilitate professional collaboration with the central office (Bosua et al., 2013), implying that such tools in itself are good examples of how organisations can mitigate professional isolation (Neufeld & Fang, 2005; Sardeshmukh et al., 2012). Indeed, recent literature (e.g., Bentley et al., 2016) has distinguished between organisational support and teleworker support, whereby the latter is designed to help the functioning of the employee as a remote worker by motivating technical competence and supervisor accessibility, rather than addressing the social aspects of their role. Thus, while organisational support can mitigate social isolation by fostering a sense of community, addressing professional isolation may require different support mechanisms. Future research should emphasise the importance of holistic support strategies in addressing the multifaceted challenges of remote work.

Lastly, the fifth hypotheses were not met, as organisational support did not moderate the wider indirect effect of remote work on organisational identification, via workplace isolation. This distances from previous literature to suggest that although supportive organisational constituents increase the employees' feelings of social belonging, it does not necessarily contribute to the shared belief that organisational support is self-enhancing (Edwards, 2009; He et al., 2014; Santiago, 2020).

Instead, it could be argued that the remote employees who actively seek workplace connection may have done so anyway, regardless of the availability of supportive resources (Kossek & Lautsch, 2018). However, this type of individual-focused support primarily caters to the needs of isolated individuals, without necessarily fostering a collective sense of identity among virtual workers (e.g., Slof et al., 2021). Instead, creating a shared social identity typically involves a collective sense of belonging and shared experiences among group members (Ashforth et al., 2008); contexts which become more difficult to promote as employees have increasing autonomy in their location of work (Dery & Hafermalz, 2016; Raghuram et al., 2019). Thus, even with organisational support addressing social isolation at the individual level, it may not bridge the gap and facilitate a shared social identity among remote workers (Kreiner et al., 2009), stressing the need for future research to investigate unique dynamics and mechanisms that foster a shared social identity in virtual work arrangements.

## **Implications**

This present study focuses on increasing implementation of flexible work arrangements in a post COVID-19 era, posing significant theoretical implications that challenge existing theories in the context of remote work (e.g., Baumeister & Leary, 1995; Tajfel, 1974; Tajfel & Turner, 1979; Wiesenfeld et al., 2001). Indeed, the departure from traditional assumptions may be attributed to the

increased technological competence of employees (Nguyen et al., 2020), debunking the notion that physical proximity is necessary for workplace affiliation in the digital era (Thatcher & Zhu, 2006; Wiesenfeld et al., 1999), and underscoring the need to revise traditional theories in light of technological advancements.

Nevertheless, this research implies that social isolation remains a major drawback of remote work, as institutions have not yet learnt how to leverage digital tools for social cohesion (Cotton et al., 2013). Accordingly, the principles of organisational support (Eisenberger et al., 1986) remain valid in the new working landscape, as it acts as a buffer to the adverse social experiences of remote employees (Bentley et al., 2016).

By understanding these theoretical implications, organisations must continuously develop support strategies that contribute to employees' sense of purpose and meaning (Brooks, et al., 2020; Deschênes, 2023; Mihalache & Mihalache, 2022). Naturally, initiatives including virtual team-building activities and online social communities have addressed the unique challenges posed by remote work in the digital age (Chen et al., 2020; CIPD, 2021; Usman et al., 2021), implying their continued importance for remote employees to thrive and maintain strong connections with their organisation.

Yet, aside from having such hard controls in place, organisations should additionally provide training on how to improve the use of these support mechanisms for communication and collaboration (Ellsworth-Krebs et al., 2021; Parry, et al., 2022). Undeniably, the sudden onset of remote work forced the need of the workforce to acquire new competencies to effectively work in virtual contexts (Vartiainen, 2021), stressing the significance of training programs that focus on managing and supporting hybrid teams to effectively equip remote employees with the necessary skills to mitigate the challenges associated with social isolation (Ferreira et al., 2023).

Nonetheless, remote work counter-intuitively offered an opportunity for organisations to apply significant forethought on to how effectively handle the evolving expectations of a remote workforce (Raghuram, 2021). Indeed, given the widespread adoption of remote work as an option, rather than an exception, it is crucial to consider the current context to gain a nuanced understanding of how such practical implications can manifest during a period of immense organisational change (Brewster et al., 2016; Cooke et al., 2019). Organisations should thus continue to monitor and adapt virtual work practices, to ensure organisational ability in recreating identification and socialisation processes that fit the evolving needs of a dispersed workforce (Popovici & Popovici, 2020; Schlachter et al., 2018).

## **Limitations**

Despite the insightful implications, this research does not go without limitations. The correlational, cross-sectional design employed in this research hinders the capacity to exhibit causal relationships

and understand the dynamic nature of remote work in relation to the observed variables, only providing a snapshot of the proposed relationships (e.g., Gabr et al., 2021). As flexible work arrangements are continuously evolving (King's College London, 2022), longitudinal analyses would be necessary to capture the ongoing trends and changes in remote work practices, offering a more thorough understanding of the dynamic nature of remote work and its implications for individuals and organisations (Hu & Subramony, 2022; Mutebi & Hobbs, 2022).

Furthermore, the present study's adopted dependent variable measures were developed before the widespread adoption of remote work as the new normal (Rudolph, et al., 2021), thus may not fully capture the unique dynamics and challenges associated with this work arrangement in the current era of organisational change (De Lucas Ancillo et al., 2023). In consequence, caution is advised when interpreting the current findings, and should consider the potential differences in experiences and perceptions of flexible work arrangements in today's context, where organisations are increasingly adapting their practices to accommodate the new working landscape (Felstead & Henseke, 2017; Forbes et al., 2020). Subsequent research should therefore consider employing revised measures that better capture the current remote work environment, and encapsulate a holistic approach to flexible work arrangements, to ensure greater generalisability of findings.

In conclusion, the pandemic commenced organisations to swiftly implement alternative working practices, primarily necessitated by stay-at-home orders and social distancing. Going forward, society continues to leverage this new working landscape, marked by the adoption of flexible work arrangements, including remote work. This present study aimed to assess the implications of this structural shift, suggesting that remote work no longer holds a significant relationship with organisational identification or professional isolation, but still poses threats to social isolation. Although the exact mechanisms that are responsible for this lack of significance go beyond the scope of this study, it seems that organisations are now in a position where they can apply significant forethought and careful planning to how they can best manage the organisational affiliation and career aspirations of their virtual employees. Nevertheless, the importance of organisational support for social cohesion is not limited to traditional work settings, stressing the need for organisations to develop strategies and policies that enable remote workers to thrive and maintain strong social connections with their workplace. Ultimately, significant planning is required for any change, and fortunately, the post-pandemic era and technological innovations has allowed organisations ample time to reassess their existing practices. As such, how economists and policy-makers commandeer the constantly altering working landscape will determine how the implications to virtual employees' well-being will continue to unfold.

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## Appendices

### Appendix A Pre-registration of Dissertation Study



**CONFIDENTIAL - FOR PEER-REVIEW ONLY**

#### **Exploring The Impact of Remote Work on Organisational Identification (#128646)**

**Created: 04/13/2023 04:39 AM (PT)**

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#### 1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

#### 2) What's the main question being asked or hypothesis being tested in this study?

The aim of this current research is to investigate the impact of remote work on employees' organisational identification. We test whether an increased extent of remote work will lead to decreased organisational identification in full-time white-collar employees, compared to those individuals that remote work to a lesser extent. Additionally, we test whether employees who experience more significant social and professional isolation will display even lower levels of organisational identification using the same scales. Further, we aim to test whether employees who experience high levels of organisational support will be protected from social and professional isolation, and hence display more positive feelings of organisational identification, despite engaging in high levels of remote work.

#### 3) Describe the key dependent variable(s) specifying how they will be measured.

The dependent variable is organisational identification, which will be measured using Mael & Ashforth's (1992) unidimensional scale of organisational identification. Additionally, using the workplace isolation subscales (Marshall et al., 2007), social and professional isolation will be measured as mediating variables. Organisational support will be tested as a potential moderating variable using five items from the measure of supportive behaviours from Aubé & Rousseau (2005), which reflects the actual actions colleagues take to emotionally and physically help others at work. Further, general occupational measures will be assessed to measure the employment characteristics of the sample, some of which will be used as controls throughout the study.

#### 4) How many and which conditions will participants be assigned to?

As this is a survey-based study, participants will not be typically assigned to conditions, but rather respond to questions in a self-reported manner. Therefore, in this case, the independent variable would be the participant's responses on the extent of the remote work question (0 – 5 days per week). There will not be any conditions to assign participants. The responses to this question will be collected and analysed to determine patterns or relationships between the extent of remote work and other variables of interest in the study.

#### 5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Main hypothesis: A one-way analysis of variance (ANOVA) will be performed to test for significant

differences between the means of organisational identification across the average levels of the remote work engaged in weekly. Mediation hypothesis: A series of regression analyses will be performed to examine whether the mean ratings of organisational identification (DV) were mediated by social isolation and professional isolation (IVs). Specifically, the DV will be regressed once onto a condition variable only to measure the total effect of the IV on the DV. Next, the mediators (social and professional isolation) will be regressed on the IV separately, to examine the effect of the IV on the mediator variables. Lastly, a simultaneous regression analysis will regress the DV simultaneously onto the mediators and the IV, to see if the effect of the IV is significantly reduced once the mediators are accounted for. A bootstrapping procedure will determine whether this reduction is significant so that we can conclude significant mediations. Moderation hypothesis: A series of regression analyses will be conducted to test organisational support as a potential moderator of the effect of remote work on the mean ratings of the organisational identification. Specifically, for this analysis, the DV will first be regressed on the six categories of the IV to examine the main effect of the IV. Then, the moderator variable will be added to the regression model to examine the interaction effect of the moderator variable and the IV on the DV. To test for the significance of the interaction effect, the F-test will be used to compare the model with both the main and interaction effects to the model with only the main effect of the independent variable. A significant interaction would indicate that the effect is indeed moderated by the hypothesised moderator, organisational support.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Eligibility for the study will include being a full-time employee in a white-collar occupation, and aged 16+ years. We will exclude any participants that do not meet these criteria. Further, we will exclude participants who incorrectly answer the attention check question presented within the survey.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

At least 100 participants will be recruited for this study. This has been decided based on a statistical power analysis that was performed using the G\*power program for sample size estimation. With an alpha = 0.05 and power = 0.80, the projected sample size needed for a medium effect size ( $f^2 = 0.15$ ) is approximately 85 is required to detect a significant model. Thus, the proposed sample size of 100 will be more than adequate for the objectives of this study and should also allow for expected attrition and our additional objectives of controlling for possible mediating and moderating variables.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

N/A

## Appendix B Qualtrics Dissertation Questionnaire

### *Employees' Experience of Remote Work Schemes*

Organisational and Social Psychology, LSE

#### Information for participants

Thank you for considering participating in this study which will take place in May 2023. This information sheet outlines the purpose of the study and provides a description of your involvement and rights as a participant, if you agree to take part.

#### 1. What is the research about?

The research study that explores '*remote work*' practices and how they are experienced by employees in the workplace. By working from home, this study interprets this as an employee working from their house, apartment, or place of residence, rather than working from the office. It is not novel that ever since the COVID-19 epidemic, workplaces have set in motion and sustained a work environment that is no longer limited to spatial and temporal boundaries. The researcher is interested in extrapolating experiences of this structural shift from the employees that are employed in this flexible work arrangement.

#### 2. Do I have to take part?

Taking part in this research is entirely *voluntary*, and you are free to make your own choice about whether you want to participate. If you agree to take part, you can choose not to answer any questions that you do not want to. You are also free to withdraw from the study at any time, without having to give a reason. This can be done by simply closing your browser throughout the survey. Lastly, you can decide not to consent to having your data included in further analyses.

#### 3. What will my involvement be?

The survey will be completed online at a time that suits you best. As the main task of this study, you will be required to answer the questions presented throughout the survey. The survey itself should last approximately 20 minutes. It is important that you try to answer all the questions. If you are not quite sure about a question, simply tick the box that applies most. This is your personal assessment, there are no right or wrong answers. Some of the questions to be asked may require details that are considered sensitive for some individuals. If you do not feel comfortable providing these details, you are not required to. Alternatively, you may wish to withdraw from the survey by closing the browser.

#### 4. How do I withdraw from the study?

You can withdraw from the study at any point until 1<sup>st</sup> June 2023, without having to give a reason. If any questions during the survey make you feel uncomfortable, you do not have to answer them. Withdrawing from the study will have no effect on you. If you withdraw from the study, I will not retain the information you have given thus far, unless you are happy for me to do so.

#### 5. What will my information be used for?

I will use the collected information exclusively for scientific purposes. The responses that you will provide throughout the survey will inform our research on employees' remote work experiences, as part of a Master's Dissertation Project at the London School of Economics and Political Science. The findings of the research may also be published in research journals or used in presentations. If you would like to be sent a summary of the findings, we can arrange for this.

#### 6. Will my taking part and my data be kept confidential? Will it be anonymised?

All the data collected from you will be anonymised and there will be no record that links the data collected from you with personal data from which you could be identified. Only myself and my

supervisor will have access to the data files. Once the project is completed, the information you have provided will be kept safely by the London School of Economics and Political Science. If you give your consent, the information you provide will be made “open data”. This indicates that your anonymised data will be made publicly available and may be used for purposes not related to his study. You will remain unidentifiable from these data – your name will not be used in any reports or publications resulting from the study.

### 7. Who has reviewed this study?

This study has undergone ethics review in accordance with the LSE Research Ethics Policy and Procedure.

### 8. Data Protection Privacy Notice

The LSE Research Privacy Policy can be found at:

[https://info.lse.ac.uk/staff/divisions/Secretarys-Division/Assets/Documents/Information-Records-Management/Privacy-Notice-for-Research-v1.2.pdf?from\\_serp=1](https://info.lse.ac.uk/staff/divisions/Secretarys-Division/Assets/Documents/Information-Records-Management/Privacy-Notice-for-Research-v1.2.pdf?from_serp=1)

The legal basis used to process your personal data will be Legitimate Interests. The legal basis used to process special category personal data (e.g. data that reveals racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, health, sex life or sexual orientation, genetic or biometric data) will be for scientific and historical research or statistical purposes.

To request a copy of the data held about you please contact: [glpd.info.rights@lse.ac.uk](mailto:glpd.info.rights@lse.ac.uk)

### 9. What if I have a question or complaint?

If you have any questions regarding this study please contact the researcher, [researcher name] on [researcher email].

If you have any concerns or complaints regarding the conduct of this research, please contact the LSE Research Governance Manager via [research.ethics@lse.ac.uk](mailto:research.ethics@lse.ac.uk).

If you are happy to take part in this study, please sign the consent sheet attached/below.

## CONSENT FORM

### PARTICIPATION IN THIS RESEARCH STUDY IS VOLUNTARY

I have read and understood the study information dated May 2023, I understand the nature and purpose of the procedures involved in this study. These have been communicated to me on the information sheet accompanying this form.	YES / NO
I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and that I can withdraw from the study at any time up until 1 <sup>st</sup> June 2023, without having to give a reason.	YES / NO
I understand that the information I provide will be used for the researcher’s Master’s Dissertation, and that the information will be anonymised	YES / NO
I understand that any personal information that can identify me will be kept confidential and not shared with anyone, and that on completion of the study my data will be anonymised by removing all links between identifying information and my study data	YES / NO
I give permission for the anonymised information I provide to be deposited in a data archive so that it may be used for future research not related to this study, and it will not be possible to identify me from these data.	YES / NO

For information please contact: [researcher name]

[researcher email]

By selecting "I consent", you indicate agreement to all the points mentioned and thus fully and freely consent to your participation in this study. The survey will then commence.

- I consent, begin the study.
- I do not consent; I do not wish to participate.

### **Eligibility Criteria**

1. What is your age?:
  - a. (no. of years)
2. What is your current employment status?
  - a. Employed full-time (40+ hours a week)
  - b. Employed part-time (less than 40 hours a week)
  - c. Unemployed
  - d. Student
  - e. Retired
  - f. Self-employed
  - g. Other (please specify)
  - h. Prefer not to say
3. Are you currently employed in a white-collar occupation?  
*This survey defines a white-collar occupation as a professional, managerial, or administrative job that is performed from behind a desk in an office or other formal (remote) setting.*
  - a. Yes
  - b. No

### **Introduction Questions**

4. Which of the following white-collar occupations best describes your current profession?  
Please select one.
  - a. Accounting/Finance
  - b. Law/Legal Services
  - c. Marketing/Advertising/Public Relations
  - d. Consulting
  - e. Education/Teaching
  - f. Healthcare/Medical Services
  - g. Information Technology/Computer Science
  - h. Engineering/Architecture
  - i. Management/Executive
  - j. Other (please specify)
  - k. None (does not apply)
5. How many years have you been employed by your current organisation?
  - a. 0-1
  - b. 1-2
  - c. 3-5
  - d. 5-7
  - e. 7-10
  - f. 10+

The following questions are related to how you currently experience remote work.

*This survey defines remote work as a work arrangement in which an employee performs their job duties outside of a traditional office environment, such as from their home, a co-working space, or another remote location.*

6. Which of the following best describes your *current* work arrangement, after the COVID-19 pandemic?
  - a. Fully remote – “I work from home or another location all the time”.
  - b. Hybrid – “I split my time between working remotely and working on-site”.
  - c. Fully on-site – “I work on-site at an office or physical location all the time”.
  - d. Other (please specify)
  
7. On average, how many days a week do you work remotely?
  - a. I never work remotely
  - b. 1 day a week
  - c. 2 days a week
  - d. 3 days a week
  - e. 4 days a week
  - f. 5 days a week
  
8. Did you start working remotely prior to the COVID-19 pandemic?
  - a. Yes
  - b. No
  - c. Not applicable
  
9. How much experience do you have in remote work?
  - a. None at all
  - b. A little
  - c. A moderate amount
  - d. A lot
  - e. A great deal
  
10. Do you prefer working remotely?
  - a. Yes, I prefer working remotely
  - b. No, I prefer working in the office
  - c. No preference, I am open to both working remotely and in the office
  - d. Not applicable
  
11. How satisfied are you today with your job?
  - a. Extremely dissatisfied
  - b. Somewhat dissatisfied
  - c. Neither satisfied nor dissatisfied
  - d. Moderately satisfied
  - e. Extremely satisfied

**Social Isolation (Marshall et al., 2007)**

**Please indicate your level of agreement with the following statements:**

*Please note that the following questions are related to your current work experience, outside of the context of the COVID-19 pandemic.*

12. I have friends available to me at work

- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
13. I have one or more co-workers available who I talk to about day-to-day problems at work
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
14. I have co-workers available whom I can depend on when I have a problem.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
15. I have enough people available at work with whom I can talk about my job.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
16. I have people around me at work.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree

**Professional Isolation (Marshall et al., 2007)**

**Please indicate your level of agreement with the following statements:**

*Please note that the following questions are related to your current work experience, outside of the context of the COVID-19 pandemic.*

17. I am well integrated with the company where I work.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
18. I am kept in the loop regarding company social events/functions.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree

- d. Somewhat agree
  - e. Strongly agree
19. I am part of the company network.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
20. Upper management knows about my achievements.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
21. My supervisor communicates my achievements to upper management
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree

**Organisational Support (Aubé & Rousseau, 2005)**

**Please indicate your level of agreement with the following statements:**

*Please note that the following questions are related to your current work experience, outside of the context of the COVID-19 pandemic.*

22. We help each other out if someone falls behind in his/her work.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
23. We cooperate to get the work done.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree
24. We encourage each other to do a good job.
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree

25. We recognise and value the contributions of each member to task accomplishment.
- Strongly disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - Somewhat agree
  - Strongly agree
26. We care about team members' feelings and well-being
- Strongly disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - Somewhat agree
  - Strongly agree

**Organisational Identification (Mael & Ashforth, 1992)**

**Please indicate your level of agreement with the following statements:**

*Please note that the following questions are related to your current work experience, outside of the context of the COVID-19 pandemic.*

27. When someone criticises my employer, it feels like a personal insult.
- Strongly disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - Somewhat agree
  - Strongly agree
28. I am very interested in what others think about my employer.
- Strongly disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - Somewhat agree
  - Strongly agree
29. When I talk about my employer, I usually say "we" rather than "they."
- Strongly disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - Somewhat agree
  - Strongly agree
30. My employer's successes are my successes.
- Strongly disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - Somewhat agree
  - Strongly agree
31. When someone praises my employer, it feels like a personal compliment
- Strongly disagree
  - Somewhat disagree

- c. Neither agree nor disagree
- d. Somewhat agree
- e. Strongly agree

32. If a story in the media criticised my employer, I would feel embarrassed
- a. Strongly disagree
  - b. Somewhat disagree
  - c. Neither agree nor disagree
  - d. Somewhat agree
  - e. Strongly agree

### **Demographics**

33. What gender do you identify with?
- a. Male
  - b. Female
  - c. Non-binary/third gender
  - d. Prefer not to say
34. Please specify the ethnicity you identify with:
- a. White
  - b. Mixed/multiple ethnic groups
  - c. Asian/Asian British
  - d. Black/African/Caribbean/Black British
  - e. Prefer not to say
  - f. Other (please specify)
35. Please specify where you currently live:
- a. Europe
  - b. Asia
  - c. North America
  - d. South America
  - e. Australia
  - f. Africa
  - g. Prefer not to say
36. Please specify where you are currently employed:
- h. Europe
  - i. Asia
  - j. North America
  - k. South America
  - l. Australia
  - m. Africa
  - n. Prefer not to say
37. What is the highest degree or level of school you have completed?
- a. Less than a high school diploma
  - b. High school degree or equivalent
  - c. Bachelor's degree (e.g., BA, BSc)
  - d. Master's degree (e.g., MA, MS, MEd)
  - e. Doctorate (e.g., PhD, EdD)
  - f. Other (please specify)

## DEBRIEFING INFORMATION

*Exploring The Impact of Remote Work on Organizational Identification: The Mediating Roles of Workplace Isolation, and the Moderating Effect of Organizational Support.*

### Research Background

Remote working has become increasingly prevalent in recent years due to technological advancements and the COVID-19 pandemic, posing new challenges and opportunities many organisations. One area that has received little attention is how remote working may influence employees' sense of belonging in the workplace. Thus, this present study aims to investigate how remote work affects feelings of isolation and subsequent organisational identification in a sample of full-time white-collar employees. Organisational support will be additionally assessed in attempts to provide insights for employing organisations to promote a sense of belonging, as the shift to remote work sustains. Results of this study will have important implications for the management of remote workers and the design of remote work policies.

As a result of your participation in this study, your responses will contribute to the testing of these hypotheses and will later be developed into a Master's Dissertation project.

### Readings of interest

- Bentley, T. A., Teo, S. T., McLeod, L., Tan, F., Bosua, R., & Gloet, M. (2016). The role of organisational support in teleworker wellbeing: A socio-technical systems approach. *Applied ergonomics*, 52, 207-215.
- Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., ... & Vugt, M. V. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American psychologist*, 76(1), 63-77.
- van Zoonen, W., Sivunen, A., Blomqvist, K., Olsson, T., Ropponen, A., Henttonen, K., & Vartiainen, M. (2021). Factors influencing adjustment to remote work: Employees' initial responses to the COVID-19 pandemic. *International journal of environmental research and public health*, 18(13), 6966.
- Wang W, Albert L and Sun Q (2020) Employee isolation and telecommuter organizational commitment. *Employee Relations* 42(3): 609–625.

### Further Support

If your isolation is a significant cause of stress, consider talking to a friend, a trusted adult, or a health professional. Below is a list of organisations you can contact directly for confidential support:

- **Samaritans:** If you need someone to talk to then Samaritans are available on 116 123 (UK) for free, 24/7. They are there to talk to, listen and they won't judge or tell you what to do.
- **NHS mental health hub:** If you're experiencing stress, feelings of anxiety or low mood, the NHS mental health hub has advice, a self-assessment quiz, audio guides and practical tools to help.
- **Mind's Side by Side:** You can join Mind's Side By Side, an online community where you can listen, share and be heard by others:

### Dissemination of results

The results of the study will be made available at the end of my postgraduate studies by September 2022. These results will be disseminated as part of a Master's Dissertation project.

### Contact details

If you have further questions or are interested in the study results, please contact [researcher name], on [researcher email]

You can also speak to the supervisor of the project, Ilka Gleibs

Email – [i.h.gleibs@lse.ac.uk](mailto:i.h.gleibs@lse.ac.uk)

If you have any concerns or complaints regarding the conduct of this research, please contact the LSE Research Governance Manager via [research.ethics@lse.ac.uk](mailto:research.ethics@lse.ac.uk).

### **Final Consent**

#### **Having participated in the study**

I agree to the London School of Economics and Political Science keeping and processing the data I have provided during the course of this study in accordance with the information I received at the outset and the Data Protection Regulation.

By clicking on "Next", you confirm that the questionnaire is finished and provide final consent to submit all your responses in the study.

Thank you for completing our survey that seeks to explore the organisational impact of remote work.

Your responses will help us to better understand the impact of remote work on employees' sense of connection to their organisation and how workplace isolation and organisational support may play a role in shaping this relationship. Your input will be invaluable in helping us to develop strategies that can enhance employee well-being and productivity in the context of remote work.

Please note that your responses will be kept confidential and will only be used for research purposes. We value your privacy and appreciate your trust in us.

Thank you again for your time and for sharing your valuable insights with us. Your contribution is greatly appreciated!

**Appendix C**  
**Preliminary Analyses and Key Assumptions**

**Normality, Outlier, Independence, and Multicollinearity Assumptions**

**Table 5.**  
*Descriptive and Collinearity Statistics*

		Statistic
Organisational Identification	Mean	3.36
	5% Trimmed Mean	3.39
	Minimum	1.00
	Maximum	5.00
	Skewness	-0.51
	Kurtosis	-0.48
Organisational Support	Mean	4.38
	5% Trimmed Mean	4.44
	Minimum	2.00
	Maximum	5.00
	Skewness	-1.20
	Kurtosis	1.70
	VIF	1.87
Professional Isolation	Mean	1.88
	5% Trimmed Mean	1.81
	Minimum	1.00
	Maximum	5.00
	Skewness	1.24
	Kurtosis	1.15
	VIF	1.87
Social Isolation	Mean	1.82
	5% Trimmed Mean	1.77
	Minimum	1.00
	Maximum	5.00
	Skewness	1.03
	Kurtosis	0.92
	VIF	1.56
Remote Work	Mean	2.68
	5% Trimmed Mean	2.70
	Minimum	0.00
	Maximum	5.00
	Skewness	-0.08
	Kurtosis	-1.03
	VIF	1.51
Model Summary	Durbin-Watson	1.74

*Note.*  $N = 142$ .

### Linearity Assumptions

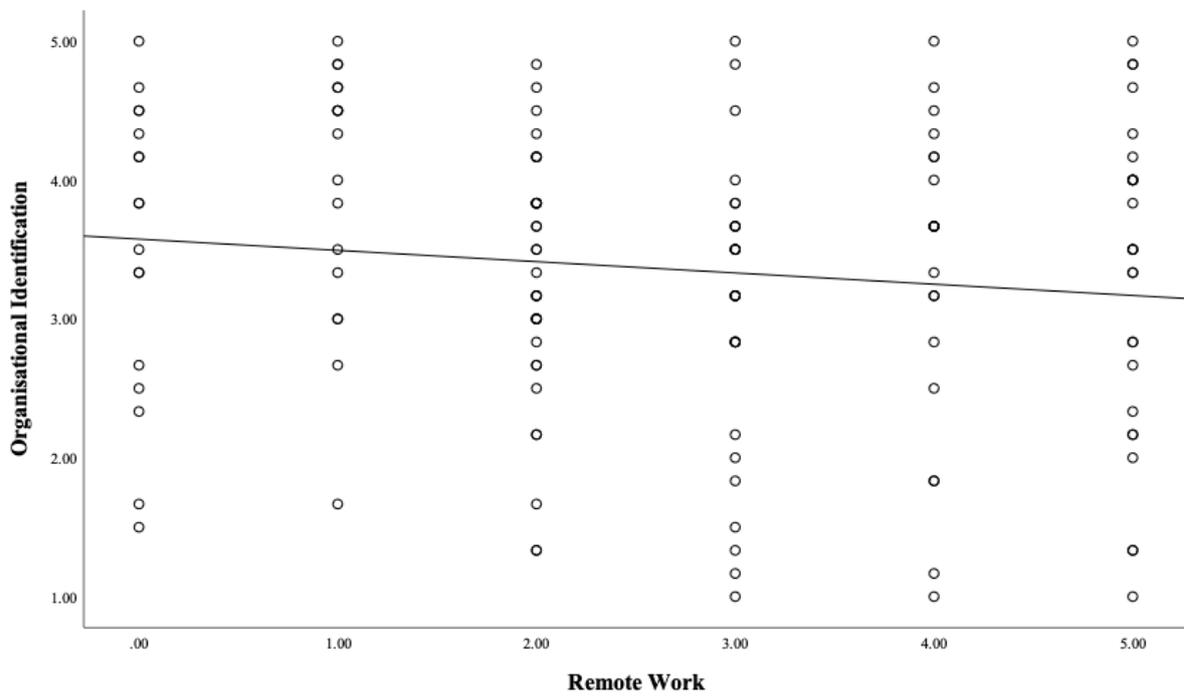


Figure 4. Relationship Between Remote Work and Organisational Identification.

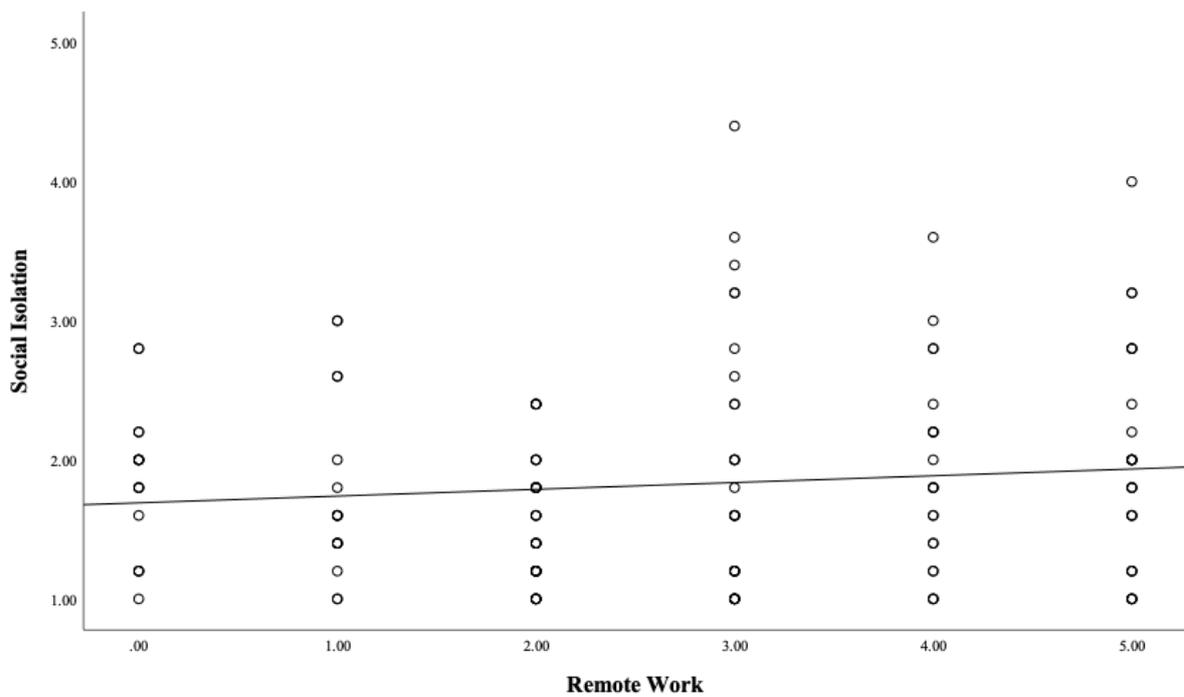
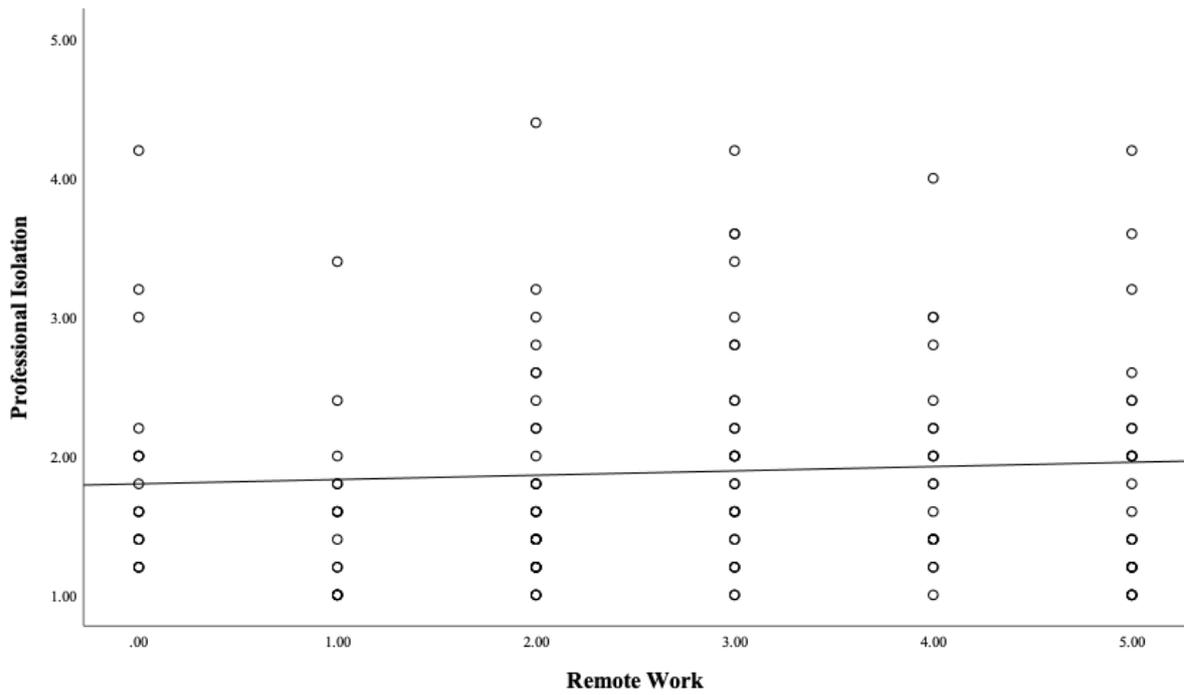
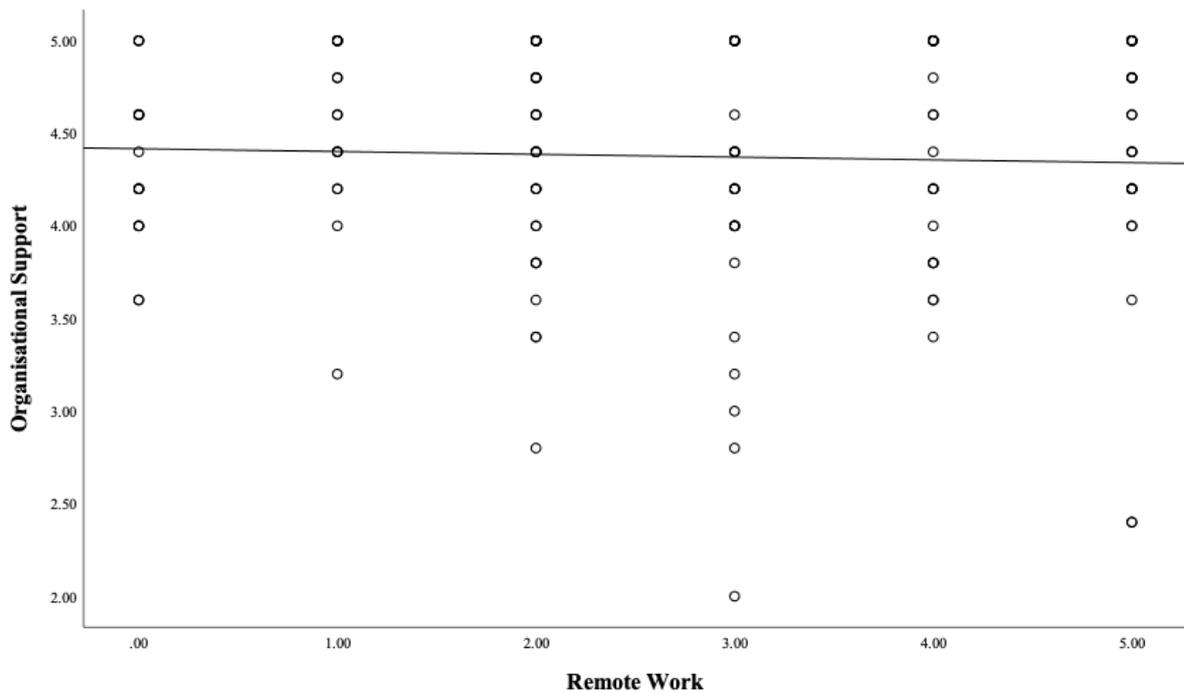


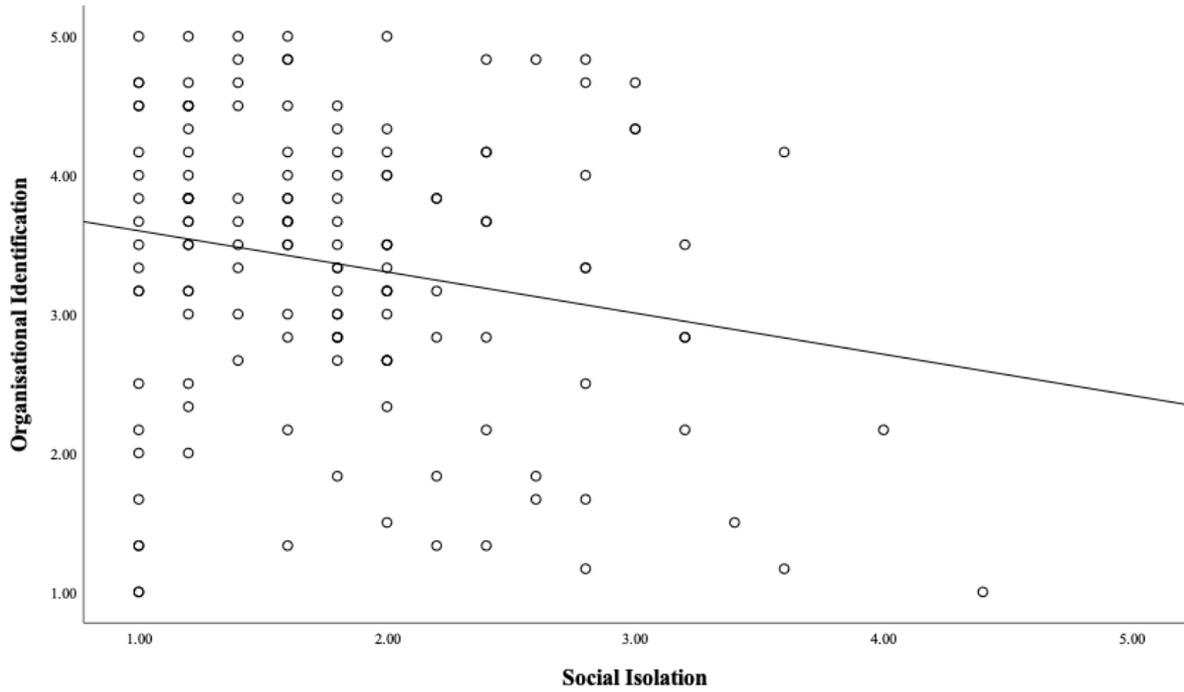
Figure 5. Relationship Between Remote Work and Social Isolation.



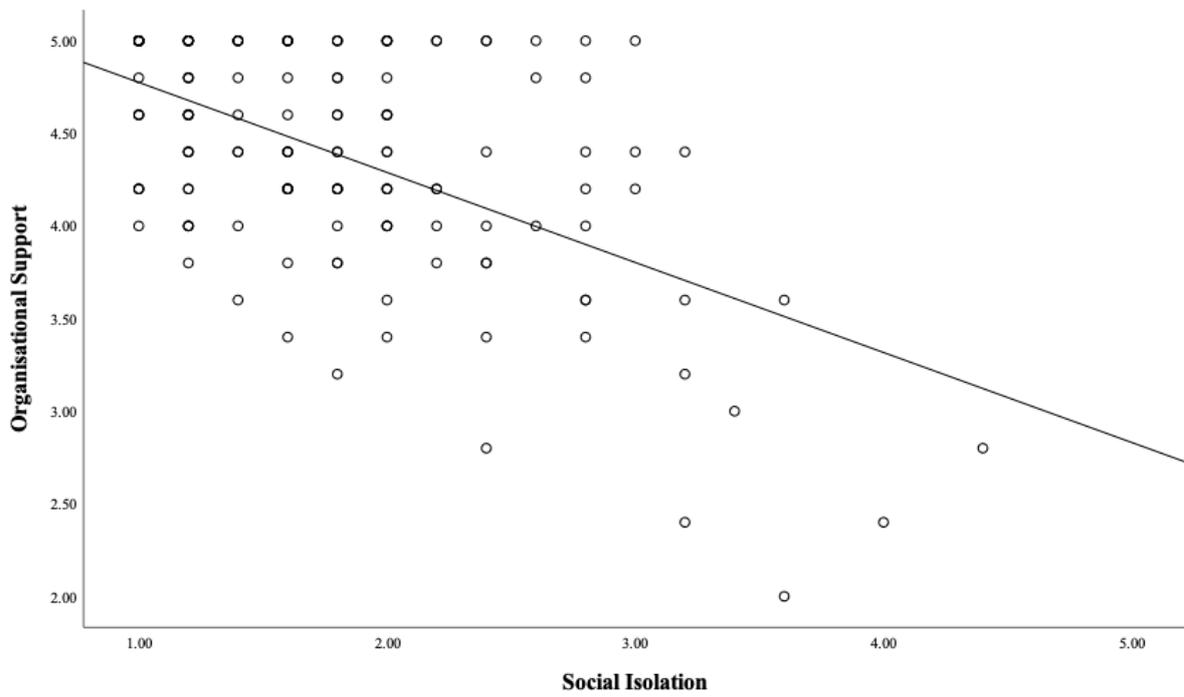
**Figure 6.** Relationship Between Remote Work and Professional Isolation.



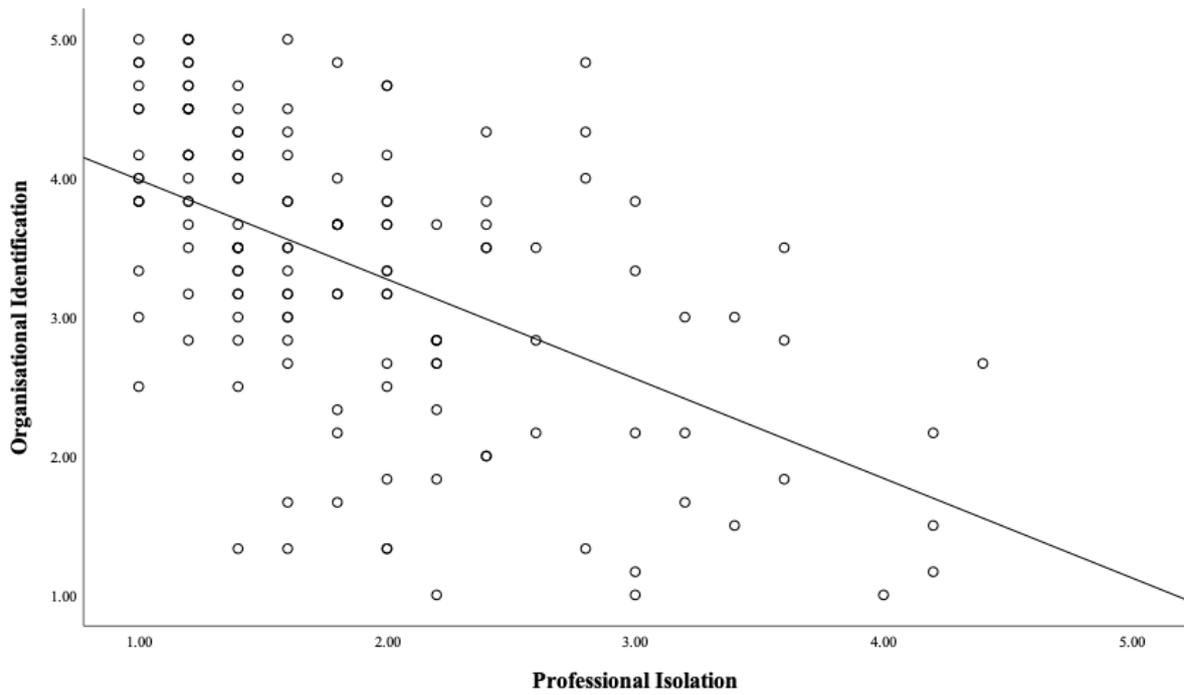
**Figure 7.** Relationship Between Remote Work and Organisational Support.



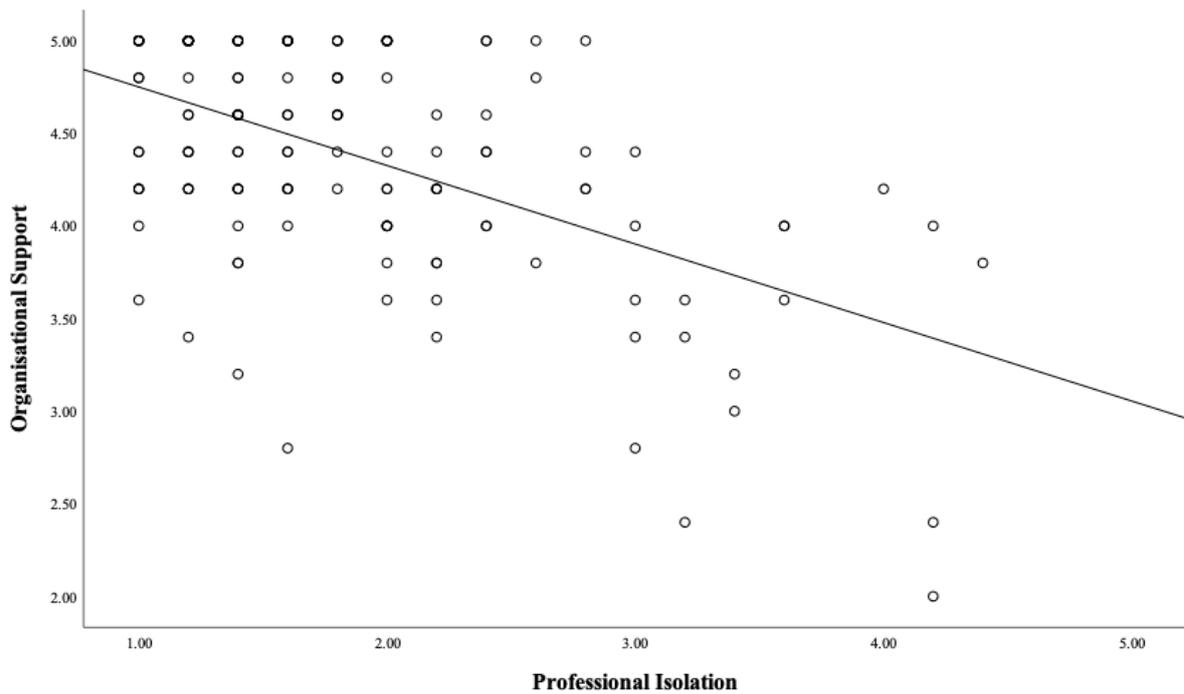
**Figure 8.** *Relationship Between Social Isolation and Organisational Identification.*



**Figure 9.** *Relationship Between Social Isolation and Organisational Support.*

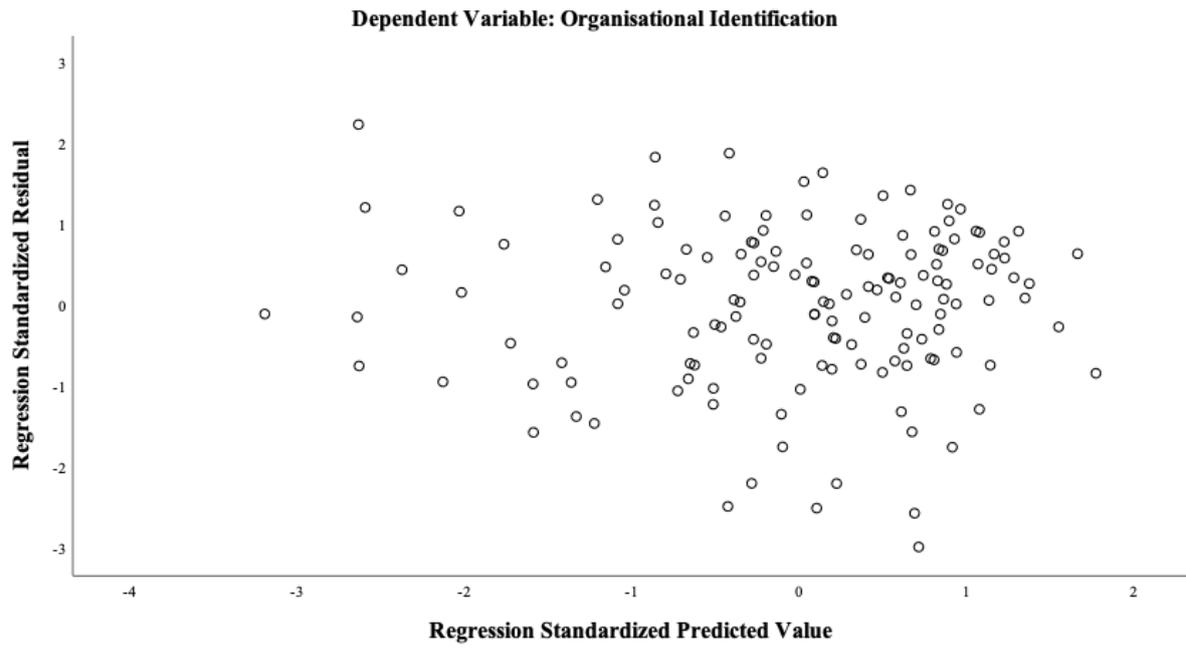


**Figure 10.** *Relationship Between Professional Isolation and Organisational Identification.*



**Figure 11.** *Relationship Between Professional Isolation and Organisational Support.*

## Homoscedasticity Assumption



**Figure 12.** *Residuals Scatterplot of the Regression Standardised Residuals.*