

When Will Employees Accept Remote Working? The Impact of Gender and Internet Skills

Ailun XIONG

Associate Professor, Chongqing Technology and Business University, Chongqing,
400067, China

Email: allenxiong2008@126.com

Senmao XIA

Senior Lecturer (Associate Professor), Surrey Business School, University of Surrey,
Guildford, GU2 7XH, UK

Email: s.xia@surrey.ac.uk

Qile HE

Professor, Derby Business School, University of Derby, Derby, DE22 1GB, UK

Email: q.he@derby.ac.uk

Nisreen AMEEN

Associate Professor, School of Business and Management, Royal Holloway
University of London, London, WC1B 3RF, UK

Email: nisreen.ameen@rhul.ac.uk

Ji YAN

Professor, Durham University Business School, Mill Hill Lane, Durham, UK, DH1
3LB

Hunan University of Technology and Commerce, Yuelu Avenue, Changsha, Hunan,
410205, China

ji.yan@durham.ac.uk

Paul JONES

Professor, School of Management, Swansea University, Swansea, SA2 8PP, UK

Email: w.p.jones@swansea.ac.uk

Corresponding author:

Dr. Senmao XIA, Senior Lecturer (Associate Professor), University of Surrey,
Guildford, UK

Email: s.xia@surrey.ac.uk; xsem6688@sina.com

This work is financed by the Foundation of Ministry of Education: 19YJC630187, and National Science Youth Foundation: 71902014.

When Will Employees Accept Remote Working? The Impact of Gender and Internet Skills

Abstract:

The unprecedented COVID-19 pandemic required millions of people across the world to become remote workers. However, little is known about how to achieve effective remote working for organizations. This study investigates the types of employees that are more suited to accepting remote working by considering two determinants: gender and internet skills. Based on an official data set from China, this study reveals that females are more likely to accept remote working, as are those employees with advanced internet skills. This study further investigates the impacts of perceived benefits on employees' acceptance of remote working. It appears that the preference of females for remote working is attributed to avoiding face-to-face interaction rather than free time planning. This study is among the first to reveal how skill matching matters in order to be successful remote workers. Meanwhile, this study indicates that it is gender-specific psychological differences rather than the division of labor in families that motivate females to accept remote working, an important observation which has been neglected so far. The findings are helpful for employers and employees in the post-pandemic era.

Keywords: Psychological acceptance, Remote working, Gender, Internet skills, Employees

JEL: M120 M150

1. Introduction

The World Health Organization declared the COVID-19 outbreak a global pandemic on March 11, 2020. After that, the world soon realized that this pandemic not only represented a health emergency but also a human, economic, and social crisis (Bertello et al., 2021). In many firms and organizations, the effects of the pandemic are leading to a strong push for digitization (Kraus et al., 2020). The prevalence of remote working, as an innovative technology-enabled working model, has thus increased considerably (Oksanen et al., 2021; Schäfer et al., 2023).. Statistics show that over one-third of the U.S. labor force switched to remote work between February and May 2020 (Brynjolfsson, 2020). By the end of 2021, there were still 26.7% of U.S. employees working remotely, a clear increase compared to only 6% of the total

labor force prior to the pandemic¹. Numerous scholars have thus tried to investigate the effect of remote working (e.g., Song and Gao, 2020; Giménez-Nadal, 2019; Brynjolfsson, 2020) but have not reached a consensus. For instance, some scholars believe that remote working provides a more flexible schedule, better work-life balance, and reduces travel time (Timbal and Mustabsat, 2016). Others, however, maintain that staying at home makes it difficult to separate work and family life, which may impose the pressure of endlessly working (Danielak, 2019) and the feeling of being alienated (Baytcom, 2015; Ipsen et al., 2021). Therefore, remote working brings about both advantages and disadvantages to employees (Taser et al., 2022; Ingusci et al., 2022).

Although there has been a plethora of studies concerning the impact of remote working on individuals, there are still several sizable research gaps. First, very few studies have tried to assess the mediating role of internet skills. According to DiMaggio and Hargittai (2001, p. 10), internet skills refer to “the capacity to respond pragmatically and intuitively to challenges and opportunities in a manner that exploits the internet’s potential and avoids frustration”. Therefore, if the negative feeling of remote working is attributed to technostress and anxiety caused by the use of ICT technology (Taser et al., 2022), we would expect that individuals with advanced internet skills would be more optimistic about remote working. Another noteworthy problem is the gender-specific psychological differences associated with remote working. Generally, males are more experienced with ICT technologies and are more likely to have taken training courses associated with computer use and have advanced knowledge concerning digital skills (Schumacher and Morahan-Martin, 2001; Bain and Rice, 2006; Rupiatta and Beckmann, 2018). Empirical evidence also suggests that technostress is significantly associated with females rather than males (Torre et al., 2020). Therefore, preference for or resistance to remote working may be due to psychological factors rather than merely to work-life balance (de-Vos et al., 2018; Pennington and Stanford, 2020; Gottlieb, 2021).

In light of the discussion above, the aim of our study is to gain new insights into preferences for remote working by investigating the role of internet skills and psychological factors. In this study, ordered logistic regression and nominal logistic

¹ Data source: <https://www.zippia.com/advice/remote-work-statistics/>

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

regression are used; these are the common statistical tools for analyzing opinion polls. Our contribution to the literature can be summarized as follows: first, skill mismatches are the key determinants of workers' job satisfaction (Xiong et al., 2017). However, remote employees with limited digital skills may experience more challenges, and teleworking may not be suitable for them. Many studies have proposed that remote working will become more prevalent after COVID-19 (e.g., Hern, 2020). Scholars and practitioners so far have overstated the advantages associated with remote working. It is necessary to consider the fit between flexible work arrangements and different individuals (Wang et al., 2021). Second, this study expands the literature by empirically analyzing remote working acceptance in the non-Western context. Free time planning is one of the primary advantages of remote working in most Western studies. However, in China, there is a blurred line between work and non-work life domains (Tang et al., 2020). A report covering 12,471 Chinese families shows that over 42% of employees worked overtime in 2017. This rate is 59% for low-income workers². Therefore, we posit that psychological factors may influence employees' attitudes toward remote working, a point that has not been thoroughly studied.

Overall, this study can provide practical guidance on how to deal with the fit between flexible work arrangements, especially in a non-Western context. The rest of this study is structured as follows: Section two reviews the literature on remote working, gender differences and internet skills. Section three explains the model setup, data source and variables. Empirical results are presented in Section four, and Section five provides the conclusions.

2. Literature review

2.1 Divergent findings of remote working

Owing to the impact of the COVID-19 pandemic, remote working has been adopted by many organizations (Morikawa, 2021). A strand of literature highlights the positive effect of remote working. When staying in the workplace, employees must conform to various rules and experience face-to-face supervision. As a result, the reduced autonomy is generally negatively related to job satisfaction. On the contrary, when doing remote working, individuals have more flexible time planning, more autonomy,

² <http://www.chinadaily.com.cn/a/201812/12/WS5c1070d2a310eff30329088a.html>

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

lower stress, limited interference by colleagues, and reduced commuting travel costs (see a summary by Nakrošienė et al., 2018). Hence, remote working is associated with higher levels of intrinsic motivation, which improves job performance. Based on survey data collected after the pandemic, a large number of studies confirmed that remote working reduces the negative impact of the pandemic, increases the productivity of employees and may continue to be prevalent even when the pandemic is over (Kohont and Chen, 2022; Aruldoss et al., 2022). Although remote working has a great many benefits, it has also created some challenges such as a blurring of the boundaries between work and non-work (Stadin et al., 2021). It creates negative outcomes such as anxiety, isolation and health-related problems which may reduce job satisfaction (Taser et al., 2022). In fact, working onsite causes additional threats to human lives during the pandemic. People have to adapt to the flexible working arrangements as there are no alternatives. Therefore, we cannot simply claim that remote working is better or worse than working onsite and is not equally cost-effective for everyone.

2.2 Internet skills and remote working

For remote workers, a large proportion of their work may rely on online and digital tools which makes internet skills crucial in remote working. According to Grošelj et al., 2021, internet skills are an important part of digital inclusion, and those who are proficient in using the internet for diverse purposes are more likely to achieve a privileged societal position (Livingstone and Helsper, 2010). It is important to note that internet skills are not the same as computer skills, as they require more complex abilities to communicate, search, and create content online (Hargittai et al., 2018; Park et al., 2019). As a result, some people may feel psychological distrust, anxiety, and pressure when they suddenly have to use network technology, whilst others who have sufficient internet skills can calmly complete various tasks away from the office. The difference in internet skills is referred to as the “digital gap” (Litt, 2013).

Previous studies have categorized internet skills into four distinct but complementary categories (Deursen and van Dijk, 2016). Firstly, operational skills refer to the fundamental ability to use the internet, such as browsing and searching for content online. Secondly, formal skills refer to the ability to prevent individuals from getting lost and disoriented when surfing online. Digital distraction has been identified as one

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

of the major negative effects caused by the internet (e.g., At Levik and Bjarn, 2021). Thirdly, information skills refer to the ability to assess and select information online, so as to avoid digital overload (Mota and Cilento, 2020). Fourthly, strategic skills refer to the ability to achieve professional goals with the help of the internet. Studies have shown that individuals with advanced internet skills have higher computer self-efficacy, which refers to their belief in their ability to use digital resources efficiently. Such confidence can significantly mitigate the negative feelings associated with technostress (Torre et al., 2020). In summary, internet skills help employees to locate online opportunities and perform necessary actions to utilize them (Deursen and van Dijk, 2016). Taking all these factors into consideration, we propose that:

H₁: Individuals with better internet skills are more likely to accept remote working.

Previous studies have found that social demographic factors are closely related to online behaviors. For instance, Deursen et al., (2021) found that people with limited digital knowledge and skills tend to use the internet for leisure and entertainment only and are not able to reap enough benefits from its use. Deursen (2010) showed that young adults exhibit more variety in internet use when compared to elders, and they tend to use the internet for information purposes. Additionally, men have better internet-related knowledge and are more self-confident than women about their ability to adapt to new technologies (Wei and Zhang, 2008). The gender digital divide is also significant in China, with rural females being most excluded as they have the lowest capital endowment, according to Du and Yang (2020) who used a large data set. Furthermore, female students from multi-child families were found to be most disadvantaged in online educational activities and social media use (Pawluczuk et al., 2021; Arroyo, 2020). In summary, using computers and other digital tools is generally considered as a male activity, and even though males may not have sufficient internet skills, they tend to be less worried about engaging in remote working. Taking all these factors into consideration, we propose that:

H₂: The positive relationship between internet skills and remote working will be more significant for females.

2.3 Psychological attributes of accepting remote working

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

One of the most evident advantages of remote working is the increase in employees' autonomy in scheduling and organizing their work. Some early studies maintained that remote working is mainly a preference for women as it gives them a unique chance to balance work and family lives (Lim and Teo, 2000). For example, remote working potentially increases career opportunities for women, as they can return to work earlier from maternity leave (Bélanger, 1999). Since women tend to perceive remote working as helpful in balancing working and family life, they are more likely than men to accept it (Sullivan and Lewis, 2001). However, some other scholars have maintained that the benefit of remote working for women to balance work and family life had not materialized. Being with children at home means that working life tends to be disturbed (Crosbie and Moore, 2004). Women have to transfer the time saved by remote working to housework and childcare (Noonan and Glass, 2012). Therefore, in many cases, working from home (a typical example of remote working) increases rather than reduces the burden for women (Crosbie and Moore, 2004; Yucel and Chung, 2023). To sum up, remote working does not always bring about a work-life balance for female employees. There may be some other factors that motivate female employees to accept it.

Substantial evidence suggests that males and females have significant mental and psychological differences, which may constitute another reason for women to accept remote working. First, women have sometimes been found to be more risk-averse than men and prefer higher information environments (Croson and Gneezy, 2009). Such differences may lead females to be more willing to interact with people they already know (Friebel et al., 2021). Remote working thus creates higher levels of psychological safety for women. Second, females tend to display greater fear and anxiety than males across their lifespan (Poulton et al., 2001). For example, girls tend to show excessive fear of social events, people in authority, criticism, and talking to strangers, as compared with boys (Ranta et al., 2007). Remote working reduces face-to-face interaction, provides certain anonymity, and enables asynchronous communication (see a summary by Prizant-Passal et al., 2016), all of which minimize the likelihood of making undesirable impressions on others. Moreover, both laboratory and field studies confirm that males are more eager to compete, and their performance is more positively associated with competition (Niederle and Vesterlund, 2011). When working onsite, employees work side by side and observe each other's

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

activity. Peer effects thus arise, which inevitably create a competitive environment (Georganas, et al., 2015). Therefore, it is not surprising that females feel more comfortable when engaging in remote working. They don't have to communicate with strangers frequently, there is no need to worry about excessive working competition and the disturbance of strangers. Taking all these into consideration, we propose that:

H_{3a}: Women are more likely than men to accept remote working.

H_{3b}: Women accept remote working to avoid unnecessary face-to-face interaction.

3. Research Design

3.1 Data Set

This study employs the data set from the Chinese General Social Survey (CGSS). It was launched jointly by Renmin University (Beijing) and Hong Kong University of Science and Technology in 2003. Target respondents for CGSS are adults older than eighteen in both urban and rural households. The distribution of sampling units is designed as follows: (1) a total of 125 primary sampling units are selected for the national sample; (2) four secondary sampling units are selected in each primary sampling unit; (3) each secondary sampling unit covers two third-level sampling units; (4) ten households are selected in each third-level unit. It is renewed continuously every two years. The CGSS has become one of the most popular data sets in the study of household well-being in China. Some important studies based on CGSS have been published in high-quality journals, such as *China Economic Review*, *Social Indicator Research* and *Chinese Sociological Review*. (e.g., Wang and Cheng, 2017).

We adopted the CGSS data set in 2017; it included several critical items on internet use and 12,000 observations in total. It should be noted that survey items in each wave of the survey are not absolutely identical. Hence, we are not able to combine data from different waves. Compared with other data sets, the CGSS contains a larger sample size that self-administered surveys cannot cover. Moreover, it also contains more accurate information that enables us to extend our research findings to a larger population. We understand that using the pre-pandemic data has certain limitations. However, historical data allows us to reveal people's attitudes toward remote working under normal conditions. Specifically, when discussing the pros and cons of remote working in the pre-pandemic era, people tend to compare it with the option of working onsite. However, working onsite is no longer a viable scenario during the

pandemic, since it poses additional health risks to employees. Therefore, employees have to choose between "working from home" and "working under threat". Hence, we cannot claim that remote working is necessarily superior to onsite working. The comparison between these two work modes is more meaningful when there are no interfering factors (in this case, health risk).

Previous studies on remote working largely centered on the Western world, and little is known about how employees in the East view remote working. China has unique social characteristics that are different from those in the Western world. Therefore, there is an urgent need for academic research on remote working which pays more attention to China and other Eastern countries. China's culture and society significantly influence employees' work and life. For instance, influenced by the philosophy of Confucius, providing financial support is the major method of fulfilling family responsibilities for Chinese people (Zhao et al., 2019). In addition, employees may bring along their networks from the workplace into their family lives, and vice versa. Hence, there is a blurred line between work and non-work life domains in China (Tang et al., 2020). A recent survey of over 3,000 samples revealed that a large proportion of Chinese employees had an unpleasant experience regarding remote working. Specifically, 65% of respondents reported that their work hours have been extended due to remote working; 45% of respondents reported that working from home decreases their job performance; 40% of respondents have reported an increased working pressure³.

3.2 Model set and variables

To reveal the interplay among gender, internet skills, and remote working, our study relied on two different regression methods. We first identified the determinants of people's acceptance toward remote working — "Will you accept remote working instead of onsite working in future?" The answers were assessed on a 3-point scale — "No=1", "Not sure=2", "Yes=3". The ordered logit model was used. One of the most important features of the ordered logit model is that the dependent variables are measured on an ordinal scale. It is possibly the most popular model for analyzing ordinal data (See, for instance, Xiong et al., 2019; Khiari and ben Rejeb, 2015). Treating the data as continuous variables may cause serious distortion of the findings.

³ Link to the report: <https://baijiahao.baidu.com/s?id=1733501661605995008&wfr=spider&for=pc>

The probability of observing outcome i corresponds to the probability that the estimated linear function, plus random error, is within the range of the cut-points estimated for the outcome:

$$\Pr(\text{outcome } j = i) = \Pr(k_{i-1} < \beta_1 x_{1j} + \beta_2 x_{2j} + \dots + \beta_k x_{kj} + \mu_j \leq k_i)$$

μ_j is assumed to be logistically distributed in ordered logit. $\beta_1 \dots \beta_k$ refer to the coefficient of each variable. k refers to the number of possible outcomes. In this case, i is equal to 3.

In the next stage, we are interested in finding out what are the major advantages of remote working compared with onsite working. The answer includes: (1) improved working efficiency; (2) free time planning; (3) avoiding unnecessary face-to-face interaction with colleagues; and (4) no significant advantages for remote working. We use the nominal logit model, which is specified as follows:

$$\begin{aligned} \Pr(y = 1) &= \frac{e^{X\beta^{(1)}}}{e^{X\beta^{(1)}} + e^{X\beta^{(2)}} + e^{X\beta^{(3)}} + e^{X\beta^{(4)}}} \\ \Pr(y = 2) &= \frac{e^{X\beta^{(2)}}}{e^{X\beta^{(1)}} + e^{X\beta^{(2)}} + e^{X\beta^{(3)}} + e^{X\beta^{(4)}}} \\ \Pr(y = 3) &= \frac{e^{X\beta^{(3)}}}{e^{X\beta^{(1)}} + e^{X\beta^{(2)}} + e^{X\beta^{(3)}} + e^{X\beta^{(4)}}} \\ \Pr(y = 4) &= \frac{e^{X\beta^{(4)}}}{e^{X\beta^{(1)}} + e^{X\beta^{(2)}} + e^{X\beta^{(3)}} + e^{X\beta^{(4)}}} \end{aligned}$$

The outcomes 1, 2, 3, 4 are recorded in y , and X refers to explanatory variables. The value of y is unordered - it is a nominal response with four categories which do not have a natural order. For instance, we cannot claim that the outcome of “improve working efficiency” is larger or smaller than the outcome of “free time planning”. Hence, ordered logit models used in the previous section cannot deal with the unordered categorical property of y in this case.

As aforementioned, *internet skills* is a multi-dimensional concept. We selected eight items to measure internet skills based on the previous literature (See Table 1 for details). In order to reduce the dimensionality of internet skills, we adopt Principal Component Analysis (PCA) to convert eight items into one variable. One of the major

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

advantages of PCA is reducing the dimensionality of data, while keeping as much variation as possible. Although internet skills can be divided into four categories (e.g., Deursen and van Dijk, 2016), our study does not attempt to distinguish different types of skills. Remote working requires the adoption of various technical applications such as online meetings, communication and team collaboration platforms. It is hard to predict which specific internet skills will be more prevalent. However, those with advanced skills should be able to use digital technologies well to adapt to remote working. Therefore, we synthesized only one comprehensive index to describe internet skills.

Table 1. Principal Component Analysis (PCA) for Internet Skills

Item	Mean	S.D	Max/Min
I know how to open a web browser	4.38	0.75	5/1
I know how to download and use APPs in my smart phone	4.22	0.69	5/1
I can control the time spent online	3.85	0.57	5/1
Internet of things will not impact my real life in a negative way	4.01	0.58	5/1
I know how to verify important information from online media	3.67	0.61	5/1
I know how to secure online payment safety	3.81	0.77	5/1
I know where and how to express my ideas online	3.42	0.68	5/1
I know how to defend my personal rights online	3.26	0.81	5/1
Comprehensive score based on (PCA)	0.1412	0.48	-2.12/2.69

Note: *The table shows descriptive statistics on each item and the final score based on PCA*

Our study also includes several control variables that are associated with remote working, such as age, educational attainment, income level, and self-rated health. These can be seen as the covariants that help predict the outcome variable. For instance, those with lower levels of education are less likely to accept and utilize new technology (e.g., van Boekel, et al., 2017). Support from family members or friends is also a strong predictor for internet use (Mariusz and Yih-Kuen, 2017). Based on a telephone survey of 980 respondents, Choi and Dinitto (2013) found that 34% of the under-60 group currently use the internet. The ratio dropped to 17% for the over-60 group. Job characteristics have also been incorporated as control variables. In the CGSS 2017, respondents were asked how many people they have to collaborate with

in the workplace. If individuals are required to interact frequently with others, they may be less willing to accept remote working. To this end, factors like *Hukou*⁴, social networks, and self-rated health are also controlled to deal with heterogeneity.

Table 2. Descriptive statistics

Variables	Explanation	Statistics
Acceptance of remote working	No	27.24%
	Not sure	38.21%
	Yes	34.55%
Benefit of remote working	More efficiency	17.45%
	Free time planning	28.38%
	Avoid unnecessary interaction	17.26%
	No advantages	36.91%
Male	Male respondents=1	51.75%
Age	age of respondents	Max(72), Min(16) M(38.22), SD (11.44)
Educational Attainment	With college degree=1	15.55%
Income level	Lowest level	8.34%
	Lower level	35.54%
	Middle level	38.57%
	Upper level	17.38%
	Highest level	0.17%
Hukou	with urban <i>Hukou</i> =1	45.66%
People Live with	How many people do you live with	Max(10), Min(0) M (2.95), SD (3.39)
Children	How many children do you have	Max(7), Min(0) M (1.25), SD (0.48)
Contacts at work	None=1	31.55%
	1 to 5 people=2	37.28%
	6-10 people=3	18.72%
	over 10 people=4	12.44%
Social network	Frequently socialize with others	33.17%
	Sometimes socialize with others	53.07%
	Seldom socialize with others	13.76%
Self-rated Health	Poor	5.13%
	Fair	10.96%
	Good	24.35%

⁴ Hukou is an official document issued by the Chinese government, certifying that the holder is a legal resident of a particular area.

	Very Good	36.25%
	Excellent	23.31%

Table 2 presents the descriptive statistics for dependent variables, independent variables, and control variables. 34.55% of respondents believed that their work can be carried out by remote working. A little more than 38% of respondents held a neutral point of view. Regarding the benefit of remote working, over 28% of respondents chose free time planning. Around 17% of respondents considered increased efficiency as the major benefit of remote working, and another 17% of respondents considered avoiding unnecessary interaction as the major benefit. 36.71% of respondents see no major difference between remote working and face-to-face work. Scores on internet skills are computed based on PCA, and a higher value indicates higher levels of skills. Fewer than 16% of respondents have a college degree. According to the latest population census (2021) in China, there are 15,467 people with a college degree in every 100,000 of the population. This suggests that the data set we use is a representative sample. Moreover, about one-third of respondents do not need to contact anyone during their work. Around 55% of respondents have contact with 1-10 people in the workplace. Regarding self-rated health, our data reveals that nearly 60% of respondents are in very good or excellent condition.

4. Empirical analysis

4.1 Determinants of accepting remote working

Table 3 investigates the determinants of acceptance of remote working. Different control variables are incorporated in Model 1, Model 2, and Model 3. As suggested in columns 1, 2, and 3, *Male* shows a negative sign, with the odds ratio of 0.791-0.793. This implies that if all samples were male, the probability of accepting remote working would decrease by around 20%, which is consistent with previous studies (Arntz, et al., 2020). Note that in Models 2 and 3, more control variables are added, and the significance of *Male* remains constant. This suggests that our results are robust. The odds ratio of internet skills is around 1.08, suggesting that the probability of accepting remote working tends to increase by 8% if the score of internet skills increases by 1 unit.

According to Table 3, several control variables also exhibit a significant sign. *Age* seems to be negatively related to remote working. The younger generation

holds a more positive attitude towards the prevalence of remote working. Except for the digital age divide mentioned above, a recent study also reveals that the younger group had the highest evaluation of job fun (Hong et al., 2018). A college degree and higher income levels are positively related to accepting remote working. One possible explanation is that those with a higher educational level and higher income levels are less likely to be involved in manual work. Previous scholars are concerned that the widespread remote working may reinforce income inequality (Irlacher and Koch, 2020). Our results thus confirm the viability of such concerns, given that educated and higher-income individuals tend to benefit more from remote working. The results show that the *number of children* is unable to predict the acceptance of remote working, which is inconsistent with Western literature. As aforementioned, many grandparents bear the primary responsibility for looking after children at home in China (Xiong et al., 2022). Hence, it is reasonable to find that the number of children is unrelated to the decision regarding remote working in China. Finally, *social networks* are significant in predicting remote working acceptance, while *self-rated health* exhibits an insignificant sign.

Table 3. Ordered logit models for the acceptance of remote working

Variables	Model 1	Model 2	Model 3
Male	0.793(0.000)	0.791 (0.000)	0.792(0.000)
Internet Skills	1.081(0.000)	1.079(0.000)	1.079(0.000)
Age	0.974(0.000)	0.974(0.000)	0.975(0.000)
Educational Attainment	1.528(0.001)	1.493(0.000)	1.493(0.000)
Income Level	1.236(0.000)	1.231(0.000)	1.232(0.000)
Contacts at work	1.059(0.112)	1.044(0.120)	1.054(0.117)
People Live with	0.991(0.302)	0.992(0.421)	0.991(0.110)
Children		1.033(0.144)	1.104(0.073)
<i>Hukou</i>		1.065(0.411)	1.066(0.412)
Social network			1.206(0.012)
Self-rated Health			0.992(0.422)
Number of Obs.	4091	4091	4091
LR X^2	545.90	548.38	546.42

Note: odds ratios are reported. P values are in parentheses. Model 1, Model 2 and Model 3 are conducted with different sets of control variables.

4.2 Reason for accepting remote working

Table 4 shows the estimations of perceived benefits of people’s acceptance of remote working. Note that there are four possibilities (that is, increased efficiency, free time planning, avoiding unnecessary face-to-face interaction, and no significant advantages). The final possibility — no significant advantage (Outcome 4) — is used as the reference outcome, and the results should be interpreted in a different way.

Table 4. Nominal logit model for benefits of remote working

	Increased efficiency (Outcome 1)	Free time planning (Outcome 2)	Avoid unnecessary interaction (Outcome 3)
Male	0.892(0.253)	0.867(0.092)	0.819(0.032)
Internet Skills	1.389(0.000)	1.303(0.000)	1.207(0.034)
Age	1.011(0.014)	1.018(0.000)	1.022(0.000)
Educational Attainment	2.358(0.000)	1.744(0.000)	1.868(0.000)
Income Level	1.082(0.255)	1.261(0.000)	1.192(0.009)
Contacts at work	0.955(0.370)	1.040(0.367)	1.052(0.304)
Social network	1.072(0.505)	1.273(0.000)	1.222(0.024)
Self-rated Health	1.147(0.005)	1.055(0.202)	1.072(0.156)
<i>Hukou</i>	1.431(0.002)	1.546(0.000)	1.271(0.034)
Number of Obs.	4091	4091	4091
LR χ^2	806.14	806.14	806.14

Note: Relative risk ratios are reported. P values are in parentheses. The outcome 4 “No advantages” is used as a reference category in this model. The coefficient reported refers to the probability of the occurrence of Outcome 1, 2, 3 when compared with Outcome 4.

For instance, *male* exhibits a negative sign in ‘Outcome 3’, and is significant at the 5% level. Recall that all male observations are recorded as 1 in our data set. The negative coefficient thus suggests that when choosing between “avoid unnecessary interaction” and “no significant advantages of remote working”, males are more likely to opt for the latter statement. Alternatively, we can say that females are more likely to opt for the former statement. However, the negative sign does not necessarily mean that females tend to put “Outcome 3” in the first place. It is merely the comparison between “Outcome 3” and “Outcome 4”. We cannot claim that when it comes to the benefit of remote working, “Outcome 3” ranks at the top. Gender is insignificant in

column 1, suggesting that gender is not a critical factor in predicting respondents' choice between "Outcome 1" and "Outcome 4". Compared with the previous section, the significance level has reduced from 1% to 5%.

Internet skills are significant in predicting "Outcome 1", "Outcome 2", and "Outcome 3". Those with advanced internet skills are more likely to believe that remote working is associated with free time planning and working efficiency improvement. Among all the control variables, Age, Education attainments, and *Hukou* are significant across all three models. Well-educated and rich urban residents hold a more positive view of remote working compared with others. Social network is significant in predicting "Outcome 2" and "Outcome 3" but not "Outcome 1". According to Robison et al. (2002), establishing interpersonal networks requires constant maintenance and investment. Remote working thus enables individuals to arrange their social activities and maximize their benefits.

4.3 Gender difference, internet skills and remote working

Finally, we present Table 5 to explore whether the effect of internet skills is contingent on gender. The results suggest that those with advanced internet skills are more likely to accept remote working regardless of whether they are male or female respondents. However, regressions on male samples reported a relatively lower odds ratio, suggesting that the effect of internet skills is more profound for females. This is in line with our hypothesis. The interaction effect between gender and internet skills is shown in Figure 1. The horizontal axis refers to the levels of internet skills ranging from one to five. The vertical axis refers to their probability of accepting remote working. We can see two separated upward-sloping lines. Female results are located above male results, suggesting that females are generally more likely to accept remote working. The gap between the two lines is widening with the increase of internet skills. This implies that internet skills exert a stronger effect on female subjects. Regarding male subjects, the probability of accepting remote working increases by around 10% (from 40% to 50% as shown in Figure 1) when internet skills increase from level 1 to level 5. For female subjects, the probability of accepting remote working increases by around 20% (from 50% to 70% as shown in Figure 1) when internet skills increase from level 1 to level 5.

Table 5. Sub-sample analysis by gender

Variables	Male samples	Female Samples
Internet Skills	1.120(0.014)	1.297(0.000)
Age	1.019(0.000)	1.015(0.000)
Educational Attainment	1.327(0.001)	1.532(0.006)
Income level	1.223(0.002)	1.229(0.001)
Contacts at work	1.131(0.012)	1.003(0.949)
People Live with	0.928(0.030)	0.994(0.889)
Children	1.018(0.258)	0.987(0.301)
<i>Hukou</i>	1.356(0.005)	1.065(0.203)
Social network	1.130(0.011)	1.176(0.075)
Self-rated Health	0.979(0.653)	1.001(0.989)
Number of Obs.	2117	1974
LR X^2	211.18	257.77

Note: odds ratios are reported. P values are in parentheses.

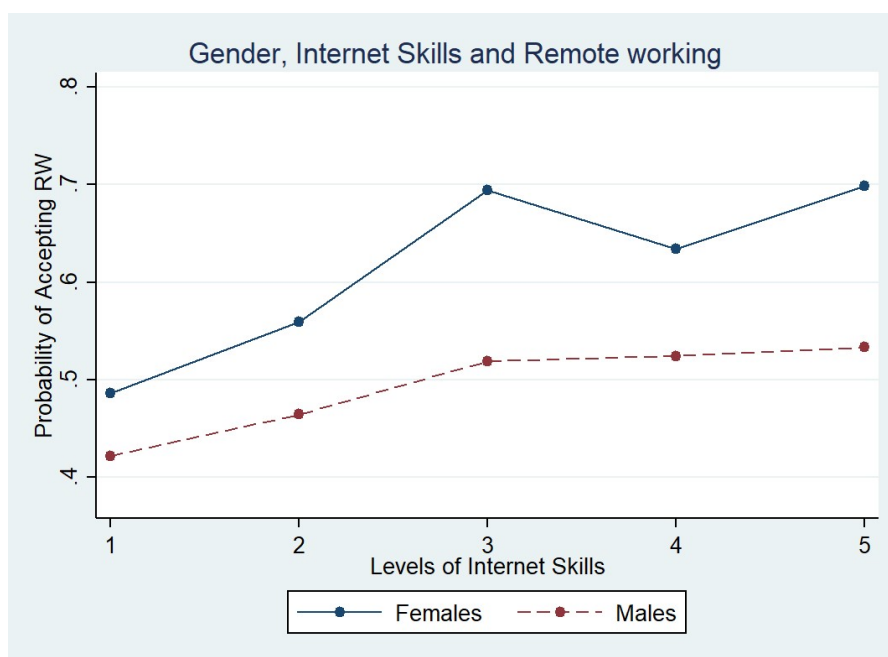


Figure 1. Plot of interaction effect

5. Discussion and Conclusion

5.1 Summary of findings

Previous studies have highlighted that a flexible working pattern can help balance

work and family life, particularly for women (Hynes, 2005). However, remote working also requires individuals to use special software or Apps to communicate and interact with colleagues. Additionally, they are less likely to receive assistance from others and may have to search for answers online. Thus, internet skills are critical for enabling employees to successfully accept remote working. Therefore, this paper attempts to illustrate the gender difference in remote working, with a focus on internet skills.

The results based on the data set from China provided supporting evidence for our hypotheses. Firstly, enhancing internet skills is positively associated with the acceptance of remote working (H1). Our finding extends this line of research by highlighting that internet skills may be a critical yet overlooked determinant of remote working acceptance. Studies have already revealed that people with fewer internet skills were less likely to engage in digital communication during the COVID-19 pandemic, which may result in a new form of the digital divide (Nguyen et al., 2021). Our results also revealed that the positive effect of internet skills is more profound for females (H2). More importantly, females do not value free time planning more than males. Instead, they consider "avoiding face-to-face interaction" as the primary benefit of remote working (H3). These findings are partly consistent with the evidence offered by Arntz et al. (2020; 2022), suggesting that gender differences exist in remote working. However, this study offers a new perspective by considering psychological factors. A recurring finding from the stream of research on gender differences shows that females prefer a safe environment, tend to create smaller social networks, and are relatively risk averse (Friebel et al., 2021). Therefore, psychological factors may be vital in understanding gender differences in remote working acceptance.

5.2 Theoretical and practical implications

Our study provides two important theoretical implications. First, it expands the literature on remote working and human resource management by investigating the impacts of job skills on the mode of working. Although existing literature highlights the possible downsides of remote working (Timbal and Mustabsat, 2016; Danielak, 2019), little attention has been paid to the issue of skills matching. Job skills have a great impact on job satisfaction (Vieira, 2005), and onsite working and remote

working may require different skills. Our study points out that internet skills explain why some employees prefer remote working while others do not. To be better engaged in remote working, employees should be disciplined and stay focused when using the internet. Flexible work arrangements will be more effective for individuals with greater abilities to avoid distraction (Wang et al., 2021). In sum, our study extends the current literature by identifying internet skills as an important precondition for successful remote working. By doing so, we respond to existing calls for further research on the digital divide in the post-pandemic era (Nguyen et al., 2021).

Second, this study challenges traditional views (e.g., Hynes, 2005) by revealing that free time planning may not be a primary reason for females to accept remote working. It is also an oversimplification to connect females' preferences for remote working to overall gender development (e.g., Kurowska, 2018). There is ample evidence that men and women may be fundamentally different in many personality traits (e.g., Huszczo and Endres, 2017), and these psychological and cognitive differences may significantly affect people's preferences in working styles. While prior research has highlighted that remote working is not a feasible option for certain workers (Gifford, 2022), the reasons behind this have been relatively under-explored. To fill this gap, our study reveals how different individuals view the benefits (i.e., improved working efficiency, free time planning, and avoiding unnecessary face-to-face interaction) associated with remote working. By doing so, our study contributes to a clearer and more comprehensive understanding of the applicability of remote working. In sum, the effect of psychological and mental traits is worth considering and could be a fruitful avenue for the burgeoning studies of remote working.

Several practical implications can also be derived from this study. Firstly, many employees had little or no experience working remotely before the COVID-19 pandemic. This means they might have difficulties dealing with the necessary technologies, managing distractions, and staying organized at home. Therefore, it is necessary for the HR department to train employees in basic tools and skills to succeed in a remote environment. Specifically, firms may need to establish a special department responsible for solving technical problems faced by remote employees. It is important to allow employees to learn from IT experts about the technology and

gain more knowledge. This can be done by arranging tutorial programs beforehand. For instance, Fujitsu implemented one-to-one skills training for all employees to better adapt to remote working starting in July 2020. The company also conducted additional wellbeing checks to offer compassionate support to address mental and psychological issues caused by the new working style.

Second, employers are advised to consider employees' personal characteristics when promoting remote working. Considering personality for example, some employees may opt for remote working to avoid face-to-face interaction. However, those with extravert personalities may have negative experiences regarding remote working. For instance, several companies canceled remote working arrangements since they found that not all employees were mentally prepared for it. Specifically, it is necessary to figure out whether employees are independent workers or team players. Are they used to being around people? Do they have sufficient communication skills? These questions can be applied as criteria to distinguish effective and ineffective remote workers. As suggested by Schäfer (et al., 2023), remote working is too diverse to consider as unitary. It is also important to consider more specific dimensions of flexible work arrangement (e.g., geographical flexibility, technological tools, Independent work). This would help us understand better the influence of remote working at individual levels

5.3 Limitations and future research

This study has some limitations which deserve further investigation in the future. Firstly, internet skills were assessed using a self-rated survey, which may contain biases as some individuals may overestimate or underestimate their abilities in using the internet. Additionally, the concept of internet skills was proposed more than 10 years ago. Future studies may consider developing a new scale that encompasses the various skills necessary to perform remote work. Secondly, we did not account for personalities or job characteristics that can be controlled for to manage individual heterogeneity. For example, prior research indicates that individuals with higher scores on extraversion experienced more stress during lockdown (Langvik et al., 2021). Furthermore, to identify the factors that contribute to employees' acceptance of remote work, future studies should explore the multiple facets of the home-work conflict in different cultural contexts. Thirdly, our study was based on data from China. While providing a focused understanding of behavioral characteristics to avoid

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

the confounding effect of national culture, future research should replicate our study in multiple other countries to enhance its generalizability. For instance, Japan and Korea are among the few developed countries in East Asia where traditional gender roles and male favoritism still persist despite women enjoying more freedom and better healthcare. Thus, investigating how to promote women's equality through remote work in these countries warrants further exploration.

References

- Arntz, M., Yahmed, S.B., & Berlingieri, F. (2020). Working from Home and COVID-19: The Chances and Risks for Gender Gaps. *Intereconomics: Review of European Economic Policy*, 55(6):381-386.
- Arntz, M., Yahmed, S.B., & Berlingieri, F. (2022). Working from home, hours worked and wages: Heterogeneity by gender and parenthood. *Labour Economics*, 76:102169.
- Arroyo, L. (2020). Implications of Digital Inclusion: Digitalization in Terms of Time Use from a Gender Perspective. *Social Inclusion*, 8(2):180-189.
- Aruldoss, A., Kowalski, K.B., & Travis, M.L., (2022). The relationship between work-life balance and job satisfaction: moderating role of training and development and work environment. *Journal of Advances in Management Research*, 19(2):240-271.
- At Levik, O.E., & Bjarn, V. (2021). Examining the relationship between resilience to digital distractions, ICT self-efficacy, motivation, approaches to studying, and time spent on individual studies. *Teaching and Teacher Education*, 102(2):103326.
- Bain, C.D. & Rice, M.L. (2006) The Influence of Gender on Attitudes, Perceptions, and Uses of Technology. *Journal of Research on Technology in Education*, 39(2):119-132.
- Baytcom, B. (2015). The Advantages and Disadvantages of Working from Home. Retrieved 03 March, 2021, from <http://www.bayt.com/en/career-article-1601>
- Bélanger, F. (1999). Workers' propensity to telecommute: An empirical study. *Information and Management*, 35(3):139-153.
- Bertello, A., Bogers, M., & Bernardi, P.D. (2021). Open innovation in the face of the covid-19 grand challenge: insights from the pan-european hackathon 'euvsvirus'. *R&D Management*, 52(2):178-192.
- Brynjolfsson, E., Horton, J.J., Ozimek, A., Rock, D., Sharma, G., & TuYe, H.Y. (2020). COVID-19 and remote work: An early look at US data (No. w27344). National Bureau of Economic Research.
- Yucel, D., & Chung, H. (2023). Working from Home, Work-family Conflict, and the Role of Gender and Gender Role Attitudes, *Community, Work & Family*, 26(2):190-221.

- Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>
- Choi, N.G., & Dinitto D.M. (2013). The Digital Divide Among Low-Income Homebound Older Adults: Internet Use Patterns, eHealth Literacy, and Attitudes Toward Computer/Internet Use. *Journal of Medical Internet Research*, 15(5):e93.
- Crosbie, T., & Moore, J. (2004). Work–life Balance and Working from Home. *Social Policy and Society*, 3(3):223-233.
- Croson, R., & Gneezy, U. (2009). Gender Differences in Preferences. *Journal of Economic Literature*, 47 (2):448-74.
- Danielak, W. (2021) Positive and Negative Effects of Remote working During the COVID-19 Pandemic in Small Enterprises in Poland. *European Research Studies Journal*,3:708-718
- de-Vos, D, Meijers, E., & van-Ham, M. (2018). Working from home and the willingness to accept a longer commute, *Annals of Regional. Science*, 61:375–98
- Deursen, A., Helsper, E., & Eynon, R. (2021). Compound and Sequential Digital Exclusion: Internet Skills, Uses, and Outcomes, Working paper, Retried 14 September 2021, from <https://research.utwente.nl/en/publications/compound-and-sequential-digital-exclusion-internet-skills-uses-an>
- Deursen, A., & van Dijk, J, (2016). Modeling Traditional Literacy, Internet Skills and Internet Usage: An Empirical Study, *Interacting with Computers*, (28):13–26
- Deursen. (2010). Internet skills: vital assets in an information society, IEEE International Carnahan Conference on Security Technology.
- Dilmaghani, M. (2009), There is a time and a place for work: comparative evaluation of flexible work arrangements in Canada, *International Journal of Manpower*, 42(1):167-192.
- Dimaggio, P., & Hargittai E. (2001). From the 'Digital Divide' to 'Digital Inequality': Studying Internet Use as Penetration Increases. Working Papers, Retrieved 11 May, 2021, from https://culturalpolicy.princeton.edu/sites/culturalpolicy/files/wp15_dimaggio_hargittai.pdf
- Du, P., & Yang, J. (2020). Gender, capital endowment and digital exclusion of older people in China, *Ageing and Society*, 41(11):1-25.
- Friebel, G., Lalanne, M., & Richter, B. (2021). Gender differences in social interactions. *Journal of Economic Behavior & Organization*, 186(1):33-45.
- Georganas, S., Tonin, M., & Vlassopoulos, M. (2015). Peer pressure and productivity: The role of observing and being observed. *Journal of Economic Behavior & Organization*, 117:223-232.
- Gifford, J. (2022). Remoting Working: Unprecedented Increase and A Development Research Agenda. *Human Resource Development International*, 25(2):1-9
- Giménez-Nadal, I.J., Molina J.A. & Velilla, J. (2019) Work time and well-being for workers at home: evidence from the American Time Use Survey. *International Journal of Manpower*, 41(2):184-206.
- Gottlieb, C., Grobovšek, J., Poschke, M., & Saltiel, F. (2021). Working from home in developing countries, *European Economic Review*, 133(C):233-242.

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

- Grošelj, D., van Deursen, A. J. A. M., Dolničar, V., Burnik, T., & Petrovčič, A. (2021). Measuring internet skills in a general population: A large-scale validation of the short Internet Skills Scale in Slovenia. *Information society*, 37(2): 63-81.
- Hall, P., & Soskice, D. (2001). Introduction to Varieties of Capitalism Varieties of capitalism: The institutional foundations of comparative advantage, Wiley Online Library
- Hargittai, E., Piper, A.M., & Morris M.R. (2018) From Internet access to Internet skills: Digital inequality among older adults. *Universal Access in the Information Society*, 15:157-180.
- Hern, A. (2020). Covid-19 could cause permanent shift towards home working. The Guardian. Retrieved from <https://www.theguardian.com/technology/2020/mar/13/covid-19-could-cause-permanent-shift-towards-home-working>
- Hong L., Park, N., & Sun, F. (2018). Job Satisfaction Evaluation of Employees in China: Age Differences. *Innovation in Aging*, 73(4):331-350
- Huszczko, G., & Endres, M.L. (2017). Gender differences in the importance of personality traits in predicting leadership self-efficacy. *International Journal of Training and Development*, 4: 304-315.
- Hynes, S.K. (2005). Transitions to Parenthood: Work-Family Policies, Gender, and the Couple Context. *Gender & Society*, 19(3):376-397.
- Ingusci, E., Signore, F., & Cortese, C.G. (2022). Development and validation of the Remote Working Benefits & Disadvantages scale. *Quality and Quantity*, <https://doi.org/10.1007/s11135-022-01364-2>
- Ipsen, C., Veldhoven, M.V., & Kirchner, K. (2021). Six Key Advantages and Disadvantages of Working from Home in Europe during COVID-19. *International Journal of Environmental Research and Public Health*, 18(4):1826.
- Irlacher, M., & Koch, M. (2020). Working from Home, Wages, and Regional Inequality in the Light of Covid-19. CESifo Working Paper Series.
- Khiari, M., & ben Rejeb, J. (2015). Determination of the Regional Impact on Innovation with an Ordinal Logit and a Multilevel Analysis. *Procedia-Social and Behavioral Science*, 195(3):592-602.
- Kohont, A., & Chen, M.H. (2022). Organizational support of working from home: aftermath of covid-19 from the perspective of workers and leaders. *Sustainability*, 14(9):1-16.
- Kraus, S., Clau, T., & Breier, M. (2020). The economics of COVID-19: Initial empirical evidence on how family firms in five European countries cope with the corona crisis *International Journal of Entrepreneurial Behaviour & Research*, 26(5):1067-1092.
- Kurowska, A. (2018). Gendered Effects of Home-Based Work on Parents' Capability to Balance Work with Non-work: Two Countries with Different Models of Division of Labour Compared. *Social Indicators Research*, 151:405-425.
- Langvik, E., Karlsen, H., Saksvik-Lehouillier, I. & Sørengaard, T.A. (2021). Police employees working from home during COVID-19 lockdown: Those with higher score on extraversion miss their colleagues more and are more likely to socialize

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

- with colleagues outside work, *Personality and Individual Differences*, 179:110924, <https://doi.org/10.1016/j.paid.2021.110924>.
- Lim, V.K.G., & Teo, T.S.H. (2000), To work or not to work at home-An empirical investigation of factors affecting attitudes towards teleworking, *Journal of Managerial Psychology*, 15(6):560-586.
- Litt, E. (2013). Measuring users' internet skills: A review of past assessments and a look toward the future. *New Media & Society*, 15(4):612– 630.
- Livingstone, S., and Helsper, E.J. (2010). Balancing opportunities and risks in teenagers' use of the Internet: The role of online skills and Internet self-efficacy. *New Media & Society*, 12(2):309–329.
- Mariusz, D., & Yih-Kuen, J. (2017). Digital divide among people with disabilities: Analysis of data from a nationwide study for determinants of Internet use and activities performed online. *Plos One*, 12(6):e0179825.
- Morikawa, M. (2021). Productivity of Working from Home during the COVID-19 Pandemic Evidence from a Firm Survey, Discussion Papers from RIETI. <https://econpapers.repec.org/scripts/a/abstract.pf?p=y:h=RePEc:eti:dpaper:21002>
- Mota, F., & Cilento, I. (2020). Competence for internet use: Integrating knowledge, skills, and attitudes. *Computers and Education Open*, 1:100015
- Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2018). Working from home: characteristics and outcomes of telework, *International Journal of Manpower*, 40 (1):87-101.
- Nguyen, M.H., Hargittai, E., & Marler, W. 2021. Digital Inequality in Communication During A Time of Physical Distancing: The Case of Covid-19. *Computers in Human Behavior*,):106717.
- Niederle, M., & Vesterlund, L. (2011). Gender and Competition. *Annual Reviews of Economics*, 3(1):601-630
- Noonan, M.C., & Glass, J. (2012). The hard truth about telecommuting. *Monthly Labor Review*, 135(6):38-49.
- Oksanen, A., Oksa, R., Savela, N., Mantere, E., & Savolainen, I. (2021). COVID-19 crisis and digital stressors at work: A longitudinal study on the Finnish working population. *Computers in Human Behavior*, 122:106853.
- Park, C.W., Kim, D., Cho, S. & Han, H. (2019). Adoption of multimedia technology for learning and gender difference. *Computers in Human Behavior*, 92:288-296.
- Pawluczuk, A., Lee, J.H, & Gamundani, A.M. (2021). Bridging the gender digital divide: an analysis of existing guidance for gender digital inclusion programme evaluations. *Digital Policy Regulation and Governance*, 23(3):287-299.
- Pennington, A., & Standford J. (2020). Working from Home: Opportunities and Risk. Briefing Paper, Center for Future Work. Retrieved 10 June, 2021, from <https://apo.org.au/node/303205>
- Poulton, R., Milne, B.J., Craske, M.G., & Menzies, R.G. (2001). A longitudinal study of the etiology of separation anxiety. *Behaviour Research and Therapy*, 39(12):1395–1410.

- Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>
- Prizant-Passal, S., Shechner, T., & Aderka, I. (2016). Social Anxiety and Internet Use--A Meta-analysis: What Do We Know? What Are We Missing, *Computers in Human Behavior*, 62:221-229.
- Ranta. K., Kaltiala-Heino, R., Koivisto, A.M., Tuomisto, M.T., Pelkonen, M., & Marttunen M. (2007). Age and gender differences in social anxiety symptoms during adolescence: the Social Phobia Inventory (SPIN) as a measure. *Psychiatry Research*, 153(3):261-70.
- Robison, L.J., Schmid, A.A., & Marcelo, E.S. (2022). Is Social Capital Really Capital? *Review of Social Economy*, 60(1):1-21.
- Rupietta, K., & Beckmann M. (2018). Working from Home. *Schmalenbach Business Review*, 70(1):25-55.
- Schumacher, P., & Morahan-Martin, J. (2001). Gender, Internet and Computer Attitudes and Experiences. *Computers in Human Behavior*, 17(1):95-110.
- Schäfer, B., Koloch, L., Storai, D. Gunkel, M., & Kraus, S. (2023). Alternative Workplace Arrangements: Tearing Down the Walls of a Conceptual Labyrinth. *Journal of Innovation & Knowledge*, 8:100352. 10.1016/j.jik.2023.100352
- Song, Y., & Gao, J. (2020) Does Telework Stress Employees Out? A Study on Working at Home and Subjective Well-Being for Wage/Salary Workers. *Journal of Happiness Studies*,21:2649-2668
- Stadin, M., Nordin, M., Brostrom, A., Magnusson Hanson, L.L., & Fransson, E.I. (2021). Technostress operationalised as information and communication technology (ICT) demands among managers and other occupational groups – results from the Swedish Longitudinal Occupational Survey of Health (SLOSH). *Computers in Human Behavior*, 114:1–9.
- Sullivan, C., & Lewis, S. (2001). Home-based telework, gender, and the synchronization of work and family: perspectives of teleworkers and their co-residents, *Gender, Work & Organization*, 8(2):123-145.
- Sullivan, C., Smithson J. 2007. Perspectives of homeworkers and their partners on working flexibility and gender equity. *International Journal of Human Resource Management*, 18(3):448-461.
- Taser, D., Aydin, E., Torgaloz, A.O., & Rofcanin, Y. 2022. An examination of remote e-working and flow experience: The role of technostress and loneliness. *Computers in Human Behavior*, 127, 107020
- Tang, L., Miao, R., & Jiang, L. (2020). Employee Political Skill, Supervisor-Subordinate Guanxi, and Work-Family Conflict: The Cross-Level Moderating Role of Family-Friendly Practices. *International Journal of Environmental Research and Public Health*, 17(14):5185.
- Tismal, A., & Mustabsar, A. 2016. Flexibility or ethical dilemma: an overview of the work from home policies in modern organizations around the world, *Human Resource Management International Digest*, (24)7:12-15.
- Torre, L.G., Leonardis, D.V., & Chiappetta, M. (2020) Technostress: how does it affect the productivity and life of an individual? Results of an observational study. *Public Health*, 12:189:60-65

Citation: Xiong, A., Xia, S., He, Q., Ameen, N., Yan, J., & Jones, P. (2023). When Will Employees Accept Remote Working? The impact of Gender and Internet Skills. *Journal of Innovation & Knowledge*, 8(3), 100402. DOI: <https://doi.org/10.1016/j.jik.2023.100402>

van Boekel, L.C., Peek, S.T., & Luijkx, K.G. (2017). Diversity in Older Adults' Use of the Internet: Identifying Subgroups Through Latent Class Analysis. *Journal of Medical Internet Research*. 24;19(5):e180. doi: 10.2196/jmir.6853.

Vieira, J. (2005). Skill mismatches and job satisfaction. *Economics Letters*, 89(1):39-47.

Wang, B.Z. & Cheng, Z. (2017). Environmental Perceptions, Happiness and Pro-environmental Actions in China. *Social Indicators Research*, 132:357–375

Wang, B., Liu, Y., & Qian, J. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology*, 5:doi: 10.1111/apps.12290.

Wei, L., & Zhang, M. (2008). The impact of Internet knowledge on college students' intention to continue to use the Internet. *Information Research*, 13(3):348-353.

Xiong, A., Li, H., Westlund, H., Pu, Y. 2017. Social networks, job satisfaction and job searching behavior in the Chinese labor market. *China Economic Review*, 43:1-15.

Xiong, A., Sun, X., Li, H., & Westlund, H. (2019). Determinants of Social Networks in Rural China: Does Transportation Have a Role to Play? *Social Science Quarterly*, 100(5):1709-1725.

Xiong, A., Tao, J., Li, H., & Westlund, H. (2022). Will female managers support gender equality? The study of “Queen Bee” syndrome in China. *Asian Journal of Social Psychology*, 25(3):544-555.

Data availability statement

Data available on request due to privacy/ethical restrictions