Original Research

Remote Workers' Reasons for Changed Levels of Absenteeism, Presenteeism and Working Outside Agreed Hours During the COVID-19 Pandemic

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Abstract

Few studies have analyzed the extent of remote workers' absenteeism, presenteeism and working outside agreed hours during the COVID-19 pandemic. Even fewer have examined the reasons that led remote workers to change these behaviors during the pandemic. The present study aimed to investigate these. An online survey containing closed- and open-ended questions was distributed to IT and communication remote workers ($N = 459$). Closed-ended questions were analyzed quantitatively, while open-ended questions were analyzed qualitatively. Most participants engaged in presenteeism and worked outside of agreed work hours. Absenteeism was less common than presenteeism. Presenteeism was found to be more common among women and younger workers. Absenteeism was more frequent among younger workers, sales and support workers, and workers who did not hold management positions. Working outside agreed hours was more common among older workers and workers in managerial positions, but less common among support, sales, and administrative staff. Compared with the pre-pandemic period, absenteeism decreased, whilst presenteeism and working outside agreed hours increased during the pandemic. Health behaviors, work-related factors, and perceptions of illness influenced absenteeism and presenteeism behavior. For some individuals, health behaviors improved during remote work, reducing the need for absenteeism. Greater accessibility to work, increased workload, and the belief that one could manage work even if ill led to increased presenteeism while working remotely. The eroding of boundaries between home and work, reduced commuting, increased workload, and increased work-related communication were associated with increased working outside agreed hours.

Plain Language Summary

Remote working increased tremendously during the pandemic, and the following study aimed to determine how levels of absenteeism from work, working whilst ill (termed presenteeism) and working outside agreed hours changed amongst remote workers during the pandemic. The study also explored the reasons for such changes. An online survey was carried out amongst IT and communication remote workers. 459 workers participated. The majority of participants worked whilst ill and worked outside of their agreed hours. Working whilst ill was more common than sickness absenteeism. Working when ill was more common among women and younger workers. Absenteeism was more frequent among younger workers, sales and support workers, and workers who did not hold management positions. Working outside agreed hours was more common among older workers and workers in managerial positions, but less common among support, sales, and administrative staff. Compared with the pre-pandemic period, absenteeism decreased, whilst working whilst ill and working outside agreed hours increased during the pandemic. For

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some individuals, health behaviors improved during remote work, reducing the need for absenteeism. Greater accessibility to work, increased workload, and the belief that one could manage work even if ill while working remotely led to increased presenteeism. The eroding of boundaries between home and work, reduced commuting, increased workload, and increased work-related communication were associated with an increase in working outside agreed hours. Working ill and working outside agreed hours can be detrimental to health and work performance. The findings can help organizations to understand and manage these factors.

Introduction

The impact of the COVID-19 pandemic on all aspects of life can hardly be overstated. Many people found themselves forced to change their routines overnight. Many workers who were accustomed to working at a company's workplace every day suddenly found themselves working from home. Remote working, also known as teleworking, has been associated with several benefits, such as added flexibility and work-life balance, but also disadvantages, such as work intensification and the potential for work to interfere with personal life (Eurofound & International Labour Office, 2017). In a post-pandemic world, remote work has remained a reality for many workers. The current paper aims to explore three behaviors that impact remote workers' health and performance. These include absenteeism, presenteeism, and working outside agreed hours. The study also aims to determine if levels of these behaviors varied during the pandemic and the perceived reasons for this.

Sickness absenteeism generally refers to choosing not to go to work when feeling unwell. EU statistics indicate that in 2020, the first year of the COVID-19 pandemic in Europe, the number of sickness absences remained relatively stable compared to the previous year, with a slight increase in most countries (Eurostat, 2021). An analysis of sickness absenteeism rates among remote workers during COVID-19 does not appear to have been conducted. Studies conducted prior to the pandemic (Ahmed et al., 2020; Montreuil & Lippel, 2003; Steidelmüller et al., 2020) suggest that remote workers tend to take less sick leave and are more likely to work when ill, termed presenteeism (Johns, 2010). However, a study conducted during the pandemic found no differences in presenteeism rates between teleworkers and non-teleworkers (Gerich, 2022). Current study objectives include examining the frequency and interaction of absenteeism and presenteeism among remote workers (Objective 1) and determining how levels of absenteeism and presenteeism changed during the first 12 months of the pandemic compared to the 12 months prior (Objective 2). Despite the mixed and limited previous results, it is likely that absenteeism among remote workers decreased whereas presenteeism increased during this period.

Absenteeism is often used by organizations as an indicator of employee health. However, taken in isolation, absenteeism measures can be misleading, as workers who are unwell could choose to work anyway. Some organizations implement measures to limit absenteeism because it is seen as costly. However, such policies may have the unintended consequence of increasing presenteeism levels (Grinyer & Singleton, 2000). In fact, absenteeism is a potentially health-promoting behavior that provides workers with an important opportunity to recover from various illnesses and disorders. Dellve et al. (2011) found that those who took no sick leave had worse health than those who took a limited amount. Absenteeism can also help workers escape negative workplace factors (Simpson et al., 2015) that may cause or exacerbate ill health.

Presenteeism, on the other hand, is often linked with negative consequences, such as adverse effects on health and work performance (Fiorini et al., 2022; Silva-Costa et al., 2020). However, positive effects of this behavior have also been recognized. Amongst them, it has been argued that workers are more productive during presenteeism than when they are absent (Karanika-Murray & Biron, 2020; Lohaus et al., 2021). Most studies on the consequences of presenteeism have not focused on remote workers. However, a study by Shimura et al. (2021) suggests that presenteeism-related performance loss was rare, occurring only in those who worked entirely remotely. This suggests that the consequences of presenteeism may depend on the percentage of work that is done remotely.

Several theoretical models of sickness absence and presenteeism have been proposed. These generally conceptualize ill workers' behavioral choices as between one of two alternatives: attending work or staying home when ill (e.g., Johns, 2010; Karanika-Murray & Biron, 2020; Lohaus & Habermann, 2019; Miraglia & Johns, 2016). This is also reflected in common measures of presenteeism, used to examine the antecedents, frequency, and consequences of this behavior. Such measures typically aim

to determine the number of days or the number of periods of time individuals attended work while ill, or struggled with work while attending ill (Gerich, 2015; Johns, 2010; Ruhle et al., 2020). Remote work, however, expands the opportunities available to ill workers. Sickness absenteeism does not only involve not going to work but also not working from home. In terms of presenteeism, individuals who have the option to work remotely may be able to choose between attending the workplace whilst ill (classic presenteeism) and working from a remote location when ill (virtual presenteeism). This suggests that definitions and measures of presenteeism should place less emphasis on the location of work, with presenteeism better conceptualized as "working when ill." This definition is consistent with the recommendations of some scholars on the topic (see Ruhle et al., 2020).

The antecedents of presenteeism and absenteeism have been the subject of several papers. Factors that have been shown to influence workers' decisions include perceptions of their own illness (Fiorini et al., 2020), health status (Miraglia & Johns, 2016), work attitudes such as commitment (Fiorini et al., 2018; Krane et al., 2014), administrative and organizational factors, such as difficulties in requesting leave or financial consequences of missed work (Shan et al., 2020), job demands, work resources and personal resources (Kinman & Wray, 2022; Miraglia & Johns, 2016), individual factors such as gender or age (Gerich, 2016; Gosselin et al., 2013) and country-level factors such as culture and the economy (Lohaus & Habermann, 2019). Despite the wealth of research, studies on the antecedents of absenteeism and presenteeism among remote workers, including since the pandemic, are scarce (Ruhle et al., 2020). Therefore, it is unclear to what extent the theories and findings related to absenteeism and presenteeism decisions of non-remote workers are applicable to remote workers.

Related studies of remote workers have found that those who have the option to telework are less likely to attend work sick with a contagious disease than those who do not have the option to telework (Rousculp et al., 2010). Recent studies of remote workers have associated presenteeism with work intensification (Gerich, 2022) and greater psychosocial demands (Biron et al., 2021). A study by Ruhle and Schmoll (2021) indicated that many factors previously associated with presenteeism also apply to remote workers. Antecedents included perceptions of work responsibilities, difficulty in being replaced, ability to adjust one's schedule as needed (adjustment latitude), aspects related to social support, and specific illness perceptions. However, reasons specific to working remotely also emerged, such as the fact that not having to commute facilitates presenteeism, while it was also perceived as more difficult to justify absenteeism when working remotely. Such novel findings underscore the

need for further studies on absenteeism and presenteeism choices among remote workers. It is also unclear if factors, such as demographic factors and the proportion of work carried out remotely, influence absenteeism and presenteeism frequencies in remote workers. This will be studied in the present study (Objective 3). Furthermore, studies do not appear to have analyzed the reasons for changed levels of absenteeism and presenteeism among remote workers during the pandemic. This will also be investigated in the current study (Objective 4).

Another behavior that likely became more common with the increase in remote working during the pandemic is working outside agreed hours (WOAH), sometimes termed working during non-working hours, such as during vacations, non-working days and unpaid time after work. Such behavior has been associated with negative health outcomes such as emotional exhaustion (Ghislieri et al., 2022). European data indicate that those who worked from home during the pandemic worked longer hours than those who did not (Eurofound, 2021). Pre-pandemic findings have shown that the increased prevalence of technology in the workplace has led to more frequent work-related communications outside of work hours and greater expectations of constant availability (McDowall & Kinman, 2017). Furthermore, remote working has been shown to lead to a blurring of the boundaries between work and personal life roles (Johnson et al., 2020). Such work behavior has also been explored as a facet of leaveism. Leaveism includes several components, one of which involves completing work at home outside of normal work hours (Hesketh & Cooper, 2014). This aspect of leaveism appears to be more prevalent among individuals in more senior positions (Gellatly, 2019; Houdmont et al., 2018), while it may have a more negative impact on individuals who are not in senior positions and leaveism may be imposed (Gellatly, 2019).

A limited number of studies have analyzed the possible reasons for WOAH since the pandemic. This behavior appears to be more common among women, those with children, and those with children who were home-schooled (Eurofound, 2021). These findings are suggestive of having to cope with family and household demands whilst attempting to work (Adisa et al., 2023). Other reasons given reflect other pre-pandemic findings, including the loss of standardized schedules when working from home (Matli, 2020), that remote working is associated with work intensification, and greater pressure to always be available (Adisa et al., 2023). Workplace norms to check workplace communications after working hours also appear to be relevant (Cheung et al., 2022).

Because little attention has been paid to this issue, the current study will examine how frequently remote workers are WOAH (Objective 5) and whether this changed during the first 12 months of the pandemic compared to the

12 months prior (Objective 6). It appears likely that WOAH is frequent and may have increased during the pandemic. The correlates of this behavior have been the focus of few studies to date, and the current study examines whether the proportion of work performed remotely, absenteeism and presenteeism, as well as demographic variables, are associated with WOAH (Objective 7). Furthermore, workers' perceived reasons for changes in WOAH during the pandemic do not appear to have been explored and will be studied in the present study (Objective 8).

Method

The study uses data from an exploratory cross-sectional study conducted among workers in the Information Technology (IT) and communications sectors in Malta (EU). Following the outbreak of the COVID-19 pandemic, remote working increased substantially in Malta during 2020 when compared to the previous year (National Statistics Office - Malta, 2021a). Prior to the pandemic, the rate of remote working arrangements in Malta was lower than the EU average (Malta Central Bank, 2021). The IT and communications sector was studied as it included workers who already had the ability to work remotely prior to the pandemic. This allowed for comparisons between those whose remote working increased during the first year of the pandemic versus those whose frequency of remote working remained the same. Internationally, absenteeism and presenteeism rates vary by sector, country and employment type (Eurofound, 2019), however, very little research has focused on IT and communications sector workers. In view of the study's focus, it is also worth noting that employees in Malta report good levels of health (Fiorini, 2019) and have access to paid sick leave.

Major IT and communication organizations in Malta were invited to distribute an informative email to their employees. Fifteen organizations, 14 from the private sector and one from the public sector accepted the invitation. All the selected organizations provided workers with the possibility to work remotely during the first 12 months of the COVID-19 pandemic. Employees who had engaged in remote working during this period were invited to complete an anonymous online questionnaire. In view of the study's exploratory nature, the questionnaire included both open-ended and closed-ended questions (Fiorini et al., 2016). 468 responses were received, of which 459 were analyzed, representing almost 5% of individuals working within this sector in Malta (National Statistics Office - Malta, 2021b). Cases, where respondents reported not engaging in remote working, were excluded from the analysis.

The study received ethical clearance from the Faculty Research Ethics Board at the Faculty of Economics, Management and Accountancy at the University of Malta.

Measures

A literature search was conducted to identify measures that were consistent with the study's objectives. Preference was given to measures that appear regularly in published studies, however, where such measures could not be identified, measures were developed. The questionnaire was tested amongst a small group of IT workers ($n = 5$) prior to distribution. The measures included in the final questionnaire are described below.

Use of remote working: Based on a measure by Fiorini et al. (2022), participants were asked to estimate their average use of remote working during the first 12 months of the COVID-19 pandemic on a 5-point scale ranging from no remote working (0%) (1) to all of the work done by remote working (100%) (5).

Change in remote working: As related questions were not identified, a single-item question was created to investigate if participants' use of remote working had changed during the first 12 months of the pandemic compared with the 12 months prior to this. Responses were given on a 3-point scale which included, reduced use of remote working (1), same use (2), and increased use of remote working (3) during the first 12 months of the pandemic.

Absenteeism: In view of its frequent use within the scientific literature, a single-item question based on the work of Aronsson et al. (2011) was used. "How many times did you take sick leave during the first 12 months of the COVID-19 pandemic?" Responses were given on a seven-point scale ranging from never (1) to six or more times (7).

Change in absenteeism: In the absence of related questions, a single-item question was developed that asked participants if their sick leave frequency had changed during the first 12 months of the pandemic compared to the 12 months preceding it. Four responses were possible; no use of sick leave during either period, less use of sick leave, the same amount of sick leave, and more use of sick leave during the pandemic than before it. For the purpose of analysis, the variable was re-coded as described in the analysis section.

Reasons for change in absenteeism: Via an open-ended question, participants who stated that their absenteeism rates had increased or decreased were asked to provide reasons for this change.

Presenteeism: A single-item measure based on that of Aronsson et al. (2000) and commonly used within the presenteeism literature was used. Participants were asked to recall the number of times they had worked, from their workplace or remotely, despite feeling sufficiently unwell to take sick leave during the first 12 months of the pandemic. Responses were given on a seven-point scale ranging from never (1) to six or more times (7).

Change in presenteeism: As related questions were not identified, a single-item question was developed which asked participants if their use of presenteeism varied during the first 12 months of the pandemic compared to the 12 months preceding it. Respondents could either choose that their presenteeism frequency had remained the same—either it was never used during either period, or presenteeism was used with the same frequency during both periods, that presenteeism had decreased during the pandemic, or that it had increased during the pandemic. The variable was re-coded as described in the analysis section.

Reasons for change in presenteeism: An open-ended question asked participants who reported a change in their presenteeism frequency to provide reasons for this change.

WOAH: In view of a lack of research on the topic, a single-item measure was developed. "During the first 12 months of the COVID-19 pandemic, did you use your non-working hours (e.g., vacation leave, unpaid time after work, non-working days) to carry out work tasks?" Responses were provided on a five-point scale which ranged from never (1) to always (5).

Change in WOAH: In view of the absence of empirical research on the topic, a question was developed that asked participants to reflect if they had worked during their non-working hours more frequently in the first 12 months of the pandemic when compared to the 12 months before it. Participants could either choose that WOAH had not changed, either because they never did this during either period, or their frequency had remained the same, or they could indicate that WOAH had decreased or increased during the pandemic. The variable was re-coded as described in the analysis section.

Reasons for change in WOAH: An open-ended question asked participants who stated that their use of WOAH had changed to provide reasons for this.

Demographics: data regarding gender, age and role were collected. 250 males (55%) and 204 females (44.4%) participated. Three hundred thirty-three of the participants were aged between 26 and 45 (73%), with a further 74 participants aged 25 or younger (16%) and 54 participants aged 46 or older (12%). In terms of role, 134 held technical positions (29%), 113 held managerial positions (25%), 78 were professionals (17%), 68 held administrative roles (15%) and 59 worked in support and sales (13%).

Analysis

Quantitative analysis was conducted via SPSS version 27. Change variables were re-coded into dichotomous variables as these were skewed (Morgan et al., 2013). The new categories were chosen to ensure a sufficient number of cases in each category. Subsequently, change in absenteeism was re-coded as less absenteeism (1) and the same or more absenteeism (2); change in presenteeism was re-

coded as less or the same presenteeism (1) and more presenteeism (2); and change in WOAH was re-coded as less or the same WOAH (1) and more WOAH (2). In terms of data analysis, Kendall's Tau-b was used to analyze associations between ordinal variables as well as ordinal and dichotomous variables (Morgan et al., 2013). When the association between two dichotomous variables were analyzed, Phi was used (Morgan et al., 2013).

In terms of the open-ended questions regarding the reasons for the change in frequency of absenteeism, presenteeism and WOAH, analysis was conducted qualitatively via Braun and Clarke's (2006) thematic analysis framework. Thematic analysis was chosen due to its wide use in related scientific papers. In line with this framework, the author familiarized themself with the data and generated initial codes. Via an inductive approach, a search for themes was then conducted. Once identified, themes and their codes were reviewed, following which they were named and defined. This process was repeated for each of the open-ended questions.

Results

During the first 12 months of the pandemic, almost half the sample (46%) reported carrying out all their work remotely, 32% carried out more than half of their work remotely, and 22% carried out half or less than half of their work remotely. The vast majority (82%) made use of remote working to a greater degree during the first 12 months of the pandemic than in the period that preceded it. Ten percent reported working remotely to a similar degree, whilst 8% worked remotely to a lesser degree during the pandemic.

Absenteeism, Presenteeism, and WOAH Frequency

The frequency of studied behaviors and the change in these behaviors is illustrated in Table 1. Most participants engaged in presenteeism and WOAH, with both increasing during the pandemic. Absenteeism was less frequent than presenteeism and decreased during the pandemic.

Bivariate analysis revealed that absenteeism and presenteeism frequency ($\tau_b(451) = .14$, $p < .001$) and the frequency of presenteeism and WOAH ($\tau_b(449) = .15$, $p < .001$) were significantly associated. An association between absenteeism and WOAH was not identified. In terms of change variables, change in absenteeism and change in presenteeism were negatively associated (Phi(444) = $-.27$, $p < .001$). Change in WOAH was positively associated with a change in presenteeism (Phi(452) = $.15$, $p = .001$). A significant association between change in WOAH and absenteeism was not identified.

Table 1. Frequency and Change of Measured Behaviors.

	Absenteeism (%)	Presenteeism (%)		Work outside agreed hours (%)
Frequency			Frequency	
Never	265 (58)	188 (41)	Never	127 (28)
Once	102 (22)	52 (11)	Seldom	78 (17)
Twice	56 (12)	71 (15)	Sometimes	144 (31)
Three or more times	35 (7)	141 (31)	Often	91 (20)
			Always	15 (3)
Change				
Never	144 (31)	146 (32)		121 (26)
Less	173 (38)	31 (7)		22 (5)
The same	123 (27)	141 (31)		138 (30)
More	16 (4)	128 (28)		173 (38)

Table 2. Associations Between Remote Working and the Studied Behaviors.

	Absenteeism		Presenteeism		Work outside agreed hours	
	n	τ_b	n	τ_b	n	τ_b
Remote working frequency	458	.02	452	.05	455	−.06
Change in remote working	454	.04	448	.02	451	.04
	Change in absenteeism		Change in presenteeism		Change in work outside agreed hours	
	n	τ_b	n	τ_b	n	τ_b
Remote working frequency	456	−.13**	446	.05	454	−.03
Change in remote working	452	−.12*	443	.07	451	.07

Note. n = number; τ_b = Kendall's Tau-b.
* < .05; ** <.01.

Bivariate analysis was conducted to identify relationships between the proportion of remote work and the studied outcome variables. As illustrated in Table 2, more frequent remote working, as well as increased remote working during the pandemic, were associated with reduced absenteeism levels during the pandemic.

Associations with demographic variables and frequency variables were also explored. Regarding age, older individuals reported less frequent absenteeism ($\tau_b(457) = -.15$, $p < .001$) and presenteeism ($\tau_b(451) = -.11$, $p = .007$), but more WOAH ($\tau_b(454) = .18$, $p < .001$). Regarding gender, a significant association was only identified for presenteeism, which was more frequent in women ($\tau_b(455) = .13$, $p = .003$). Significant associations between role and presenteeism were not identified. Managers, however, reported less frequent absenteeism ($\tau_b(451) = -.17$, $p < .001$) and more frequent WOAH ($\tau_b(448) = .29$, $p < .001$). Support and sales staff reported more frequent absenteeism ($\tau_b(451) = .10$, $p = .02$) and less frequent WOAH ($\tau_b(448) = -.16$, $p < .001$). Administrators reported less frequent WOAH ($\tau_b(448) = -.12$, $p = .006$). Being in a technical or professional role was not associated with any of the frequency outcome measures.

In terms of changed levels during the pandemic, gender was not associated with a change in any of the three behaviors. Older age was only associated with increased WOAH during the pandemic ($\tau_b(453) = .15$, $p < .001$). In terms of role, a link was only identified with those in a support or sales staff role. These workers reported increased absenteeism (Phi(449) = .16, $p < .001$) and reduced WOAH (Phi(448) = −.12, $p = .009$) during the pandemic.

Reasons for Change in Absenteeism and Presenteeism Frequency

Perceived reasons for changed presenteeism and absenteeism frequencies during the pandemic were found to be interlinked and included three themes: Disease frequency and health levels; organizational and work-related factors; and illness perceptions. These themes are described below. The frequency of themes of the two largest categories, a reduction in absenteeism and an increase in presenteeism are presented in Table 3.

Table 3. Frequency of Perceived Reasons for Reduced Absenteeism and Increased Presenteeism.

Theme	Less absenteeism (%)[a]	More presenteeism (%)[b]
Disease frequency and health levels		
Disease	74 (48)	2 (2)
Health	14 (9)	-
Organizational and work-related factors		
Ability to work from home when ill	56 (36)	71 (65)
Workload	-	9 (8)
Responsibilities and feelings of guilt	-	10 (9)
Organisational policies	2 (1)	3 (3)
Precarious employment	-	5 (5)
Illness perceptions		
Severity of illness and workability	26 (17)	16 (15)
Type and legitimacy of illness	16 (10)	17 (15)
Disease transmission	8 (5)	24 (22)
Recovery	2 (1)	11 (10)

[a]Based on 154 responses.
[b]Based on 110 responses.

Disease Frequency and Health Levels. A large number of participants linked lower absenteeism with experiencing less **disease** compared to the previous year. This was also given as a reason for lower presenteeism rates by a few participants. One important reason was that participants had less contact with other people, and thus the risk of disease transmission was lower. Some participants also described how household members also benefited.

> *By working remotely, I am not in contact with the same amount of people as when I used to work in an office environment, therefore I have had a clean bill of physical health since the start of the pandemic.*

Many participants also linked the lower incidence of disease to greater awareness and use of preventive measures such as wearing masks, social distancing, higher levels of hygiene, and greater awareness of communicable diseases.

> *I have so far gotten less sick than before since I wash my hands more, use sanitizer, and use masks when a lot of people are around and in public.*

Individuals also reasoned that better levels of **health** during the studied period resulted in lower absenteeism. Participants described their better health habits, such as more sleep, exercising and healthier eating, as well as lower stress levels and better family life. Participants linked these positive factors with working from home.

> *Didn't get sick since I was more aware of hygiene and had a healthier lifestyle. Even as regards food I ate much healthier when working from home.*

Among individuals who took more sick leave, a few highlighted that they were sick more often, or that the change to online work resulted in poorer health. More frequent illness also resulted in more presenteeism in a few participants.

Organizational and Work-Related Factors. The **ability to work from home when ill** was perceived by many participants as an important reason for reduced absenteeism and increased presenteeism. Individuals emphasized that as they could now do their work from home, sick leave was seen as unnecessary.

> *Since I could still work from home when I was sick I didn't feel the need to use my sick leave.*

Participants described the home environment as more "*comfortable*" to work from when unwell. The added flexibility of remote working also allowed individuals to cope when working ill—for example by taking breaks when needed. The lack of commuting and added support from others in their household also made it more manageable to work when ill. It was thus seen as "*easier to work unwell from home than to work unwell from the office.*"

> *Given that I was working from the comfort of my home and able to disconnect for small recovering periods, it made it possible for me to avoid using sick leave and continue my work nonetheless.*

In terms of those who engaged in greater presenteeism, some individuals highlighted that they did so due to heavy **workloads**. Participants described how presenteeism allowed them to avoid workloads building up excessively as well as how workload had increased during the pandemic.

Others engaged in more presenteeism in view of their **responsibilities and feelings of guilt about using sick leave**. The option to work remotely appears to have driven such feelings of guilt:

> *I felt uncomfortable taking sick when I was staying at home with the possibility of still keeping on doing the job.*

Participants were also affected by **organizational policies**. Participants described avoiding sick leave or engaging in presenteeism due to the need to obtain a doctor's certificate in order to avail of sick leave. During COVID-19, participants were worried about attending doctor's clinics, and also noted that these had become more difficult to obtain during the pandemic:

> *Since medical certificates are required and doctors were not visiting homes in view of the pandemic.*

Other participants engaged in remote presenteeism in view of organizational policies not to attend work with symptoms. A few participants who took more sick leave also stated that this was due to COVID-19 organizational policies.

Finally, some workers engaged in more presenteeism as they worried that excessive absenteeism could result in **losing their jobs**. The pandemic also appeared to influence this, as described below:

> *Because I had several sick leave episodes already and I was afraid of losing my job during the pandemic when it's hard to find a new job.*

Illness Perceptions. Several illness-specific reasons were discussed by participants. **Severity of illness and workability** were frequently mentioned. Participants reported less absenteeism and/or more presenteeism because their symptoms were mild enough not to require sick leave and had little or no impact on their work performance. Often this was linked to the ability to manage symptoms of illness because one was working remotely.

> *Minor things which would cause me problems at the office could be handled at home without impacting my ability to work.*

More severe symptoms that impacted work performance, however, resulted in absenteeism. This was also the case for a few participants who took more sick leave and less presenteeism, often due to COVID-19-related mental challenges:

> *Towards the end of the COVID year, my mental health was suffering so much that I was not fit to do any work and needed to have an extended break due to the stress and anxiety that I had.*

The **type and legitimacy of the illness** were also discussed. Participants did not take sick leave or engaged in presenteeism with specific illnesses, including pain, migraines and mental health symptoms. Participants highlighted how they could cope with such symptoms remotely, and in the case of mental illness, the legitimacy of taking sick leave was questioned. Furthermore, it was stated that whilst gastric problems would previously necessitate absenteeism, it was easier to deal with such symptoms when working from home.

> *.... I've always felt like having depression/anxiety is not a good enough reason to take sick leave.*

Conversely, a few workers took more sick leave, often highlighting that it was linked to a reason they considered acceptable, such as COVID-19 or pregnancy.

Another change related to remote working was **disease transmission**. Participants who took less absenteeism or more presenteeism stated that whereas sick leave was previously needed to avoid passing on contagious diseases, this was no longer a concern when working remotely.

> *....you don't go to work in order not to infect other people but you're still in a condition to work, you can work from home.*

A number of participants who engaged in more presenteeism or less absenteeism also stated that working, in contrast to taking sick leave, helped them to **recover**. This was particularly mentioned by those who suffered from mental issues and believed that keeping busy helped them:

> *Work gives me purpose and keeping busy is healthy, speaking out and opening up helps but work is a powerful tool to get over problems.*

Reasons for Change in WOAH

The following section analyzes the reasons given for why the frequency of WOAH changed during the first 12 months of the pandemic. The provided reasons are divided into three major themes: the home as a workplace; work arrangements and organizational factors; and personal factors. Each of these themes had a number of sub-themes that are described below. As very few respondents reported reduced WOAH, the section focuses on the reasons given for increased WOAH (Table 4).

The Home as a Workplace. Many workers commented on how the **borders between work and the home had become blurred**. Participants stated that the work environment and the home environment were physically identical, and also struggled to distinguish between working hours and non-working hours, with some losing track of time. Both led participants to WOAH.

Table 4. Frequency of Perceived Reasons for Increased Work Outside Agreed Hours.

Theme	Increased work outside agreed hours (%)[a]
The home as a workplace	
Blurred borders between work and home	22 (14)
Difficult to disconnect	35 (22)
Increased access to work	29 (18)
Preference to working from home	11 (7)
Work arrangements and organizational factors	
Work demands	59 (37)
Lack of work resources	4 (3)
Obligation or work imposed	15 (9)
Time saved from commuting	21 (13)
Flexibility	17 (11)
Personal factors	
Personality	7 (4)
COVID-19 and related restrictions	21 (13)
Responsibilities related to family and children	9 (6)
Personal needs	4 (3)

[a]Based on 158 responses.

When working from home, the barrier between work and leisure time becomes blurred. The home becomes a workplace.

Many participants also found it **difficult to disconnect** from work. In particular, due to a combination of working from home and the increased use of communication technologies during the pandemic, such as cell phones, chat groups and email, co-workers and clients would often contact them outside of their working hours. "*Expectations were that you are always available.*" Because they worked from home, remote meetings would also exceed their work hours. Participants also found it more difficult to stop thinking about work, which was sometimes attributed to the loss of commuting between work and home. Related to workload, several participants found themselves unable to stop working until they had completed their day's tasks.

With remote working it is more difficult to disconnect. Messaging apps used for work are too intrusive and keep you always connected
As I was working remotely, the office telephone was transferred to my mobile, so clients continue contacting me even after office hours

Another related sub-theme was the ease with which one could work at any time of day due to **increased accessibility to work**. Participants had easy access to work tasks via home offices or work laptops. Participants also noted how they had not received work emails and communications on their phones prior to the pandemic. Participants often found themselves returning to their computers or voluntarily opening their email accounts to check up on things or to carry out work tasks.

When I was working at home, my laptop was there so I could access my emails etc. Before the pandemic, I never used to take my laptop home with me to avoid working during my non-working hours.

A number of participants also highlighted that they **preferred to work from home**. Participants stated that they were more comfortable at home, could concentrate better and were more productive and thus chose to work more.

…the peace and quiet at home and the fact that the setup (laptop etc..) was already there made it enjoyable to carry on a few tasks outside working hours.

Work Arrangements and Organisational Factors. High **work demands** were given as a key reason for the increase in WOAH. Participants discussed how WOAH prevented work from piling up, allowed them to tackle pending work, and how their workload and deadlines were challenging. Some participants indicated that their workload had increased during COVID-19. Participants explained how the increased use of communication technologies, such as chat programs, had led to much more communication during work hours, resulting in workers having to work after hours as all their regular paid hours were consumed by this communication. Other reasons given for this increase in communication were that in the physical workplace, co-workers could observe when others were performing a task or in a meeting and not disturb them. However, when working remotely, such communications would be received no matter one's status, with an expectation that these are seen to.

When you're at the office and you are in a meeting, you are most likely not interrupted. At home, I might be discussing various issues with different colleagues all at the same time.

The workload also increased due to companies grappling with the pandemic: some participants reported workload increasing following an increase in business or because organizations were trying to compensate for lost income streams. In others, work became more complicated due to COVID-19 procedures and restrictions.

A small group of individuals also highlighted a **lack of resources**, stating that a lack of staff led to greater pressure upon the workforce and a greater need to work during one's non-working hours:

Redundancies resulted in more work for the individual employees

Some workers also discussed how work was **imposed on them or they felt obliged** to WOAH. In several cases, workers highlighted how it was imposed by their organization, often by means of administrative changes related to remote working:

Management removed overtime for remote workers but work still needed to be done.

In other cases, feelings of obligation to continue working or feelings of responsibility encouraged workers to choose to WOAH. In this latter case, participants often highlighted that they had management responsibilities, or felt obliged to work more as they were in their first year of a new job.

Several workers carried out additional work due to the **time saved commuting**. Participants explained how prior to remote working, they wasted hours commuting to the workplace, with participants seeing this saved time as an opportunity to work extra hours. Participants described starting their work earlier, or continuing beyond their working hours until they had finished their tasks, knowing that a long commute did not await them.

Working from home during the pandemic made me work more. I saved about two and a half hours of travel time and I had no problem putting this time into my work.

The added **flexibility** available when working from home was also given as a reason for WOAH. Reasons varied including that it was a fair trade-off for having been provided with flexibility. Others used flexibility to work at a different pace, taking breaks when needed or using it to also juggle responsibilities not related to work, as discussed in the next section.

If my job offers flexibility, I do not mind working a bit more during my non-working hours.

Personal Factors. Some participants put their additional work down to factors related to their **personality**. Workers attributed WOAH to enjoying work or because it was in their character to work excessively.

That's my life. I am a workaholic.

COVID-19 and related restrictions played a role in fostering WOAH. Several participants discussed how they stayed home with little to do due to restrictions which led to the closing of establishments or due to fear of COVID-19. Many participants described that they found

this situation boring and therefore chose to carry out further work.

With barely anything to do outside of the home, I would very often continue working.

Responsibilities related to family and children also played a role. Some participants described how difficult they found working remotely while also trying to cater for their young children. Issues regarding dealing with children's remote schooling during work hours were also described. This led participants to WOAH in order to catch up with work, with some describing that they worked well into the night.

Being home alone taking care of two kids, one of them a toddler, makes it difficult to carry out all tasks, therefore I would make up for the lost time during weekends or public holidays.

Others, however, described remote working more positively and stated that remote working had allowed them to balance work and family responsibilities.

A few workers engaged in WOAH as remote work allowed them to tackle other **personal needs**. These included balancing work with studies, hobbies and domestic duties such as refurbishments.

I was juggling work and academic course tasks over the course of the whole week. Meaning if during a vacation day, it seemed more fitting to clear out smaller tasks (including work tasks), I would do it.

Discussion

The data obtained highlighted the impact of the COVID-19 pandemic on the Information Technology (IT) and communications sectors in Malta. In line with reports from other countries (Eurofound, 2020), remote work has increased substantially in the sector studied. Presenteeism was found to be frequent and more widespread than absenteeism (Objective 1). This is consistent with previous findings from other sectors (Caverley et al., 2007; Rantanen & Tuominen, 2011). In line with other studies (Miraglia & Johns, 2016), the incidence of absenteeism and presenteeism was also positively associated, likely due to individuals with poorer health having to choose between the two behaviors more often. Presenteeism has also been linked to several negative outcomes, including poor work performance and negative long-term health outcomes, leading to future absenteeism (Bergström et al., 2009; Fiorini et al., 2022; Silva-Costa et al., 2020). Consequently, this could also have contributed to the correlation between absenteeism and presenteeism.

Given the uptake of remote working in the first year of the COVID-19 pandemic, the study also examined whether the frequency of absenteeism and presenteeism changed during this period (Objective 2). In line with expectations, the frequency of absenteeism decreased while presenteeism increased. Furthermore, an increase in presenteeism during the pandemic was associated with a decrease in absenteeism during the same period. This suggests that ill workers replaced absenteeism with presenteeism. This is potentially cause for concern in view of presenteeism's negative consequences. The decrease in absenteeism in the first year of the pandemic seems to contradict statistics from other European countries (Eurostat, 2021), however, this finding is likely due to the remote nature of the analyzed workers. Indeed, pre-pandemic studies show that remote workers use less absenteeism and engage in greater presenteeism than those who do not work remotely (Ahmed et al., 2020; Montreuil & Lippel, 2003; Steidelmüller et al., 2020).

The study examined factors associated with the frequency of absenteeism and presenteeism (Objective 3) and changes in these two behaviors during the pandemic (Objective 4). Workers who reported that a greater proportion of work was done remotely, or that remote work had increased during the pandemic, also reported reduced absenteeism during the pandemic. The findings may suggest that remote working has health benefits. This was supported by the qualitative results. Many participants attributed lower absenteeism during the pandemic to a lower incidence of illness and better health when working remotely. Reasons included better levels of hygiene, less contact with others and thus fewer communicable diseases, and healthier habits when working from home, such as better nutrition, more sleep and more exercise. Previous studies support the positive effects of remote working on communicable diseases, with their incidence decreasing during the pandemic (Allison et al., 2021). However, findings on health behaviors such as exercise, nutrition and sleep have been more mixed (Blume et al., 2020; Cummings et al., 2022). Interestingly, no relationship was found between remote working and presenteeism. While better health would suggest that presenteeism would also decrease, this may have been offset by ill remote workers choosing presenteeism more often than when they worked in the office. This was supported by both the aforementioned statistical findings and the qualitative results, where the leading reason for an increase in presenteeism was the ability to work from home.

Associations between demographic factors and absenteeism and presenteeism variables were also examined. Absenteeism was less common among older workers. While similar findings have been reported (Engström & Janson, 2009), aging has often been linked with increased absenteeism (Wikman et al., 2005). The current sample was relatively young, with only about 15% of the sample aged 46 or older. This may have influenced the findings. Absenteeism due to mild disease has been shown to decrease up to age 50 (Markussen et al., 2011). In addition, the results may have been influenced by the relationship between age and role. Post-hoc tests revealed that older participants were significantly more likely to be in a leadership position, which was also associated with lower absenteeism, while younger participants were significantly more likely to be in a support and sales role, which was associated with higher absenteeism. Studies have often shown that individuals with greater responsibility and higher income have lower absenteeism than those with less responsibility and lower income (Morikawa et al., 2004; Wikman et al., 2005). Older workers also reported less presenteeism. This is a common finding (Gosselin et al., 2013; Susser & Ziebarth, 2016), and may relate to attendance requirements for younger workers who often occupy lower positions. A link between position and presenteeism, however, was not identified. As older age was associated with both lower absenteeism and lower presenteeism, this may also suggest that older workers were healthier than younger workers. Absenteeism also increased among sales and support workers during the pandemic. This may be related to declining sales due to economic pressures and changing service user behaviors which may have impacted workload and stress levels.

Demographic links with presenteeism were limited, other than the association with age, women were found to use presenteeism more than men. This is a common finding in the presenteeism literature (Arnold, 2016; Susser & Ziebarth, 2016). The reasons for this are unclear but may include both more frequent illness in women and social factors such as greater work-life conflict than in men (Gustafsson Sendén et al., 2016). However, whilst the latter appeared to influence WOAH, evidence that this influenced presenteeism was not found in the qualitative results. Further studies are thus warranted.

Aside from the changes in health status and health behavior discussed, the study showed how participants' perceptions of illness could influence absenteeism and presenteeism choices. This has previously been reported in both remote (Ruhle & Schmoll, 2021) and non-remote (Fiorini et al., 2020) workers. Among the findings of the current study, presenteeism was favored when illness symptoms were less severe and thus easier to manage, and when illness was not perceived as having a negative impact on workability, thus avoiding problematic decrements in performance. Opposite situations promoted absenteeism. Furthermore, situations in which work was perceived as beneficial to recovery promoted presenteeism rather than absenteeism. These findings are

consistent with those of non-remote workers (Fiorini et al., 2020), however, remote workers did highlight a number of key differences that explain why presenteeism may be more frequent amongst remote workers than non-remote workers. The threshold at which an illness is considered serious enough to warrant absenteeism may be higher when working from home, as workers perceive that it is easier to cope from home when unwell. In addition, some types of illnesses previously reported to require absenteeism, such as gastric issues (Fiorini et al., 2020; Morken et al., 2012), were considered to be easier to manage in a home environment and thus more likely to result in remote presenteeism. Finally, several studies of non-remote workers have reported that contagious illnesses foster absenteeism because workers fear they would infect their colleagues (Collins & Cartwright, 2012; Fiorini et al., 2020). As previously reported (Ruhle & Schmoll, 2021), this appears to vary in remote workers, who believed that disease transmission was no longer a concern and thus could continue working when unwell.

Certain types of illnesses, such as mental illness, also led to presenteeism because some workers believed they were not legitimate reasons for absenteeism. This was due to stigma and the invisibility of these conditions. This has been found previously in non-remote workers (Buck et al., 2011; Fiorini et al., 2020), but because teleworkers are often invisible to their colleagues, remote work may have exacerbated this problem. The issue is not clear-cut, however, as some individuals described presenteeism as a possible method of coping with mental illness or as a source of recovery. This is consistent with presenteeism theory which argues that it can also have positive effects (Karanika-Murray & Biron, 2020). Studies examining the possible health benefits of presenteeism among remote workers are lacking and are needed.

Apart from health and illness-related factors, organizational factors were also found to influence changes in absenteeism and presenteeism. Organizational absenteeism policies have previously been shown to influence absenteeism (Ahmed et al., 2020) and presenteeism (Ruhle & Schmoll, 2021) decisions among remote workers. In the current study, these were pandemic-specific. Workers took absenteeism or remote presenteeism because company policies required them to avoid the workplace if they had symptoms of a cold. Such policies were implemented to reduce workplace transmission of COVID-19. While the latter could encourage both behaviors, during the pandemic it became more difficult to obtain a doctor's certificate, which was required to use sick leave by participating organizations. Some physicians refused to see patients until they had been tested for COVID-19, stopped making house calls altogether, and did not offer telemedicine alternatives. As it became

more difficult to access sick leave, this led to an increase in remote presenteeism. However, some participating organizations only required a doctor's certificate for long sick leave periods, and this may explain why the factor was not highlighted by more participants.

Work demands were cited by some as a reason for increased presenteeism. This is a common finding (Kinman & Wray, 2022), including in remote workers (Biron et al., 2021; Gerich, 2022; Ruhle & Schmoll, 2021). The current study contributed by providing reasons for this association. Workers emphasized that presenteeism prevented work from building up, whereas work actually increased during the pandemic, as discussed later. Feelings of responsibility toward work and guilt about taking sick leave also drove presenteeism. While such feelings have previously been associated with presenteeism (Brosi & Gerpott, 2023; Kinman & Wray, 2022), the current study suggests that awareness that work could be done from home contributes to feelings of guilt.

A few participants admitted to engaging in presenteeism due to job insecurity. Workers would work ill due to the pandemic-related pressures their organization was facing, both to improve company income and to be seen as productive. Due to the global economic crisis triggered by the pandemic, job insecurity has previously been reported among remote workers (Adisa et al., 2023). However, this sub-theme was mentioned by only a few participants, likely due to the low unemployment rate in Malta during the pandemic. Malta introduced several national measures to prevent redundancies during COVID-19 (Fiorini, 2021). In addition, the study was conducted in economically strong sectors which, due to the nature of the work, were able to switch rapidly to remote working when the pandemic commenced.

The study also investigated WOAH. In line with Objective 5, the behavior was found to be very common amongst the participants, with almost three-quarters of the sample engaging in it to some degree. In fact, around a quarter engaged in it regularly. Whilst research on the topic is limited, similar findings have been reported amongst those working from home (Mar & Buzeti, 2021). In line with expectations and previous findings (Eurofound, 2021) WOAH increased during the pandemic (Objective 6). This is likely due to the uptake of remote working. Despite this, the proportion of work conducted remotely was not linked to the frequency of WOAH, nor to a change in this behavior (Objective 7). This finding was surprising but suggests that the ability to work remotely may be more important than the proportion of work that is conducted remotely.

Individuals who were WOAH also reported more presenteeism. Since a commonly reported consequence of presenteeism is a reduction in work performance

(Aboagye et al., 2019), this may have necessitated WOAH to meet work demands. Conversely, it is understandable that individuals who believe that WOAH is needed are likely to reason similarly about presenteeism. The qualitative results, discussed below, support this and show that both constructs are enabled by a number of similar predictors, including the ability to work from home and work demands. Long working hours have also been associated with poorer health (Sparks et al., 2018), and thus WOAH may have led to presenteeism. However, WOAH was not associated with absenteeism. This may further suggest that the link with presenteeism is related to work performance rather than health outcomes.

Statistical analysis of demographic factors revealed that individuals in managerial positions reported WOAH more often. Administrators, sales and support employees were less likely to report WOAH. Studies from other sectors have demonstrated that workers who hold more senior positions are WOAH more frequently (Gellatly, 2019; Houdmont et al., 2018; Mar et al., 2022). The qualitative findings indicated that whilst some workers were WOAH because they felt it was expected of them, those in managerial positions felt obligated to do so. Those who worked in sales or support were also WOAH less during the pandemic than prior to it. This could be due to fewer sales and work opportunities during the pandemic. WOAH was more frequent in older workers and increased during the pandemic. This could be due to the previously described relationship between this variable and a leadership position, as well as older workers possibly holding more work-focused beliefs (Pitt-Catsouphes & Smyer, 2005). Qualitative results, described later, demonstrated the relevance of such beliefs.

The study also aimed to investigate the factors that led to a change in WOAH during the pandemic (Objective 8), and three relevant themes were identified. These included the home as a workplace, work arrangements and organizational factors, and personal factors.

A key issue that led to an increase in WOAH was the transformation of the home into a workplace. Consistent with previous findings (Johnson et al., 2020), participants described how the boundaries between work and leisure blurred, with individuals struggling to distinguish between the work environment, work hours, and the non-working environment and non-working hours. Participants also struggled with disconnecting from work, often laying blame on constant work communication and the expectation of constant availability, as has previously been described (McDaniel et al., 2021; McDowall & Kinman, 2017). However, the current study found that the blurring of boundaries can also be self-induced, often to complete work tasks. Remote work made work more accessible, while participants also described not being able to stop thinking about work. The elimination of commuting, often seen as a benefit of remote working, was sometimes described as having previously acted as a mental boundary between work and leisure. Although WOAH has been linked with negative outcomes (Ghislieri et al., 2022), some participants reported that they preferred working from home and were positive about completing work tasks during their non-working hours.

Regarding working arrangements and organizational factors, work demands were considered as a key antecedent to WOAH. It was described that work demands have increased since the switch to remote work, with communication overload, in particular, being cited. Participants described receiving work-related communications via methods that were not as common before the pandemic, such as chat groups. Workers were also disturbed during meetings and after hours, making it difficult for them to complete their actual work tasks. As with presenteeism, participants also spoke of feeling guilty for not continuing to work, or being expected to continue working after hours. Previous studies have highlighted how remote work can lead to communication difficulties (Ferreira et al., 2021) and that workers can feel pressured to be constantly available (Adisa et al., 2023). The current study adds to these findings by highlighting how the changing nature of communication adds to an individual's workload and WOAH aided workers to cope. For some participants, the situation was also exacerbated by a lack of work resources and support. It has been established that such resources aid workers to cope with their work demands (Bakker & Demerouti, 2007), however, the study contributes by highlighting the impact that this can have on WOAH.

Flexibility and the time saved by not having to commute have been described as benefits of remote work (Ferreira et al., 2021; Kłopotek, 2017), but in the current study, they emerged as reasons for WOAH. Some participants were willing to reinvest the time saved in their work, but this could also be an indication of excessive workload. Some participants also felt that overworking was ingrained in their personality. Indeed, previous studies have described that remote workers can view excessive work in a positive light (Middleton, 2007).

Several other personal factors also influenced WOAH. Some participants had to continue WOAH as they struggled to work from home whilst tending to family responsibilities. Although this might be expected to affect women more often than men (Eurofound, 2021), no association was found between gender and WOAH. This could be because others view such a merging of work and life positively, despite this extending their working hours. Previous studies have highlighted that the impact of remote working on family life and work-

life balance may vary between individuals (Ferreira et al., 2021). Participants also used their flexible work schedules to cope with other personal challenges, such as their studies. Thus, WOAH allowed participants to manage their workload despite other commitments.

COVID-19 also specifically impacted WOAH. Participants worked longer hours due to boredom during periods of restrictive public health measures, or out of fear of leaving the home. While boredom during the pandemic has been described previously (Tutzer et al., 2021), the link with WOAH appears to be novel. Malta did not instigate a full lockdown during COVID-19, where individuals were not allowed to leave their homes or were restricted in terms of the distance that they could travel, but several establishments, such as those related to catering, shops and entertainment, as well as schools were closed due to public health measures during different phases of the pandemic (Fiorini, 2021).

Limitations

The study made use of a cross-sectional online questionnaire, which whilst aiding to boost participation levels, did not allow for the study of longitudinal associations or the attribution of causality. The outcome measures also had a long recall period, which may have resulted in biases; the chosen recall period, however, limited the impact that seasonal illness and seasonal work could have had upon the findings. Whilst the use of open-ended questions allowed for the studied topics to be explored, the method of administration did not allow for the probing of respondents' replies. Furthermore, the study highlighted findings from the IT and communications sector in Malta, and whilst this sector has a high proportion of foreign workers, the findings cannot be generalized to other sectors or countries.

Conclusion and Implications

Remote work increased substantially during the first 12 months of the COVID-19 pandemic. During this time, absenteeism became less frequent, while presenteeism and working outside agreed hours (WOAH) increased and were frequent. Corporate decision-makers are often unfamiliar with presenteeism and do not measure it. Additionally, while companies are often aware that remote workers are WOAH, the frequency with which this occurs is also often unclear. In view of the findings of this study and the often negative consequences of presenteeism and WOAH, companies should consider conducting periodic surveys to get an overview of these behaviors in their workplaces. Supervisors should also be made aware of these constructs and their implications.

The study aimed to identify factors linked with these behaviors. Many of the variables associated with presenteeism and WOAH can be influenced by the employing organization. Job demands appear to be a key factor that can influence these behaviors both directly and indirectly. Organizations need to ensure that their managers know how to manage remote workers, by assigning them tasks that are realistic given their work schedules and demands and providing them with the support they need. When managers are unaccustomed to managing remote workers, training should be considered. Excessive work communication during and after work hours also needs to be addressed. Measures that aid workers to disconnect from work can be beneficial but are very rare in Malta. Methods that allow workers to be more aware of the demands and obligations of their colleagues can also help reduce disruption, such as software applications that indicate when workers are unavailable. Such measures would reduce the demands on employees and potentially reduce other factors that influence presenteeism and WOAH rates, such as feelings of guilt and using flexibility to carry out additional work.

The study showed that remote work can also have health benefits. Health promotion programs for workers in Malta are rare, and even rarer for remote workers. Organizations should consider implementing such programs to take advantage of the potential benefits of remote working. The study indicates that such programs should not be limited to physical factors such as nutrition and exercise, but should also cover aspects such as workload expectations and time management. This may aid to reduce feelings of guilt and WOAH. While it has been argued that it may be better for workers to do only a portion of their work remotely, the current findings do not support this. More remote work was associated with lower absenteeism, while associations with presenteeism and WOAH were insignificant.

Expectations regarding absenteeism also need to be addressed. Some workers felt that this was less necessary when working remotely, or they felt guilty if they used it. While further study is needed on the effects of remote presenteeism on the performance and health of those with minor illnesses, organizations should be educated on the benefits of sick leave and assisted in formulating policies that provide guidance to remote workers on when absenteeism is warranted. Particular attention should be paid to illnesses where absenteeism is considered "illegitimate" such as mental health conditions. The introduction of policies by more organizations that a medical certificate is not required for short periods of paid sick leave should improve access to these when needed.

Author Contributions

The paper is solely the work of Luke Fiorini. This includes material preparation, data collection and analysis, and the drafting of the manuscript.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

Ethics Approval

The study received ethical clearance from the Faculty Research Ethics Board at the Faculty of Economics, Management and Accounts at the University of Malta.

Consent to Participate

Organizational and participant consent were obtained. Personal information that could identify individuals was not collected.

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Data Availability Statement

The quantitative data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions

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