



WORKING CONDITIONS AND HUMAN COSTS OF WORKING IN A HOME-OFFICE IN TIMES OF PANDEMIC

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Summary

The COVID-19 pandemic meant that many companies had to resort to remote work from home as an alternative to carrying out their activities, however, the sudden change and without due planning resulted in increased work demands for professionals. This study aimed to investigate the working conditions and the human cost of work in professionals from an institution who carried out work activities from home during the COVID-19 pandemic. This is quantitative and qualitative research, with interviews carried out and application of the Work Context Assessment and Human Cost of Work assessment scales. The scales were answered using an online form and the interviews were conducted via videoconference, using a semi-structured script. 33 employees from the administrative sector of an educational institution participated in the study. The results showed work organization as the main risk factor for illness. Cognitive cost was the most prominent factor as a consequence of remote work. It is concluded that working from home during the pandemic required the development of new skills and adaptation to changes in work that led to an increase in the mental workload. The study was useful in pointing out aspects of improvement in the context of home-office work.

Keywords: Home-office. Work conditions. Human cost of work.

1. INTRODUCTION

The new coronavirus pandemic has severely affected public health, with social distancing and restriction of movement being some of the measures taken to mitigate the spread of the virus. Due to this, many companies have had to resort to remote work from home as an alternative to carrying out their activities. Home working, teleworking or home-office work refers to the work arrangement in which the worker carries out their tasks and responsibilities at home, using Information and Communication Technologies (ICT). Teleworking from home in times of pandemic requires temporary and alternative work arrangements, requiring responsibility and commitment shared by employer and worker to maintain both business and employment continuity (INTERNATIONAL LABOR ORGANIZATION, 2020). Due to the sudden change that led to workers having to work from home, many companies were unable to properly supply the necessary resources for employees to perform their work in appropriate conditions. Thus, workers had to set up an office space in their homes with the furniture they had available, having to share the space with other people, as well as using environments with dual functions. All of this leads to working conditions that result in

discomfort and possible future illnesses (DAVIS et al, 2020).

Furthermore, changes in work conditions and organization have repercussions on relevant changes in productivity, which tends to decrease (MORETTI et al, 2020). In this case, it is necessary to consider the cognitive and emotional demands that emerge in the context of a pandemic, contributing to the drop in productivity (MARTINS; AGUIAR; BASTOS, 2020). This study aimed to investigate the working conditions and the human cost of work in professionals from an institution who carried out work activities from home during the COVID-19 pandemic period.

2. METHODOLOGY

The study was carried out in the administrative sector of a private university from May to June 2020. The participants were 33 employees from the Human Resources, Educational Technologies and Purchasing sectors. The sample was mostly made up of men (57.6%), married people (57.6%) and people with a postgraduate degree (54.6%). The predominant age group is 25 to 35 years old (45%). The majority of participants have worked at the institution for less than 5 years (60.6%) and in their current position (78.8%).

A combination of quantitative and qualitative methods was used. For the quantitative approach, the Work Context Assessment (EACT) and Human Cost of Work Assessment (EACHT) scales were used (MENDES; FERREIRA, 2007). Qualitative data were collected through interviews via videoconference, using a semi-structured script.

The Work Context Assessment Scale consists of three factors, namely: work organization; work conditions; and socio-professional relationships. The Human Cost of Work Assessment Scale also consists of three factors, namely: physical cost; cognitive cost; and affective cost. Each factor presents a set of items that are evaluated by responses from 1 to 5. The interpretation is obtained through the average of the items for each factor, with: averages above 3.7 points meaning a serious situation; averages between 2.3 and 3.69 points, critical situation; and averages below 2.9, a satisfactory situation.

When participants responded to the questionnaire, they were asked to evaluate the last month of work, therefore, referring to the period of social distancing with home-office activities.

Quantitative analysis was carried out using descriptive statistics using Excel. For qualitative analysis, the Content Analysis technique was used.

3. RESULTS

EACT evaluates representations relating to work organization, socio-professional relationships and working conditions (MENDES; FERREIRA, 2007). The overall average obtained in the EACT was 2.21, which represents a positive rating, suggesting a level of general satisfaction related to the work context. However, the Work Organization factor presented a moderate average, being the dimension that was most negatively evaluated in this category, as shown in Table 1.

Table 1. Average and interpretation of the Work Context Assessment

Factor	Media	Interpretation
Work Organization	2,9	Moderate
Work conditions	1,9	Positive
Socio-professional relations	1,8	Positive

The best evaluated aspects were those related to the adequacy of working conditions, work safety, integration and cooperation between professionals. In this case, the physical working conditions are seen as not precarious and without safety risks, and the environment is favorable to socio-professional relationships. From the participants' perspective, working

from home brings the comfort and security of being at home. As one of the interviewees said: “working from home is much more comfortable, if I want to sleep late and wake up a little later I can do my activities”.

The most negatively evaluated aspects were the division between those who plan and those who execute, monitoring performance, repetitive tasks and pressure for deadlines. Home office work seems to mainly affect the way work is organized, especially with regard to task content and supervision. As most participants perform administrative activities, it is considered that the work tends to have a certain repetitiveness, regardless of whether the activity is remote. However, it is possible that remote work has exacerbated the aspects of demands for performance arising from leaders, who also had to try to adapt to rapid changes in the way they work, without due preparation.

In the interviews, workers reported the advantages of working from home as flexible working hours, more free time by not wasting time commuting, developing new skills and greater interaction with family. Among the disadvantages, they cited the increase in the number of tasks, excessive electronic monitoring, irregular working hours, excessive meetings, difficulties in accessing information, which confirm the emphasis on aspects of work organization. In addition, interviewees also considered the use of technology (including internet connection), noise, limited space, interruptions due to working at home and lack of interaction with colleagues as hindering factors.

Regarding working time at home, participants reported that it was difficult to organize their work schedule, as seen in this interviewee's statement:

There's no such thing, it's nine thirty at night and you're on WhatsApp working. There are no fixed working hours so that you can actually be at work and go home afterwards, you try to organize it, but when work comes into your home then the difficulty becomes even greater, right?

The organization of work is considered an important source of psychological suffering, especially when it restricts the space of freedom for the use of workers' intelligence and creativity resources, which also compromises productivity and quality of work (MENDES, 2007). Therefore, more than physical working conditions, work organization appears to be the biggest risk factor for illness for home-office workers.

The ECHT presented an overall average of 2.55, which represents a moderate, critical assessment. The cognitive cost was the one with the most negative or severe evaluation, while the affective cost was moderate and the physical cost was positive, with less impact on work exhaustion, as can be seen in Table 2.

Table 2. Average and interpretation of the Human Cost of Work Assessment

Factor	Media	Interpretation
Physical cost	1,6	Positive
Cognitive cost	3,7	Negative
Affective cost	2,4	Moderate

The items with the lowest implications for the human cost were those related to physical demands, such as handling heavy objects, using physical force, standing and going up/down stairs. The items that showed the highest cost are related to cognitive cost, involving mental concentration, solving problems, using creativity, making mental effort, using vision continuously and dealing with unforeseen events.

The results point to the excessive mental workload, which may be associated with the work content itself, but also with home-office work, as this system required the development of new skills (such as use of technologies and participation in video conferences) and adaptation to the new work context (such as interruptions and distractions when carrying out professional tasks at home). It is noteworthy that high mental load can generate fatigue, leading to a reduction in the discrimination of signals and a delay in sensory responses, in addition to greater difficulty in solving problems, changes in memory and an increase in the

rate of errors (BONFATTI, 2011).

As for the affective cost, having control over emotions and having to deal with contradictory orders were items evaluated more negatively, with a moderate rating. It is possible that participants perform tasks that require a certain level of emotional control in order to avoid difficult or conflicting situations in socio-professional interactions. In this sense, the emotional cost can aggravate stressful situations at work (ANTLOGA et al, 2014).

In the interviews, the emotional cost of working from home was highlighted due to social isolation and lack of interaction with colleagues. One interviewee said: “the lack of coexistence is complicated, in the workplace you talk about one subject and another; What I miss is the lack of interaction with the team and with the people we interact with on a daily basis.”

To deal with the human cost of work, workers develop individual and collective mediation strategies. If these strategies are ineffective, workers may experience suffering and even become ill (ANTLOGA et al, 2014). In the interviews, the main strategies were identified: trying to keep working hours the same as in person, taking breaks during work, avoiding watching the news, carrying out physical activity, watching films. These measures seek to alleviate not only the cost of work, but also the psychological suffering arising from social isolation during the pandemic period.

From this study, some recommendations were made to improve the health and quality of life of these professionals. Among them are: training in the use of new technologies, periodic meetings for planning and problem solving, adapting physical working conditions at home, organizing the working day, developing leadership, increasing autonomy and control over work, creating of psychosocial support systems.

4. CONCLUSIONS

The study made it possible to investigate the work context and the human cost of work for home-office workers. The results highlighted work organization as the main risk factor for illness. Mental load was the most prominent factor as a result of remote work during the pandemic.

The COVID-19 pandemic has radically changed the organization of work, with implications for the health and well-being of workers. The data obtained in this study are useful for seeking improvements in the context of working from home. Future research, especially of a longitudinal nature, is necessary to investigate the risks of illness when working from home.

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