

Conditions and Results of Teleworking by University Teachers

Condiciones y resultados del teletrabajo en profesores universitarios

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ABSTRACT

Aim: To evaluate the working conditions and the results of teleworking of a group of teachers from a higher education institution in Cuba.

Methods and techniques: A survey about teleworking designed by specialists at the Faculty of Psychology, University of Havana, Cuba was applied to a representative sample of 43 employees and executives. The data were processed using absolute and relative frequency measurements, Student-T test, and Chi square test, in IBM SPSS Statistics, v. 22, for Windows.

Main results: The working conditions were evaluated as positive, particularly labor planning and organization, clarity of objectives and deadlines. However, the organization did not provide the means for distance work, and offered no previous training on this work arrangement. The results of teleworking were also favorable, with apparent improvements in the competencies of teleworkers in relation to information and communication technology use, information management, autonomy and self-control, and time administration. Nonetheless, a rise in the number of working hours, intensity, and work load was observed.

Conclusions: Teleworkers recognized the benefits of this method, and expressed positive opinions about the working conditions, and the results of teleworking, though some aspects were observed to hamper their occupational health. No statistically significant differences were observed between the criteria from employees and executives. Several recommendations were made in order to improve teleworking.

Key words: teleworking, working conditions, work results, Covid-19, university teachers.

RESUMEN

Objetivo: Evaluar las condiciones laborales y los resultados del teletrabajo, en un grupo de profesores de una institución de la educación superior en Cuba.

Métodos y técnicas: Se aplicó como instrumento un cuestionario de teletrabajo elaborado por especialistas de la Facultad de Psicología de la Universidad de La Habana, Cuba, a una muestra representativa de 43 trabajadores y directivos. Para el procesamiento de los datos se utilizaron: frecuencias absolutas y relativas, t de Student y Chi cuadrado, a través del paquete estadístico IBM SPSS Statistics v 22 para Windows

Principales resultados: Las condiciones laborales fueron valoradas como positivas, con destaque en la planificación y organización del trabajo, la claridad de los objetivos y sus plazos de cumplimiento; no obstante, la organización no facilitó los medios para el trabajo a distancia y no ofreció una capacitación previa sobre esta modalidad. Los resultados del teletrabajo también fueron favorables; mejoraron las competencias de los teletrabajadores en el empleo de las tecnologías de la información y las comunicaciones, la gestión de la información, su autonomía y autocontrol y la administración del tiempo; aunque se evidenció como negativo un incremento de la cantidad de horas dedicadas a la actividad laboral, el ritmo y volumen de trabajo.

Conclusiones: Los teletrabajadores reconocieron los beneficios de esta modalidad y valoraron positivamente las condiciones laborales y los resultados del teletrabajo; aunque se mostraron algunas dificultades que afectan su salud laboral. No existieron diferencias estadísticamente significativas entre la valoración de trabajadores y directivos. Se ofrecieron recomendaciones para el perfeccionamiento del teletrabajo.

Palabras clave: teletrabajo, condiciones laborales, resultados del trabajo, COVID-19, profesores universitarios.

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INTRODUCTION

The literature shows consensus when referring to teleworking as a form of work organization whose main feature consists in doing the job from outside the physical space of the organization, and the main working tools are information and communication technologies (Estupiñán, Villamil, and Jiménez, 2019; Guaca, Caicedo, and Díaz, 2018; Martínez, Cote, Dueñas and Camacho, 2017; Medina, Avila, and González, 2020; Peiró, 2020; Peiró and Soler (2020); Vicente, Torres, Torres, Ramírez, and Capdevila, 2018).

This work arrangement appeared in the United States of America in the 1970s as a response to the fuel crisis that hit the nation. Since, it has been a valid alternative for moments of crisis such as now, generated by the pandemic caused by the novel coronavirus. Under the current international sanitary emergency, teleworking contributes to the vitality of working organizations, benefitting employees who due to several reasons cannot visit their workplaces (Medina *et al.*, 2020).

Because of the advantages observed after its implementation, the systematic utilization of teleworking has been encouraged by labor organizations. According to Anghel, Cozzolino, and Lacuesta (2020), 30% of employees in the European Union might take up teleworking, whereas 60% of jobs in qualified occupational groups might be performed using this arrangement, though activities with a lower professional training are less favored. In turn, Tapasco and García (2016) consider that all information and knowledge management activities, including those of teachers and researchers can be done by teleworking.

Other sources consulted have offered interesting data about the number of teleworkers in Latin America and Europe. Guaca *et al.* (2018) refer that in Mexico, 6% of employees use teleworking, whereas in Brazil and Argentina, this figure accounts for 9%. Additionally, the official data from 2018 indicate that 13.5% of employers between 15 and 64 perform distance work in the European Union (Anghel *et al.*, 2020), whereas Peiró and Soler (2020) note that before the pandemic, the percent of teleworkers in Spain was 4.8%, whereas it was 11.6% in Luxembourg, and 14.1% in the Netherlands. Although in Cuba the number of teleworkers during the first months of the pandemic went over 600 000, the utilization of this method has not been systematic, either due to the lack of knowledge of the advantages for the organization and employers, technological limitations, including connectivity, or as the result of fears, prejudices, and beliefs of executives. Hence, it is necessary to monitor the results associated with this new experience. Accordingly, two questionnaires about distance work and teleworking were designed for the Cuban context (Medina, Martínez, Avila, González, and Hernández (2021). The application of the first version of the questionnaires in a group of teachers was used as a pilot test. The aim of this research is to evaluate the working conditions and the results of teleworking in a group of teachers from a higher education institution in Cuba.

DEVELOPMENT

Theoretical background of the research

In the bibliography reviewed, the references of the benefits provided by teleworking are many, and they are grouped in the advantages to the teleworker, advantages to the organization, and advantages to society as a whole.

Among the main benefits to teleworkers are the possibility of better management of the working and household settings, and better autonomy for the organization of work and self-regulation of time management, with a greater flexibility to distribute the working hours (Anghel *et al.*, 2020; Gajendran & Harrison, 2007; Hoyos and Mesa, 2015; Martínez *et al.*, 2017; Medina *et al.*, 2020; Suárez 2016; Tapasco and García, 2016).

Similarly, the evidence points to greater satisfaction in work and motivation (Montalvo, 2020; Tapasco and García, 2016), and the reduction of stress among teleworkers. There are also advantages associated with the personal economy, since teleworking permits the utilization of less financial resources use in terms of commuting and meals (Mieres and Gorchs, 2003; Muñoz, Amórtegui, and Esguerra, 2018; Ramírez, 2008; Suárez 2016), in addition to less commuting time to and from workplaces. The authors of this study consider that an additional benefit is the quality of nutrition: less consumption of junk food and eating at regular times.

In turn, companies have benefits as well, by diminishing the number of physical people in the organization, favoring a more effective utilization of physical spaces (Mieres and Gorchs, 2003), and the reduction of overcrowded spaces. Besides, it contributes to energy saving, and greater durability of office equipment and furniture. Additionally, Beltrán and Sánchez (2002), Ramírez (2008), Suárez (2016), and Tapasco and García (2016) are in favor of increases in productivity and the reduction of job absenteeism indexes.

Lastly, teleworking offers advantages to the society in terms of the protection of the environment, and the reduction of environmental pollution (Benjumea, Villa, and Valencia, 2016; Chávez, Martínez, and Davila, 2020; Hoyos and Mesa, 2015; Muñoz *et al.*, 2018; Suárez, 2016), by cutting down movement in large cities with a decrease in the number of circulating vehicles. From a social perspective, it permits executives to hire employees with personal issues, who cannot be physically present in the workplace (pregnant women, mothers with children who require special care, disabled people, care givers, or inhabitants from distant areas).

Despite the multiple advantages of teleworking, a fundamental element to be considered to encourage quality using this method has to do with ensuring the proper working conditions to perform the job (Estupiñán *et al.*, 2019). According to Tapasco and García (2016), the personal decision to perform teleworking relies on the real possibilities of assuming it, based on the working and technological conditions, and the personal characteristics.

Among the main working conditions are the technological resources needed for distance work (Peiró and Soler, 2020), particularly email and Internet accounts. Therefore, having

competencies to use information and communication technologies is a fundamental requisite (Anghel *et al.*, 2020). At the same time, Arredondo and Granda (2015) acknowledge that communication represents another key factor of success.

Besides, there must be a physical space at home that ensures comfort, privacy, proper lighting, and low levels of noise. This space should be respected by the family, including the time dedicated to the job, in keeping with the working and family settings (Medina *et al.*, 2020).

Moreover, Hoyos and Mesa (2015) associate the positive or negative experience of this work arrangement with the capacity of self-regulation by teleworkers, who must be capable of managing their time, planning and organizing work, with self-control and self-discipline.

In the presence of these favorable conditions, the teleworking experience contributes to higher working quality and greater productivity (Benjumea *et al.*, 2016; Hoyos and Mesa, 2015; Montalvo, 2020), thus creating a healthier perception of the job done by the employees (Medina *et al.*, 2020).

There are job risks associated with teleworking that pose challenges to effective implementation. Among them are the ergonomic and psychosocial risks. Hence, the adoption of labor health and safety standards is fundamental, supported by legislation that protects teleworkers (Heras de las, 2016; Gandini and Perciballi, 2020; Montalvo, 2020; Vicente *et al.*, 2018).

According to Moreno and Jiménez (2013), cited by Guaca *et al.* (2018), when the work organization is unable to guarantee proper technology, there is a tendency for employers to feel overwhelmed due to work excess and other psychosocial risks. This criterion is shared by Peiró and Soler (2020), who introduce stress-generating causes like not having the adequate conditions for teleworking at home, and the lack of preparation to assume the changes brought by a new working method. Also associated with stress is the difficulty of teleworkers to take breaks (Anghel *et al.*, 2020) and addiction to work, which may represent one of the main psychosocial risks of this method (Suárez, 2016; Tapasco, and García, 2016). Over-committing can lead to work overload, either due to outside demands or derived from a high level of self-demand, with an ensued increase of the working hours.

Overload and work stress are known to influence the increase of work-household conflicts significantly (Martínez *et al.*, 2017), though proper handling of the boundaries between work and personal or family life can help reduce them significantly. Working from home can also generate feelings of isolation and communication difficulties with coworkers and executives.

Meanwhile, the psychosocial risks seem to be the main limitation to employees, the organization can face difficulties in terms of internal communication, faulty teamwork, lack of employee commitment, and higher costs as a result of inappropriate management of teleworking (Martínez *et al.*, 2017).

Because of these and other reasons, the literature refers that quite a few executives assume a conservative position with respect to teleworking. Guaca *et al.* (2018) noted that among the many reasons against teleworking are myths related to the few possibilities the people of advanced age and mothers with small children at home have to assume teleworking. At the same time, there is the fear of executives that teleworkers do not consider work as the organizational space, without the supervision of their executives, no compliance with set working hours and therefore goals. Medina *et al.*, (2020) add the existence of some beliefs that affect the perception of teleworking, such as the assumption that the household responsibilities are distractions that affect work and hinder the performance of job activities at home, and that it causes deterioration of the organizational culture.

The literature consulted shows a limited number of references of empirical research studies about teleworking in education. However, some results show that the possibilities for application in this area are extensive (Guaca *et al.*, 2018; Chávez *et al.*, 2020; Chirinos and Panta, 2014). These authors reveal a positive attitude of teachers to this modality, who consider the possibilities of reducing the conflict between family and work, increase the quality and flexibility in the organization of time, the reduction of stress, and higher life quality, as satisfying elements. Tapasco and García (2016) associate teleworking in the teaching practice with high levels of productivity and satisfaction, low levels of physical and emotional fatigue, and a reduction of work stress, frustration, and work overload.

Nevertheless, other research evidences that teachers have little information and communication technology competencies, and tend to refuse teleworking (Tapasco and García, 2016). However, a study including a group of teachers in Cuba revealed that it is one of the most widely developed competencies during this period (Medina, Avila *et al.*, 2021).

Methodology used

The main instrument for this research was the questionnaire survey on teleworking designed by Medina, Martínez *et al.* (2021), with two versions: for executives and for teachers. The questionnaire has closed multiple choice questions, others use the Likert scale (2 or 3 scores), and open questions. It covers several dimensions: benefits of teleworking, working conditions, working competencies, and work results. This study did not include the dimension of competencies, as it is part of another research.

The application of the instrument was online; the questionnaire survey was sent to the subjects and the sample was enlarged with the inclusion of anyone who sent their responses to the authors. One of the requisites of the study was to maintain confidentiality.

The information provided in the multiple selection questions and the Likert scale was statistically processed using IBM SPSS Statistics v. 22, for Windows. The descriptive statigraphs (absolute and relative frequency) were calculated, and were used to compare groups, parametric tests (Student-T), and non-parametric tests (Chi Square). The open questions were processed through content analysis.

Population and sample

The population was made of 49 employees and executives currently employed in teleworking for over four months.

A representative sample consisted of 43 teachers (including executives), accounting for 88% of the population. During the study, they had been using teleworking for an average time of 5.8 months. The average age was 43 (DS 17.4), ranging between 23 and 73 years of age. The mean experience in the post was 17 (DS 17.9), ranging between 1 and 53 years of age, with a predominance of women (84%).

All the subjects were professionals, including 14% as executives, 74% teachers, and 12% trainee graduates from university. Among the executive and teaching posts (38

subjects), the predominant category was full professor (highest teaching category), accounting for 36.8%; assistant professors representing 29%; associate professors, with 18%; and instructors, accounting for 16%. The sample was divided in two groups: executives and employees (86%).

Results and discussion

A high percent of the sample (93%) admitted that they used teleworking as a prevention measure against COVID 19, the most commonly represented reason. The advantages of teleworking are used for situations of crises, even when its implementation has not been a systematic practice in Cuba. Nevertheless, the study found secondary motivations expressed by the employees referred to the risk age (21%), the care of dependent family members (16%), distant residence from the workplace (14%), and personal situations related to health (9%). The recognition of these causes permits the establishment of a possible rationale for maintaining some of the employees under this modality, even after overcoming the pandemic.

Teleworking not only facilitates work under emergency situations, like now in the world, it also brings about benefits, both to teleworkers and the work organization.

The analysis of opinions associated with the benefits to teleworkers revealed that there were no statistically significant differences between executives and employees ($p > .05$). Table 1 shows the general behavior of the data collected. Whereas 86% acknowledged that they were allowed to continue to receive a salary in conditions with reduced physical presence in the workplace, 79% said that it reduced the commuting times and helped them establish a self-plan to comply with the goals set. This is in keeping with research done by Mieres and Gorchs (2003), Muñoz *et al.*, (2018), Ramírez (2008) and Suárez (2016).

Table 1. Benefits of teleworking to employees (%)

It offers the possibility of continuing work with a salary paid in conditions that limit the physical presence in the workplaces.	86
It takes away the commuting time.	79
It enables self-planning of work, depending on the deadline of set goals.	79
It helps attend to household and family demands along with the working responsibilities.	61

Source: Made by the authors

Although it was recognized by 61%, it allowed employees to alternate the household and family demands along with the working responsibilities, which was also identified by Anghel *et al.* (2020); Gajendran and Harrison (2007); Hoyos and Mesa (2015); Martínez *et al.* (2017); Medina *et al.* (2020); Medina, Avila *et al.* (2021); Suárez (2016), and Tapasco and García (2016). This group was mainly composed of mothers with school children, and people who were in charge of elders and other family members.

This result has a direct relation to the benefits of teleworking recognized by the subjects in the study. No statistically significant differences were observed between the groups ($p > .05$).

Table 2 shows the opinions given by the subjects about the importance of this work method.

Table 2. Benefits of teleworking to the work organization (%)

It permits the reduction of the number of employees attending the workplaces.	98
It helps maintain the work of people whose personal conditions keep them from visiting the workplace.	84
It reduces costs of commuting, meals, and electric consumption of the organization.	70
The indexes of job absenteeism are reduced.	51
Work satisfaction is higher.	41
Productivity is higher.	38
There is higher commitment to the organization.	38

Source: Made by the authors

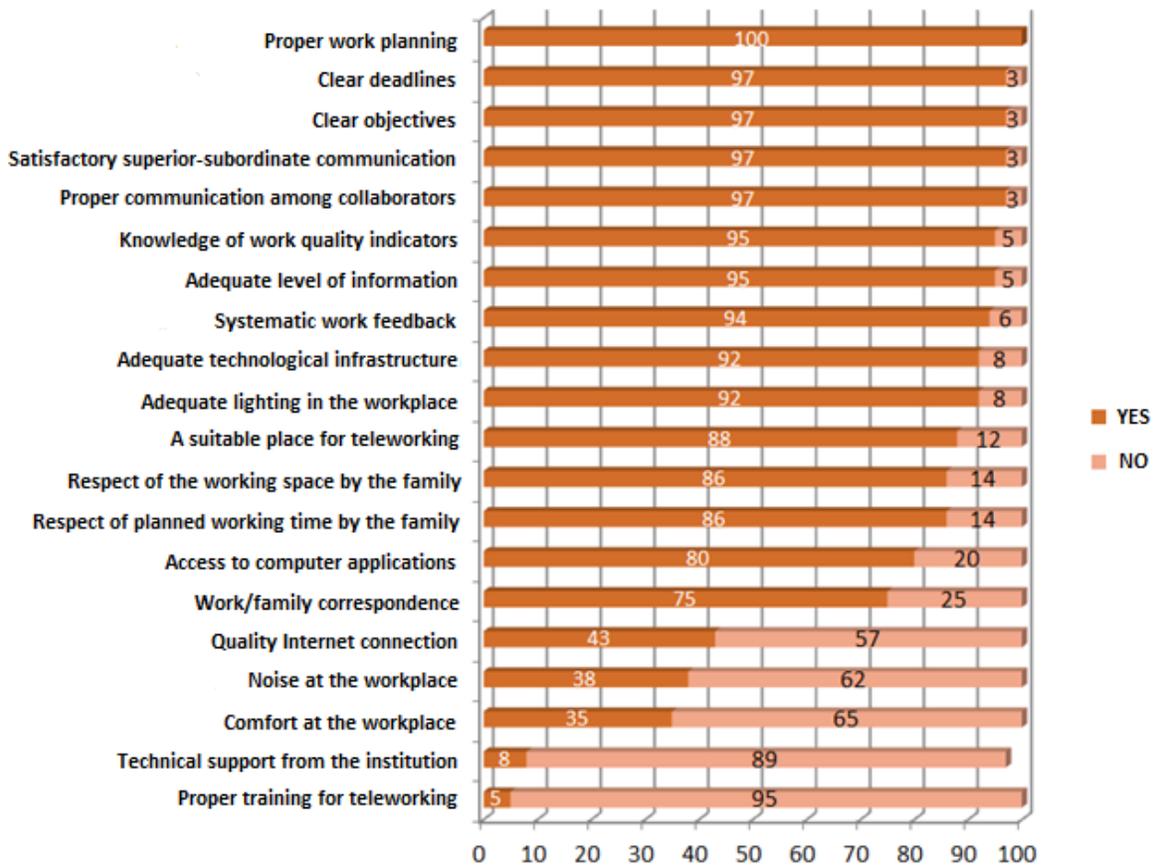
In the sample, 98% emphasized on the reduction of the affluence of employees to the physical space of the institution, with an ensuing implementation of the sanitary measures enforced to prevent COVID-19. At the same time, 84% pointed that they were able to continue to have the talent of some employees whose personal and family conditions kept them from attending the workplaces, whereas 74% noted the reduction in commuting times, meals, and power consumption, one of the main benefits of teleworking, according to Mieres and Gorchs (2003). Another opinion given by over 50% of the subjects is that it led to a reduction in the indexes of absenteeism.

Although, to a lesser extent, the study demonstrated a positive increase in productivity, working satisfaction, and the commitment to the organization, in keeping with the results of Beltrán and Sánchez (2002), Ramírez (2008), Suárez (2016), and Tapasco and García (2016). Interestingly, there was no overwhelming opinion related to the contribution of teleworking to the reduction of work stress, which was reported by Montalvo (2020).

Although the benefits of teleworking are evident, it is appropriate to conduct an analysis of the working conditions this form of organization uses, due to the considerable influence on health and performance.

In the perception analysis of employees and executives about the influence of the working conditions on teleworker performance, no statistically significant differences were found between the groups ($p > .05$).

The assessment of executives coincided with the criteria of employees, who considered that they mastered the elements associated with planning and work organization in a high percent: 100% said that they planned their working tasks according to the demands of their organizations, whereas 97% had set clear goals and deadlines. Additionally, 97% of the sample referred to the good communication, both to their heads and coworkers, which facilitated advances in complying with their goals, and collaboration established to achieve them. Moreover, 95% asserted that they had the information needed to perform their work successfully. Fig. 1 represents the assessment of teleworkers about their working conditions.



Source: Made by the authors

Fig. 1. Working conditions of teleworking

Another important aspect had to do with feedback from the results of work. More than 90% noted that they knew the indicators from which their work was evaluated, and they received systematic feedback from their executives about the quality of their performance.

In the study, 89% referred that their organization did not provide the working tools needed for teleworking, which represents one of the indispensable conditions for the success of teleworking, according to Anghel *et al.* (2020). However, 92% possessed a computer with the requirements to perform their jobs, and 80% possessed updated and compatible versions to the ones used in their working environments, including the software applications needed: Microsoft Office, Internet browsers, software applications, etc.

Likewise, 88% of the employees recognized that they had a specific place in their homes to work, with proper lighting (92%), and the respect of physical working space

and time by their families (86%). The study also revealed that 75% was able to conciliate their working responsibilities with the household demands, keeping them in place, which is essential for teleworking, according to Medina *et al.* (2020). The main difficulty in relation to the working environment was the noise, since 38% of teleworkers reported that it affected their concentration. During the quarantine time, every member of the family stayed home, along with the neighbors, as sources generating noise.

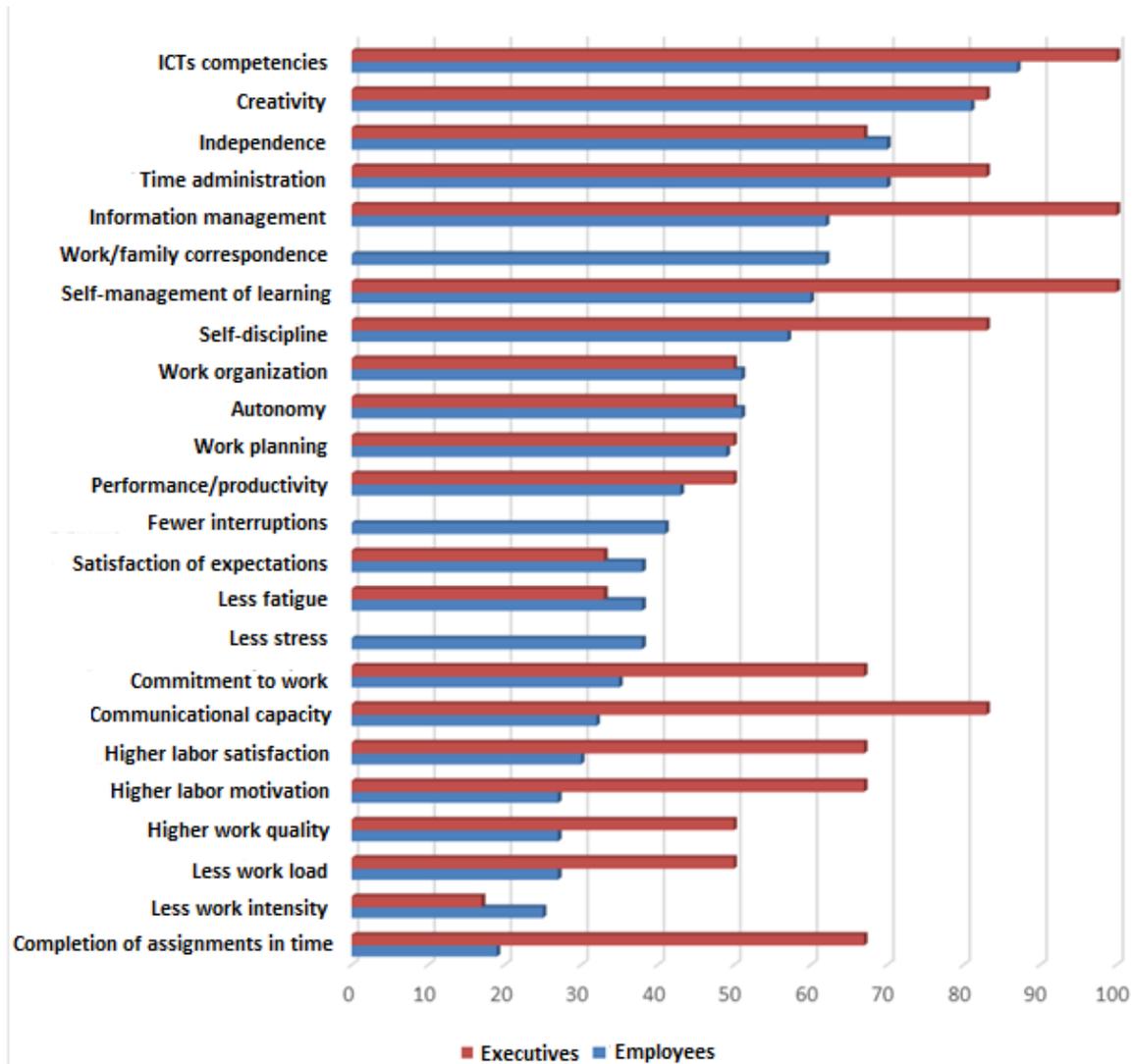
The main difficulty stated was that 95% of the subjects said that they received no training to assume teleworking. This is related to the emergency character of the origin of teleworking, in face of the need of protecting the health of the staff in the middle of an extreme sanitary situation, leaving no time for preparation of the necessary conditions and training. This aspect should be considered the sooner the better, provided that this working arrangement remains in place.

In turn, 65% considered that the workplace offered the necessary comfort conditions to prevent osteo-muscular discomfort and ailments, which has been reported by Heras de las (2016), Gandini and Perciballi (2020); Montalvo (2020) and Vicente *et al.* (2018) as one of the main ergonomic risks of teleworking. Likewise, 57% referred to constraints as to the speed and stability of Internet connection, which is essential for the activity done.

Moreover, the effects of teleworking on the working results should be weighed. The analysis of teleworker opinions about their results during their distance working periods revealed interesting data when compared to their full time employees at work. In general, no statistically significant differences were observed between the self-perception of employees and that of their executives about the results ($p > .05$). The indicator associated with timely delivery of assignments was excluded, in which 67% of executives found an increase, in only 19% of employees. However, the study found better qualitative assessment by the executives on the results of work.

The highest values showed that 87% of employees increased their abilities to use information and communication technologies, which Anghel *et al.* (2020) assumes as an essential requisite of teleworking; 62% improved their competencies of information management; the executives observed a 100% increase in their employees. A study done by Medina, Avila *et al.*, (2021) corroborated these findings, as they reported the abilities developed in the utilization of ICTs as one of the most widely developed

competencies during teleworking. Meanwhile, 81% of employees noted an increase of creativity in performance, which reached 83% according to their superiors. Fig. 2 shows the assessment made by employees and executives.



Source: Made by the authors

Fig. 2. Positive work results (%) that increased during teleworking, according to the criteria of employees and executives

Another positive aspect was associated with work planning and organization. Most employees (70%) said they were more independent, and organized their time better, coinciding with the responses of 67% of their executives.

The assessment made by executives about learning self-management conducted by their employees (100%) was more favorable than their own assessment (60%). Meanwhile, 50% of them noted that they enjoyed greater autonomy to make decisions, along with self-discipline and self-control, also found by Anghel *et al.* (2020), Gajendran & Harrison (2007), Hoyos and Mesa (2015), and Medina *et al.*, (2020). The recognition of a better conciliation between the working and household activities as a positive aspect, was identified by 62% of employees, whereas 67% of executives found the same.

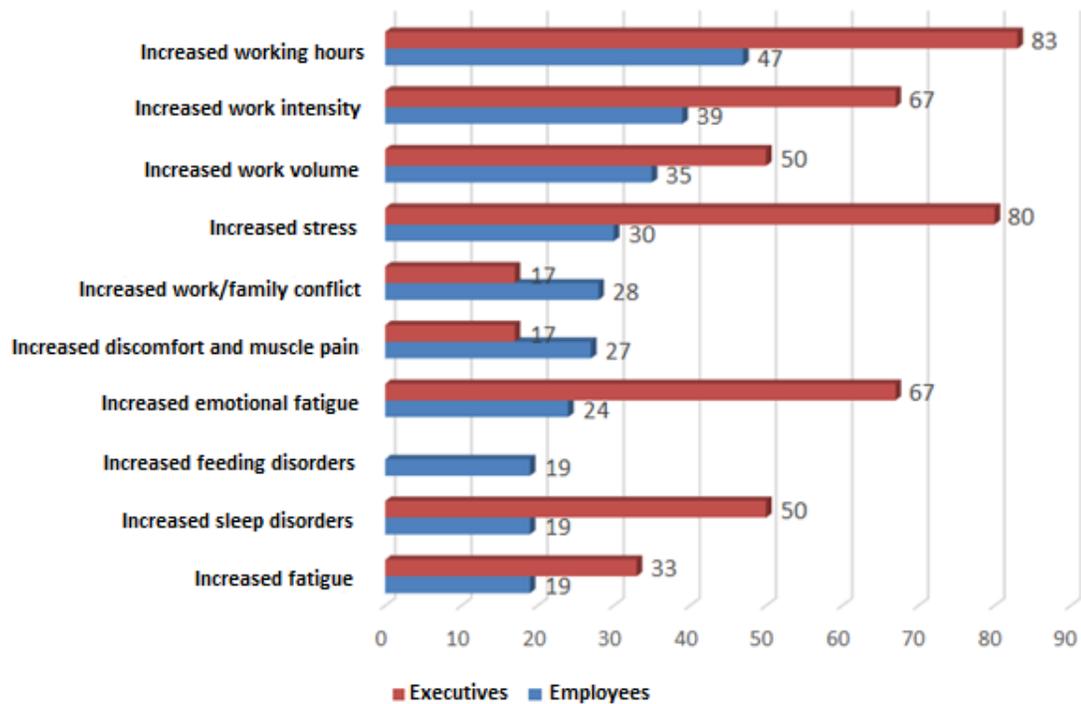
Regarding work quality, 43% referred that their performance increased with this arrangement, coinciding with the results reported by Beltrán and Sánchez (2002), Ramírez (2008), Suárez (2016), and Tapasco and García (2016). Meanwhile, 27-38% referred to higher labor satisfaction, motivation, and commitment to the organization, also found by Montalvo (2020) and Tapasco, and García (2016), along with the fulfillment of their goals, working objectives, and quality of their performances. These indicators also showed a slight increase in the evaluation conducted by their executives, above 50%.

Significantly, more than 30% of the sample noted that their experience as teleworkers contributed to reducing fatigue, difficulty to concentrate, and almost 40% stress, which may be relevant data for decision-making in organizations in relation to the work method used by their employees. The study also revealed that 41% of teleworkers said that work interruptions decreased, which was in keeping with the previous ideas related to a respect of the working space at home.

Although to a lesser extent, 20-29% said that it reduced the number of hours, volume, and rhythm of work, as well as feeding disorders. At this point, the opinions of executives did not show significant differences from the values declared by their employees, though 80% considered that they increased their levels of stress, which is a relevant indicator that was evaluated likewise by 30% of the employees.

Interestingly, only 19% of the subordinates referred to feeling apart from the organization, previously identified by Suárez (2016), and Tapasco and García (2016) as one of the main risks of teleworking. Therefore, these indicators show that people feel connected by the working assignments and interpersonal ties at work, despite the physical distance of their organization and the little personal contact with their coworkers.

However, the number of employees that referred to an increase in the number of indicators that threaten occupational health was high, which can be seen in Fig. 3.



Source: Made by the authors

Fig. 3. Negative results (%) that increased during teleworking, according to the criteria of employees and executives

A group of employees (47%) considered that the number of working hours increased their work intensity and volume between 30 and 39%. The executives referred to higher figures, since 83% mentioned an increase in the number of working hours of their employees, whereas 50% increase was observed in work volume, and 67% in the intensity of work. This result may be explained by the fact that teachers also had

different roles to play during this teleworking period, including their responsibility to the professional society they belong to, with actions to control the pandemic, which had an effect on the increase in the number of working hours, intensity and volume.

These unfavorable elements could be related to the fact that the organization did not guarantee the proper technical means for teleworking, coinciding with the results of Moreno and Jiménez (2013), cited by Guaca *et al.* (2018), though they may also be associated with the worker commitment to their organization, identified by Anghel *et al.* (2020) as an important psychosocial risk of teleworking, by generating difficulty to set free from the activity, creating an addiction to work in extreme cases (Suárez, 2016; Tapasco and García, 2016).

Although to a lesser extent, a group of teleworkers perceived an increase in other unfavorable elements (about 20%), who noted an increase in emotional wearing down, fatigue, discomforts and muscle pain, coffee consumption, and sleep disorders. This result can be associated with inadequate working conditions in terms of comfort and ergonomic conditions, already reported by Medina *et al.*, (2020). The executives evaluated this increase to a greater extent, who considered that their employees suffered greater sleep disorders (50%), fatigue (33%), and emotional wearing down (67%). The possibility that the evaluation of executives about the results of their employees in teleworking was acknowledged to be influenced by the perception of their own experience as teleworkers.

Remarkably, some employees referred to an increase in the number of conflicts between the working and household lives (28%), with frequent interruptions of the job at home (19%). The executives, in turn, had no information to provide regarding this topic.

Lastly, it is noteworthy that despite the elevated professional training of the subjects in the sample, which enables teachers to stand against beliefs, stereotypes, and prejudices, 42% considered valid that teleworkers must be available 24h, whereas 28% certified that working from home is a distraction that affects performance, because the household responsibilities hinder the performance of professional activities at home. Also important is that teleworkers must dedicate a number of important daily hours to work, so leisure must be observed by the teleworkers and their coworkers, executives,

and family members. It requires a set of legal rules, and to include the working hours in the contract.

Generally, the opinions of executives about the performance and results of their employees are higher than the perception of the latter. There was an increase in the number of favorable indicators to evaluate the results by the employees, but at the same time, there is a remarkable increase in the quantity of aspects that threaten occupational health.

Among the main recommendations given by teleworkers to their organization to improve their experience, 40% considered it necessary for the entity to provide infrastructure and access to the Internet, which coincides with Moreno and Jiménez (2013), cited by Guaca *et al.* (2018). In that sense, 56% of the subjects had difficulty accessing the Internet and email due to the poor connection speed, whereas 47% added personal financial limitations to afford the high costs of the service, and 23% referred to technological limitations. Before teleworking, email was the chief means of indirect communication used, but in this period, its importance was replaced by other more dynamic and operational choices like WhatsApp and Telegram for interpersonal and group communication. The organization should invest in the improvement of teleworking conditions, for which it must ensure technical equipment and higher teleworker training for an effective utilization of that form of work arrangement.

Another important group of subjects (19%) pointed out that the communication channels and ways should be diversified to guarantee the flow of communication properly to all the organizational levels, and ensure the success of results. Only 10% stated the need for conducting teleworking training for further improvements.

Other recommendations were associated with optimization and adjustment of planning, depending on the real conditions of each employee, to establish a coherent motivation to teleworking, and offer a greater level of information about the collective results. Also, it is necessary for teleworkers to set up strategies for self-care, ensuring active pauses during their performance, including ergonomic positions and leisure hours that enable better time organization, which was reported by Heras de las (2016), Gandini and Perciballi (2020), Montalvo (2020), and Vicente *et al.*(2018), as a fundamental requisite of teleworking.

In that sense, an additional recommendation is to embrace a combination of full-time work with teleworking activities, which could favor interpersonal ties and reduce work stress, as found by Anghel *et al.* (2020).

The balance between the pros and cons of teleworking caused 81% of the sample to grade their experience as good, whereas the remaining 19% said it was average. Hoyos and Mesa (2015) stressed on the direct relation between self-regulation of teleworkers, expressed favorably in this study, and their personal experiences as teleworkers.

This study also demonstrated that there were no statistically significant differences between the assessment of employees of their personal experiences in teleworking and their projection to continue practicing it in the future, reaching 248 in the Chi square test. Only 56% considered the choice of teleworking as an alternative for the future. This result may be influenced by the personal satisfaction of teachers with face-to-face education and direct contact with students and colleagues; also because of negative emotions experienced during the quarantine period driven by Covid-19.

Moreover, 46% of the employees in the sample said that in their organization there are others that can be eligible for teleworking, as stated by 87% of executives.

The results presented and discussed show a tendency in favor of the predominance of a positive perception of teleworking, in terms of working conditions, outcome, and a predominance of satisfactory aspects of the experience. Nevertheless, other recommendations can be considered for continuous improvement of this method, should it be maintained as an alternative for the organization.

CONCLUSIONS

The positive assessments from teleworkers and executives about the conditions and outcome are predominant. No statistically significant differences were observed between the groups.

The broad benefits of teleworking for the organization and the employees were acknowledged, representing a valid alternative to keep the job ties of professionals with limitations for in-present work.

The working conditions of teleworkers were evaluated as positive. Aspects like planning and organization of work, clarity of goals to meet, and deadlines, stood out. Besides, the existence of proper communication with coworkers and executive, along with better conciliation of the working and household activities was observed.

The main difficulties associated with the working conditions referred that the organization did not provide the necessary equipment for distance work, and did not offer previous training for this method. There were also difficulties related to the ergonomic conditions in the working area at home that affect the health of the employees.

The results of teleworking were favorable. Teleworkers improve their competencies in the utilization of information and communication technologies, information management, and their autonomy and control to plan tasks and time management. There was also an increase in the performance of teleworkers and the quality of their performance, together with an increase of satisfaction, motivation, and commitment to the organization.

The unfavorable results are associated with an increase of time, intensity, and volume of work. It causes emotional wearing down, fatigue, and muscle pain.

The executives considered that the experience of teleworking with their employees was favorable, as they stress on the positive and negative aspects to consider them for improving results.

Recommendations are necessary to enhance teleworking as an alternative to labor organization in the institution. There is a need to systematize it in the future, and to establish legislation for implementation in the country.

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Conflict of interest and conflict of ethics statement

The authors declare that this manuscript is original, and has not been submitted to another journal. We are responsible for the content published in this paper, and certify the existence of no plagiarism, or interest or ethical conflicts.

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