Power System Protection and Control
ISSN:1674-3415

WORK ENGAGEMENT IN TELEWORKING AND FACE-TO-FACE WORK: A STUDY OF CHILEAN WORKERS

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Received:15 February 2025 **Revised**:18 March 2025 **Accepted**: 8 April 2025

***SUMMARY*:**

The research analyzes Work Engagement under telework and on-site working conditions in workers in the region of Arica and Parinacota in Chile, during the year 2020, a period that covers both work modalities. A quantitative and correlational approach was used. The population was constituted by the labor force of the region of Arica and Parinacota in Chile, which was 95,060 workers. By means of random probability sampling, with a standard deviation of 0.5, a confidence level of 95% and 7% error, a sample of 196 participating subjects was obtained. For data collection, a questionnaire was used based on the UWES-9 (Schaufeli & Bakker, 2004) with a battery of 33 questions, aimed at identifying sociodemographic characteristics of the sample, measuring work engagement according to the triad of vigor, dedication and absorption, as well as the advantages and disadvantages of the two employment modalities. The results reveal that Work Engagement is affected by the work modality used and influenced by the sociodemographic variables, which indicates correlation. It is concluded that it is premature to consider these results as definitive, due to the unusual and unexpected conditions under which work engagement was assessed. On the other hand, further studies are required on the triggers/drivers of work engagement and their correlation with sociodemographic characteristics, as well as a follow-up of teleworking as a developing work modality.

***Keywords**: Work Engagement, Vigor, Dedication, Absorption, Telework, Face-To-Face Work.*

SUMMARY

The research analyzes Work Engagement under teleworking and face-to-face work conditions in workers from the Arica and Parinacota region in Chile, during the year 2020, a period that covers both work modalities. The quantitative and correlational approach is used. The population consisted of the workforce of the Arica and Parinacota region in Chile, which was 95,060 workers. Through random probability sampling, with a standard deviation of 0.5, a confidence level of 95% and 7% error, a sample of 196 participating subjects was obtained. For data collection, a questionnaire based on the UWES-9 (Schaufeli & Bakker, 2004) was used with a battery of 33 questions, aimed at identifying sociodemographic characteristics of the sample, measuring work engagement according to the triad vigor, dedication and absorption, as well as the advantages and disadvantages of the two employment modalities. The results reveal that work engagement is affected by the work modality used and influenced by sociodemographic variables, which indicates a correlation. It is concluded that it is premature to consider these results as definitive, due to the unusual and unexpected conditions in which work engagement was assessed. On the other hand, further studies are required on the triggering/driving factors of work engagement and its correlation with sociodemographic characteristics; as well as monitoring teleworking as a developing work modality.

DOI: 10.46121/pspc.53.2.13

Power System Protection and Control
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***Keywords**: Work Engagement, Vigor, Dedication, Absorption, Teleworking, Face-To-Face Work.*

1. INTRODUCTION

2020 was a unique year, with numerous changes due to the confinement measures aimed at stopping the COVID-19 virus, which spread rapidly throughout the world and ended up reshaping daily activities such as studying, working, communicating and even exercising. Given the events experienced with the coronavirus, and particularly the changes that companies have undergone in relation to the number of workers that must be in a space, as a result of health restrictions, to control the spread of the virus (Fang, et al, 2020), the implementation of Teleworking was encouraged. This is a practice that in many cases helps workers to complement their professional tasks, granting security to the worker in times of pandemic and reducing their degree of mobility to certain spaces (Belzunegui-Eraso & Erro-Garcés, 2020; Domínguez, 2024).

In this context, remote work, an already existing but not widely implemented modality, gained strength (Maurizio, 2021; De Obesso and Carrero, 2023; Kasperska, et al., 2024). In Latin America, in some countries its implementation is regulated by laws or resolutions, and in others, without any legal basis to support it (Ramírez Velásquez , et al, 2021). Regardless of this, companies, in all areas, were forced to take measures quickly to maintain the continuity of their operations and teleworking gave them this possibility, in addition to safeguarding the health of their workers (Maurizio, 2021). In the case of Chile, which already contemplated the modality, in March 2020 Law 21,220 was enacted, which modifies the labor code regarding remote work. This establishes the term remote work as "…that in which the worker provides his or her services, totally or partially, from his or her home or another place or places other than the company's establishments, facilities or tasks", and establishes teleworking as services "…provided through the use of technological, computer or telecommunications means or if such services must be reported through these means" (Art. 152 quater G).

However, despite the legal backing, this type of work poses significant challenges for companies and organizations in general. Productivity and the work environment must be given special care, since their leaders lose physical control over their collaborators, with their motivation at stake, among other aspects (Domínguez, 2024), which can affect work engagement within the organizational environment, that is, the positive emotional state of the person in relation to their work activity. According to some union representatives, "the process of implementing teleworking was seen more as an obligation than as a gradual and dialogued process" (Fundación Instituto de Estudios Laborales [FIEL], January 25, 2021).

The The Arica and Parinacota Region, according to data provided by the Ministry of Health, was one of the most affected regions in terms of the spread of infections, reaching a rate of active cases of 347.5 per 100 thousand inhabitants by August 2020 (MINSAL, 2020), remaining in the first places of infections during the COVID 19 outbreak, if the MINSAL reports are observed over time. These figures prompted companies in the city of Arica and the region to adapt their processes and workers to develop remote work, in line with the global trend. According to a study by the Federation of Call-Center Workers of Chile [FETRACALL], et al. (2021), workers expressed feeling "subjected to an experiment" due to the lack of preparation and training to carry out their jobs remotely.

The data show the effect of the changes generated by the pandemic on the workforce. Thus, during 2020, the workforce figure in the Arica and Parinacota region was 95.06 (thousands), which had decreased by 18.4% compared to the same period of the previous year (National Statistics Institute, 2020). The unemployment rate, in recent years, has gradually increased, reaching 7% in 2021 (Communal Planning Secretariat, 2021) . It is also relevant to appreciate the process of returning to face-to-face work after the decline of the coronavirus and the implications for the workforce (Cheung, 2024). Both processes generate changes with an influence on the human component.

In light of the above, the research aimed to analyze work engagement under teleworking and in-person working conditions in workers in the Arica and Parinacota region in Chile, during 2020, a period that covers both work modalities.

2. DISTINCTIONS OF ENGAGEMENT

DOI: 10.46121/pspc.53.2.13

Power System Protection and Control
ISSN:1674-3415

Engagement is a concept that has been gaining relevance in recent decades and still presents differences between different authors (Caballina and Makarova , 2022). However, three meanings stand out (Narayanasami et al, 2024): employee engagement, organizational engagement, and work engagement.

Employee engagement is related to the contribution that, according to Khan (1990, 1992), people can make of themselves in job performance, that is, physically, cognitively and emotionally, thereby generating consequences for both their work and their personal experiences.

commitment , on the other hand , is directly aligned with the organizational entity in which the individual works and implies: acceptance and belief in the goals and values intrinsic to the organization; willingness to make efforts in order to achieve the company's goals; and the intention to remain in the organization (Mowday, et al., 1979). These elements may or may not occur together (Fernández & Guevara, 2015). According to Saks (2006), employee commitment and organizational commitment differ significantly, but both can be predicted from the organizational support perceived by the worker.

Work engagement is understood as a positive psychological affective state, characterized by its three pillars: vigor, dedication and absorption. The first one refers to high levels of energy, activation, resistance, mental resilience and/or will in the face of work activity, as well as perseverance in the face of difficulties; the second one accounts for high levels of enthusiasm, inspiration, pride and challenge for the activity, and the third one means high levels of concentration or focus on work (Salanova, et al., 2000; Schaufeli, et al., 2002). "…Rather than a momentary and specific state, commitment refers to a more persistent and omnipresent affective-cognitive state that is not centered on any specific object, event, individual or behavior (Schaufeli & Bakker, 2004, p. 6). For Schaufeli & Bakker (2010), work engagement and employee engagement are interrelated, but they are not interdependent, nor equivalent.

3. METHODOLOGY

This is a quantitative and correlational research. The population consisted of the entire workforce of the Arica and Parinacota region in Chile, for the second quarter of 2020, which was 95,060 workers, according to data from the National Institute of Statistics (2020). Through random probabilistic sampling, with a standard deviation of 0.5, a confidence level of 95% and 7% error, a sample of 196 subjects participating in the research was obtained.

The study variables, both independent and dependent, are presented in Table 1:

Table 1. Description of study variables

<table>
<tr><td rowspan="2">Independent Variable</td><td rowspan="2">Working Mode</td><td colspan="2">Telecommuting</td></tr>
<tr><td colspan="2">Face-to-face work</td></tr>
<tr><td rowspan="3">Dependent Variable</td><td rowspan="3">Work Engagement</td><td rowspan="3">Engagement Pillars</td><td>Vigor</td></tr>
<tr><td>Dedication</td></tr>
<tr><td>Absorption</td></tr>
</table>

Source: Own elaboration .

For data collection, a questionnaire with a battery of 33 questions separated into three sections was used . The first section was intended to identify the sociodemographic characteristics of the sample. While sections 2 and 3, configured on the basis of the nine-question questionnaire of the Utrecht Work Engagement Scale known by its acronym UWES-9 (Schaufeli & Bakker, 2004) sought to measure work engagement according to the triad: vigor, dedication and absorption, during teleworking in a pandemic and in face-to-face work after the pandemic, respectively, as well as the advantages and disadvantages of the two employment modalities . Regarding the reliability levels of the scale used, the measurement of the stratified Cronbach's Alpha scale was carried out, where the coefficients for each of the factors that involve *Work Engagement* were calculated separately. *Engagement* : vigor, dedication and absorption, achieving reliable results.

4. RESULTS

Sociodemographic profile of the participants

DOI: 10.46121/pspc.53.2.13

Power System Protection and Control
ISSN:1674-3415

The results regarding the characteristics or sociodemographic profile of the participants are shown succinctly in Table 2, finding that, of the total of 196 individuals considered in the sample, 62% of them belong to the female sex and 38% to the male sex **.** 69 % are in the range of 35 to 50 years, followed by those in the range between 18 and 34 years (17% of the total), and finally, those belonging to the group of 51 years or older with 14% of the total. In relation to the educational level, although there were more alternatives, all the participants are in the groups of complete secondary education, incomplete higher education and complete higher education, this last group being the most prevalent, representing 84% of the total.

When asked about the sector in which they are located in the workplace, it was found that the participants belong mostly to the public sector, representing 60% of the total. However, when inquiring about the area in which they work, the largest number of participants was located in the area of education, followed by administration and management, unidentified area (other) and customer service in general. For the purposes of this research, Work *Engagement* in teleworking and face-to-face work was considered in the areas of: education, administration and management, and customer service in general, since it is not possible to identify the work aspects of the unidentified areas. The rest of the areas mentioned do not show a relevant number of participants.

When asked about the amount of time they have been working at the institution, The data obtained show that those who have been with their institution for more than 11 years are the majority, with 58 participants representing 30% of the total. Meanwhile, workers who have been with their institution for less than 1 year represent 10% of the total, with 19 participants.

Table 2. Sociodemographic profile of the participants

Sex	74 (38%) men	122 (62%) women			
Age range	33 (17%) (18 to 34)	135 (69%) (35 to 50)	28 (14%) (51 and +)		
Educational Level	14 (7%) Ed. Media Complete	18 (9%) Incomplete Higher Ed.	164 (84%) Ed. Superior Complete		
Labor Sector	78 (40%) Private	118 (60%) Public			
Professional Area (3 main ones)	46 (23%) Administration and Management	52 (27%) Education	17 (9%) Customer Service		
Length of stay in the institution	19 (9.69%) Less than 1 year	20 (10.20%) Between 1 and 2 years	50 (25.51%) Between 3 and 5 years	49 (25%) Between 6 and 10 years	58 (29.59%) More than 11 years

Source: Prepared by the authors based on data obtained from a survey.

Levels of Work *Engagement*

First, the general results of Work Engagement in teleworking and face-to-face work are presented. Then, the findings are shown in relation to the pillars of Work Engagement: vigor, dedication and absorption.

Work Engagement in Teleworking

Participants who score less than 4.5 points are considered as Not *Engaged workers* . The application of the survey revealed that 76% of the participants (149) who performed or are still performing work through teleworking (at the time of the study) are classified as Not *Engaged* , while 24% of the participants (47) are classified as *Engaged* . The average score obtained for Work *Engagement* in teleworking was 3.62 points.

Work Engagement face-to-face work

The number of people who are associated with a positive level of Work *Engagement* are those who obtain a score greater than 4.5. With the application of the survey, the results obtained are 51% of the participants (100) Not Engaged, while 49% are associated with workers (96) *Engaged* . The average score obtained for Work *Engagement* as a result of the application of the survey was 4.37 points for face-to-face work.

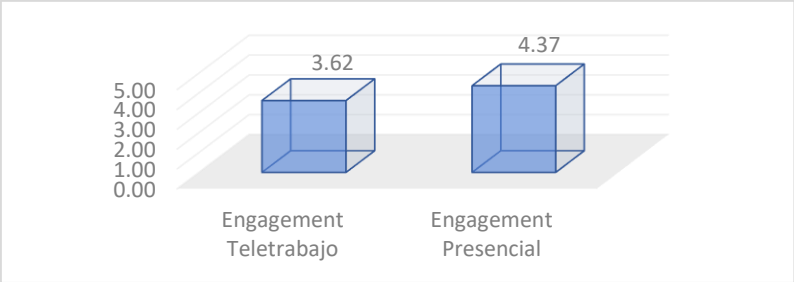
DOI: 10.46121/pspc.53.2.13

Power System Protection and Control
ISSN:1674-3415

Work Engagement in Teleworking vs. Face-to-Face Work

Engagement levels regarding teleworking and face-to-face work in the city of Arica are below the average that can be represented as *Engaged* . However, it is observed that the scores obtained for Work *Engagement* in face-to-face work exceed by 0.75 points in relation to the teleworking modality, so it can be seen that the latter affects the levels of Work *Engagement* according to the perception of the workers (See figure 1).

Figure 1. Comparison of average scores obtained from Work Engagement in face-to-face and teleworking modalities

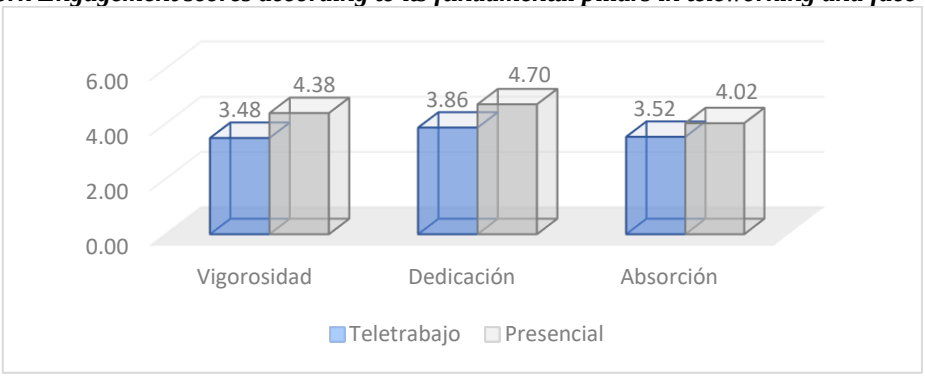


Source: Own elaboration.

Work Engagement according to its pillars: vigor, dedication and absorption

As previously stated, the pillars of Work *Engagement* are analyzed according to vigorosity, dedication and absorption. The results obtained in the study carried out in the Arica and Parinacota region show a large difference in terms of the average scores obtained for vigorosity with a difference of 0.9 points, dedication with a difference of 0.84 points and for absorption with a difference of 0.5 points. In all characteristics, teleworking is at a disadvantage compared to the face-to-face modality (See figure 2).

Figure 2. Work Engagement scores according to its fundamental pillars in teleworking and face-to-face work



Source: Own elaboration.

The pillar most affected by teleworking is Vigor, manifested by a worker not feeling the desire to start the workday. When reviewing the responses in this pillar, it is clear that, although the scores obtained for the face-to-face modality do not exceed the average of 4.5 to be considered *Engaged*, a difference of at least 0.94 points is observed regarding the teleworking modality.

Regarding *Dedication* in the Work *Engagement measurement,* it can be observed that the scores obtained for face-to-face work, in all the answers, exceed the average of 4.5 points, considered as *Engaged scores,* indicating that feeling involved with work and experiencing feelings of challenge and pride, occur in person. It can also be observed that the people who answered the survey, whether they work remotely or face-to-face, feel proud of the work done within the organization to which they belong. The greatest difference observed for the average scores was for the question associated with the inspiration that work generates in the participant, with a difference of

DOI: 10.46121/pspc.53.2.13

1.08 points, which can be associated with the lack of strategies to motivate employees during the application of teleworking.

Absorption pillar show that, in the question " When I am working, do I lose track of time?" , teleworking has an advantage of 0.29 points over face-to-face work. In the question about happiness while working, the score obtained for the face-to-face modality exceeds teleworking by 0.91 points, also remaining above the acceptable minimum of 4.5 points for *Engaged levels.* The lowest average score was obtained for the question: "When I do my work, do I forget about everything around me?" in the teleworking modality, obtaining a difference of 0.75 points with the face-to-face modality. Both modalities are below the minimum of 4.5 points.

Table 3 shows the differences obtained in each separate question between teleworking and face-to-face work, which summarizes what was indicated above.

Table 3. Average score obtained for questions applied in the survey, highlighting the 3 largest differences and the 3 smallest differences.

Pillar	Questions	Teleworking Score	In-person Score	Average Difference
Vigor	*When I wake up, do I feel like working?*	3.78	4.48	↓ 0.7
	Do I feel strong and energized while I work?	3.28	4.38	↑ 1.1
	Do I feel energized at work?	3.39	4.29	0.9
Dedication	*Do I take pride in the work I do?*	4.45	4.97	↓ 0.52
	Does my work inspire me to do new things?	3.42	4.55	↑ 1.13
	Am I enthusiastic about my work?	3.7	4.59	0.89
Absorption	*When I'm working, do I lose track of time?*	4.09	3.81	↓ 0.28
	Do I feel happy when I am working?	3.73	4.69	↑ 0.96
	When I'm working, do I forget everything around me?	2.74	3.55	0.81

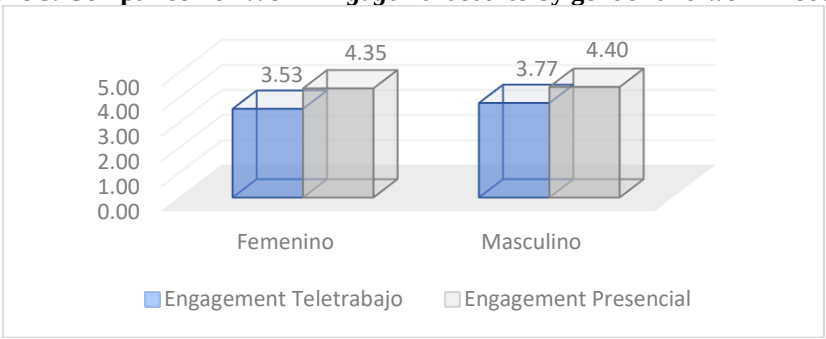
Source: Own elaboration.

Work Engagement considering the sociodemographic profile of the sample

Work Engagement by Gender

The differences observed in the average scores obtained in Work *Engagement* in teleworking versus face-to-face work, considering gender (figure 3), also show considerable differences. As for the female gender, Work Engagement in teleworking is 0.82 points below that observed in face-to-face work. While, in the male gender, the difference is smaller, being 0.63 points compared to that manifested in face-to-face work.

Figure 3. Comparison of Work *Engagement scores* by gender and work modality



Source: Own elaboration.

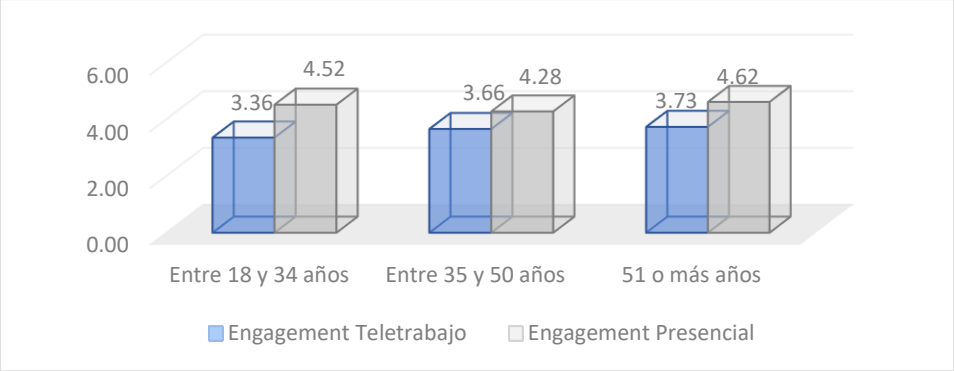
Work Engagement by age range

DOI: 10.46121/pspc.53.2.13

Power System Protection and Control
ISSN:1674-3415

In the results obtained by age (figure 4), it is observed that for all ranges, teleworking presents lower average scores for Work *Engagement* . For those who belong to the age group between 18 and 34 years, the most significant difference is presented, being 1.16 points between in-person work (greater engagement) and teleworking (less engagement). Meanwhile, the range of 35 to 50 years presents a difference of 0.62 points and the group of 51 years and older 0.89 points, between in-person work and teleworking, respectively. For both the age group between 18 and 34 years, and the 51 years or older group, average engagement scores of over 4.5 points are obtained for in-person work. It is important to indicate that the age group of 51 years or older is the one that presents the highest assessment of *Engagement* in both teleworking and in-person work.

Figure 4. Work Engagement scores by age ranges in teleworking and face-to-face work



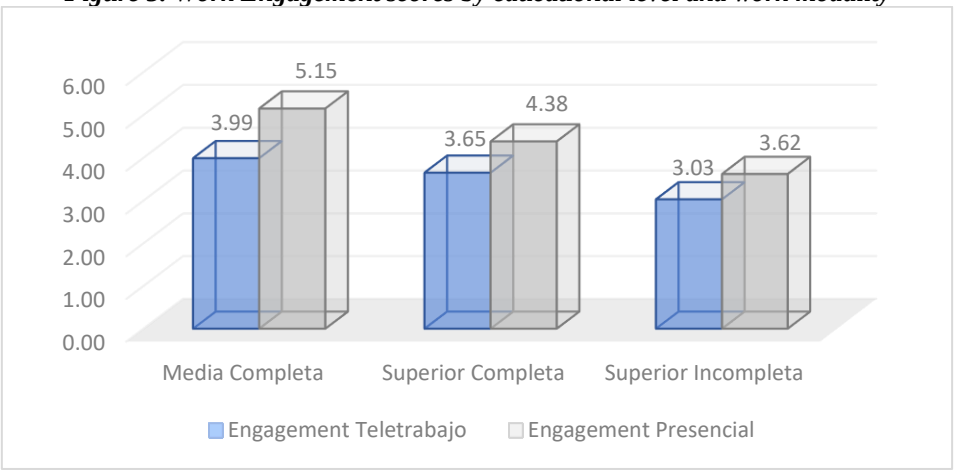
Source: Own elaboration.

Work Engagement by educational level

The educational level also shows differences in terms of Work *Engagement* for the two modalities considered (figure 5). In the teleworking modality, those who have completed secondary education have an average of 3.99 points of engagement, for those who have completed higher education it decreases to 3.65 points on average and for workers who have incomplete higher education, the average is the lowest with 3.03 points of Work Engagement.

As for the differences in the averages of Work Engagement obtained for the two work modalities, a greater presence is observed, in all groups, for the face-to-face modality. The greatest difference is observed in the group with complete secondary education, with a difference of 1.16 points. The difference decreases to 0.73 points for the group with complete higher education and to 0.59 points for incomplete higher education. The group with the lowest level of Work *Engagement* is the group with complete higher education, both for teleworking and face-to-face modalities.

Figure 5. Work Engagement scores by educational level and work modality



Source: Own elaboration.

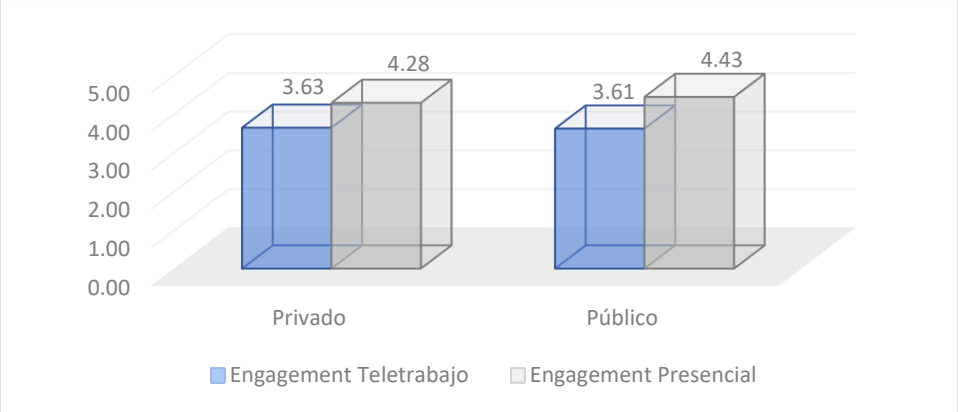
DOI: 10.46121/pspc.53.2.13

Power System Protection and Control
ISSN:1674-3415

Work Engagement by Work Sector

The averages obtained for Work *Engagement* in the private and public sectors (Figure 6) follow the previous trend, where teleworking obtains lower scores than the face-to-face work system. As for Work *Engagement* in private companies, the average in teleworking is slightly above the average in the public sector by 0.02 points, while in the face-to-face modality the public sector is above the private sector by 0.15 points.

Figure 6. Work Engagement scores obtained by employment sector and work modality

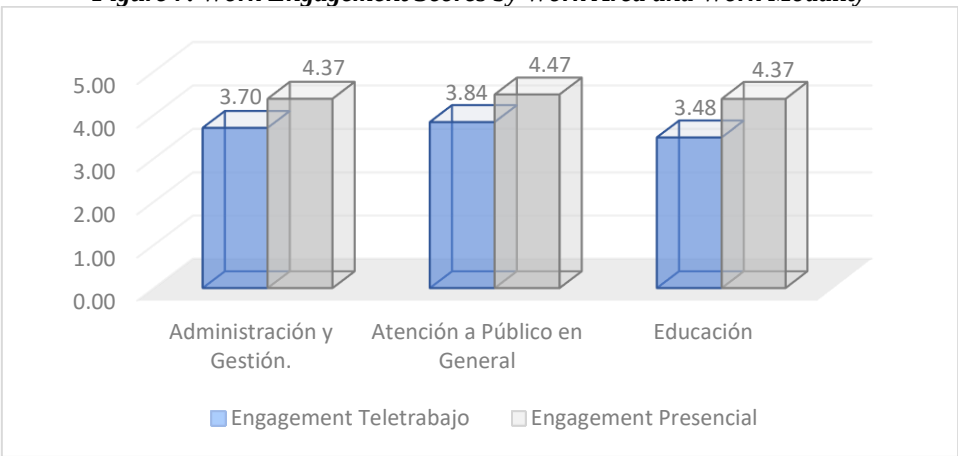


Source: Own elaboration.

Work Engagement by work area

As mentioned above, to analyse Work *Engagement* by work area, the three most relevant areas were taken into consideration according to the number of participants in the study (Figure 7). In these three areas, teleworking is below the average scores obtained for face-to-face work, with the highest score being observed for the area of customer service in general with an average of 4.47 points. Regarding teleworking, the highest average score obtained is also found for workers in this area with 3.84 points. Regarding Administration and Management, the difference observed is 0.67 points. The greatest difference is obtained in the area of education with 0.89 points for face-to-face work over the teleworking modality. The area of education also shows the lowest average Work *Engagement scores* for teleworking with 3.48 points and for face-to-face modality an average of 4.37, remaining only 0.13 points below the acceptable average of Work Engagement (4.5 points).

Figure 7. Work Engagement Scores by Work Area and Work Modality



Source: Own elaboration.

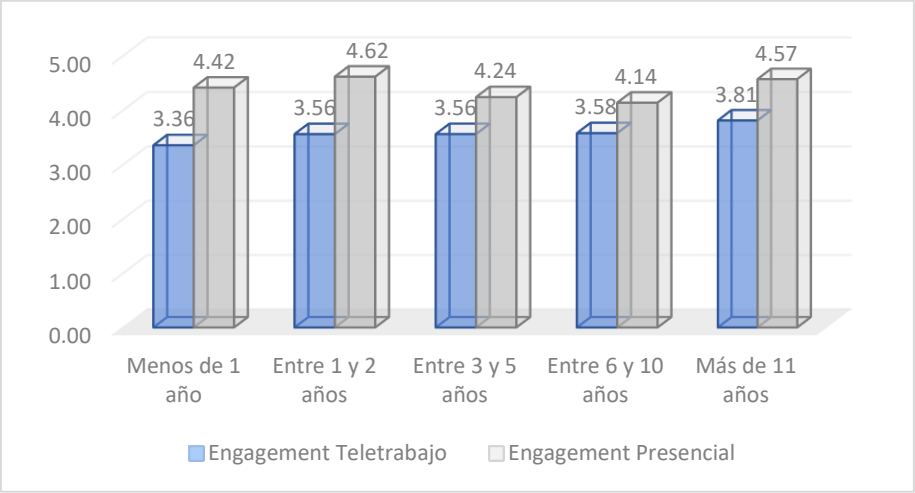
Work Engagement for Years at Work

As for Work *Engagement* for face-to-face work or teleworking according to the years of permanence in the institution (figure 8), the trend of greater Work *Engagement* for the face-to-face modality continues. Workers who have been working for less than a year show a difference of 1.06 points, the same difference that is observed for those who have been working for between 1 and 2 years. For those who have been working for between 3 and 5

DOI: 10.46121/pspc.53.2.13

years at the institution, the difference between the averages obtained is 0.68 points, for those who are in the group of 6 to 10 years the difference is 0.56 and for those who have been working for more than 11 years at the institution, the difference is 0.76.

Figure 8. Work Engagement scores by years of permanence in the work institution and work modality

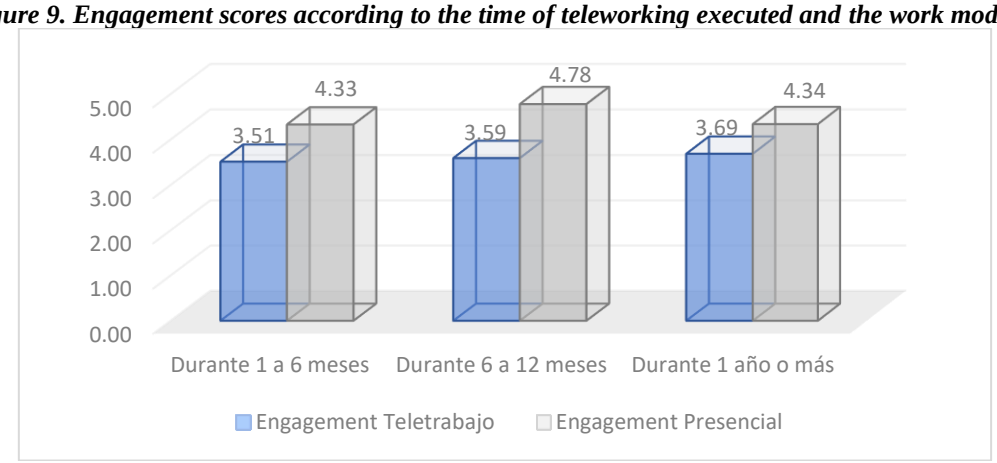


Source: Own elaboration.

Work Engagement per period performing teleworking or face-to-face work

Depending on the period in which workers performed teleworking tasks in their institutions, higher engagement averages are obtained for the face-to-face work modality, with the greatest difference observed in those who performed teleworking tasks for 6 to 12 months with 1.19 points. It can be observed that, the longer the time spent in the teleworking modality, the *Engagement score* obtained for this modality increases slightly. While, for the face-to-face modality, an increase in the score obtained for those who were teleworking for 6 to 12 months is observed (See figure 9).

Figure 9. Engagement scores according to the time of teleworking executed and the work modality



Source: Own elaboration.

5. ADVANTAGES AND DISADVANTAGES OF WORKING MODALITIES

The results obtained from the questions associated with the advantages and disadvantages of teleworking and face-to-face work are presented below. It is important to clarify that the answers with the highest number of votes were selected.

Regarding teleworking, the most commonly perceived advantages were: cost savings in transportation (26%), flexible hours (20%) and work-family balance (17%). While higher productivity, lower work stress and autonomy when developing work represent 5, 6 and 9% of the total respondents. As for the disadvantages of teleworking

DOI: 10.46121/pspc.53.2.13

with the highest votes, the following are mentioned: decreased job opportunities (6%), loss of organizational culture (9%), loss in performance measurement (11%), imbalance between family and work life (12%), greater workload (13%), work-social relationship with coworkers (15%) and social isolation (18%). These last two factors represent the majority of the total percentage.

As for the main advantages that workers indicate for performing their work in the face-to-face modality, they are in order of relevance: Greater social work relationships (20%), improvement in the organization of work with work groups (19%), better work communication (14%), compliance with work schedules (11%), better concentration (10%), and control of the work performed (9%). Now, as for the disadvantages associated with face-to-face work, the following stand out: Travel from home to the workplace (24%), less family interaction (19%), less personal time (16%), work shifts are not suitable for family life (7%), adaptation to returning to the workplace (7%), and increased stress due to face-to-face work (7%).

6. DISCUSSION OF RESULTS

When comparing the results of work engagement in teleworking versus face-to-face work, it was found that the percentages obtained for Non- *Engaged workers* (76%) in teleworking greatly exceed those shown by the same study for face-to-face work (51%). However, when observing the results in each of the work modalities, it was found that the scores obtained for Work *Engagement* in face-to-face work (4.37) as well as for teleworking (3.62) in the Arica and Parinacota region are below the score considered *Engaged (4.5)* , that is, their positive affective psychological state towards work does not reach the established average. One aspect to point out is that the results show lower levels of Engaged in teleworking, in all cases, in relation to face-to-face work. In this sense, the percentage of workers considered *Engaged* in teleworking is only 24%, while for face-to-face work it increases to 49%.

This is consistent with the approach of Schaufeli, et al (2002), for whom the characteristics of the job predict the employee's commitment. In this sense, Masuda, et al. (2017) found that employees show a higher level of Engaged when organizations offer the option of teleworking compared to those that do not. However, Renard, et al. (2021) question the effects attributed to teleworking on variables such as commitment, performance, health, among others, adding that the positions regarding this are dissimilar. Proof of this is the study by Giauque, et al., (2022), carried out during and after the COVID-19 pandemic, which found no effects on the levels of Engaged in the staff, while the study by Mofakhami, et al (2024), revealed greater possibilities of deterioration in health and well-being in those subjects who worked remotely when compared to those who worked in person, while Syrek (et al., 2022), found a decrease in the engagement curve, but an increase in well-being in teleworking.

When observing Work *Engagement* in workers in the Arica and Parinacota region, from the three fundamental pillars: *Vigor, Dedication and Absorption,* only in the *Dedication pillar* , in face-to-face work, positive Engaged scores are obtained *(4.70)* , while the other two pillars, in both work modalities, are below 4.5 points. However, Vigor stands out as the most affected pillar in the two work options below 4.5 points. These results could be attributed to the remote work conditions and confinement measures experienced and the subsequent return to face-to-face work, with psychological effects on the working population (Bhatt, et al., 2023; Unda, et al., 2023), causing depression, increased anxiety, fears associated with the disease (COVID 19), which are ultimately expressed in a worker with less energy.

Now, the scores obtained in the responses corresponding to each pillar of Work Engagement reveal that the lowest score obtained is for the question of the *Absorption pillar* , relative *to forgetting the environment that surrounds the worker in the teleworking modality* . This could be supported by the haste with which teleworking was implemented, which is why there was no cultural practice of the modality, defined spaces at home for work tasks, coexistence with family activities, and many other factors that contributed to the lack of concentration of the teleworker (Nowrouzi-Kia, et al., 2024). However, the lowest average score was also obtained for this question in face-to-face work, which leads to reflecting on the distractions in the traditional workspace, from psychological and physical aspects, that affect the concentration of workers.

The highest score obtained in teleworking is for the question about *pride in the work done* , which is the only average that comes close to the Engaged score of 4.5 points. This provides a guideline for continuing to work on the actions that management can carry out with workers to motivate and continue with the pride that their workers feel about the work performed. Although the average obtained for face-to-face work is above 4.5 points, also

DOI: 10.46121/pspc.53.2.13

being the highest score of all the questions, work must continue to be done and to reinforce with workers the importance of the work done and how to motivate workers' pride and satisfaction.

The biggest difference observed was for the question about *inspiration to do new things* , where teleworking scored 3.42 while face-to-face work scored 4.55 points, with a difference of 1.13 points. It is necessary to analyze what factors affect inspiration in the remote modality, and if this point was highly affected by factors directly associated with the pandemic, such as the need for distractions and social activities that allowed people to disconnect from work and not fall into the monotony of the domestic routine that prevented creativity and innovation at work.

The consideration and importance (Do, et al., 2024) of the sociodemographic characteristics of workers in the Arica and Parinacota region, showed with respect to gender that women have a lower level of Engaged in the teleworking modality (3.53) compared to the face-to-face modality (4.35). While the male gender, despite not reaching the average of 4.50 in any of the modalities, exhibits higher Engaged values than women, in both options. These results can be associated with historical gender inequality (Kley, 2023; Zhelenkova, 2023) both in the workplace and at home, which leads to a greater burden on women, as there is a role of mother or caregiver in charge of the home, which, accompanied in many cases by poor support from the rest of the family, causes women to become overloaded with both work tasks and housework, reducing leisure and free time opportunities for them and impacting their health (Rodriguez-Modroño, 2023), that is, a poor balance between family life and work (Lipták, et al., 2023), with repercussions on the three pillars of work engagement.

Regarding age, the results show that, in teleworking, all age groups have a lower level of work engagement than in face-to-face work. However, the age group of 51 years or older has higher levels of work engagement in both modalities, when compared to the rest of the age groups assessed. The result is consistent with Do, et al (2024), who found results that point to greater work engagement (absorption and dedication) in older employees with more work experience.

An outstanding result is the one related to work engagement, taking into account the educational level of employees in the two work modalities. In this sense, those with an incomplete higher education level present the lowest levels of work engagement in both modalities, the *complete higher education level* maintains a downward balance in both modalities, with better scores in face-to-face work; while in those employees with *complete secondary education*, work engagement in face-to-face work is outstanding (5.15) above the established average of 4.5 points, however, in teleworking they remain below the average. The results point to higher levels of work engagement in face-to-face work, regardless of the educational level of the employees, which turns the focus on the conditions of the spaces to carry out the work daily; a favorable environment requires ergonomic spaces, as well as the necessary equipment and tools that allow improving productivity and increasing worker commitment (Awada et al., 2021). Added to the above is the distancing from coworkers, which shows the negative impact of teleworking on human relations (Lipták, et al., 2023).

Looking at the work sector in which employees work, the trend is maintained in both the public and private sectors, which favors work engagement in person. Palumbo (2020) detected that the balance between the work and personal life of public sector workers was altered, and teleworkers experienced greater worry and fatigue, which could lead to burnout. However, when examining the work area of performance, the results showed the trend that has been observed, that is, the highest level of work engagement towards the average of 4.5 points is present in face-to-face work, for the three most relevant performance areas, with the General Public Service area being the closest with 4.47 points. However, when observing the educational area, and comparing it with the other two, it presents the lowest levels of work engagement in the teleworking modality.

It must be considered that teleworking for the education area, at all levels, is highly demanding, with effects on the physical, mental and social state (Sahu, 2020; Pinheiro Almeida, et al., 2021). This is a work area in which the teacher must deal with the continuous demands of bosses, students, representatives (depending on the educational level) and their own needs. In the context of remote work, there are also major challenges and effects on teachers, such as poor mastery of technology (Bianchi and Caso, 2021), search for balance between work and personal/family space (Kotowski, et al., 2022), distancing from peers and students leading to deterioration of human relationships (Lipták, et al, 2023), adoption of new pedagogical strategies (Bravo, et al., 2020), pressure and demands with effects on physical/mental health (Ossa, et al, 2023: Aygün, et al., 2023), which became evident when implementing the modality in a hasty and mandatory manner, without the proper knowledge and few tools,

DOI: 10.46121/pspc.53.2.13

due to the arrival of the pandemic (Palma, et al., 2021). In this context, the deterioration of teacher well-being has implications for pedagogical performance (Cervantes, 2021).

Considering the participant's years of service in the institution in relation to work engagement, the line of better levels in face-to-face work was maintained, without major differences that could indicate any particular trend. A similar behavior is expressed in the data related to work engagement scores taking into account the period of time doing telework or face-to-face work. These results are consistent with the assessment of Ponce, et al (2024), who state that the experiences lived during the COVID-19 pandemic varied widely and differed by race-ethnicity, gender, and age.

Teleworking, being a modality that is carried out from home, presents certain advantages. In this case, the interviewees highlighted the savings in transportation costs, followed by flexible schedules and the balance between family and work. On the other hand, from the challenges or disadvantages for the worker, the respondents stated that the most important were social isolation and the loss of work and social relationships with coworkers. The above could have been influenced by the health characteristics in which the teleworking measures were applied, where the confinement measures amplified the feeling of isolation (Tonon, et al., 2024). On the other hand, the lack of experience in the application of teleworking of both the worker and their leaders could also affect work and family life, with excessive workloads causing stress and other health problems; compromising the measurement of performance and decreasing opportunities for career growth, among others. According to Nowrouzi-Kia, et al., (2024), workers had difficulties disconnecting once the work day was over and were unable to distinguish between the work and home environments.

For the face-to-face modality, the observed advantages correspond to the counterpart of the disadvantages of the remote modality, highlighting the social/work relationship. The disadvantages are similar, highlighting the travel to the workplace (time) and the decrease in its presence in family life. These divergences between both modalities coincide with the findings of Nowrouzi-Kia, et al., (2024) who express that remote work effectively provides flexibility in terms of saving travel time and flexible work schedules, but it also brings with it challenges related to presenteeism, absenteeism and the balance between work and personal life. In this context, one aspect to consider is the emergence of so-called atypical or non-traditional jobs (Chernozhukov et al., 2021; Suhányi et al., 2022), which open opportunities for individuals to assess the advantages and disadvantages they offer, in a constantly changing market.

7. CONCLUSIONS

According to the results, the levels of Work *Engagement* are affected by the work modality used and influenced by the sociodemographic variables, which indicates a correlation. In the case of the Arica and Parinacota region, the highest levels of work engagement are present in the face-to-face modality, without being really highlighted. However, it is still premature to consider these results as definitive, since the unusual and unexpected conditions in which work commitment was assessed, such as confinement, the change of work modality (face-to-face to teleworking and vice versa) and even how the unusual situation was addressed in the company or organization, would be involved in the responses given by the employee, both in their work and personal life, in the face of a profound change in their daily activities.

Additionally, the teleworking modality, although not an innovation, is in a process of development and consolidation in the national and global market, which will surely lead to its adjustment and consideration as a viable alternative in the long term. Understanding, in all its dimensions, the effects of this approach on the work engagement of the worker is essential, in order to adjust the conditions and regulatory framework for its implementation. But to do so, greater knowledge of the triggering/driving factors of work engagement and its correlation with sociodemographic characteristics is required. This is key for business organizations, due to the impact it can generate on performance, productivity, organizational climate, quality of service, among other indicators to be considered in management.

Particularly in the Arica and Parinacota Region, so hard hit by the COVID 19 pandemic, maintaining energy, enthusiasm and focus on work is a challenge, the achievement of which is associated with improvements in the performance and productivity of the company, and therefore, in improvements in the productivity of the region.

DOI: 10.46121/pspc.53.2.13

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