



## Trust as a driver of teacher well-being during the COVID-19 pandemic

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**Abstract | Introduction:** This study examines the impact of organisational trust on teachers' well-being during virtual teaching throughout the COVID-19 pandemic in Uruguay ( $N = 351$ ; 270 women, 81 men) using the Job Demands-Resources model for understanding. **Method:** This study was conducted by means of a Structural Equation Model. **Results:** The results show that trust in leaders and colleagues positively influences perceived personal resources and teachers' engagement. Trust in leaders is positively related to organisational resources. Engagement is negatively linked to sleep problems, while high job demands are associated with more technostress, affecting teachers' sleep problems. **Conclusions:** The importance of organisational trust in times of change is highlighted, emphasising its role in promoting positive psychological states and facilitating the use of resources to improve teachers' well-being. The influence of trust on well-being is not direct but mediated by a series of variables.

**Keywords:** Organisational trust, technostress, well-being, sleep, engagement.

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### La confianza como motor de bienestar docente durante la pandemia de COVID-19

**Resumen | Introducción:** Este estudio examina el impacto de la confianza organizacional en el bienestar de los docentes en la enseñanza virtual durante la pandemia de COVID-19 en Uruguay ( $N = 351$ ; 270 mujeres, 81 hombres) utilizando para la comprensión el modelo de demandas-recursos laborales. **Método:** Esta se llevó a cabo mediante un modelo de ecuaciones estructurales. **Resultados:** Los resultados muestran que la confianza en líderes y colegas influye de manera positiva en los recursos personales percibidos y el *engagement* de los docentes. La confianza en los líderes se relaciona positivamente con los recursos organizacionales. El *engagement* se vincula de manera negativa con los problemas del sueño, mientras que las altas exigencias laborales se asocian con más tecnoestrés, afectando, además, los problemas de sueño de los docentes. **Conclusiones:** Se destaca la importancia de la confianza organizacional en tiempos de cambio, subraya su papel en promover estados psicológicos positivos y facilitar el uso de recursos para mejorar el bienestar docente. La influencia de la confianza sobre el bienestar no es directa, sino que está mediada por una serie de variables.

**Palabras clave:** Confianza organizacional, tecnoestrés, bienestar, sueño, *engagement*.

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The uncertainty generated by the advancing COVID-19 pandemic impacted many everyday activities. The education sector was no exception, and online instruction was one of the most widely used strategies to ensure the continuity of the teaching-learning activity (Chou & Chou, 2021).

This study investigates how organisational trust (OT) impacts teacher well-being. Organisational trust refers to a positive anticipation of others' actions within the organisation (Kramer, 1999), involving a level of vulnerability to uncertainty and risk (Mayer et al., 1995). The aim of this study is to expand on existing knowledge regarding OT (Dirks & de Jong, 2022), highlighting its significance in managing uncertainty and its role as a valuable asset for organisation members. We have integrated organisational trust into Bakker and Demerouti's model (2017), one of the most widely used models for understanding workplace well-being. This allows us to analyse how the perception of organisational trust influences teachers' perceptions of demands and available resources, which are central aspects of the model for understanding the development of well-being or distress in the workplace.

This pandemic impacted work demands and meant the loss of essential resources (e.g., informal interactions) to carry out teaching activities. Several studies have reported the impact of these changes on teachers' well-being and health. For instance, Pressley (2021) found increased teacher anxiety and burnout. This could be linked to increased demands, especially because of the intensive use of technologies, new educational approaches, and changes in role expectations.

In this study, we will explore well-being by considering both subjective (i.e., engagement and technostress) and objective aspects (i.e., sleep problems).

This will allow us to integrate evidence that has been collected by studies related to subjective well-being (Peiró et al., 2014), with components of physical well-being. This will enable a better understanding of the way teachers adapt and respond to complex environments, such as the one experienced during the pandemic.

### Sensemaking and trust

This rapid and disruptive transformation of the work of teachers led to a change in the activities they perform. Apart from having their jobs mediated by technology, many teachers began rethinking the meaning of their work (Longmuir, 2023). The basic assumptions of organisational functioning and coordination of activities ceased to be helpful in a virtual scenario; ambiguous and unstable situations prompt sense-making processes through which individuals seek to understand and give meaning to their experiences (Fuglsang & Jagd, 2015).

Collective meaning-making provides an essential context for understanding behaviour in the organisation. Weick (2017) noted that grasping the essence of organisational behaviour involves understanding how people are able to navigate uncertainty. In uncertain environments, people must act, plan, and organise, with "sensemaking" playing a central role (Weick, 2017). Some researchers note that the development of meaning has

been an essential process for teachers during the pandemic (Christianson & Barton, 2021). Trust is a critical resource in building sensemaking, as coping with activities in a scenario of uncertainty requires acting without much certainty (Ng & Lucianetti, 2016).

### The role of trust in the pandemic

Barber (1983) characterised trust as "a set of socially learned and socially confirmed expectations that people have of each other, of the organisations and institutions in which they live, and of the natural and moral social orders that set the fundamental understandings of their lives" (pp. 164-165). Thus, events that confirm initial expectations lead to increased trust, while events that differ from expectations lead to a decrease in trust. In this sense, Knez and Camerer (1994) argued that trust is an "expectational asset" (p. 101) that social perceivers use to assess the trustworthiness of others. These assets are essential, particularly in adverse situations (Kramer, 1999) where behavioural innovation is required, as occurred during the pandemic.

OT is often understood in the framework of the Social Exchange Theory (Martínez-Tur, 2003). The interdependence among an organisation's members emphasises the importance of reciprocity (Rousseau et al., 1998). This principle is fundamental in social exchange theories, highlighting its crucial role in social development by facilitating individuals' adaptation to environmental challenges (Buunk & Schaufeli, 1999). Individuals feel compelled to reciprocate the support and trust they receive from the organisation. Considering trust as a psychological state of teachers, which entails positive expectations, would facilitate a more favourable assessment of their resources and demands as well as those of the people they interact with. Hough et al. (2020) stated that higher OT meant higher levels of optimism. Elevated levels of vertical trust (trust in management roles) and horizontal trust (trust in colleagues) can result in a more positive assessment of the resources and demands encountered by teachers. Tummers and Bakker (2021) indicate that organisational leaders directly influence the demands and resources that workers receive and also their impact. On the other hand, relationships with colleagues are an essential source of feedback that allows the development of a broader repertoire of personal behaviours (Hughes et al., 2018).

### Extension of the JD-R model for understanding teachers' well-being

In investigating the effects of the pandemic working conditions on teachers' motivation and well-being, the present study used the JD-R model (Bakker and Demerouti, 2017), with the addition of vertical trust (McAllister, 1995) and horizontal trust (Huff & Kelley, 2003), as well as technostress (Salanova, Llorens et al., 2007) and teacher-reported sleep quality (Buysse et al., 1989). The JD-R model illustrates how job demands and resources, directly and indirectly, affect workers' stress and engagement, being relevant throughout all commercial enterprise, including for teachers (Taris et al., 2017).

Regarding sleep quality, a negative relationship with engagement has been reported. For example, Barber et al. (2013) found a relationship between sleep and engagement, noting that workers with higher engagement levels showed better sleep hygiene and greater capacity for self-regulation. During this pandemic period, sleep problems affected many workers (Salfi et al., 2021). For teachers, the “online classroom” setting meant that the intensive use of electronic devices could also potentially generate high levels of distress, particularly technostress (Lee & Chen, 2021). Technostress is “stress that develops from introducing and using new information and communication technologies in the work context” (Llorens et al., 2017, p. 1). The relationship between stress levels and sleep quality has been extensively documented over time (Lo Martire et al., 2020). Exposure to electronic devices is identified as something that negatively affects sleep quality (Green et al., 2017).

This study aims to test the mediation of job demands and job resources between OT, both vertical and horizontal, with the levels of well-being reported by teachers during the pandemic (see figure 1).

**Hypothesis 1:** Vertical trust will be positively related to organisational resources and negatively related to job demands.

**Hypothesis 2:** Horizontal and vertical trust will be positively related to personal resources.

**Hypothesis 3:** Vertical and horizontal trust will be positively related to work engagement.

**Hypothesis 4:** Engagement will be negatively related to the quality of teachers’ sleep problems.

**Hypothesis 5:** Job demands will be positively related to teachers’ technostress.

**Hypothesis 6:** Job demands will be positively related to poor sleep problems.

**Hypothesis 7:** Technostress will be positively related to sleep problems.

## Method

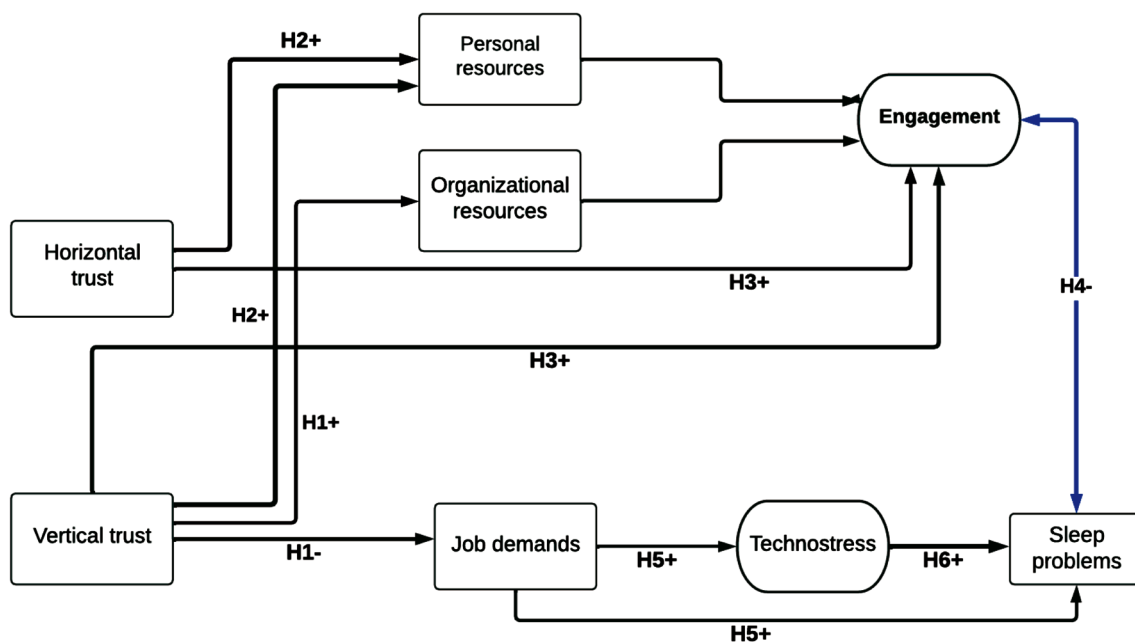
### Participants

The sample comprised 351 teachers (77% female and 23% male) from six private schools in Uruguay, spanning pre-school (17%), primary (26%), and secondary education (57%). Participant ages fell into three categories: 9% were 18-25 years of age, 39% were 26-40, and 52% were 41 or older. Convenience sampling was used with a 70% response rate. School principals facilitated participation, and a Zoom conference explained the survey’s purpose and confidentiality. Data was collected via a questionnaire on Qualtrics, with participants consenting before participation. The use of online questionnaires was necessitated by the confinement measures implemented during the COVID-19 pandemic.

### Measurement instruments

This study used the RED questionnaire (Salanova, Cifre et al., 2007) and other instruments to assess specific constructs which have been previously validated with Uruguayan teachers (INEED, 2019).

RED is a 51-item scale that assesses several work-related psychological constructs (Salanova, Cifre et al., 2007). *Trust* was assessed: (1) Vertical trust 2 items (Huff & Kelley, 2003). An example of these items is “There is a high degree of trust of the Directorate towards teachers” ( $R = .79$ ). (2) Horizontal trust 4 items (McAllister, 1995), for example, “I can trust some of my colleagues to talk about difficult situations” ( $\alpha = .82$ ). These are answered using a Likert scale ranging from 0 (*never*) to 4 (*always*).



**Figure 1.** Research model and hypotheses formulated for this study

*Job Demands* was assessed by 20 items of the RED questionnaire (Salanova, Cifre et al., 2007): (1) Quantitative overload (3 items; “The work I did during the first semester meant having more work than I can do”;  $\alpha = .76$ ). (2) Role ambiguity (3 items; “The work I did during the first semester involved completing tasks without having clear guidelines”;  $\alpha = .79$ ). (3) Conflict of role (2 items; “The work I did during the first semester involved doing tasks that would be better done otherwise”;  $\alpha = .64$ ). (4) Cognitive overload (3 items; “The work I did during the first semester involved paying close attention and concentration on my tasks”;  $\alpha = .61$ ). (5) Emotional overload (3 items; “The work that I did during the first semester meant having to face problems by putting myself in the place of others”;  $\alpha = .74$ ). (6) Emotional dissonance (3 items; “The work that I did during the first semester involved having to express certain emotions when in reality I feel indifferent”;  $\alpha = .70$ ). (7) Work-Family Conciliation (3 items; “When I finished work, I was too tired to do household chores”;  $\alpha = .87$ ) and (8) Family-Work Conciliation (3 items; “I was so worried about his personal problems that I couldn’t concentrate at work”;  $\alpha = .81$ ). Respondents answered using a 7-point Likert-type scale (from 0 ‘never’ to 6 ‘always’). The reliability of the whole scale was good ( $\alpha = .89$ ), when considering the cutoff of .70 (Nunnally & Bernstein, 1994).

*Job Resources* were assessed by 22 items of the RED questionnaire (Salanova, Cifre et al., 2007): (1) Autonomy (3 items; “In my work in the first semester, many times I had to organise my daily work in the way I thought was most convenient”;  $\alpha = .70$ ). (2) Feedback (4 items; “I have received suggestions about how I do my work from my fellow teachers”;  $\alpha = .68$ ). (3) Climate social support (3 items; “At work in the first semester my colleagues have valued constructive criticism (giving my opinion to improve the task”;  $\alpha = .66$ ). (4) Coordination (3 items; “In relation to teacher coordination in the first semester, coordination bodies have solved complicated problems”;  $\alpha = .91$ ) and (5) Leadership (10 items; “How often does the Director of this educational centre have clear work guidelines”;  $\alpha = .94$ ). This questionnaire is answered using a Likert scale of 5-points ranging from 0 (*never*) to 4 (*always*). The reliability of the full scale was good ( $\alpha = .89$ ).

*Personal Resources* was assessed by 19 items on the RED questionnaire (Salanova, Cifre et al., 2007) and the *Emotional Style Questionnaire* (Kesebir et al., 2019): (1) Self-efficacy (4 items; “I can do my job well despite having to solve difficult problems”;  $\alpha = .89$ ) was assessed using a Likert scale of 5 points ranging from 0 (*never*) to 4 (*always*) and (2) Emotional Styles (10 items using a Likert-7 points scale ranging from 1 “*strongly disagree*” to 7 “*strongly agree*”) that are distributed in 2 dimensions: Resilience (4 items; “I find it difficult to regain calm after experiencing something negative”;  $\alpha = .73$ ) and Attention (1 item; “I have good concentration skills”;  $\alpha = .72$ ). The internal consistency of the scale was  $\alpha = .80$ .

*Work Engagement* was assessed with 3 items of the HERO questionnaire (Salanova et al., 2012) distributed in 3 dimensions: (1) Vigour (1 item; “I feel full of energy”). (2) Dedication (1 item; “I am enthusiastic about my work”), and (3) Absorption (1 item; “I am involved in my

work”). This questionnaire is answered using a Likert scale of 5-points ranging from 0 (*never*) to 5 (*always*). The reliability of the scale was good ( $\alpha = .79$ ).

Technostress was assessed with 12 items of the RED questionnaire (Salanova, Llorens et al., 2007) distributed in 3 dimensions: (1) Techno-fatigue (4 items; “When I finish working with technologies, I feel exhausted”;  $\alpha = .88$ ). (2) Techno-anxiety (4 items; “I feel tense and anxious when working with technologies”;  $\alpha = .85$ ), and (3) Ineffectiveness (4 items; “I am unsure about finishing my tasks well when I use technologies”;  $\alpha = .83$ ). This questionnaire is answered using a Likert scale of 7 points ranging from 0 (*never*) to 7 (*every day*).  $\alpha$  of the scale was .88.

*Sleep quality* was assessed with 14 items of the Pittsburgh Sleep Quality Index (De la Vega et al., 2015). This scale assesses: (1) Subjective quality of sleep (1 item; “During the last month, how would you assess, as overall, the quality of sleep?”). (2) Efficiency (1 item; “During the last month, what time have you usually gotten up in the morning?”). (3) Disturbances (9 items; “During the last month, how many times have you had trouble sleeping because of having to get up to go to the toilet”). (4) Use of hypnotics (1 item; “During the last month, how many times have you taken medicines (on your own or prescribed by the doctor) to sleep?”) and (5) Daytime dysfunction (2 items; “During the past month, how many times did you feel drowsy while driving, eating, or doing any other activity?”). The reliability of the whole scale was good ( $\alpha = .87$ ). Based on the assessed components, this questionnaire yields a result of 0 to 21 points, where 0 indicates the absence of sleep difficulties, and 21 indicates severe difficulty.

## Data analysis

First, descriptive analysis, internal consistencies, Cronbach’s alpha, and intercorrelations were computed using SPSS 28.0. Considering that the teachers worked at various levels of instruction, an ANOVA was conducted to examine differences between the groups. The ANOVA indicated a significant difference in the variables of quantitative overload  $F(4, 346) = 3.59, p < .05$ , role ambiguity  $F(4, 346) = 2.36, p < .05$ , family-work conciliation  $F(4, 345) = 2.43, p < .01$ , and techno-fatigue  $F(4, 346) = 2.29, p < .05$ , with preschool teachers scoring lower in these areas.

Harman’s single factor test was performed with SPSS 28.0 to check for bias due to common method variance. Finally, we calculated structural equation modelling (SEM) using AMOS 28 to analyse the hypotheses by means of different models.

Considering the study’s cross-sectional nature, we followed the recommendations by Kline (1998) and computed three alternative models. In Model 1, job resources, personal resources, and job demands mediate the relationship between trust (horizontal and vertical trust) and the dimensions of commitment, technostress, and sleep quality. In Model 2 (M2), the mediation model includes a direct relationship between trust (horizontal and vertical), engagement, technostress, and sleep quality. In model 3 (M3), trust is a consequence of well-being (engagement, technostress, and sleep quality).

ty). Finally, in M1, the mediation test of MacKinnon et al. (2002) was used to test the mediating effect of work and personal resources and job demands between trust (horizontal and vertical) and well-being (engagement, technostress, and sleep quality).

We used the maximum likelihood to estimate the structural models. Namely, we used absolute and relative fit indices (Marsh et al., 1996): Chi-square ( $\chi^2$ ) index, Chi-square ( $\chi^2/df$ ) and the Root Mean Square Error of Approximation (RMSEA). In addition, we used Normed Fit Index (NFI), Non-normalised Fit Index (i.e., the Tucker-Lewis Index, TLI or NNFI), Comparative Fit Index (CFI) and Incremental Fit Index (IFI).

We considered the following cutoff scores: a Chi-square analysis with a  $p$  value above .05 indicates good fit,  $\chi^2/df$  below 2 indicates a good fit, RMSEA results below .05 indicate very good fit while values between .05 and .08 are considered acceptable (Browne & Cudeck, 1993). Regarding TLI, IFI, CFI and NFI indices, values above .90 are considered indicators of good fit (Hoyle, 1995).

Some of the constructs that were evaluated (role conflict, cognitive overload, feedback, and social support) yielded a Cronbach's Alpha below the accepted cutoff score (.70; Nunnally & Bernstein, 1994). It is important to evaluate these constructs in more detail in the future. It is worth noting that the INEEd (2020) study reported scores above 0.75 for these same constructs.

## Results

### Descriptive analyses

Table 1 displays means, standard deviations, Cronbach's Alpha (excluding the Sleep scale), and intercorrelations between study variables. Results indicate that engagement correlates positively with all other variables. Technostress correlates positively only with job demands and sleep quality. Personal resources correlate positively with organisational resources, horizontal and vertical trust. Organisational resources correlate positively with horizontal and vertical trust, and job demands. Horizontal trust correlates positively with engagement, personal resources, organisational resources, and vertical trust. Vertical trust correlates positively with all va-

riables except technostress. Job demands correlate positively with all variables except personal resources and horizontal trust. Finally, sleep quality correlates positively with engagement, technostress, and job demands.

Moreover, Harman's single factor test of the database ( $N = 315$ ) revealed a poor fit ( $\chi^2 = 1804.563$ ,  $p < .000$ , RMSEA = .165, CFI = .502, NFI = .587, TLI = .443, IFI = .678) which means that common variance is not a problem in the data set.

### Structural equation modelling: Testing the hypotheses

Table 2 shows the results of the SEM analyses for the different models tested. Results indicate that M1 shows the best good fit indices ( $\chi^2 = 286.276$ ,  $df = 157$ , RMSEA = .04, CFI = .96, NFI = .91, TLI = .95 and IFI = .96) compared to the alternative models. Moreover, MacKinnon's mediation test shows that the mediation effect is statistically significant.

Model 1 shows that vertical trust had a negative relationship with the perception of job demands ( $\beta = -0.30$ ,  $p < .001$ ) and a positive relationship with organisational resources ( $\beta = 0.56$ ,  $p < .001$ ). Regarding the latter, vertical trust explains 43% of their variance. We found that both types of trust have a positive relationship with the perception of the personal resources available for the participants. Although the relationship of vertical trust with the elements that accounts for the loss of well-being is mediated by labour demands, in the well-being pathway of the JD-R model engagement this is directly linked to vertical ( $\beta = 0.22$ ,  $p < .001$ ) and horizontal trust ( $\beta = 0.16$ ,  $p < .001$ ). Engagement also has a relationship with both types of trust mediated by personal and organisational resources, which explains 37% of its variation variation (see Figure 2).

On the other hand, the sleep problems variable, an essential element to understanding the well-being of teachers who teleworked in this period, shows a negative covariance with engagement ( $\beta = -0.08$ ,  $p < .001$ ) as well as with variables corresponding to the deterioration process of the well-being of the JD-R model, such as labour demands ( $\beta = 0.15$ ,  $p < .001$ ) and technostress

**Table 1.** Means, standard deviations, alpha and intercorrelations between the study variables ( $N = 315$ )

Dimensions	M	SD	$\alpha$	1	2	3	4	5	6	7
1. Engagement	4.27	0.60	.79	-						
2. Technoestress	2.71	0.97	.88	-.20***	-					
3. Personal resources	4.30	0.54	.88	.43***	-.01	-				
4. Organisational resources	3.73	0.55	.88	.36***	-.03	.21***	-			
5. Horizontal Trust	4.34	0.66	.82	.34***	-.05	.24***	.32***	-		
6. Vertical Trust	4.22	0.86	.88	.37***	-.08	.17**	.71***	.29***	-	
7. Job Demands	2.83	0.56	.89	-.31***	.44***	-.10	-.19***	-.09	-.31***	-
8. Sleep Quality	6.90	3.45	.90	-.19***	.32***	-.07	-.08	-.05	-.04	.32***

Note. M = Means; SD = Standard deviation.  $\alpha$  Alpha. N/A = not available. \*\*\* $p < .001$ , \*\* $p < .01$  and \* $p < .05$ .

**Table 2.** Structural equation modelling ( $N = 315$ )

Model	$\chi^2$	df	RMSEA	CFI	NFI	TLI	$\Delta\chi^2$	$\Delta df$	$\Delta RMSEA$	$\Delta IFI$	$\Delta NNF$	$\Delta TLI$
$M_1$	286.276	157	.048	.96	.91	.95						
$M_2$	295.674	153	.051	.95	.91	.94						
$M_3$	433.631	156	.071	.91	.87	.89						
Diff. 1 - 2							9398.00***	4	-.003	.01	0	-.00
Diff. 1 - 3							147355.00***	1	-.023	.05	.04	.05
Diff. 2 - 3							137957.00***	-3	-.020	.04	.04	.04

Note.  $M_1$  = Model 1;  $M_2$  = Model 2;  $M_3$  = Model 3;  $\chi^2$  = Chi-square;  $df$  = degrees of freedom; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; NFI = Normed Fit Index; TLI = Tucker-Lewis Index; IFI = Incremental Fit Index; Diff. and  $\Delta$  = differences.

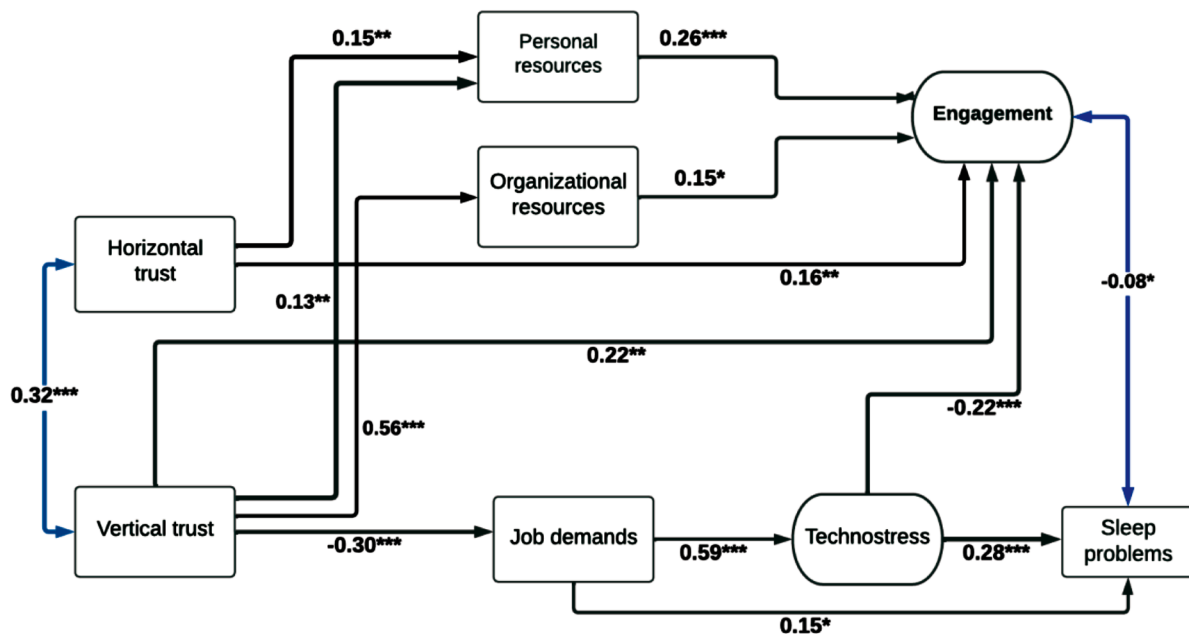
( $\beta = 0.28, p < .001$ ). We found that the latter explains 15% of the variance of teachers' sleep problems. This model shows that sleep problems, an important indicator of teacher well-being during the pandemic, was presented by the decrease in levels of engagement present in teachers and by their greater perception of work demand. Considering that both types of trust influence the well-being and deterioration processes, we can assume that they provide positive expectations of value, which aids in facing change and abrupt organisational crises.

The mediation analyses, following the methodology indicated by MacKinnon and Dwyer (1993) and MacKinnon et al. (2004), showed that job demands significantly mediate the relationship between vertical trust and technostress ( $\alpha \times \beta = -44.72, p < 0.001, \beta = -0.18$ ). Similarly, technostress mediated the relationship between job demands and sleep ( $\alpha \times \beta = 26.40, p < 0.001, \beta = 0.16$ ). Organisational resources mediated the relationship be-

tween vertical trust and commitment ( $\alpha \times \beta = 38.07, p < 0.001, \beta = 0.10$ ), while personal resources mediated both the relationship between vertical trust and commitment ( $\alpha \times \beta = 12.10, p < 0.001, \beta = 0.04$ ) and between horizontal trust and commitment ( $\alpha \times \beta = 13.88, p < 0.001, \beta = 0.04$ ). These findings highlight the crucial role of mediating variables in the work environment.

## Discussion

This study enhances our comprehension of how organisational trust (OT) affects the well-being of teachers who worked remotely during the pandemic. Our findings indicate that perceived levels of OT influenced the evaluation of job demands and the resources available to address them. By extending the JD-R model, we observed that both vertical and horizontal trust indirectly influenced teachers' well-being during this period. These findings have theoretical and practical implica-

**Figure 2.** Final model

Note. \*\*\* $p < .001$ , \*\* $p < .01$  and \* $p < .05$ .

tions that warrant future research. However, since the data were collected during the COVID-19 pandemic, it is essential to consider contextual limitations when interpreting the findings.

### Theoretical implications

Using the widely used JD-R model (Bakker et al., 2023) and incorporating trust as an antecedent variable allows us to understand the influence of OT on well-being and deterioration processes. This constitutes a potential extension of the JD-R model for understanding well-being at work.

The influence found in this study (for both vertical and horizontal trust) on specific aspects of teacher well-being is not direct. Rather, it occurs through the impact of vertical trust on individuals' perceptions of their personal resources, organisational resources, and job demands, as shown by regression analyses of the SEM model. Meanwhile, horizontal trust influences teachers' perceptions of available personal resources, as we see in the model developed in this study.

Vertical trust in teachers, that is, the trust placed in their superiors, has been observed to have a positive effect on the perception of both personal and work resources, while at the same time it is negatively related to perceived work demands, as postulated in Hypothesis 1. Kramer and Lewicki (2010) suggest that trust is a psychological state that influences how organisational stimuli are interpreted by fostering favourable expectations toward the behaviour of others. This constitutes an important aspect for adapting to organisational changes as Tanis and Postmes (2005) point out.

On the other hand, trust between colleagues also plays an important role in people's assessment of existing personal resources, as proposed in Hypothesis 2. Horizontal trust relationships may be essential for the development and perception of personal resources, since they open feedback, for example, contributing to a better understanding of individual abilities. With higher levels of trust, group members may feel more comfortable about showing their vulnerability in times of uncertainty, allowing them to obtain useful feedback on their abilities to cope with work demands. OT therefore constitutes a prism through which individuals interpret organisational phenomena in a positive way, which has already been studied with other positive resources (Tripiana & Llorens, 2015).

Both types of OT analysed (vertical and horizontal) have shown a positive correlation with the levels of engagement reported by teachers (Adnan et al., 2021).

According to the study, the engagement of the teachers surveyed is influenced by sleep problems (Hypothesis 4). This indicates that the processes of activation and motivation at work positively affect variables that account for the well-being of employees. Loss of engagement is also likely to lead to spirals of resource loss due to low attentional capacity upon awakening (Salfi et al., 2021), making it even more challenging to cope with the demands of daily work.

The intensive use of ICT during the pandemic has caused a large part of the labour demand to occur through these platforms. The confirmation of Hypoth-

eses 5 and 6 accounts for the relationship of high work demands with high levels of technostress and sleep problems. ICT became essential for a group of professionals, only some of whom were prepared to use them, modifying their pedagogical practices to adapt to this new format (Kulikowski et al., 2022).

The confirmation of Hypothesis 7 indicates that there is a relationship between technostress and teachers' sleep problems. The assessment of this impact on sleep is valuable as it confirms the influence of the workers' perceived stress and the high use of technologies, which, as the literature also points out, has an implication on sleep quality. Furthermore, the teachers surveyed reported working longer than usual (on average, about 15 hours per week).

A relevant finding for this study of teacher well-being is recognising the fundamental role of OT in this work context. This, previously associated with teaching performance (Li et al., 2018), is a crucial factor in understanding teacher well-being in this study.

### Practical implications

Considering the impact of OT on individual well-being, it is essential to recognise that any measure aimed at improving it represents a valid means of increasing the well-being of individuals within organizations during periods of change. For example, Salanova et al. (2021) have illustrated how implementing positive management practices strengthens an organisation's trust.

Teachers have expressed concerns about maintaining a healthy work-life balance during the pandemic. The leaders' attention to this aspect, together with effective organisational actions such as the implementation of conciliation measures and the regulation of online connection times, could have led to positive interventions that led to higher levels of trust among teachers, both among themselves as well as toward the organisation in general. Likewise, having spaces with colleagues where they could discuss their difficulties and doubts regarding the use of technologies and the evolution of their role could also have represented a positive intervention to improve well-being and raise levels of OT. These interventions to be implemented in response to changes on how teachers work. The results of this work revealed that preschool teachers were the least affected by job changes during the pandemic.

### Limitations and suggestions for future research

One of the main aspects of this study is that the data collection was carried out under certain organisational conditions generated by the measures implemented during the COVID-19 pandemic, including home confinement and the urgent shift to virtual teaching. It remains necessary to explore whether these findings are similar in different organisational contexts or whether they are replicated in other areas of work beyond teaching.

The cross-sectional nature of this study means that it is impossible to analyse how the processes of interaction between members of the organisation, as proposed by reciprocity theory, cause trust to be amplified or

diminished over time and what impact these changes have on teachers' perceptions and their well-being.

Future studies could focus on collecting objective outcome variables (performance, student learning outcomes, etc.).

## Conclusions

The results of this study highlight the relevance of trust as an essential resource for coping with organizational change in teaching centres. This suggests that the actions taken by educational organizations to improve trust can help to maintain high levels of well-being among teachers, as they can evaluate both the resources available for coping and the demands of the job more favourably. The development of trust as a positive psychological state could be an essential goal for organisational management in times of change that affects how work is organised. As successive studies show, the actions undertaken by the organisation promote reciprocity among teachers. Organisations should assess and manage trust as an intangible asset that aids in maintaining employee well-being and behaviours relevant to achieving organisational goals.

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## Ethical approval

This study was conducted in accordance with the APA Certification of Compliance with Ethical Principles and was approved by the Ethics Committee of the Universidad Católica del Uruguay (07-23-2020).

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