



Psychological Impact of COVID-19 on Primary Education Teachers in the Basque Country

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COVID-19 has greatly challenged many areas, including those affecting educational systems. Teachers have had to cope with tremendous pressure, stress, and anxiety. The objective of this study is to analyze how primary education teachers in the Autonomous Region of the Basque Country (Spain) perceive the impact that moods and the ensuing consequences of COVID-19 have on their personal and professional spheres. This study used a quantitative methodology based on a dedicated questionnaire. A total of 849 teachers answered the questionnaire and reported that they had felt nervous (\bar{x} : 8.77) and tense (\bar{x} : 8.57), and that they had been shocked by the excessive length of the lockdown (\bar{x} : 7.70) and the restrictions in sports and leisure activities (\bar{x} : 7.59). Significant differences were found according to gender, type of school, socioeconomic environment, age, and years of experience. The study highlights the need to educate both teachers and students so that they can manage and regulate their emotions in unexpected situations. An additional need was identified to enhance teachers' digital skills to better enable them to face the challenges of the Information and Knowledge Society.

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INTRODUCTION

The COVID-19 pandemic brought with it both challenges and changes in all areas, including education, as face-to-face classes were largely interrupted to prevent the spread of the virus and contain its impact. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020a), at the end of March 2020, 166 countries around the world ordered the temporary closure of all their educational institutions, and almost 1.5 billion students at all levels of education (82.8% of the world's total) stopped having face-to-face sessions.

In order to ensure a continuity of instruction throughout the academic year, a face-to-face educational environment was converted into a digital one. As noted by UNESCO (2020b), the closure of schools brought along a series of consequences that were especially severe for the most vulnerable children and their families. These included poor nutrition, since many children and young people relied on free or discounted meals offered in schools; confusion and stress for teachers, as they were unsure of their obligations and of how to remain connected with their students; parents' lack of preparation for distance and home schooling, which was especially evident in the case of families with limited education and resources; rise in dropout rates; and social isolation, among others.

As Tejedor et al. (2020) have argued, this technology-mediated transformation meant "high pressure [for teachers and students] both in their work and in adapting to the new scenario"

(p. 4). An OECD survey (Reimers and Schleicher, 2020) also reported on several challenging issues identified by respondents from the educational sphere, notably including:

Ensuring the continuity of academic learning for students, supporting the students who lacked skills for independent study, ensuring continuity and integrity of the assessment of student learning, ensuring support for parents so they could support student learning, and ensuring the well-being of students and of teachers (p. 30).

As Darling-Hammond and Hyster (2020) underlined, it has become apparent in this context that both teachers and school leaders require new skills to meet the academic and socio-emotional needs of all students. They proposed the following strategies to do so: investing in high-quality educator preparation, aligning educator professional learning opportunities with current needs, supporting mentoring and the development of new teacher roles, and creating time for teachers to collaborate with each other and with key partners.

IMPACT OF COVID-19 ON TEACHERS

The suspension of face-to-face classes and the change to virtual teaching demanded that teachers learned the necessary skills within a short period of time (Cáceres-Muñoz et al., 2020). Adapting educational practices to the virtual scenario required teachers to be trained in digital techniques; however, only 56% of teachers in the OECD received initial training in the use of Information and Communication Technology (ICT), and only 43% felt well or very well prepared for this task (OECD, 2019). In addition, the teaching staff not only had to adapt existing methodologies, resources and materials to enable distance learning, but they also had to offer support, promote resilience, give academic guidance, prevent procrastination, be empathetic listeners, actively engage in providing emotional advice and motivation, and ensuring organization and institutional coherence (Villafuerte et al., 2020).

Several studies carried out in different countries have showed that COVID-19 has had a psychological impact on teachers. In Mexico, Baptista et al. (2020) conducted a study on state schoolteachers and found that “with greater or lesser efforts, they were able to manage information, work collaboratively with their peers, and communicate with parents and school principals” (p. 83). Although it was a difficult challenge for everyone involved, respondents also expressed that they had positive feelings about how they had managed to see the school year through to fruition. In Peru, Quispe and García (2020) concluded that teachers of different educational levels showed signs of stress and anxiety, with higher levels being identified among women. This was also reflected in a study focused on school teachers in India (Mukherjee, 2021), where it was reported that the change to virtual education generated by the pandemic aggravated inequalities between men and women, as it broke down the barriers between space work and personal space, and women had to be available for work 24/7 without any family support to care for their children. However, this study also

pointed to some support from spouse and family in scheduling daily work routines.

In Portugal, Alves et al. (2021) concluded that the pandemic has reduced teachers’ perception of well-being vis-à-vis their profession. According to their findings, while teachers were satisfied with the educational system before the pandemic, COVID-19 caused them concern about their professional future. The study indicated that gender, years of service, well-being, perceptions of teaching difficulties, and future prospects are predictors of professional well-being during the pandemic. Kim and Asbury (2020) carried out a study to learn about the experiences of non-university teaching staff in England within the first 5 or 6 weeks that followed school closures. They identified six major themes: uncertainty, finding a way, worry for the vulnerable, importance of relationships, teacher identity, and reflections. Their conclusion was that, with the support of strong relationships, teachers managed to overcome the initial uncertainty and settle into the situation, eventually finding a way forward.

In Spain, Trujillo-Sáez et al. (2020) conducted a study with more than 5,000 teachers, families, and students, and identified two major ideas around which the vision of the educational community revolved: concern and hope. In this context, the teaching staff expressed concern about monitoring their students, both academically and in terms of their physical and socio-emotional state. They therefore wanted to return to face-to-face learning as soon as possible. In addition, they underlined the need to reinforce both infrastructures (facilities and technological resources) and staff; and they showed that teachers had felt abandoned by the education authorities. The study also argued that “together with the level of self-imposed demand by the teaching staff and the need to put into operation unusual practices for teaching and school management, the experience has generated a deep fatigue among the teaching community” (p. 81). However, despite their disappointment, teachers also expressed their desire for training, not only in digital skills and strategies for virtual teaching, but also in active methodologies, evaluation systems, feedback, and monitoring of students beyond the academic sphere. López-Cassà and Pérez-Escoda (2021) conducted a study with 1,087 teachers in Spain that highlighted the important emotional impact that lockdown has had on the Spanish teaching community. They specifically reported that:

Teachers experienced more intense emotions than usual, as negative emotions such as anguish and nostalgia were very much a part of their lives. In light of the circumstances they were faced with, the positive emotion of tranquility was also experienced by the teachers and contributed to how they coped with the situation (p. 1039).

In the Autonomous Region of the Basque Country, Portillo et al. (2020) explored the perception that teachers of all educational stages had of their own performance in distance teaching during the lockdown period. According to the teachers, what led them to perceive a greater workload and to experience negative emotions were training shortcomings in digital skills. Along these lines, Ozamiz-Etxebarria et al. (2021), in a study with 1,633 teachers from different educational stages in the

Basque Country, found that a high percentage of teachers showed symptoms of stress (50.6%), anxiety (49.4%), and depression (32.2%). They also concluded that gender, age, job stability, the school year in which they taught, and parental status were variables that influenced these symptoms. The authors stressed the need to take care of teachers' mental health to improve both the quality of teaching and students' mental health.

As García (2021) states, the emotional needs of students are generally considered, but the emotional management of teachers is rarely addressed. However, it is important for research to consider this aspect, since "a teacher who is poorly motivated, who feels undervalued, who feels that his or her work is never enough, and who has constant stress triggers, will hardly be able to offer adequate emotional attention to his or her students" (García, 2021, p. 100–101). In the same line, Alves et al. (2021) conclude that the pandemic has reduced the teachers perception of well-being, which must be considered by researchers, as the satisfaction of teachers affects the well-being and motivation of students, factors that are relevant in the academic success of students. In this sense, López-Cassà and Pérez-Escoda (2020, 2021) point out that the emotional impact of COVID-19 on non-university teachers needs to be studied in depth. These have led us to focus this study on the emotional impact of COVID-19 on primary school teachers.

METHODOLOGY

Objectives and Hypotheses

The general objective of this study was to analyze how primary education teachers in the Basque Country perceived the impact of certain moods and consequences of COVID-19, both on their personal and professional spheres.

The hypotheses were:

- H1: Teachers perceive that due to COVID-19, certain moods had a negative impact on their daily lives.
- H2: Teachers perceive that some consequences resulting from COVID-19 had a negative impact on their professional performance and their field.
- H3: There are significant gender-based differences regarding the impact that some moods and some consequences of COVID-19 had on teachers.
- H4: There are significant differences regarding the impact that some moods and some consequences of COVID-19 had on teachers according to the type of school.
- H5: There are significant differences regarding the impact that some moods and some consequences of COVID-19 had according to the socioeconomic level of the families of schoolchildren.
- H6: There are significant differences regarding the impact that some moods and some consequences of COVID-19 had on teachers according to their ages.

- H7: There are significant differences regarding the impact that certain states of mind and some consequences of COVID-19 had on teachers according to their years of experience.

Sample and Data Collection

The sample consisted of all the primary education teachers in the Basque Country. No exclusion criteria was established. In fact, all inservice teachers active at the primary education stage during home confinement (from March 2020 to June 2020) were invited to participate in the study. The questionnaire was sent to the heads of all the schools in the Basque Country (Spain) that offer primary education. They sent the questionnaire to their teachers, those who were teaching (active) during the home confinement from March to June 2020. It is a simple random probabilistic sample.

The questionnaire was hosted on the Qualtrics platform. The two official languages in the Basque Country (Spanish and Basque) were used. The estimated response time was 15 min. The questionnaire was sent to the schools on January 7, 2021. After two reminders, the last questionnaires to be returned were received on February 12, 2021.

The final sample consisted of 1069 teachers, 8.9% of the total sample. Taking into account that the total number of primary teachers at this stage was 11891 in the academic year 2018–2019 (Eustat, 2021), the sample was representative. As Sierra Bravo (1987) maintains, the sample size has to meet 4 factors, which are: the breadth of the universe, the confidence level, the estimation error and the standard deviation. In this study the universe is 11891 teachers, so that for a confidence level of 95% and a margin of error of 5%, the necessary sample size is 373, so we can affirm that since 1069 teachers (8.9%) responded, the sample is representative.

Table 1 shows the participation percentages regarding the context variables.

Instrument

A questionnaire was first designed based on the study by Trujillo-Sáez et al. (2020), Quispe and García (2020), Tejedor et al. (2020), Baptista et al. (2020), Balluerca et al. (2020), Martínez-Garcés and Garcés-Fuenmayor (2020), Armando et al. (2020), Burgos-Videla et al. (2021), and Sánchez et al. (2020).

Subsequently, the judgment of eight experts in education and ICT was used. They were asked to assess the suitability of the items, their clarity, and the need for any further categories to be added.

The experts made the following recommendations: the scales should be changed, and some of the items should be grouped, replaced, split and/or reformulated according to the specific use of ICT in primary education.

Based on the expert judgment, the questionnaire consisted of seven dimensions: general context (type of school, school location, gender of teachers, socio-economic background of families, age of teachers, years of teaching experience, and teaching cycle); psychological impact; psychological causes and consequences; technological infrastructure and resources; ICT uses; ICT training; and ICT interest. Questions 1–4, 7, 11, and 13 were single-answer multiple choice questions; questions 5, 6,

TABLE 1 | Participant sample.

Variable	Typology	Questions about the impact of state of mind on teachers' professional performance (N = 849)		Questions about the impact of the variables on teachers' daily life (N = 731)		Questions on the impact of variables on teachers' professional life (N = 731)	
		Absolute	%	Absolute	%	Absolute	%
School	Public	560	65.95	479	65.53	479	65.53
	Private or publicly-aided private	289	32.97	252	34.47	252	34.47
Area	Bizkaia	469	55.24	407	55.68	407	55.68
	Gipuzkoa	254	29.91	214	29.27	214	29.27
	Araba	126	14.84	110	15.05	110	15.05
Socioeconomic environment	Low	124	14.6	106	14.5	106	14.5
	Medium-Low	374	44.05	323	44.19	323	44.19
	Medium-high	333	39.22	284	38.85	284	38.85
	High	18	2.12	18	2.462	18	2.462
Stage	1st	412	48.52	353	48.29	353	48.29
	2nd	437	51.47	378	51.71	378	51.71
Gender	Female	672	79.15	575	78.66	575	78.66
	Male	169	19.9	148	20.25	148	20.25
	Others	8	0.94	8	1.094	8	1.094
Age	21-30	151	17.78	123	16.83	123	16.83
	31-40	192	22.61	176	24.08	176	24.08
	41-50	236	27.79	205	28.04	205	28.04
	51-64	270	31.8	227	31.05	227	31.05
Years of teaching experience	0-10	274	32.27	234	32.01	234	32.01
	11-20	238	28.03	211	28.86	211	28.86
	21-30	180	21.2	162	22.16	150	20.52
	31 or more	157	18.49	124	16.96	136	18.6

Developed by the authors.

14, and 16 were open-ended; question 15 was a ranking question; and the remaining questions were 0-10 Likert scale questions. Questions 14 and 16 were not mandatory as they were linked to the affirmative answers given in questions 13 and 15. All other questions were mandatory, except the ones about teachers' daily life and teachers' professional life.

Finally, a pilot study was conducted to examine the overall performance of the measuring instrument. Five primary school teachers with similar characteristics to the target population participated in this study. They corroborated the extent to which the questionnaire items were easily understood.

Analysis and Results

The statistical package SPSS version 27 was used for the data analysis. The questionnaire was subjected to an internal consistency analysis using Cronbach's alpha coefficient. According to Nunnally (1978), values of Cronbach's alpha greater than 0.7 are considered good, whereas Field (2009) recommended a minimum level of 0.8 to indicate good internal consistency. The total Cronbach's alpha coefficient for the questionnaire was 0.87, which showed an adequate internal consistency and reliability.

The three scales of the questionnaire used in this article measure, on the one hand, the impact that some states of mind have on the professional performance of teachers, and the impact of a series of variables on their daily personal lives and their professional lives. The Cronbach's alpha for each was 0.88 and 0.7, respectively. An adequate level of internal consistency was achieved in both cases.

A factor analysis of principal components showed that they were grouped in the same way as they were presented in the questionnaire. It can therefore be stated that the questionnaire meets validity criteria.

Table 2 shows the means and standard deviations of the evaluation scale in relation to the impact of some states of mind on teachers' professional life during lockdown. As can be seen, the states of mind that had the most impact were being nervous and tense, followed by irritated, anxious, restless, and annoyed, and those that obtained the lowest score were joyful and happy.

Whereas no significant differences were perceived regarding the socioeconomic background of the families, some were identified with respect to the rest of the independent variables analyzed. However, if each of the variables is analyzed independently, there are significant differences in relation to the

TABLE 2 | Impact of states of mind on teachers' professional performance.

Variable	Mean	Deviation
Nervous	8.77	2.486
Tense	8.57	2.665
Irritated	7.70	2.926
Anxious	7.67	2.985
Restless	7.64	2.800
Annoyed	7.05	2.933
Melancholic	6.94	3.010
Sad	6.93	2.965
Angry	6.76	2.987
Optimistic	6.63	2.598
Upset	6.41	2.972
Dejected	6.18	2.998
Downcast	6.04	2.915
Jovial	5.53	2.582
Happy	5.23	2.613
Joyful	5.10	2.646

Developed by the authors.

type of school, the socioeconomic environment, gender, age, and years of experience. As far as school type is concerned, public schools scored higher on feeling optimistic, jovial, and happy, and lower on feeling joyful. In contrast, private and publicly-aided public schools scored higher on feeling joyful and lower on feeling optimistic, jovial, and happy.

Regarding the socioeconomic environment, there are significant differences in terms of feeling joyful, optimistic, downcast, jovial, and happy. Families from higher socioeconomic backgrounds also scored higher on all the variables referred to above, except for feeling downcast, which had poorer scores. In the latter case, families from low socioeconomic environments scored higher. However, families from a medium-low socioeconomic background scored lower on feelings of joyfulness and sadness, and those from a more disadvantaged socioeconomic level also scored low on feeling optimistic and restless.

Regarding gender, women scored higher than men on feeling nervous, irritated, melancholic, tense, angry, anxious, restless, and sad. It was only regarding feeling optimistic that men scored higher than women.

As far as age is concerned, people between the ages of 21 and 30 scored the highest on feeling joyful, melancholic, optimistic, dejected, and happy; those aged between 31 and 40 scored the highest with respect to feeling annoyed, angry; and those aged between 41 and 50 had the highest scores for feeling irritated and upset. People between the ages of 50 and 64 had the lowest scores on all the variables mentioned above (irritated, joyful, melancholic, optimistic, upset, annoyed, angry, and happy), with the exception of feeling dejected. People aged 21–30 scored the lowest on this category.

Finally, in terms of years of experience, people with 0–10 years of experience scored higher regarding feeling joyful, melancholic, optimistic, dejected, and happy; respondents with 11–20 years of experience had higher scores in connection with feeling irritated,

upset, annoyed, and angry. People with more than 31 years of experience scored lower regarding feeling irritated, melancholic, dejected, upset, annoyed, and angry; and people with between 21 and 30 years of experience had lower scores on feeling joyful, optimistic, and happy.

Regarding the impact that the variables studied had on the daily life of teachers during lockdown, **Table 3** shows the means and standard deviation values of the scale used for their evaluation. In this case, the variables that had the most impact were the excessive length of the lockdown period and the restrictions in sports and leisure activities, while “being hospitalized or having loved ones in hospital” had the lowest score. It is worth highlighting that, of the ten variables included in the questionnaire that the teachers completed, only three of them scored above five points; however, one of them, namely, fear of being infected, scored slightly higher than the mean values.

While generally speaking significant differences could be seen in terms of age and years of experience, when focusing on each of the variables analyzed, no significant differences were identified regarding the type of school where teachers worked, although there were some with regard to the socioeconomic background of families and gender. Specifically, regarding the socioeconomic environment, significant differences were seen with respect to the variable “being hospitalized or having loved ones in hospital.” People from families from a high socioeconomic background scored higher than those from a low socioeconomic background. Significant differences could also be perceived in relation to gender regarding the variable “restrictions in sports and leisure activities.” In this case, men scored higher than women.

For age and years of experience, there were significant differences in relation to having school-age children in their care (in both cases, people between the ages of 41 and 50 had the highest scores and those who had between 21 and 30 years of experience scored the lowest); older dependents (in both cases, people between the ages of 50 and 64 scored the highest and those who had between 21 and 30 years of experience scored the lowest); lack of social support (in both cases, people between the ages of 41 and 50 scored the highest and those who had between 21 and 30 years of experience scored the lowest); belonging to an at-risk group (in both cases, people between the ages of 50 and 64

TABLE 3 | Impact on teachers' daily life.

Variables	Mean	Deviation
Children of school age in their care	4.12	4.081
Elderly people in their care	3.29	3.460
Being hospitalized or having loved ones in hospital	2.29	2.805
Being ill or having loved ones who are ill	3.21	3.426
Lack of social support	3.16	3.138
Fear of being infected	5.36	3.174
Belonging to an at-risk risk group	3.25	3.095
Excessive length of lockdown	7.70	2.664
Economic insecurity	3.00	2.807
Restrictions in sports and leisure activities	7.59	2.777

Developed by the authors.

scored the highest and people who had between 21 and 30 years of experience scored the lowest); excessive length of lockdown (in both cases, people between the ages of 41 and 50 scored the highest and those aged between 50 and 64 scored the lowest); and restrictions in sports and leisure activities (in both cases, people between the ages of 21 and 40 scored the highest and those between 50 and 64 years of age scored the lowest).

Regarding the impact on the teachers' professional life during lockdown, **Table 4** shows the means and standard deviations of the evaluation scale. As can be seen, the variables that had the greatest impact were rescheduling of working hours and subject redesign. On the contrary, the lack of support from the management team, the collapse of the virtual learning environments (VLEs) and the lack of support from other teachers were the items that scored the lowest, specifically, below 5 points.

In general terms, there were significant differences with respect to all the variables analyzed, but when considering each of the variables (**Table 4**), significant differences could be perceived in all of them, except for the lack of clear guidelines from the management team on how to proceed and other issues, lack of support from the management team, and an unstable Internet connection.

As far as the type of school is concerned, whereas public schools scored higher on all the variables in which significant differences were observed, that is, regarding the lack of ICT training among families, lack of ICT training among students, lack of ICT resources for teachers, lack of ICT resources among the families/students, precarious technological resources, excessive bureaucratic hurdles on the part of the school, unstable Internet connection on the part of students, lack of interest of students and lack of involvement of families, the private

and publicly-aided private schools scored the lowest on these variables.

In relation to the socioeconomic environment of the families, for all the variables in which significant differences could be perceived (the same in the case of school types), the lower the socioeconomic level, the higher the score obtained.

Regarding gender, women scored higher than men on all variables in which significant differences were observed, that is, rescheduling of working hours, subject redesign, lack of time for forced adaptation, lack of ICT training for teachers, lack of ICT training for students, precarious technological resources, excessive bureaucratic hurdles on the part of the school, and collapse of the VLEs.

Regarding age, scores were lower among people aged between 21 and 30 on the following variables: rescheduling of working hours, subject redesign, lack of time for forced adaptation, lack of ICT training of teachers, lack of ICT training for families, and precarious technological resources. The score was higher for people aged between 21 and 30 years old regarding the lack of support from other teachers, in which the score was lower among people between 41 and 50 years old. These group aged between 41 and 50 years old also scored the highest regarding the redesign of their subject, lack of time for forced adaptation, lack of ICT training of families, and precarious technological resources. The age range was slightly reduced (that is, covering professionals from 31 to 40) among those who scored the highest in rescheduling of working hours, and increased concerning the lack of ICT training of teachers, as respondents aged between 50 and 64 scored the highest in this case.

Finally, in relation to years of experience, significant differences could be perceived regarding the following variables: remote work overload, rescheduling of working hours, subject redesign, lack of time for forced adaptation, lack of ICT training of teachers, lack of ICT resources for teachers, lack of ICT resources for families/students, precarious technological resources, and lack of support from other teachers. The highest scores were obtained by people who had between 11 and 20 years of experience in the case of all the variables except for the one that referred to the redesign of the subject, on which the highest score was by people with 21–30 years of experience, and the one that referred to the lack of support from other teachers, on which the highest scorers were those with between 0 and 10 years of experience. Finally, people who had 0–10 years of experience scored the lowest on the following variables: remote work overload, rescheduling of working hours, subject redesign, lack of time for forced adaptation, and lack of ICT teacher training. For the rest of the variables, that is, lack of ICT resources for teachers, lack of ICT resources for families/students, precarious technological resources, and lack of support from other teachers, those who scored the lowest were people with more than 31 years of experience.

CONCLUSION

Two years ago, COVID-19 rang alarm bells in the world of education, as it was required to adapt to remote education in a

TABLE 4 | Impact on teachers' professional life.

Variables	Mean	Deviation
Remote work overload	8.66	2.778
Rescheduling of working hours	8.95	2.235
Subject redesign	8.98	2.157
Lack of time for forced adaptation	8.63	2.469
Lack of ICT training for teachers	6.89	3.145
Lack of ICT training for families	8.50	2.485
Lack of ICT training for students	8.04	2.661
Lack of ICT resources for teachers	6.88	3.131
Lack of ICT resources for families/students	8.04	2.680
Precarious technological resources	7.26	3.013
Excessive bureaucratic hurdles imposed by schools	6.21	3.418
Lack of clear guidelines from the management team on how to proceed and other issues	5.29	3.280
Lack of support from the management team	3.98	3.267
Collapse of VLEs	4.82	3.129
Unstable Internet connection (teacher)	5.24	3.415
Unstable Internet connection (student)	7.26	2.874
Lack of support from other teachers	4.27	3.247
Lack of student interest	6.06	2.969
Lack of family involvement	5.72	2.926

Developed by the authors.

very short period of time. This involved rethinking teaching and learning methods, mobilizing resources, and training teachers in record time. This was a new situation for many, which was unexpected for the vast majority. The consequences of the pandemic were immediate. Both teachers and students suffered enormously. In the words of Villafuerte et al. (2020), teachers endured challenging experiences, as they had to take on a role as empathic and active listeners, as well as emotional advisors and motivators. The results showed that, in line with the study by López-Cassà and Pérez-Escoda (2021) and Ozamiz-Etxebarria et al. (2021), feeling nervous, tense, irritated, anxious, restless and annoyed, that is, negative emotions, were the states of mind that caused the strongest negative impact among the participating teachers, in line with the study by Portillo et al. (2020). This was particularly true for women, a fact that was also confirmed by the study by Quispe and García (2020), and for teachers aged between 31 and 50 or who had 11–20 years of experience. It is important to note that, consistent with the study by Alves et al. (2021), the impact of these states of mind was lower among teachers over 50 years of age and with more years of service.

The learning effort that teachers had to make within a very short period of time (Cáceres-Muñoz et al., 2020), the fact that less than half of the teachers felt prepared for the new scenario brought by COVID-19 (OECD, 2019), and the pressure that this put them under (Tejedor et al., 2020) are some of the reasons that supported these results.

This study also showed that public school teachers, as opposed to teachers employed by private and publicly-aided private schools, seemed to feel more optimistic, jovial, and happy, albeit less joyful. This supports the study by Baptista et al. (2020), which concluded that public school teachers showed positive feelings (in their case, by having managed to complete the school year).

This study has also confirmed that families from a higher socioeconomic background felt more joyful, optimistic, jovial, and happy than those from more socioeconomically disadvantaged social levels.

According to Kim and Asbury (2020), concern for the most vulnerable was one of the most heated topics during the pandemic. This study showed that this concern was reflected in the unease generated by being hospitalized or having loved ones in hospital, which had a greater impact on people from families with a high socioeconomic background; having children of school age in their care and not having social support, which had an impact above all on people between the ages of 41 and 50; having older people in their care, and belonging to an at-risk group, which had a greater impact on people between the ages of 50 and 64.

Additionally, one of the issues with a major negative impact was the restriction in sports and leisure activities. It had a greater impact on men than on women, and also on teachers between the ages of 21 and 40. Another aspect that had a negative impact on teachers between the ages of 41 and 50, but less so on those over 50, was the excessive length of the lockdown period.

The variables that had the strongest professional impact on teachers during lockdown were the rescheduling of working

hours and subject redesign, while the lack of support from the management team, the collapse of the VLEs, and the lack of support from other teachers were the items that obtained the lowest scores, below the mean values. This somewhat contradicts the results of the study by Trujillo-Sáez et al. (2020), who showed that teachers had felt abandoned by the education authorities.

In addition, significant differences were perceived on all variables, except for the lack of clear guidelines from the management team on how to proceed and other issues, the lack of support from the management team and having an unstable Internet connection. Along these lines, Trujillo-Sáez et al. (2020) noted that teachers underlined the need to reinforce infrastructures (facilities and technological resources) and staffing levels and reported that they have felt abandoned by the education authorities.

It is worth noting that the impact of a number of variables was greater in public schools and in lower socioeconomic status families. These variables were: lack of ICT training for families and students, lack of ICT resources for teachers and families/students, precarious technological resources, excessive bureaucratic hurdles on the part of the school, unstable students' Internet connection, lack of interest of students, and lack of involvement of families.

Regarding gender and inequalities between men and women, the study confirmed the results of the research conducted by Mukherjee (2021). Ultimately, it was women who scored higher than men regarding the rescheduling of working hours, subject redesign, and the lack of time for forced adaptation. These results could become even more negative due to the lack of ICT training for teachers and students. Not surprisingly, according to the OECD (2019), only 56% of teachers received initial training in the use of ICT which, according to Portillo et al. (2020), was one of the difficulties pointed out by teaching staff. Additionally, the use of ICT led them to perceive that they had a heavier workload. It should not be forgotten that it was women who suffered the strongest impact of precarious technological resources, excessive bureaucratic hurdles on the part of the schools, and the collapse of the VLEs.

However, it was interesting to find that all these variables had a greater impact on teachers between the ages of 41 and 50 or with 11–20 years of experience, and less impact on those between 21 and 30 years of age or with 0–10 years of experience, except for the lack of support from other teachers, which had a stronger impact on people over 41 years of age. Finally, the lack of ICT training for teachers had the greatest impact on teachers between the ages of 50 and 64.

As future lines of research, it is proposed to replicate the study with teachers at other stages (Pre-school, Compulsory Secondary Education and Baccalaureate), as well as to carry out a comparative study between teachers who teach remotely/online and face-to-face.

The data were collected in January 2021, so the teachers' opinion may have been biased by measuring the information after home confinement.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by University of Deusto Ethic Committee. The

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patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

AA, OK, and JP-C: creation of the frame and research design used in the study, interpretation of the results, and supervision of the entire work process. All authors were involved in the discussion, writing and revision of the manuscript, and they gave final approval to the version that is submitted for publication.

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