Demystifying EFL Teachers' Experiences During the Pandemic: A Study of the Psychosocial Risks Resulting from COVID-19

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Abstract. This study aims to identify the main psychosocial risks that COVID - 19 has caused in Ecuadorian EFL teachers and determine the factors associated with developing these risks. This study employed a quantitative approach and a non-experimental cross-sectional design, with a sample of 980 teachers from different educational levels from Ecuador. The data analysis was done using Stata 16 statistical program and a multivariate binary logistic regression (LR). The results showed that teachers are emotionally drained, isolated, frustrated with teaching, and exhausted because of teaching during the pandemic, being the women the most affected. The main factors that increased the probability of suffering these psychosocial effects were extra activities beyond working hours, status in the teacher's institutions, and gender.

Keywords: Psychosocial risks · Factors · COVID-19 · Ecuador · Online teaching

1 Introduction

In the last two years, humanity has experienced unthinkable changes which resulted from COVID-19. These changes affected every aspect of our lives, such as work, social interactions, the economy, and health. Concerning work, people, in some cases, could maintain their jobs and continue their activities from their houses. Opposite to a significant number of people who lost their jobs due to the confinement mandated by different governments aiming to control the pandemic. Many companies and businesses closed, leaving their workers jobless from one day to another. Isolation reduced social interactions to the minimum or, in some cases, interactions with other people outside their homes were nonexistent. This negatively impacted the mental health of the world population. To worsen things, the global economy was affected, and, as usual, developing countries were the ones that were severely hit. Their impoverished economies rapidly slumped, resulting in a dramatic cut of social services budgets, particularly health, when it was the most needed because of COVID-19.

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Fortunately, education did not stop during these tumultuous times but completely moved to a virtual environment. A new reality that teachers, who were unprepared to face, had to adapt rapidly. Most teachers had to overcome their struggles, sufferings, and fears and adjust to the new demands to provide their students with an appropriate education and had to use digital tools when teaching and learning [1]. In addition, teachers had to develop a curriculum that helps students think critically about the situations around them [2] using the existing resources.

Considering that education is one of the foundations of society, much attention was given to this aspect. Media turned their attention to how governments were dealing with the educational systems in their countries, and - as expected - teachers were in the spotlight. Teachers were the target of positive and negative criticisms about their practices [3]. Teachers who could quickly adapt to virtual education were admired and praised, unlike teachers who could not cope with these fast changes received negative comments. People did not understand that changes do not happen overnight and that the cultural background does not evolve as fast as society's expectations, as mentioned in [4].

These changes and pressure to perform under challenging times affected teachers. Some of them experienced psychological or health problems [5]. However, most of the studies happening during the pandemic time focused more on teaching methodology rather than teachers. Thus, it is essential to identify the main psychosocial risks that COVID - 19 has caused in Ecuadorian EFL teachers and determine the factors associated with developing these risks.

2 Literature Review

2.1 Psychosocial Risks

When the confinement started in Ecuador, teachers had to teach from their houses. This situation forced educators to juggle between their home and teaching responsibilities, raising their psychosocial risks as their stress levels increased. In most cases, this led to cardiovascular problems and loss of concentration [4]. The EU-OSHA [6] found that the [p]sychosocial risks and work-related stress are among the most challenging occupational safety and health issues. Hernandez et al. [7] mention that Karasek indicated that job demands (work rate, availability, time pressure, difficulty, and effort) and job decision latitude (potential to control daily tasks) are also factors that increase the psychosocial risks.

How people respond to work and working conditions depends on the psychosocial environment they are part of [8]. Depending on the characteristics of the environment, workers' mental, physical, and social health can be negatively affected. For example, a working environment with no regular schedules, unpredictable activities, and extra online work increases exponentially the possibility of suffering psychosocial risk among workers [9].

It is essential to consider that work is a fundamental part of the person's identity, and the labor relationships can carry psychic aftermath [10] in the form of psychosocial risks. Thus, the importance of promoting a healthy job environment. However, as [4] and [10] mention, administrators generally focus more on economic and administrative issues rather than the workers' welfare, and to perpetuate these practices, they promote these statements:

1. Stress depends on the person; some people are predisposed to experience high-stress levels, unlike others.
2. Lack of information about the adverse effects derived from psychosocial risks.
3. Cultural background that associates stress only with certain kinds of jobs.
4. Disbelief and skepticism about mechanisms that can reduce the level of stress [10, p. 57]

These misconceptions are more evident in education, where all attention is given to students and not to teachers. Media, parents, and authorities judge the teachers' work superficially without considering that they are also humans and, like the rest of the workers, are exposed to the same job pressure, stress, and risks. ILO [11, p. 7] defines *risks* as environment, job content, organizational conditions, workers' capacities, needs, culture, and personal extra-job interaction with each other. These interactions do not always occur harmonically. The environment where these interactions occur and the tasks given by the institution can also result in psychosocial risks [10], creating discomfort affecting their personal lives and reducing their levels of job satisfaction to the minimum.

3 Methodology

3.1 Approach, Design, and Scope of the Research

This study employed a quantitative approach and a non-experimental cross-sectional design to identify the main psychosocial risks that COVID - 19 has caused in Ecuadorian EFL teachers and determine the factors associated with developing these risks. It also sought to validate the following hypothesis: *factors related to teachers' gender, age, school location, qualifications, types of contracts, working space, and mode of instruction increase the probability of developing psychosocial risks.*

To achieve this objective, 980 teachers from private and public primary, secondary and higher education institutions participated in this study. The institutions were located in 23 provinces from the three regions of the country, namely, Highlands, Coast, and Amazonia. The scope of this research was descriptive, exploratory, and explanatory.

The data for this study was collected through a questionnaire that contained eleven closed-ended items. For the statistical analysis, this instrument comprised variables such as age, gender, ethnicity, marital status, level of education, institution location, type of institution, time spent in class preparation, and other factors related to psychosocial risks.

3.2 Data collection Procedure

The data collection process was carried out using a probabilistic sampling where all Ecuadorian EFL teachers working in all levels of education in the three regions of the country had the same probability of being surveyed. Following this methodology, a sample of 980 teachers participated in this study.

Once the questionnaire was validated and piloted, it was uploaded on the Google Forms platform. The link to respond to the instrument was sent to the sample through email, WhatsApp, and Facebook. The researchers opted to use this mode of data collection to increase the response rate and widen its reach to all country regions. Furthermore, the respondents' anonymity and confidentiality were highlighted to increase participation and obtain objective and consistent information. The questionnaire was administered online during January, February, and March 2021, and respondents needed 7 to 10 min to complete it.

3.3 Data Analysis

Following the study's focus and its scope to achieve its objective and validate the general hypothesis, a multivariate logistic regression analysis was used. After refining and organizing the data, the Stata 16 statistical program was used to carry out the numerical procedure.

3.4 Econometric Methodology

Given the nature of the distribution of the dependent variable and the objective of the study, a multivariate binary logistic regression (LR) was used. Through this model, it is possible to determine the relationship between a dichotomous qualitative dependent variable (dependence) and multiple independent or explanatory variables, either qualitative with various categories and/or quantitative.

To obtain an adjusted estimate of the occurrence probability of an event from the independent variables vector, whose main characteristic is the relationship between the obtained coefficients in the quantification of the effect through the Odds Ratio (OR). When the coefficient of the variable is positive, we get an OR > 1; conversely, if the coefficient is negative, the OR < 1 [12, pp. 553–556] $\Pr(Y = 1|X_1, X_2, ..., X_k) = F(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_k X_k)$ [13, p. 283].

Based on this model, the researchers were able to explain the probability of the occurrence of psychosocial risks among EFL teachers. As is shown below in the general equation that represents the econometric model employed in this study:

$$\begin{aligned} \text{excessivework} &= \beta_0 + \beta_1 \,\text{gender} + \beta_2 \,\text{age} + \beta_3 \,\text{instlocation} + \beta_4 \,\text{acadegree} \\ &+ \beta_5 \text{edulevelwork} + \beta_6 \text{dedicationtime} + \beta_7 \text{typecontract} + \beta_8 \text{workplace} \\ &+ \beta_9 \text{extractivities} + \beta_{10} \text{synchclasshours} + u_i \end{aligned}$$

The variables used in the specification of the econometric model are presented in Table 1:

Table 1. Description of variables

Type of variable	Variables	Description	Values
Dependent	Psychosocial Risks (excessivework)	It is the proxy variable that represents psychosocial risks. Indicates if the EFL teachers consider that they work excessively in virtual teaching	1 = Yes 0 = No
Independent	Gender (Gender)	Represents the teacher's gender	1 = Male 0 = Female
	Age (age)	Represents the teacher's age	Years
	Location of the institution (instlocated)	Indicates the location of the institution where EFL teachers work	1 = Urban 0 = Rural
	Academic degree (acadegree)	Indicates the highest academic degree achieved by teachers	1 = Higher education, undergrad 2 = Higher education, post-grad 3 = Superior technical and / or technological 4 = High school
	Education level work (edulevelwork)	Indicate the level of education that teachers work with	1 = Higher education 2 = Secondary 3 = Primary and preschool 4 = Superior technical and / or technological
	Hiring scheme (dedicationtime)	Indicates the time teacher works in the institution	1 = Full – time 2 = Part- time 3 = Hourly
	Status (labrelationship)	Indicates the type of contract teachers have with their institutions	1 = Non-permanent 2 = Permanent or tenure 3 = Probationary status 4 = Professional services

(*continued*)

Table 1. (*continued*)

Type of variable	Variables	Description	Values
	Workplace (workergonomic)	Indicates whether the teacher's workstation (chair, desk, shelves) is ergonomically adjusted to their needs	1 = Yes 0 = No
	Extra activities (extractivities)	Indicate whether the teachers have been assigned extra activities to those that they regularly carried out	1 = Yes 0 = No
	Synchrounous classes hours (synchclasshours)	Represents the average number of hours per day that the teacher dedicates to teaching synchronous classes	Hours
	Random error (Randomerror)	Represents all the independent variables that can affect the dependent variable and have not been explicitly considered in the model specifications	ui

4 Discussion

During the pandemic caused by the COVID – 19, teachers never stopped teaching. They had to change their lives abruptly and turn their homes, personal and sacred spaces, into classrooms exposing their private lives [5]. This phenomenon may have created an unhealthy job environment and, therefore, increased teachers' stress levels. Unfortunately, little was said about this by educational authorities and the media.

The lack of public awareness about the teachers' struggles may result from the fake job statements that administrators aim to perpetuate [4, 10] to minimize the psychosocial risks that EFL teachers experience. The media started advertising and praising teachers' extra activities, such as traveling to their students' houses to deliver their assignments or providing in-person tutorials at the high of the pandemic. Besides, additional activities such as posting ELT videos online or giving online tutorials outside working hours became the norm in online teaching.

Ecuadorian society started to relate the number of the teachers' activities done outside their class time with their vocation and commitment. Teachers who did not work extra hours or were not available for students and parents outside the class schedule were considered irresponsible and insensitive to the health situation. This may have resulted from the country's shared cultural background, which reduces the role of teachers as mere providers of teaching services and care at the expense of their own welfare.

According to the survey results (Table. 2), approximately 40 out of 100 teachers sometimes felt emotionally more exhausted as consequence of online work, and 32 out of 100 said they felt frequently exhausted. Likewise, 20 out of 100 teachers always felt more tired at the end of the virtual day than the face-to-face day, and 37 out of 100 only sometimes. On the other hand, around 34 out of 100 teachers sometimes felt socially isolated due to the pandemic. In addition, 40 out of 100 teachers said they sometimes feel frustrated at work due to this new type of study. Finally, 39 out of 100 teachers sometimes felt fatigued in the face of the online workday.

Table 2. Main Psychosoical risks

	Emotionally more exhausted	More tired at the end of the day	Socially isolated	Frustrated at my job	Fatigued
Sometimes	40,5% 397	37,3% 366	33,7% 330	39,9% 391	39,2% 384
Usually	7,1% 70	7,5% 73	16,1% 158	18,8% 184	23,9% 234
Rarely	31,7% 311	30,5% 299	26,9% 264	16% 157	12,8% 125
Never	3,8% 37	4,2% 41	10,3% 101	18,4% 180	19,3% 189
Always	16,8% 165	20,5% 201	13% 127	6,9% 68	4,9% 48
Total	100% 980	100% 980	100% 980	100% 980	100% 980

To bring to the fore teachers' struggles and their probability of suffering psychosocial risks, data in Table. 3. Shows the magnitude of the effect (increase or decrease in terms of probability) that each independent variable has on the binomial dependent variable (psychosocial risk). The results in Table. 3. Show that the probability of experiencing psychosocial risks increased 2.4 times when EFL teachers engaged in additional activities beyond their working hours and responsibilities ($\alpha = 0.01$). Furthermore, each extra synchronous teaching hour added to their usual timetables ($\alpha = 0.05$) increased 1 more time this probability.

In the educational system in the country, EFL teachers can be classified according to their status as tenured and non-tenured. Depending on their hiring scheme, teachers are classified as full-time (40 h per week), part-time (20 h per week), and hourly (less than 20 h per week) teachers. Apart from teaching, institutions usually assign managing or administrative responsibilities to tenured-full-time teachers. During the pandemic, these responsibilities rose 1.9 times the probability of facing psychosocial risks compared to non-tenured teachers ($\alpha = 0.01$). With EFL teachers' status, the teacher's hiring scheme also played a fundamental role. The lesser hours their contract included, the lesser the probability of experiencing psychosocial risks. Table. 3. Shows that part-time teachers ($\alpha = 0.01$) had 0.3 fewer possibilities of encountering psychosocial risks and hourly teachers 0.8.

Concerning gender (male or female) with a statistically significant effect of $\alpha = 0.05$, data reveals that female teachers had 1.161 more probabilities of suffering psychosocial risks than male teachers. This could be the result of the archaic idea about the role that women are expected to perform in our society (managing the family and their homes) [5], which, combined with the job demands and job decision latitude [7], must have led to high levels of stress. Thus, the need to promote gender equality and equity in our society.

Another factor that influenced the psychosocial risks was the age ($\alpha = 0.01$) and the experience that goes with it. More experienced EFL teachers showed 0.9 less probability to have psychosocial risks. How EFL teachers arranged their physical space in an ergonomic-adapted working station that facilitated ELT online, also depended on their experience. Data shows that having a proper teaching space ($\alpha = 0.01$) reduced 0,4 times the probabilities of psychosocial risk. This debunks the common perception that young teachers deal better with virtual education since they are more familiar with the technology. Results in Table. 3. Also confirm that effective virtual education goes beyond technological tools and is a holistic practice that starts with having an adequate teacher's space to deliver their classes.

Table 3. Results of the calculation of multivariate regression approach (OLS)

Dependent Variable: PSYCHOSOCIAL RISK (Overload of work)									
Variables	**Variable Categories**	**N**	**Omitted Category**	**Coefficient**	**Standard Error**	**P> |z|**	**Odds Ratio**	**dy/dx**	**IC 95%**
Gender	Male	301	X						
	Female	679		0.149	0.206	0.046**	1.161	.0189	.775 - 1.739
Age	-	980		-0.025	0.009	0.011***	.975	-.003	.957 - 0.994
Institution located	Urban	830	X						
	Rural	150		0.270	0.244	0.268	1.310	.034	.812 - 2.114
Academic degree	Higher education third level	491	X						
	Higher education fourth level	448		-0.159	0.243	0.051*	.853	-.019	.529 - 1.373
	Superior technical and / or technological	21		-0.817	0.530	0.123	.442	-.121	.156 - 1.248
	High school	20		-0.291	0.569	0.609	.747	-.038)	.245 - 2.279
Education level work	University higher education	265	X						
	Secondary	288		-0.534	0.291	0.067*	.586	-.071	.331 - 1.037
	Primary y preschool	348		0.048	0.314	0.880	105	.005	.566 - 1.941
	Superior technical and / or technological	79		-0.400	0.392	0.308	.670	-.052	.310 - 1.446
Dedication time	Full - time	881	X						
	Part-time	50		-1.048	0.353	0.003***	.351	-.166	.175 - 0.700
	Hourly- time	49		-0.132	0.396	0.047**	.876	-.017	.402 - 1.905
Labor relationship	Hired Staff (Contrato occasional)	254	X						
	Permanent status or tenure (nombramiento permanente)	597		0.678	0.227	0.003***	1.969	.087	1.262 - 3.072
	Probationary status (Nombramiento provisional)	98		-0.276	0.305	0.367	.759	-.045	.417 - 1.381
	Professional services	31		-0.328	0.461	0.477	.720	-.054	.292 - 1.778

(*continued*)

Table 3. (*continued*)

Ergonomic Workplace	Yes	391	X	
	No	589		-0.891
Extra activities	Yes	576	X	
	No	404		0.882
Synchronous class time	-	980		0.071
Constant				1.993
	Observations:		980	
	Pseudo R^2 :		0,114	
	Prob > chi^2 :		0.000	
	Prob > chi^2 (Hosmer-Lemeshow):		0.3941	
	Correctly classified :		83.06%	
	Area under ROC curve:		0,736	

Statistic Significance : *** p<0.01, ** p<0.05, * p<0.1
Coeficients without asterisks = non-significant parameter at any level

5 Conclusions

Teaching is a profession that requires dedication and vocation to help students. Unfortunately, this intrinsic aspect of teaching seems to hide the adverse effects teachers can have in their lives due to their job. For example, this pandemic praised teachers for exceeding their responsibilities and working hours. In contrast, those who did not engage in such activities were heavily criticized. The inadequate understanding of the teaching profession, which labels teachers as good or bad depending on their extra work, has prevented open debates about the risk of suffering psychosocial effects.

This study shows that many teachers are emotionally drained, isolated, frustrated with teaching, and exhausted because of teaching during the pandemic, being women the most affected. The factors that increased the probability of suffering these psychosocial effects were: first, extra activities beyond the working hours; second, teachers' status; third, gender; fourth, type of contract (full-time teachers suffered more); fifth, age (young teachers were not that able to manage their stress level) and finally the adequate working spaces teachers created in their houses.

Regrettably, there have not been any debates or references about this aspect in the media or by the authorities. The lack of understanding of the teaching profession has reduced teachers' role to a mere provider of services without much consideration for them as people with emotions and susceptible to psychosocial effects. Hence, recognizing the risks existing in teaching could provide non-academic support to teachers during their professional practice.

References

1. Lederman, D.: Will shift to remote teaching be boon or bane for inline learning? 2020 March 2020. https://www.insidehighered.com/digital-learning/article/2020/03/18/most-teaching-going-remote-will-help-or-hurt-online-learning. Accessed 13 Mar 2021
2. Martinez, J.: Take this pandemic moment to improve education, 22 June 2020. https://edsource.org/2020/take-this-pandemic-moment-to-improve-education/633500. Accessed 14 Marzo 2021
3. Almeida, E., Baldassari, A., Cajas, D., Sanguña, S.: Teachers' practices in language online courses in higher education during the COVID-19 health emergency, 6 June 2020. https://journal.espe.edu.ec/ojs/index.php/vinculos/article/view/1722. Accessed 13 Mar 2021
4. Prado-Gasco, V., Gomez, M., Soto, A., Rodriguez, L., Navarro, D.: Frontiers in psychology, 30 septiembre 2020. https://www.frontiersin.org/journals/psychology. Accessed 27 Feb 2021
5. Almeida, E., Baldassari, A., Bernal, J., Rosero, A., Zapata, A.: Factors that contribute to teachers' burnout during the COVID 19 pandemic in Ecuador, Quito (2022)
6. OSHA: European Agency for SAfety and Work, n/a n/a 2021. https://osha.europa.eu/en/themes/psychosocial-risks-and-stress. Accessed 1 Marzo 2021
7. Hernández, M., Salanova, P., Peiro, M.: Redalyc, 11 Mayo 2007. https://www.redalyc.org/pdf/727/72719413.pdf. Accessed 25 Febrero 2021
8. HSE: Health and safety executive, 1 Abril 2022. https://www.hse.gov.uk/msd/mac/psychosocial.htm
9. Rubinni, N.: Los riesgos psicosociales en el trabajo, Memoria Académica, pp. 1–17 (2012)
10. Freire, J., Corrales, N.: Riesgos psicosociales y su influencia en el desempeño laboral de los docentes universitarios, Didacsc@lia **IX**(4), 53–68 (2018)

11. ILO: Psychological risks, stress and violence in the world of work. Int. J. Labour Res. **8**(1–2), 12–80 (2016)
12. Gujarati, D., Porter, D.: Econometría, 5 edn. Mc Graw Hill Educación, Mexico (2010)
13. Stock, J.H., Watson, M.W.: Introducción a la Econometría. Pearson Educación SA, Madrid (2012)