



Psicología Educativa

ISSN: 2174-0550

ISSN: 1135-755X

Colegio Oficial de la Psicología de Madrid

Schoeps, Konstanze; Lacomba-Trejo, Laura; Valero-Moreno, Selene; Rosario, Constanza del; Montoya-Castilla, Inmaculada
The Impact of Resilience and Subjective Well-being on Teacher Burnout during COVID-19 in Chile
Psicología Educativa, vol. 29, no. 2, 2023, pp. 167-175
Colegio Oficial de la Psicología de Madrid

DOI: <https://doi.org/10.5093/psed2023a12>

Available in: <https://www.redalyc.org/articulo.oa?id=613775409006>

- How to cite
- Complete issue
- More information about this article
- Journal's webpage in [redalyc.org](https://www.redalyc.org)



Scientific Information System Redalyc

Network of Scientific Journals from Latin America and the Caribbean, Spain and Portugal

Project academic non-profit, developed under the open access initiative



The Impact of Resilience and Subjective Well-being on Teacher Burnout during COVID-19 in Chile

Konstanze Schoeps^a, Laura Lacomba-Trejo^a, Selene Valero-Moreno^a, Constanza del Rosario^b, and Inmaculada Montoya-Castilla^a

^aUniversitat de València, Spain; ^bFoundation of Intelligent Relationships, Santiago, Chile

ARTICLE INFO

Article history:

Received 17 May 2022

Accepted 13 March 2023

Keywords:

COVID-19
Teacher
Burnout
Subjective well-being
Resilience
Chile

ABSTRACT

Since the COVID-19 outbreak in Chile teachers have been struggling with increased levels of stress, aggravating burnout symptoms. The present study aims to explore burnout syndrome in Chilean teachers during confinement and how worries about COVID-19, emotional balance, life satisfaction, and resilience may mediate the emotional impact. A total of 614 teachers from different education levels participated in this study (94.60% female) using a cross-sectional design and incidental sampling method. Self-report data were analysed conducting descriptive statistics, Pearson's correlations, hierarchical regressions, and mediation models. The results indicated that burnout was associated with pre-pandemic mental health problems, more worries about COVID-19, lower levels of emotional balance and resilience. The relationships between worries about COVID-19 and burnout was mediated by resilience and emotional balance. Our findings stress the need to address potential risk and protective factors for teachers' mental health and subjective well-being during the current pandemic.

El impacto de la resiliencia y el bienestar subjetivo en el *burnout* de los profesores durante el COVID-19 en Chile

RESUMEN

Desde el brote de COVID-19 en Chile los profesores han estado lidiando con mayores niveles de estrés, agravando los síntomas de *burnout*. El presente estudio tiene como objetivo explorar el síndrome de *burnout* en profesores chilenos durante el confinamiento y cómo las preocupaciones de COVID-19, el balance emocional, la satisfacción con la vida y la resiliencia pueden mediar el impacto emocional. Un total de 614 profesores de diferentes niveles educativos participaron en este estudio (94.60% mujeres) utilizando un diseño transversal y un método de muestreo incidental. Los datos de autoinforme se analizaron mediante estadísticas descriptivas, correlaciones de Pearson, regresiones jerárquicas y modelos de mediación. Los resultados indican que el *burnout* se asocia con problemas de salud mental previos, más preocupaciones por la COVID-19, nivel de balance emocional y resiliencia reducido. La relación entre la preocupación por la COVID-19 y el *burnout* estaba mediada por la resiliencia y el balance emocional. Los resultados subrayan la necesidad de abordar los posibles factores de riesgo y de protección para la salud mental y el bienestar subjetivo de los profesores durante la actual pandemia.

On 11 March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic, as the number of countries affected by the coronavirus tripled and the number cases and deaths increased exponentially worldwide (World Health Organization, 2020a, 2020b). To reduce the number of infections and deaths, national governments established restrictions on population mobility (lockdown), which included measures of social distancing and confinement (European

Centre for Disease Prevention and Control, 2020). Specifically in Chile, before the end of general lockdown, on 17 July 2020, 231,393 people had been diagnosed with COVID-19 and 4,093 had died from the disease (Johns Hopkins University, 2020).

In addition to these restrictions, schools all over the world had been closed to most students (UNESCO Institute for Statistics, 2020). Previous studies have focused on the effectiveness of school closures

Cite this article as: Schoeps, K., Lacomba-Trejo, L., Valero-Moreno, S., del Rosario, C., Montoya-Castilla, I. (2023). The impact of resilience and subjective well-being on teacher burnout during COVID-19 in Chile. *Psicología Educativa*, 29(2), 167-175. <https://doi.org/10.5093/psed2023a12>

Funding: This research was supported by grants from the Spanish Ministry of Science, Innovation and Universities (PSI2017-84005-R), the State Agency of Research and the European Regional Development Fund (FEDER) from the European Union. Laura Lacomba-Trejo is a beneficiary of the Aid for Talent Attraction of the University of Valencia (0113/2018). Correspondence: inmaculada.montoya@uv.es (I. Montoya-Castilla).

ISSN: 1135-755X/© 2023 Colegio Oficial de la Psicología de Madrid. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

in slowing down the spread of disease, as well as the effects on students' learning and mental health (Asbury et al., 2020; Colao et al., 2020; Rauscher, 2020; Viner et al., 2021). Only a few empirical research has addressed the emotional impact on teachers during lockdown (Kim & Asbury, 2020), notwithstanding the fact their work is a socially essential (Schleicher, 2018).

Teachers have experienced a great amount of stress during the confinement, especially due to concerns about the future, adapting to remote teaching and learning, reconciling their personal and work responsibilities, the fear of infection with the COVID-19 (themselves or family members), and the shortage of supplies and medical care (Ahorsu et al., 2020; Albiser et al., 2020; Kim & Asbury, 2020; Lin, 2020; Lorenzo Ruiz et al., 2020; Satici et al., 2020; UNESCO, 2020). The main concerns encountered during the pandemic in the population are related to health, the economy and the psychosocial environment. Health-related concerns include specifically the possibility of getting sick for oneself or a loved one, access to quality health care, lack of information on the status of the virus, and the proper or inadequate use of non-spreading measures. Economy-related concerns include specifically the possibility of accessing basic services, being laid off, or having shortages of goods. Finally, concerns related to psychological environment include those referring to the situation of confinement, uncertainty about the consequences of COVID-19, social relationships, psychological state, and academic/work performance. Thus, the presence of these concerns has been associated with more emotional distress, more burnout, and less subjective well-being (Mónaco et al., 2022; Tsan et al., 2021).

Chronic stress in teachers may lead to burnout symptoms, which consequently increase job dissatisfaction and disengagement (Buric & Kim, 2020). As is well known, burnout refers to a syndrome that appears due to continuous stress at work, either due to working or relational conditions. Burnout is characterized by symptoms of psychological exhaustion, indifference towards the job, cynicism, a feeling of guilt about their behavior and low self-efficacy (Hewitt et al., 2020).

These symptoms are even more severe if pre-pandemic risk factors are involved, such as pre-existing physical or mental health problems (Valero-Moreno et al., 2021; Yao et al., 2020), being a women of younger age, and being a teacher at secondary school levels (Diehl & Carlotto, 2020; López-Atanes et al., 2020; Rossi et al., 2020). Previous studies have shown that women are more vulnerable regarding emotional health during confinement, not least because they reported already poorer pre-pandemic mental health (Ausín et al., 2021; Valdés-Flórido et al., 2020), but also because they have to reconcile their work with family obligations, such as caring for children or other dependents (Czymara et al., 2021; Power, 2020; Russell et al., 2020). Furthermore, research conducted prior to the pandemic has shown that teachers working in pre-schools and primary education usually experience lower levels of burnout than those working in high-schools and/or universities (Diehl & Carlotto, 2020; Ricardo et al., 2021).

However, when suffering from stressful life events that may cause an increase of stress or burnout, resilient people are less likely to develop emotional problems (Prime et al., 2020). Resilience is a process that facilitates adaptation to adversity (American Psychological Association [APA, 2020]). Although there has been a great deal of controversy about this concept, today resilience is understood to be the sum of personal, socio-demographic, biological, and systemic factors (Herrman et al., 2011).

The ability of resilience has been essential during confinement (Moisés de La Serna, 2020), because individuals who are more resilient have reported greater subjective well-being and life satisfaction (Macintyre et al., 2020), as well as higher levels of emotional functioning (Lacomba-Trejo et al., 2020). In this sense, subjective well-being refers to a psychological phenomenon that includes emotional responses, satisfaction in different areas of life

(work, family, health, economy, self, and reference group) and overall life satisfaction (satisfaction with current, past and future life, desire to change one's life, the meaning of others' view of one's life). It is based on an individual's assessment of whether or not his or her life is satisfying and on the experience of positive feelings (joy, euphoria, satisfaction, pride, affection, happiness, and ecstasy) and negative ones (guilt, shame, sadness, anxiety, anger, stress, depression, and envy) (Diener et al., 1999).

A better understanding of the role of potential risk and protective factors for burnout outcomes in teachers is essential to understand the impact of COVID-19 on teachers' subjective well-being. The aim of the present study was to explore the burnout syndrome in Chilean teachers during lockdown and how worries about COVID-19, emotional balance, life satisfaction, and resilience may mediate the emotional impact. Based on the previous literature, we expect that (H1) younger-aged female teachers who work in high-schools or universities are more affected by the COVID-19 and, therefore, show more burnout symptoms, lower life satisfaction, lower emotional balance, lower resilience, and are more worried about COVID-19 and its consequences; (H2) teachers who report mental or physical health problems prior to the pandemic are more vulnerable and, therefore, report more burnout symptoms, lower life satisfaction, lower emotional balance, lower resilience, and are more worried about COVID-19 and its consequences; (H3) burnout symptoms are positively associated with worries about COVID-19 and their consequences (worries about health, economic, and psychosocial consequences from COVID-19) and both are negatively related to life satisfaction, emotional balance, and resilience; (H4) worries about COVID-19 and its consequences, as well as lower levels of resilience, life satisfaction, and lower emotional balance are related with higher teacher burnout, controlling for demographic effects (gender, educational level, pre-pandemic physical, or mental health problems); (H5) the association between worries about COVID-19 and burnout is mediated by resilience, life satisfaction, and emotional balance.

Method

Participants

Self-report data were collected from 614 Chilean teachers (94.6% female) aged between 20 and 65 years ($M_{\text{age}} = 33.37$, $SD = 7.73$), using a cross-sectional study design with incidental sampling. According to the latest OECD Review of School Resources in Chile (Santiago et al., 2017), in 2015 there were about 225,000 teachers working in kindergarten/preschool, basic to upper secondary and higher education including all school types (municipal schools, private-subsidized and non-subsidized schools, schools with delegated administration). By choosing a 99% confidence level and a sample size of 614 participant the margin of error would be $\pm 5.2\%$, which is acceptable. The teachers of our sample represent all areas of the Chilean educational system: 8.3% were kindergarten/preschool teachers educating children up to the age of 5; 81.8% primary and high-school teachers providing compulsory education for students aged 6 to 17 years; 7.2% university teachers who taught at universities, professional institutes, or technical centers; 2.8% others.

Instruments

Participant characteristics were assessed by ad hoc questions about basic demographic information (gender and age), work place (kindergarten/preschool, primary, and high-school or university), previous physical health and/or mental health problems (1 = yes, 0 = no).

Spanish Burnout Inventory (SBI; Gil-Monte, 2011)

The SBI was used to assess burnout, along with the Chilean version validated by Buzzetti (2005), which understands burnout as the consequence of chronic work-related stress and complicated interpersonal relationships (Figueiredo-Ferraz et al., 2013) reliability (Cronbach's alpha). The SBI is a 20-item self-reported measure comprised by four subscales: enthusiasm toward the job (5 items, e.g., "I feel excited about my job"), psychological exhaustion (4 items, e.g., "I feel overwhelmed by my job"), indolence (6 items, e.g., "I think that many of the people I deal with at work are annoying."), and guilt (5 items, e.g., "I feel bad about some of the things I have said at work."). Participants answered on a 5-point Likert scale questions about their feelings and ideas towards their job (0 = *never*, 4 = *very frequently, every day*). The reliability was appropriate for all four subscales: enthusiasm toward the job ($\omega = .85$, $\alpha = .85$, AVE = .60, CRC = .88), psychological exhaustion ($\omega = .91$, $\alpha = .91$, AVE = .58, CRC = .85), indolence ($\omega = .80$, $\alpha = .80$, AVE = .64, CRC = .84), and guilt ($\omega = .82$, $\alpha = .81$, AVE = .52, CRC = .85). From the values of the last three subscales (psychological exhaustion, indolence and guilt) the total burnout scale can be calculated (Gil-Monte, 2011), which also showed satisfactory internal consistency ($\omega = .76$, $\alpha = .86$, AVE = .58, CRC = .85). Levels of burnout were calculated using the specific cut-off points for Spanish-speaking teacher population published by Gil-Monte (2011): 1.47 = percentile > 75 (above average), 17.3 = percentile > 85 (high level), 2.07 = percentile > 95 (critical level).

Worries about COVID-19 and its Consequences Scale (W-COV; Mónaco et al., 2022)

The W-COV is an ad hoc survey designed to assess worries about health (one's own and family members), economic, and political circumstances (at national and global level), academic and/or occupational performance, social relationships, and psychological health. The scale consists of 19 items which were scored on a 5-points Likert scale ranging between 1 (*almost never*) and 5 (*almost always*). In the original cross-cultural validation study conducted in adolescent population (Mónaco et al., 2022) results from a confirmatory factor analysis suggested adequate structural characteristics of the one-factor solution of the scale (KMO = .83, RMSEA = .08, SRMR = .09, CFI = .91, GFI = .94). In our study, the reliability indices of the W-COV were satisfactory: $\omega = .89$, $\alpha = .88$, AVE = .63, CRC = .87.

Satisfaction with Life Scale (SWLS; Diener et al., 1985)

The SWLS assesses the cognitive component of life satisfaction (e.g. "I am satisfied with my life"), rather than focusing on affect (Pavot & Diener, 2008). A total of 5 items are scored on a 7-point Likert scale ranging between 1 (*totally disagree*) and 7 (*totally agree*). The SWLS is one of the most widely administered scales in the measurement of life satisfaction (Diener et al., 2002), with a large number of studies supporting its reliability, validity, and applicability across cultures and context, including Spanish and Chilean teacher population (Lacomba-Trejo et al., 2022; Schoeps et al., 2021). In our study, McDonald's omega, Cronbach's alpha, AVE, and CRC values were .87, .86, .57, and .71 respectively.

Scale of Positive and Negative Experience (SPANE; Diener et al., 2010)

The SPANE measures pleasant (positive affect: e.g., "In the last 4 weeks I've experiences happy feelings") and unpleasant feelings or experiences (negative affect: e.g., "In the last 4 weeks

I've experiences sad feelings") on a 5-point Likert scale (1 = *never*, 5 = *always*). The 12-items are divided into two subscales (6 items each), but a global affect balance can be calculated. The scale has shown adequate psychometric properties in a Spanish-speaking population (Prado-Gascó et al., 2020). In this study, acceptable reliability indices were obtained: positive affect ($\omega = .93$, $\alpha = .93$, AVE = .63, CRC = .80), negative affect ($\omega = .88$, $\alpha = .87$, AVE = .57, CRC = .75), affect balance ($\omega = .72$, $\alpha = .91$, AVE = .60, CRC = .78).

Abbreviated Version of the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003)

The Spanish version of the CD-RISC (Notario-Pacheco et al., 2011) consisted of 10 items measuring general resilience (e.g. "Can deal with whatever comes"). Participants scored items on 5-point Likert scale ranging between 0 (*never*) and 4 (*almost always*). The CD-RISC-10 instrument showed adequate overall reliability in previous studies with Chilean and Spanish adult samples (Riquelme-Lobos & Raipán-Gómez, 2021; Valero-Moreno et al., 2021). In our study, the reliability of the CD-RISC was appropriate ($\omega = .84$, $\alpha = .81$, AVE = .56, CRC = .80).

Procedure

This investigation was approved by the Ethics Committee of the [authors not disclosed] and the data collection followed the norms of the Declaration of Helsinki (World Medical Association, 2013). Using a snowball sampling method, participants were contacted through the Internet and social networks. Participants were all informed of the purpose of the study, the confidentiality of their participation on a voluntary basis, and the anonymity of responses. Prior to responding to the online survey, participants signed an informed consent. Data were collected through an online questionnaire in LimeSurvey accessible from any electronic device (smartphone, tablet, laptop, etc.) during May and June 2020. The survey took approximately 25 minutes to complete.

Data Analyses

The study used a cross-sectional and descriptive design considering the variables described in the previous section. All statistical analysis was performed using SPSS (version 26). The following reliability indices for all measurements were calculated: Cronbach's alpha and McDonalds' omega greater than .70, average variance extracted (AVE) levels above .50 and composite reliability coefficient (CRC) above .70 are considered adequate (Valentini & Damásio, 2016). To test the first and the second hypotheses, descriptive statistics, *t*-tests for independent samples and one-factor ANOVA were performed. Scheffé (if equal variance is assumed) and Games-Howell (if not) post hoc tests were used, and effect sizes were calculated. For *t* of independent samples, a Cohen's *d* was calculated. According to Cohen (1988), small Cohen's *d* values are ≈ 0.2 , medium ones are ≈ 0.5 , and high ones are ≈ 0.8 . For ANOVA an eta partial square were calculated (η_p^2), considering small effect size values to be ≈ 0.01 , medium ones to be ≈ 0.06 , and those large enough to be considered as ≈ 0.14 . The relationship between all variables studied was examined using Pearson's correlations to test the third hypothesis. The fourth hypothesis was tested performing a hierarchical stepwise regression model to predict burnout. The predictor variables were satisfaction with life, emotional balance, resilience, and worries about COVID-19; the sociodemographic variables (age, gender, pre-pandemic physical or mental health problems, and education levels) were control variables. To test the fifth hypothesis a PROCESS macro v3.3 (Hayes, 2013) was used to perform multiple mediation analyses (model 6) to estimate the

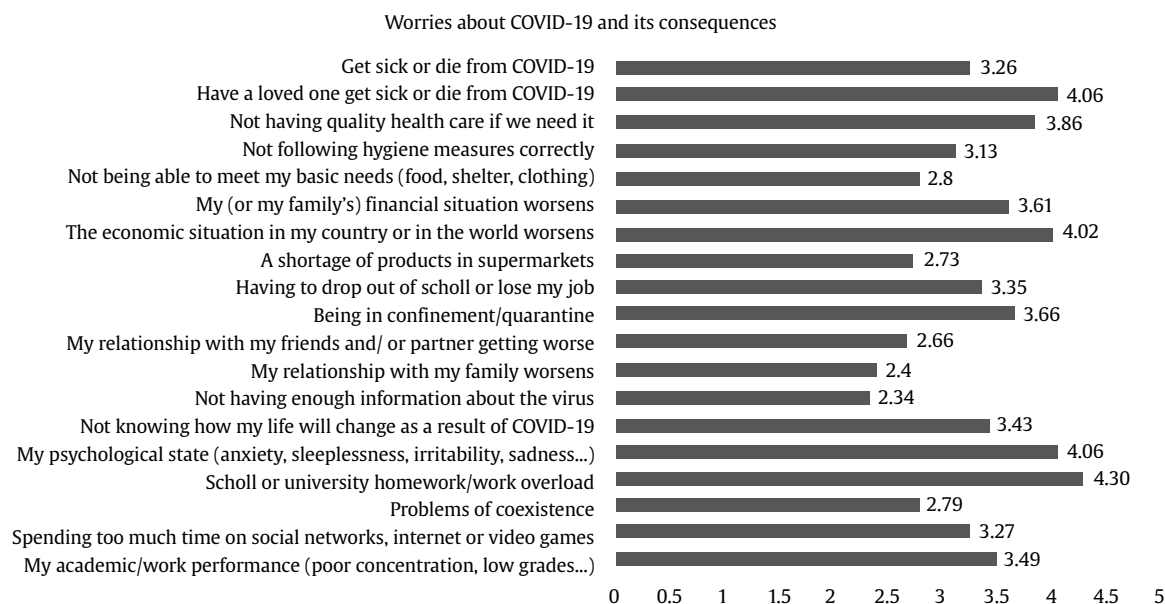


Figure 1. Means of Worries about COVID-19 and its Consequences in Teachers.

impact of worries about COVID-19 on teacher burnout with three mediators (emotional balance, life satisfaction, and resilience) and sociodemographic variables as covariates (age, gender, pre-existing physical or mental health problem, and educational level). For these analyses, a 10,000 bootstrap sample was used to calculate standard error and confidence intervals of 95%.

Results

Descriptive Statistics and Demographic Analysis

Teachers showed high levels of burnout ($M = 2.03$, $SD = 0.63$), with 46% of them reporting a critical level of burnout. Although participants reported high levels of enthusiasm toward the job ($M = 3.62$, $SD = 0.77$), they also presented high levels of psychological exhaustion ($M = 3.79$, $SD = 1.04$), indolence ($M = 2.24$, $SD = 0.78$) and guilt ($M = 2.02$, $SD = 0.77$). This result was coupled with worries about COVID-19 ($M = 3.33$, $SD = 0.67$), specifically, they were most worried about work overload ($M = 4.30$, $SD = 0.99$), their psychological health during confinement ($M = 4.06$, $SD = 1.06$), family members being infected or dying from COVID-19 ($M = 4.06$, $SD = 0.99$), the shortage of

medical care ($M = 3.86$, $SD = 1.15$), and decreased work performance ($M = 3.49$, $SD = 1.26$) (Figure 1).

Teachers reported moderate levels of subjective well-being: average life satisfaction ($M = 25.25$, $SD = 6.00$) and average emotional balance ($M = 3.06$, $SD = 7.58$). Furthermore, they presented low levels of resilience ($M = 26.39$, $SD = 5.75$). Thus, 57.20% of the participants showed low levels of resilience, and only 4.90% of them presented high levels.

Mean differences tests and ANOVAs were conducted to test for differences in variables studied related to each sociodemographic variable (gender, educational level, and pre-pandemic physical or psychological health problem) were examined. The results indicated that women reported less psychological exhaustion ($t = 2.20$, $p = .03$, $d = 0.39$) and less resilience than men ($t = 2.06$, $p = .04$, $d = 0.40$). Furthermore, participants with pre-existing physical health problems showed higher levels of psychological exhaustion, higher levels of worries about COVID-19, and lower levels of life satisfaction. Similarly, participants with previous mental health problems reported also higher levels of burnout (psychological exhaustion, indolence, guilt, and lack of enthusiasm toward the work), higher levels of worries about COVID-19, lower levels of life satisfaction, emotional balance and resilience (Table 1).

Table 1. Descriptive Analyses, Differences in Means and Effect Sizes of the Variables under Study

	Previous Physical Health Problem					Previous Mental Health Problem				
	YES		NO			YES		NO		
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	
Burnout Total	2.08(0.62)	2.00(0.64)	1.60	.110	0.13	2.21(0.62)	1.92(0.62)	5.63	.001	0.47
Enthusiasm toward the job	3.59(0.79)	3.64(0.76)	0.79	.428	0.06	3.50(0.78)	3.70(0.76)	3.17	.002	0.26
Psychological exhaustion	3.90(1.01)	3.72(1.05)	1.99	.048	0.17	4.06(0.91)	3.64(1.02)	4.97	.001	0.43
Indolence	2.27(0.79)	2.22(0.77)	0.83	.405	0.06	2.41(0.83)	2.14(0.72)	4.17	.001	0.35
Guilt	2.06(0.84)	2.00(0.73)	0.94	.350	0.08	2.19(0.80)	1.93(0.74)	3.73	.001	0.34
Worries about COVID-19	3.43(0.64)	3.26(0.68)	3.02	.003	0.26	3.44(0.63)	3.26(0.68)	3.25	.001	0.28
Life satisfaction	24.38(6.34)	25.79(5.72)	2.77	.006	0.23	23.93(6.22)	26.02(5.75)	4.16	.001	0.35
Emotional balance	2.10(7.27)	3.64(7.71)	2.50	.013	0.20	1.02(7.06)	4.23(7.63)	5.32	.001	0.45
Positive affect	20.11(4.19)	20.89(4.16)	2.24	.026	0.19	19.70(3.97)	21.12(4.23)	4.10	.001	0.35
Negative affect	18.01(4.47)	17.24(4.33)	1.85	.065	0.17	18.68(4.12)	16.86(4.41)	5.06	.001	0.42
Resilience	25.82(6.12)	26.74(5.49)	1.91	.057	0.16	24.94(5.77)	27.23(5.57)	4.90	.001	0.45

* $p < .05$, ** $p < .01$.

Moreover, primary and high-school teachers reported higher levels of burnout ($F = 9.57, p < .001, \eta^2 = .07$), specifically higher levels of psychological exhaustion ($F = 3.76; p < .001, \eta^2 = .08$) and indolence ($F = 6.31, p = .004, \eta^2 = .07$) than kindergarten/preschool teachers. In general, low effect sizes were observed.

Associations between the Variables Studied

The results of the bivariate correlations indicated that burnout was linearly and moderately or highly associated with lower levels of resilience, life satisfaction, emotional balance, but higher levels of COVID-19 related worries (Table 2). Life satisfaction was positively associated with emotional balance and resilience and negatively with worries about COVID-19 and burnout. In addition, emotional balance was positively related to resilience, and negatively related to burnout and worries about COVID-19. Furthermore, resilience was negatively associated with COVID-19 related worries and burnout. Finally, age was negatively and significantly related to COVID-19 related worries and burnout, while the association with resilience and emotional balance was positive.

Table 2. Associations between Variables Studied

	1	2	3	4	5	6
1. Age	1					
2. Burnout	-.10*	1				
3. Worries about COVID-19	-.17**	.41**	1			
4. Resilience	.16**	-.36**	-.26**	1		
5. Emotional balance	.19**	-.51**	-.49**	.51**	1	
6. Life satisfaction	.05	-.33**	-.29**	.36**	.52**	1

* $p < .05$, ** $p < .01$.

Predicting Burnout

The predictive power of the studied variables was analyzed conducting a hierarchical regression model (HRM). The criterion variables was burnout. The prediction model was conducted in three steps (Table 3): first, the sociodemographic variables were included to control for significant demographic effects; second, worries about COVID-19 and its consequences were introduced; third, variables related to subjective well-being (satisfaction with life, emotional balance) and resilience were included in the model.

The results of the hierarchical regression indicated that these three sets of variables together explained 31% of the variance of teacher burnout. Thus, in the first step, socio-demographic variables significantly explained 7% of the variance ($\Delta R^2 = .07, p \leq .001$). In the second step, worries about COVID-19 explained 3% of the variance of burnout ($\Delta R^2 = .14, p \leq .001$). In the last step, variables related to subjective well-being (life satisfaction, emotional balance) and resilience explained 23% of the variance ($\Delta R^2 = .12, p \leq .001$). In the last step, previous mental health problems ($\beta = .10, p = .004$) and worries about COVID-19 ($\beta = .21, p \leq .001$) presented a positive and statistically significant beta coefficient. Emotional balance ($\beta = -.30, p = .001$) and resilience ($\beta = -.11, p = .006$) presented negative and statistically significant beta coefficients in predicting teacher burnout. Thus, burnout in teachers was predicted by pre-existing mental health problems, higher levels of worries about COVID-19, lower levels of emotional balance, and resilience (Table 3).

Multiple Mediation Analysis

A multiple mediation model to estimate the impact of worries about COVID-19 on teacher burnout with three mediators (emotional balance, life satisfaction, and resilience) was estimated, controlling for the effects of sociodemographic variables (age, gender, pre-existing physical or mental health problem, and educational level). However, this model was not significant ($p > .05$), so statistically non-significant relationships were removed, and the model was re-estimated. This second model included only two mediators (emotional balance and resilience) and one covariate (pre-pandemic psychological problem) (Table 4).

The total effect was significant ($\beta = .19, \text{BootSE} = .03, \text{BootLLCI} = .14, \text{BootULCI} = .24$), also the indirect effect of resilience was significant ($\beta = .04, \text{BootSE} = .01, \text{BootLLCI} = .01, \text{BootULCI} = .06$) indicating the presence of a partial mediation of resilience on the relationship between COVID-19 related worries and burnout. The same was true for emotional balance ($\beta = .13, \text{BootSE} = .02, \text{BootLLCI} = .09, \text{BootULCI} = .17$), also indicating a partial mediation of emotional balance between COVID-19 related worries and burnout. Thus, the results showed how worries about COVID-19 influenced burnout directly, but also indirectly through resilience and emotional balance ($\beta = .09, \text{BootSE} = .02, \text{BootLLCI} = .06, \text{BootULCI} = .13$). This mediation model predicted 17% of the variance of teacher burnout. Both mediators exerted a statistically significant influence on burnout, but the impact of worries about COVID-19 on burnout was greater

Table 3. Hierarchical Regression Model of Teacher Burnout

Predictor	Burnout			
	ΔR^2	ΔF	β	t
Step 1	.07	8.50***		
Gender			-.03	-0.08
Age			.02	0.44
Educational level			.01	0.20
Physical health problems			-.02	-0.58
Mental health problems			.10	2.93**
Step 2	.14	64.14***		
Worries about COVID-19			.21	5.23***
Step 3	.12	27.933***		
Resilience			-.11	2.76**
Emotional Balance			-.30	6.49***
Life satisfaction			-.06	-1.55
Durbin-Watson	.66			
R^2_{adj}	.31***			

Note. ΔR^2 = change in R^2 ; ΔF = change in F ; β = regression coefficient; t = value of t -test statistic.

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Table 4. Multiple Mediation Analysis

IV	Ms	DV	R ²	p	Effect of IV on Ms (a)	Effect of Ms on DV (b)	Direct effect (c')	Indirect effect (c'-c'')	Covariable effect on DV	95% CI for indirect effects LLCI to ULCI	Total effect (c)
Worries about COVID-19		Burnout	.17	≤.0001		.20***	.20***	.19*	Pre-existing mental health problems ≤ .001***	.14 to .24	.39***
	Resilience				-.24***	-.01**		.04*		.09 to .17	
	Emotional balance				-.39***	-.03***		.13*		.02 to .05	

Note. IV = independent variable; Ms = mediators; DV = dependent variable; bootstrap samples = 10,000; R² = coefficient of determination. LLCI = lower level of the 95% confidence interval. ULCI = upper level of the 95% confidence interval.

*p ≤ .05, ***p ≤ .001.

through emotional balance alone than it is through both mediators. The influence of pre-existing psychological problems was controlled for in this relationship. To simplify the understanding of the model, the controlled covariate (previous mental health problems) is not included in the figure. Looking at the contrasts, the values indicate that the indirect effect of resilience and the indirect effect of taking resilience and emotional balance into account in the prediction of burnout are superior to the indirect effect of emotional balance on burnout alone (Figure 2).

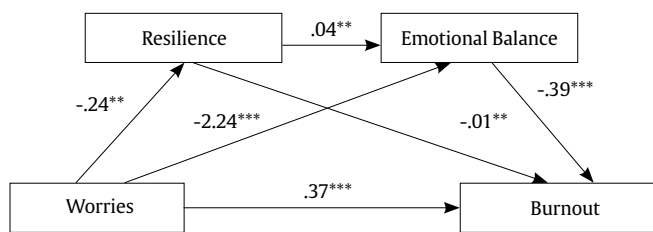


Figure 2. Model of Multiple Mediation: Resilience and Subjective Well-being Mediate the Relationship between Worries about COVID-19 and Teachers Burnout Controlling for Pre-pandemic Mental Health Problems.

Discussion

The global sanitary crisis caused by the relentless spread of the COVID-19 pandemic has been an important challenge for school education all over the world. As a result, schools in many European and American countries were closed and teachers were required to replace their classroom with remote online teaching and home schooling, forcing them to change their working practice completely overnight (Kim & Asbury, 2020). Thus, the pandemic has added new sources of stress to this already vulnerable teacher population, threatening their mental health and emotional stability (Aparisi et al., 2019). A recent line of research has initiated the study of potential protective factors that may have a buffering effect on COVID-19 related stressors, such as life satisfaction and resilience (Barzilay et al., 2020). However, the research regarding the psychological impact of COVID-19 worries on mental health conducted in teacher population is rare. Thus, the aim of the present study was to determine the potential risk and protective factors of burnout among Chilean teachers during the first weeks of lockdown due to the COVID-19 pandemic.

First, we expected younger-aged female teachers who work in high-schools or universities would be more affected by the COVID-19. On the one hand, the results indicate that women in our study are less psychologically exhausted and more resilient in comparison to their male colleagues. These unexpected results are painting a different picture than the picture of previous research, suggesting that COVID-19 pandemic appears to have a greater psychological impact on women than men (Ausín et al., 2021; López-

Atanes et al., 2020; Rossi et al., 2020; Valdés-Flórido et al., 2020). Traditionally, women have combined taking care of their children and carrying out domestic work with a career. The COVID-19 lockdown has dramatically increased this double burden and is therefore very likely to have a negative impact on women's health and well-being (Czymara et al., 2021; Power, 2020). However, there may be a few possible explanations for these findings. Given the many challenges that emerged with the onset of the pandemic, teachers felt emotionally overwhelmed while facing a number of practical problems related to online teaching (Kim & Asbury, 2020). In response, the use of emotion-focused coping strategies, more commonly used by women, such as seeking emotional support and overt emotional expression, may be more effective than a mere problem-solving approach, more commonly used by men (Meléndez et al., 2012). Thus, women may have adapted better and felt more capable of coping with the lockdown situation (resilience) and therefore perceived fewer emotional problems (Prime et al., 2020). We could also explain the results by the unequal distribution of the sample. Since that the vast majority of the sample in this study is female, there might be more variability of experience with female participants. Yet, only 5% of the participants are male and their experience might be less heterogeneous as the sample was obtained through a snowball sampling method, where participants share the online survey with their peers who are probably in a similar situation. Thus, the comparison between women and men in our study is biased because of the unbalanced gender distribution and should not be generalized to the general population.

In line with our hypothesis, younger teachers were more affected by the COVID-19 pandemic than older ones. The results suggest that younger teachers perceived more burnout symptoms and worries about COVID-19 and less resilience and emotional balance than older teachers. This finding is consistent with previous studies showing that younger age is associated with higher risk for different mental health problems (Rossi et al., 2020).

Furthermore, our results indicate that primary and high-school teachers experience higher levels of burnout compared to kindergarten/preschool teachers, particularly regarding psychological exhaustion and indifference. This finding is in line with previous studies, suggesting that especially secondary school are particularly vulnerable to suffer from work-related stress (Diehl & Carlotto, 2020). In our sample, however, we could not detect any differences between primary and secondary teachers due to imprecise data collection.

Second, we expected teachers who report mental or physical health problems prior to the pandemic would be more vulnerable during this health crisis. Our results confirmed this second hypothesis, showing that teachers with previous health problems (physical or mental) experienced more burnout symptoms (psychological exhaustion, indifference, guilt, and lack of enthusiasm for work), as well as lower life satisfaction, lower emotional balance, lower levels of resilience and were more worried about COVID-19 and its consequences in comparison to healthy teachers. These

findings are consistent with previous studies reporting that people with pre-pandemic mental health disorders are more at risk of experiencing increased emotional distress due to high susceptibility to stress compared with the general population (Yao et al., 2020).

Our results support the third hypothesis, that burnout symptoms are positively associated with worries about COVID-19 and their consequences and both are negatively related to life satisfaction, emotional balance, and resilience. Thus, teachers who are more concerned about COVID-19 and its consequences also experience higher levels of burnout. Furthermore, those teachers, who are more satisfied with their life, emotionally balanced, and more resilient are also less concerned about COVID-19 and less burned out by their job. Our findings are consistent with previous literature, that demonstrates that worries about COVID-19 are associated with psychological distress and life-satisfaction (Ahorsu et al., 2020; Satıcı et al., 2020). These findings suggest that worries and concerns about the ongoing health crisis and its consequences are an important risk for mental health problems among teachers, in addition to the more common stressors, such as work overload and behavior management (Kim & Asbury, 2020).

Furthermore, we expected that worries about COVID-19 and its consequences, as well as lower levels of resilience, life satisfaction, and lower emotional balance is related with higher teacher burnout, controlling for demographic effects (gender, educational level, previous physical, or mental health problems). Our results confirm this forth hypothesis, showing that teachers with pre-pandemic mental health disorder, high levels of COVID-19 worries, lower levels of resilience, and emotional balance reported more burnout symptoms, which is consistent with previous research (Macintyre et al., 2020; Prime et al., 2020). Furthermore, our results suggest that emotional balance was the strongest predictor of teacher burnout, i.e., teachers who experience more pleasant than unpleasant feelings are less likely to develop symptoms of burnout. Previous research has shown that the ability to experience desirable emotions is itself an emotion regulation strategy and can act as a buffer against stress (Schoeps et al., 2021). Nevertheless, life satisfaction was not a significant predictor of teacher burnout, which might indicate the more relevant role of resilience and especially emotional balance in the process of teachers' adaption to the additional stressors of the current global pandemic (Barzilay et al., 2020). This unexpected result might be explained by the conceptual difference between the three variables. While life satisfaction is an indicator of well-being (Diener et al., 2002), resilience and emotional balance have been considered coping or regulation strategies and are therefore more relevant for predicting stress symptoms such as burnout (Barzilay et al., 2020; Schoeps et al., 2021).

Supporting our central hypothesis, results from multiple mediation analyses partially confirmed the indirect effect of worries about COVID-19 and its consequences on burnout symptoms mediated through resilience, life satisfaction, and emotional balance. Thus, teachers who reported a high levels of COVID-19 worries but showed strong resilience and emotional balance experienced lower levels of burnout than those who worried about COVID-19 and its consequences but showing low levels of resilience and emotional balance. Our results highlight the key role of resilience and affect balance for teachers' mental health outcome and differ from prior research, which suggests that life satisfaction has a mediating effect on the interplay between COVID-19 related worries and stress symptoms (Castro-Calvo et al., 2022). It is worth mentioning that teachers from the present study sample showed rather low levels of resilience and only moderate levels of emotional ability in combination of high levels of overall burnout. Thus, our findings reveal the urgent need to foster teachers' noncognitive skills such as emotional balance and resilience in order to protect them from the negative impact of worries about the COVID-19 and its consequences on increased burnout symptoms.

The main implication from this study could be summarized in a set of general psychoeducational recommendations for future trainings for pre-service and/or in-service teachers that could be taken into account in their design and implementation:

1. Address and cope with worries and concerns about emerging crisis such as the ongoing pandemic.
2. Develop emotional regulation skills to cope with new stressors.
3. Promote resilience and effective coping strategies to adapt to stressful life events of diverse nature.
4. Support younger teachers who could benefit from the monitoring by more experience teachers.
5. Identify teachers with previous psychological problems who are more vulnerable in situations of stress.

Limitations and Future Research

Despite the many strengths of this research, several limitations should be considered. First, the inherent limitation of collecting data through online survey distributed by snowball sampling method puts limits to the generalizability of our findings in the study sample to the general population. However, participants did not charge or receive any financial reward for their participation in our study, which reduces the concern that they would intentionally respond inappropriately, as the primary motive for completing the survey was to express their opinion. In addition, we believe that self-report measures were appropriate for the study sample, given that adults are reliable sources of their internal states. Yet, some of the measurements have not been validated in both Chilean and Spanish adult populations but have been used in previous studies in similar samples and the psychometric properties were appropriate. In future research, however, mixed methods (qualitative and quantitative data), multiple reports from students might be used in order to contrast the information about teachers mental health. Finally, the cross-sectional design does not allow for casual inferences, which can be addressed in longitudinal studies, that evaluate changes in mental health conditions and needs following the pandemic outbreak.

Conclusions

The findings from this study indicate that worries about COVID-19 and its consequences are positively associated with symptoms of burnout, but negatively related to resilience, emotional balance, and life satisfaction in Chilean teachers. Furthermore, both resilience and emotional balance are protective factors of burnout symptoms, meaning that teachers with higher levels of these variables display lower levels of burnout. In addition, the positive association between worries about COVID-19 and its consequences and burnout symptoms is mediated by resilience and emotional balance.

This study makes an important contribution to the current COVID-19 literature by analyzing a predictive model in which resilience and emotional balance act as a buffer between worries about COVID-19 and its consequences and teacher burnout. These and other factors of psychological strengths that mitigate the psychological impact of the pandemic crisis on teachers are crucial to promote their mental health in light of the various challenges facing school education during the current pandemic.

Conflict of Interest

The authors of this article declare no conflict of interest.

Acknowledgements

The authors wish to thank the many teachers who participated in this study, hoping their families are safe and healthy.

References

- Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The Fear of COVID-19 Scale: Development and initial validation. *International Journal of Mental Health and Addiction*, 20(3), 1537-1545. <https://doi.org/10.1007/s11469-020-00270-8>
- Albiser, E., Echazarra, A., Fraser, P., Fülöp, G., Schwabe, M., & Tremblay, K. (2020). School education during COVID-19: Were teachers and students ready? <https://doi.org/10.1111/2047-8852.12164>
- American Psychological Association (APA, 2020). *El camino a la resiliencia*. <https://www.apa.org/centrodeapoyo/resiliencia-camino>
- Aparisi, D., Torregrosa, M. S., Ingles, C. J., & García-Fernández, J. M. (2019). Stress, burnout and health in a sample of Spanish teachers. *Advances in Higher Education*, 3(1), 1-11. <https://doi.org/10.18686/ah.e.v3i1.1128>
- Asbury, K., Fox, L., Deniz, E., Code, A., & Toseeb, U. (2020). How is COVID-19 affecting the mental health of children with special educational needs and disabilities and their families? *Journal of Autism and Developmental Disorders*, 51(5), 1772-1780. <https://doi.org/10.1007/s10803-020-04577-2>
- Ausin, B., González-Sanguino, C., Castellanos, M. Á., & Muñoz, M. (2021). Gender-related differences in the psychological impact of confinement as a consequence of COVID-19 in Spain. *Journal of Gender Studies*, 30(1), 29-38. <https://doi.org/10.1080/09589236.2020.1799768>
- Barzilay, R., Moore, T. M., Greenberg, D. M., DiDomenico, G. E., Brown, L. A., White, L. K., Gur, R. C., & Gur, R. E. (2020). Resilience, COVID-19-related stress, anxiety and depression during the pandemic in a large population enriched for healthcare providers. *Translational Psychiatry*, 10(1), 1-8. <https://doi.org/10.1038/s41398-020-00982-4>
- Burić, I., & Kim, L. E. (2020). Teacher self-efficacy, instructional quality, and student motivational beliefs: An analysis using multilevel structural equation modeling. *Learning and Instruction*, 66, Article 101302. <https://doi.org/10.1016/j.learninstruc.2019.101302>
- Buzzetti, M. (2005). *Validación del Maslach Burnout Inventory (MBI), en dirigentes del Colegio de Profesores A. G. de Chile*. http://www.cybertesis.cl/tesis/uchile/2005/buz-zetti_m/html/index-frames.html
- Castro-Calvo, J., Schoeps, K., Montoya-Castilla, I., & del Rosario, C. (2022). Protective factors for the mental health of adolescents and young adults in coping with pandemic-related worries: A mediation study. *Revista Latinoamericana de Psicología*, 54, 151-161. <https://doi.org/10.14349/rlp.2022.v54.17>
- Colao, A., Piscitelli, P., Pulimeno, M., Colazzo, S., Miani, A., & Giannini, S. (2020). Rethinking the role of the school after COVID-19. *The Lancet Public Health*, 5(7), Article e370. [https://doi.org/10.1016/S2468-2667\(20\)30124-9](https://doi.org/10.1016/S2468-2667(20)30124-9)
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience scale (CD-RISC). *Depression and Anxiety*, 18(2), 76-82. <https://doi.org/10.1002/da.10113>
- Czymara, C. S., Langenkamp, A., & Cano, T. (2021). Cause for concerns: Gender inequality in experiencing the COVID-19 lockdown in Germany. *European Societies*, 23(sup1), S68-S81. <https://doi.org/10.1080/14616696.2020.1808692>
- Diehl, L., & Carlotto, M. S. (2020). Síndrome de burnout de docentes: diferencias entre niveles de educación recibida: *Research, Society and Development*, 9(5), Article e62952623. <https://doi.org/10.33448/rsd-v9i5.2623>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being. The science of happiness and life satisfaction. In C. R. Snyder & S. Lopez (Eds.), *The handbook of positive psychology* (pp. 63-73). Oxford University Press.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302. <https://doi.org/10.1037/0033-2909.125.2.276>
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. <https://doi.org/10.1007/s11205-009-9493-y>
- European Centre for Disease Prevention and Control. (2020). *Covid-19 situation dashboard*. <https://qap.ecdc.europa.eu/public/extensions/COVID-19/COVID-19.html>
- Figueiredo-Ferraz, H., Gil-Monte, P. R., & Grau-Alberola, E. (2013). Psychometric properties of the "Spanish Burnout Inventory" (SBI): Adaptation and validation in a Portuguese-speaking sample. *Revue Européenne de Psychologie Appliquée*, 63(1), 33-40. <https://doi.org/10.1016/j.erap.2012.08.003>
- Gil-Monte, P. (2011). *CESQT: Cuestionario para la evaluación del síndrome de quemarse por el trabajo*. TEA Ediciones.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications. <https://doi.org/10.1111/jedm.12050>
- Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E. L., Jackson, B., & Yuen, T. (2011). What is resilience? *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, 56(5), 258-265. <https://doi.org/10.1177/070674371105600504>
- Hewitt, D. B., Ellis, R. J., Hu, Y. Y., Cheung, E. O., Moskowicz, J. T., Agarwal, G., & Bilimoria, K. Y. (2020). Evaluating the association of multiple burnout definitions and thresholds with prevalence and outcomes. *JAMA Surgery*, 155(11), 1043-1049. <https://doi.org/10.1001/JAMASURG.2020.3351>
- Johns Hopkins University. (2020). *Statistics from Chile*. <https://coronavirus.jhu.edu/map.html>
- Kim, L. E., & Asbury, K. (2020). 'Like a rug had been pulled from under you': The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. *British Journal of Educational Psychology*, 90(4), 1062-1083. <https://doi.org/10.1111/bjep.12381>
- Lacomba-Trejo, L., Schoeps, K., Valero-Moreno, S., del Rosario, C., & Montoya-Castilla, I. (2022). Teachers' response to stress, anxiety and depression during COVID-19 lockdown: What have we learned from the pandemic? *Journal of School Health*, 92(9), 864-872. <https://doi.org/10.1111/josh.13192>
- Lacomba-Trejo, L., Valero-Moreno, S., Postigo-Zegarra, S., Pérez-Marín, M., & Montoya-Castilla, I. (2020). Ajuste familiar durante la pandemia de la COVID-19: un estudio de diadas. *Revista de Psicología Clínica Con Niños y Adolescentes*, 7(3), 66-72. <https://doi.org/10.21134/rpcna.2020.mon.2035>
- Lin, C. Y. (2020). Social reaction toward the 2019 novel coronavirus (COVID-19). *Social Health and Behavior*, 3(1), 1-2. <https://doi.org/10.4103/SHB.SHB>
- López-Atanes, M., Recio-Barbero, M., & Sáenz-Herrero, M. (2020). Are women still "the other"? gendered mental health interventions for health care workers in Spain during COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), 243-244. <https://doi.org/10.1037/tra0000751>
- Lorenzo Ruiz, A., Díaz Arcaño, K., & Zaldívar Pérez, D. (2020). La psicología como ciencia en el afrontamiento a la COVID-19: apuntes generales. *Anales De La Academia De Ciencias De Cuba*, 10(2), e839-e842. <http://www.revistaccuba.sld.cu/index.php/revacc/article/view/839/855>
- Macintyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*, 94, Article 102352. <https://doi.org/10.1016/j.system.2020.102352>
- Meléndez, J. C., Mayordomo, T., Sancho, P., & Tomás, J. M. (2012). Coping strategies: Gender differences and development throughout life span. *The Spanish Journal of Psychology*, 15(3), 1089-1098. https://doi.org/10.5209/rev_sjop.2012.v15.n3.39399
- Moisés de La Serna, J. (2020). *Aspectos psicológicos del COVID-19*. Editorial Tektime. <https://doi.org/10.6084/m9.figshare.13489671>
- Mónaco, E., Schoeps, K., Valero-Moreno, S., Castro-Calvo, J., Montoya-Castilla, I., del Rosario, C., Coelho, F., Herrera, S., Trujillo, A., Riveros Munevar, F., & Amador Esparza, N. A. (2022). Cross-cultural validation of the Worries about COVID-19 and its Consequences Scale (W-COV) in adolescents and young people. *Archives of Psychiatric Nursing*, 40, 158-166. <https://doi.org/10.1016/j.apnu.2022.07.016>
- Notario-Pacheco, B., Solera-Martínez, M., Serrano-Parra, M. D., Bartolomé-Gutiérrez, R., García-Campayo, J., & Martínez-Vizcaino, V. (2011). Reliability and validity of the Spanish version of the 10-item Connor-Davidson Resilience Scale (10-item CD-RISC) in young adults. *Health and Quality of Life Outcomes*, 9(1), Article 63. <https://doi.org/10.1186/1477-7525-9-63>
- Pavot, W., & Diener, E. (2008). The Satisfaction With Life Scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, 3(2), 137-152. <https://doi.org/10.1080/17439760701756946>
- Power, K. (2020). The COVID-19 pandemic has increased the care burden of women and families. *Sustainability: Science, Practice, and Policy*, 16(1), 67-73. <https://doi.org/10.1080/15487733.2020.1776561>
- Prado-Gascó, V., Romero-Reignier, V., Mesa-Gresa, P., & Belén Górriz, A. (2020). Subjective well-being in Spanish adolescents: Psychometric properties of the scale of positive and negative experiences. *Sustainability*, 12, Article 4011. <https://doi.org/10.3390/SU12104011>
- Prime, H., Wade, M., & Browne, D. T. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist*, 75(5), 631-643. <https://doi.org/10.1037/amp0000660>
- Rauscher, E. (2020). Lower state COVID-19 deaths and cases with earlier school closure in the U.S. *MedRxiv*, 0-7. <https://doi.org/10.1101/2020.05.09.20096594>
- Ricardo, G. M., da Silva, M. E., & do Rego, B. (2021). COVID-19: Emergency remote teaching and university professors' mental health. *Revista Brasileira de Saúde Materno Infantil*, 21(Suppl. 1), 237-243.
- Riquelme-Lobos, P., & Raipán-Gómez, P. (2021). Resilience and sociodemographic factors involved in the presence of depressive, anxiety and of stress symptoms in the Chilean adult population during the COVID-19 pandemic. *Revista de Psicopatología y Psicología Clínica*, 26(3), 191-201. <https://doi.org/10.5944/rppc.27910>
- Rossi, R., Socci, V., Talevi, D., Mensi, S., Niolu, C., Pacitti, F., Di Marco, A., Rossi, A., Siracusano, A., & Di Lorenzo, G. (2020). COVID-19 Pandemic and lockdown measures impact on mental health among the general

- population in Italy. *Frontiers in Psychiatry*, 11, Article 790. <https://doi.org/10.3389/fpsy.2020.00790>
- Russell, B. S., Hutchison, M., Tambling, R., Tomkun, A. J., & Horton, A. L. (2020). Initial Challenges of Caregiving During COVID-19: Caregiver burden, mental health, and the parent-child relationship. *Child Psychiatry and Human Development*, 51(5), 671-682. <https://doi.org/10.1007/s10578-020-01037-x>
- Santiago, P., Fiszbein, A., García Jaramillo, S., & Radinger, T. (2017). *OECD reviews of school resources: Chile 2017*. OECD Publishing. <https://doi.org/10.1787/9789264285637-en>
- Satici, B., Gocet-Tekin, E., Deniz, M. E., & Satici, S. A. (2020). Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. *International Journal of Mental Health and Addiction*, 19(6), 1980-1988. <https://doi.org/10.1007/s11469-020-00294-0>
- Schleicher, A. (2018). *Valuing our teachers and raising their status: How communities can help*. International Summit on the Teaching Profession. OECD Publishing. <https://doi.org/10.1787/9789264292697-en>
- Schoeps, K., Tamarit, A., Peris-Hernández, M., & Montoya-Castilla, I. (2021). Impact of emotional intelligence on burnout among Spanish teachers: A mediation study. *Psicología Educativa*, 27(2), 135-143. <https://doi.org/10.5093/psed2021a10>
- Tsan, S. E. H., Kamalanathan, A., Lee, C. K., Zakaria, S. A., & Wang, C. Y. (2021). A survey on burnout and depression risk among anaesthetists during COVID-19: The tip of an iceberg? *Anaesthesia*, 76(Suppl 3), 8-10. <https://doi.org/10.1111/ANAE.15231>
- UNESCO. (2020). *Adverse consequences of school closures*. <https://en.unesco.org/covid19/educationresponse/consequences>
- UNESCO Institute for Statistics. (2020). *Children out of school, primary*. <https://data.worldbank.org/indicator/SE.PRM.UNER>
- Valdés-Florido, M. J., López-Díaz, Á., Palermo-Zeballos, F. J., Martínez-Molina, I., Martín-Gil, V. E., Crespo-Facorro, B., & Ruiz-Veguilla, M. (2020). Reactive psychoses in the context of the COVID-19 pandemic: Clinical perspectives from a case series. *Revista de Psiquiatría y Salud Mental*, 13(2), 90-94. <https://doi.org/10.1016/j.rpsm.2020.04.009>
- Valentini, F., & Damásio, B. F. (2016). Variância média extraída e confiabilidade composta: Indicadores de precisão [Average variance extracted and composite reliability: Reliability coefficients]. *Psicologia: Teoria e Pesquisa*, 32(2), 1-7.
- Valero-Moreno, S., Lacomba-Trejo, L., Tamarit, A., Pérez-Marín, M., & Montoya-Castilla, I. (2021). Psycho-emotional adjustment in parents of adolescents: A cross-sectional and longitudinal analysis of the impact of the COVID pandemic. *Journal of Pediatric Nursing*, 59, e44-e51. <https://doi.org/10.1016/j.pedn.2021.01.028>
- Viner, R. M., Mytton, O. T., Bonell, C., Melendez-Torres, G. J., Ward, J., Hudson, L., Waddington, C., Thomas, J., Russell, S., Van Der Klis, F., Koirala, A., Ladhani, S., Panovska-Griffiths, J., Davies, N. G., Booy, R., & Eggo, R. M. (2021). Susceptibility to SARS-CoV-2 infection among children and adolescents compared with adults: A systematic review and meta-analysis. *JAMA Pediatrics*, 175(2), 143-156. <https://doi.org/10.1001/jamapediatrics.2020.4573>
- World Health Organization. (2020a). *Country & technical guidance-coronavirus disease (COVID-19)*. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance-publications>
- World Health Organization. (2020b). *WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020*. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- Yao, H., Chen, J. H., & Xu, Y. F. (2020). Patients with mental health disorders in the COVID-19 epidemic. *The Lancet Psychiatry*, 7(4), Article e21. [https://doi.org/10.1016/S2215-0366\(20\)30090-0](https://doi.org/10.1016/S2215-0366(20)30090-0)

