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Citation: Calderón-Orellana M, Aparicio A, López—Huenante N (2023) COVID-19's impact on worker stress in human service organizations: The mediating role of inclusion. PLoS ONE 18(12): e0295743. https://doi.org/10.1371/journal.pone.0295743

Editor: Luca Valera, Pontificia Universidad Catolica de Chile (PUC) / Universidad de Valladolid (UVa),

Received: May 24, 2023

Accepted: November 29, 2023 **Published:** December 11, 2023

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Data Availability Statement: The data are not publicly available due to ethical and legal concerns. The data contain potentially identifying and sensitive participant information, and participants did not consent to share their answers. This decision is in accordance with the Accredited Scientific Ethics Committee of the University of Santiago de Chile. For further information, please contact Dr. Claudio Martínez Fernández, Acting Chair of the Ethics Committee, University of Santiago de Chile, at the following phone numbers:

RESEARCH ARTICLE

COVID-19's impact on worker stress in human service organizations: The mediating role of inclusion

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Abstract

Human service organizations faced extraordinary challenges due to COVID-19. Despite the increasing interest and research in this new scenario, there has been limited discussion about the impact of COVID-19 on workers, the challenges they faced, and the resulting stress. This study aimed to analyze the impact of COVID-19 on work-related stress and the mediating role of inclusion among workers in human service organizations in Chile during the pandemic. The research design was quantitative and involved a sample of 173 workers from civil society organizations who were contacted during the pandemic. The study confirmed that individuals most affected by the pandemic experienced higher levels of work-related stress, and that inclusion played a negative mediating role in this relationship. This article highlights the importance of relationships, decision-making processes, and access to information in reducing stress in post-COVID scenarios for organizations that traditionally handle crises.

Introduction

During the COVID-19 pandemic, the well-being of workers in human service organizations was threatened by an unprecedented scenario that forced them to adapt their methods of organization, planning, fundraising, and work [1, 2]. Despite its relevance in relation to the impact on the services they provide, the well-being and quality of life of workers in human service organizations have received limited attention compared to the healthcare sector. Indeed, research has shown that healthcare workers have experienced stress and anxiety [3–5], post-traumatic stress disorder (PTSD) [6, 7], psychological distress [8], and burnout [9, 10]. However, when it comes to social service workers, the information available is limited.

Certainly, as a result of isolation and quarantine measures, human and social services have required a reevaluation, introducing new adaptations and challenges for civil society organizations [11]. Workforce reductions and the discontinuation of certain services compelled

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Funding: This research was supported by the ANID Millennium Science Initiative Program (ICS2019_024). The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Competing interests: The authors have declared that no competing interests exist.

workers to confront substantial increases in their workloads [12], adding further strain to already overburdened services and employees [13]. Moreover, the heightened expectations from citizens regarding social services have created difficulties for these workers in balancing organizational requirements, citizen requests, and professional values [14].

Despite the clear connection between the COVID-19 catastrophe and the job-related challenges stemming from organizational adaptations, there is limited evidence on the stress experienced by workers in human service organizations due to COVID-19. This is significant considering the pivotal role of stress in job satisfaction, turnover within these organizations [15], and its impact on service quality. Indeed, threats to the well-being of social service workers can pose risks to the entire social protection system [16, 17].

Therefore, this research aims to determine the impact of COVID-19 on the stress experienced by workers in nonprofit human service organizations.

The study of workers' stress in nonprofit human service organizations and social services has taken on special relevance since the 1990s [18] because of the impact of stress on workers' well-being and performance. Studies have revealed that high work pressures, a lack of control over decision-making, ethical dilemmas in the workplace, the low inclusion, low pay, and inadequate supervision, among other factors, have been identified as sources of stress in these workers [16, 19–22]. Recognizing that low perception of inclusion, understood as the individual's sense of being part of the organization in formal and informal processes [23], has been associated to workers' stress [15, 24] and that the pandemic has affected ways of organizing work and of relating, it seems relevant to ask about the role of inclusion in the relationship between COVID-19's impact and stress. In other words, it is crucial to consider the value of inclusion in mitigating stress in a context of crisis, where organizations and workplace relationships have undergone significant changes.

Thus, this research examined the role of inclusion in the relationship between COVID-19's impact and stress and assessed if this relationship was maintained in workers at nonprofit organizations in Chile during the peak of the disease in 2021. This study is of significant relevance as it provides insights into a group that faced high demand during the pandemic. Moreover, it contributes to better understand a phenomenon that must be addressed to reduce the effects of stress on health [8, 25–27]. Additionally, it sheds light on the challenges experienced by organizations, enabling the development of strategies to cope with stress. Given the connection between the effectiveness of such services and worker well-being, these strategies can enhance the well-being of both workers and users of social services [17]. Furthermore, there is a growing demand for research on nonprofit human service organizations that seeks to clarify how to address these challenges. Finally, in considering the experience of Chile, this research adds to the study of the reality of civil society organizations from a particular perspective that until now has been underexplored [28]. In doing so, it contributes to building an understanding of stress in these organizations, complementing existing knowledge.

Well-being and stress in social service workers during pandemic of COVID-19

The scarcity of evidence related to the impact of the COVID-19 health emergency on the stress levels of nonprofit human services workers is noteworthy. Since the onset of the pandemic in March 2020, when the World Health Organization declared the disease caused by the SARS-CoV-2 virus a pandemic, most studies have focused on assessing the presence of stress in the field of social services, with inadequate attention to the effects of COVID-19 on stress.

As such, studies conducted to date have produced data that highlight elevated levels of stress in this group of workers. For instance, the study by Martínez-López et al. [29] identified

symptoms of burnout in social services personnel during the initial wave of the pandemic in Spain, with high rates of emotional exhaustion (53.8%) and depersonalization (35.1%). In a similar vein, Dima [30] reported that stress is more strongly associated with work-related burnout than with depersonalization.

Furthermore, a study involving 181 workers engaged in social services during the COVID-19 pandemic has shown that, despite expressing significant job satisfaction rooted in compassion, these professionals exhibited symptoms of post-traumatic stress disorder, burnout, and secondary trauma [31]. In other words, these individuals experience prominent levels of stress while remaining committed to their work.

Additionally, stress has been linked to depression, anxiety, and organizational support, and has been found to have a negative correlation with resilience [32]. From a broader perspective, Alsabti [33] examined the social, familial, and economic stress experienced by 135 workers from 22 social service centers serving individuals with disabilities in Saudi Arabia. This study revealed a significant relationship between social stress and burnout, as well as an inverse correlation with personal achievement.

In summary, the available evidence underscores that nonprofit human services workers have faced high levels of stress during the COVID-19 pandemic, resulting in symptoms of burnout, post-traumatic stress disorder, and other mental health issues.

Numerous studies have explored the impact of COVID-19 on the quality of life in various populations. While limited evidence specifically pertains to social service workers, research on the general population sheds light on the broader effects of the pandemic on well-being.

In the Philippines, a study focused on Filipino teachers found a significant difference in the impact of COVID-19 on quality of life based on education level. However, factors such as age, gender, marital status, employment status, income, proximity to COVID-19 cases, personal connections to COVID-19 patients, presence of underlying medical conditions, and perceived threat did not significantly affect the quality of life [34]. Another study in the Philippines involving nursing students, reported that the pandemic had a moderate impact on their quality of life. This impact varied considerably based on gender and proximity to COVID-19 cases. Furthermore, the study revealed a moderate inverse relationship between psychological resilience and the impact of COVID-19 on quality of life [35].

Khodami and colleagues conducted a global study involving 3,002 participants and found that quality of life had significantly deteriorated over time as the pandemic progressed. Perceived stress levels had risen, and emotional regulation became more challenging. Prolonged quarantine durations were associated with worsening quality of life, increased perceived stress, and greater difficulties in emotional regulation [36].

In Saudi Arabia, research by Islam and Alharthi involving 506 households confirmed a significant reduction in the quality of life due to the COVID-19 crisis. Specific factors like low income, large household size, male-headed households, urban residence, household head unemployment, low educational levels, and the presence of elderly members were associated with a higher impact of COVID-19 on quality of life [37].

Singaporean researchers observed a direct correlation between COVID-19 stress syndrome and a decline in quality of life. This stress syndrome was inversely related to feelings of gratitude [38]. Meanwhile, a study conducted by Maric and colleagues [39], with a sample of 251 patients, indicated that the pandemic's impact on quality of life exceeded the theoretical average on a 5-point scale. Surprisingly, there was no significant association between COVID-19's impact and demographic characteristics or patient diagnoses, highlighting that demographic factors did not affect the pandemic's influence on quality of life.

While the specific effects on social service workers remain an area for further investigation, these studies collectively emphasize the broad-reaching impact of the pandemic on the quality

of life in different populations and underscore the importance of understanding the multifaceted aspects of well-being during such crises.

From these numerous studies, it is possible to establish, on the one hand, that social service workers experienced stress during the pandemic. On the other hand, COVID-19's impact on quality of life did not necessarily depend on some demographic aspects but eventually on external effects such as the time of exposure to the pandemic and sustained demands over time. That is, it was related to the workers' job demands, which could be explained from the perspective of job demands-resources theory [40].

Job demands refer to those physical, psychological, organizational, or social aspects of work that require sustained effort and have physiological and psychological effects. Work resources refer to the physical, psychological, organizational, or social aspects of work that reduce the demands at work, achieve the objectives of the work, and stimulate personal development [41]. Resources allow for the prediction of outcomes such as satisfaction, motivation, and engagement [42].

According to this theory, demands and resources trigger independent processes linked to people's health and motivation. Demands are predictors of stress, and resources are predictors of job satisfaction, well-being, and engagement. However, although demands and resources initiate independent processes, they can also have combined effects. Given the basic precepts of this theory, it can be said that COVID-19's impact on quality of life is a demand for workers and therefore affects stress. This is how the first hypothesis of our study is configured:

H1: COVID-19's impact on quality of life has a direct and positive relationship with the stress of nonprofit organizations workers, both in its dimension of exhaustion and disengagement at work.

Inclusion processes and stress in catastrophe and disaster situations

Considerable evidence supports the positive impact of inclusion on both individuals and organizations under typical circumstances [24, 43–45]. Yet, research addressing the role of inclusion during times of crisis remains limited.

Chan et al. [46] examined how company characteristics influence inclusion practices for employing individuals with disabilities. Their findings underscored the critical role of company size in shaping inclusion practices, with smaller firms less likely to implement such practices. Parker et al. [47] explored workplace inequalities in the public service sector and revealed that approaches rooted in liberal or radical "soft" equality discourses led to gradual, work-focused improvements, particularly for women.

Ahmad et al. [48] identified a positive relationship between spiritual leadership and organizational inclusion practices, although the study found that the Islamic ethics of a doctor did not significantly impact organizational inclusion practices. In Thailand, Rodprayoon and Maj [49] reported that diversity and inclusion in the workplace had a more substantial effect on employee retention during COVID-19 than perceived organizational support.

Kuknor and Bhattacharya [50] established a positive association between organizational inclusion and organizational citizenship behavior, as well as organization-based self-esteem. This highlights the importance of actively managing workplace inclusion for positive organizational outcomes.

However, as with stress, although studies reported evidence regarding inclusion during the pandemic, evidence of the effect of the pandemic on inclusion was not found.

It has been established that inclusion, and particularly the perception of inclusion, is associated with organizational processes, including both formal and informal participation, access to

information, and decision-making [23]. Consequently, it is plausible to assert that changes in these processes—participation, information, and decision-making—can impact the perception of inclusion. Furthermore, if we recognize that the pandemic affected the ways in which employees interact and make decisions due to COVID-19, it is reasonable to contend that individuals affected by COVID-19 may also have experienced changes in their levels of inclusion. This leads to the proposition of our second hypothesis:

H2. The COVID-19's impact will be negatively and directly related to the perception of inclusion of nonprofit organization workers.

In a similar vein, assuming that inclusion signifies access to resources highly valued by an organization [51], one can contend, from the perspective of the Job Demands-Resources theory, that inclusion plays a role in stress. This linkage between inclusion and stress has indeed been identified by Hopkins et al. [52]in their study on factors contributing to turnover among childcare workers, revealing a correlation between inclusion, stress, and worker turnover. Moreover, the association between exclusion and stress among employees in an American company has also been investigated [53], as well as the connection between inclusion in decision-making processes and role conflict [54]. Building on this foundation, we propose the following hypothesis:

H3. The perception of inclusion will be negatively and directly related to stress in nonprofit organization workers.

Finally, considering the relationship between the effect of COVID-19 and perception of inclusion and the relationship of this with stress, we can establish the following hypothesis:

H4. COVID-19's impact on quality of life will indirectly relate to stress through the perception of inclusion among nonprofit organization workers.

Fig 1 presents the hypotheses and the hypothetical model.

Methodology

To assess the hypotheses of this study, an exploratory quantitative observational research design was employed.

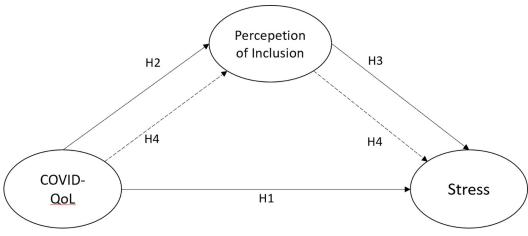


Fig 1. Hypothetical model.

Sample

The research targeted workers employed by nonprofit civil society organizations in Chile that were dedicated to social objectives such as poverty alleviation, inclusion of individuals with disabilities, development of historically marginalized areas, and the facilitation of access to social rights. Initially, contact was established with the human resources units of six organizations. To encourage participation, each organization was promised access to aggregated results information.

Ultimately, four organizations, each with a presence in different cities across Chile, agreed to participate in the study. The sampling method employed was non-probability and convenience sampling. Initially, the message was sent to 499 individuals, resulting in 242 responses at time point 1 and 200 responses at time point 2. A total of 173 individuals completed both surveys, primarily consisting of well-educated women from medium to high socioeconomic backgrounds, as well as young individuals.

Through the Vice-Rectory of Public Engagement of the University of Santiago de Chile, contact was made with the organizations' human resources units. The sample recruitment began in June. The sample was accessed via email sent by the human resources unit of each organization or by the responsible researcher during June and September of 2021. The investigation team conducted the detailed content and wording of the message. Everyone was informed in detail of the objective of the study, its stages, the treatment of the information, and its anonymity and confidentiality.

Measures

COVID-19's impact. In order to assess the impact of the pandemic on quality of life, the COV19-QoL scale was used [55]. The scale evaluates the influence of COVID-19 on quality of life and observes the individual's perceptions regarding the quality of life, its effects on physical and mental health, depression, and personal safety. To adapt the questionnaire for use in a Spanish-speaking population, the questionnaire, composed of six statements, was translated into Spanish and then assessed by three expert judges. The questionnaire is presented in Spanish and English in Table 1.

The measure was applied using a Likert-type questionnaire where individuals were presented with statements and asked to identify their level of agreement with each sentence ranging from 1 (strongly disagree) to 5 (strongly agree). The total score, which could be between 5 and 30, was the sum of item scores, and higher scores indicated a more severe impact of COVID-19 on quality of life.

Reliability was assessed with Cronbach's alpha, reaching 0.89, indicating strong internal consistency. Validity was evaluated through Confirmatory Factor Analysis (CFA), which revealed a good fit (RMSEA = 0.08, 90% CI [0.039, 0.13]; CFI = 0.98; TLI = 0.97;

Table 1. COV19-QoL scale.

Debido al CORONAVIRUS:	Due to the spread of the coronavirus
Creo que mi calidad de vida es peor que antes	My quality of life is lower than before
Creo que mi salud mental se ha deteriorado	I think my mental health has deteriorated.
Creo que mi salud física se ha deteriorado	I think my physical health may deteriorate
Me siento más tensa(o) que antes	I feel more tense than before
Me siento más deprimida(o) que antes	I feel more depressed than before
Siento que mi seguridad personal está en riesgo	My personal safety is at risk

SRMR = 0.03), affirming the questionnaire's ability to measure the intended constructs effectively.

Stress. The Oldenburg Burnout Inventory (OLBI) was employed to assess stress [56]. This instrument measures a worker's stress level and consists of two subscales. The exhaustion subscale measures the outcomes of intense physical, emotional, and cognitive stress resulting from prolonged exposure to specific job demands. The second subscale, disengagement from work, pertains to the individual's sense of detachment from work in a general sense, as well as from the work's objectives and content. In addition, attachment items refer to the relationship between an employee, their job position, and their identification with the job. The scale has 16 questions and was presented as a Likert-type questionnaire scale of 1 to 5, where 1 is "strongly agree," and 5 is "strongly disagree." Due to the instrument consisted of positive and negative statements, the latter had to be calculated in reverse (R). The final score of the scale and subscales could be between 1 and 5, with the highest scores indicating the highest stress level. The scale in Spanish and English are presented in Table 2.

Reliability reached 0.84, measured with Cronbach's alpha. However, the result for validity through CFA did not show an adequate fit. Specifically, question 9 exhibited a negative relationship with the other questions in this sample. After item 9 was removed, the scale exhibited a good fit (RMSEA = 0.09, 90% CI [0.083, 0.11]; CFI = 0.84; TLI = 0.81; SRMR = 0.08).

Inclusion. The Mor Barack perception of inclusion scale was used as a Likert-type questionnaire [23]. The scale comprises Likert-type indicators of 1–5 to evaluate the level of agreement (1, "strongly disagree" and 5, "strongly agree.") Higher scores indicated a greater sense of

Table 2. OLBI scale.

Spanish version	English version
Encuentro, con frecuencia, aspectos nuevos e interesantes en mi trabajo.	I always find new and interesting aspects in my work.
Hay días en que me siento cansado antes de llegar al trabajo (R)	There are days when I feel tired before I arrive at work (R)
Cada vez hablo, con más y más frecuencia, sobre mi trabajo de manera negativa (R)	It happens more and more often that I talk about my work in a negative way (R)
Después de trabajar, necesito más tiempo que antes para relajarme y sentirme mejor (R)	After work, I tend to need more time than in the past in order to relax and feel better(R)
Puedo tolerar muy bien la presión de mi trabajo	I can tolerate the pressure of my work very well.
Últimamente, suelo pensar menos en mi trabajo y hago mis tareas laborales casi mecánicamente (R)	Lately, I tend to think less at work and do my job almost mechanically (R)
Considero que mi trabajo es un desafío positivo	I find my work to be a positive challenge.
Durante mi trabajo, me siento emocionalmente agotado (R)	During my work, I often feel emotionally drained (R)
Con el tiempo, uno puede desconectarse de este tipo de trabajo (R)	Over time, one can become disconnected from this type of work (R).
Después de trabajar, tengo suficiente energía para mis actividades de ocio.	After working, I have enough energy for my leisure activities.
A veces me siento agotado por mis tareas de trabajo (R)	Sometimes I feel sickened by my work tasks (R)
Después de mi trabajo, normalmente me siento cansado y sin energía (R)	After my work, I usually feel worn out and weary (R)
Este es el único tipo de trabajo que me imagino haciendo (R)	This is the only type of work that I can imagine myself doing (R)
Por lo general, puedo manejar bien la cantidad de trabajo que tengo	Usually, I can manage the amount of my work well
Me siento cada vez más comprometido con mi trabajo	I feel more and more engaged in my work.
Cuando trabajo, normalmente me siento con energía	When I work, I usually feel energized.

Table 3. Perception of inclusion scale.

Spanish version	English version-original version
Tengo influencia en las decisiones tomadas por mi grupo de trabajo respecto a nuestras tareas	I have influence in decisions taken by my work group regarding our tasks.
Mi equipo comparte abiertamente información conmigo relacionada al trabajo	My coworkers openly share work related information with me
Generalmente, estoy considerado/a e invitado/a a participar en actividades relacionadas con mi grupo de trabajo	I am typically involved and invited to actively participate in work related activities of my work group
Soy capaz de influir sobre las decisiones que afectan a la organización	I am able to influence decisions that affect my organization
Generalmente, soy de los/as últimos/as en enterarme de los cambios importantes en la organización (R)	I am usually among the last to know about important changes in the organization(R)
Generalmente, estoy invitado/a a reuniones importantes en mi organización	I am usually invited to important meetings in my organization
Frecuentemente, mi jefatura directa pide mi opinión antes de tomar decisiones importantes	My supervisor often asks for my opinion before making important decisions.
Mi jefatura directa no comparte información conmigo (R)	My supervisor does not share information with me (R)
Mi jefatura directa me invita a participar activamente de reuniones de revisión y evaluación de mi trabajo	I am invited to actively participate in review and evaluation meetings with my supervisor.
Generalmente, me invitan a dar mi opinión en reuniones con jefaturas superiores a mi jefatura directa	I am often invited to contribute my opinion in meetings with management higher than my immediate supervisor.
Frecuentemente, recibo información de gerencias o de cargos más altos que mi jefatura directa (Ej. correos electrónicos)	I frequently receive communication from management higher than my immediate supervisor (i.e., memos, emails)
Generalmente, me invitan a participar de reuniones con gerencias o cargos más altos que mi jefatura directa	I am often invited to participate in meetings with management higher than my immediate supervisor.

https://doi.org/10.1371/journal.pone.0295743.t003

inclusion. As this instrument consisted of positive and negative statements, the latter had to be calculated in reverse (R).

The application of the instrument did not include the questions regarding participation in informal spaces, as it was conducted during the COVID-19 pandemic when informal participation scenarios were limited. In this way, each subscale—organization, supervisor, team, and higher management inclusion—included three items, which were added, giving the possibility of scoring between 3 and 15 in each subscale and 60 on the scale. The scale, already validated in Spanish [57], had good reliability (0.85). Additionally, it exhibited an adequate fit with values (RMSEA = 0.07, 90% CI [0.04, 0.09]; CFI = 0.94; TLI = 0.92; SRMR = 0.05). The Spanish and English versions of the scales are presented in Table 3.

Control variables. Information regarding the age, nationality, experience, education and occupation, and SES of participants was collected for control purposes.

Procedure

The study included the application of two online questionnaires through Qualtrics© software. The first questionnaire collected demographic information, while the second, administered 2 to 4 weeks later, observed the scales related to the impact of COVID-19, stress, and inclusion. The first questionnaire was answered by 242 individuals, while the second one was completed by 200 participants. 173 individuals responded to both assessments. Participants were contacted via email, and reminders were sent during the two weeks when the questionnaire remained open. Access to the sample was coordinated with the human resources units of each organization, ensuring that it did not interfere the organization's operations.

Before data collection, official written ethical approval was obtained from the Research Ethics Committee of the Universidad de Santiago de Chile (Approval Number: 222/2021) on June 18, 2021. Participants were informed about the purpose of the study, the content of the questionnaires, confidentiality, and the fact their participation was anonymous and voluntary. They were requested to provide a written, online recorded informed consent before completing the survey.

Data collection commenced in June and ended in October 2021. The database was created in the statistical software SPSS 25. Subsequently, tests pertaining to the model and hypotheses, including correlation studies, multiple linear regressions, and structural equations, were conducted using Mplus version 7. The measurement variables within the hypothetical model did not exhibit missing values.

Results

The details of its characteristics can be seen in Table 4.

These findings align with studies conducted on populations employed in child social-care services in Chile as well as in various international contexts, including China, the USA, and several European countries [16, 58, 59].

<u>Table 5</u> presents descriptive statistics of the study variables and their correlation.

According to the correlation matrix, COVID-19's impact had a positive relationship with educational level, SES, and stress. It was also possible to observe that COVID-19's impact was negatively related to age and inclusion. Likewise, stress had a negative relationship with age, tenure, and inclusion, and a positive relationship with educational level. Finally, inclusion is related to an individual's educational level and SES.

Table 4. Characteristics of the sample.

Variables	n	%	Min	Max	Mean	SD
Gender	173					
Men	48	27.7%				
Women	125	72.3%				
Missing values	27					
Age (years)			24	65	38.79	9.88
Educational level	173					
Primary School	0	0%				
Secondary School	8	4.6%				
Technical Education	17	9.8%				
Professional Education	80	43.2%				
Postgraduate	68	39.3%				
Missing values	27					
Socioeconomic status	170					
1 (poor people)	0	0%				
2 (vulnerable people)	6	3.5%				
3 (lower middle class)	16	9.4%				
4 (typical middle class)	18	10.6%				
5 (emerging middle class)	48	28.2%				
6 (affluent middle class)	74	43.6%				
7 (high class)	8	4.7%				
Missing values	30					

Table 5. Correlation results.

	Mean	SD	1	2	3	4	5	6	7
(1) Tenure	7.08	5.86	1						
(2) Age	38.79	9.88	0.67**	1					
(3) Educational level	4.2	0.79	-0.22**	-0.3**	1				
(4) SES	5.13	1.19	-0.05	-0.13	0.63**	1			
(5) COVID-19's impact	2.94	0.94	-0.11	-0.17*	0.16*	0.18*	1		
(6) Inclusion	39.56	6.96	0.04	-0.05	0.15*	0.16*	-0.17*	1	
(7) Stress	2.66	0.59	-0.2**	-0.39**	0.19*	0.14	0.62**	-0.35**	1

^{*}p < .05

https://doi.org/10.1371/journal.pone.0295743.t005

Multiple linear regressions were performed to evaluate the hypotheses under study to evaluate each of the established relationships. The results are presented in <u>Table 6</u>.

According to the results, COVID-19's impact had a positive and direct relationship with stress through the dimension of exhaustion (β = 0.52, p < 0.001) and disengagement (β = 0.74, p < 0.001). Likewise, a direct and negative relationship was observed between COVID-19's impact and inclusion, particularly through working group inclusion (β = -0.2, p < 0.01) and with organization inclusion (β = -0.25, p < 0.001). Finally, the third regression of the model confirmed that inclusion was negatively related to stress, particularly through organization inclusion and its relationship with disengagement from work (β = -0.83, p < 0.001).

Table 6. Hypothetical model regressions.

Model	В	SE	RMSEA	90% CI RMSEA	CFI	TLI	SRMR
1. COVID-19 Impact predicts stress:			0.08	0.066/0.086	0.87	0.86	0.08
Disengagement	0.52***	0.07					
Exhaustion	0.74***	0.04					
2. COVID-19 Impact predicts inclusion:			0.06	0.048/0.075	0.93	0.91	0.06
Working Group Inclusion	-0.2**	0.08					
Organization Inclusion	-0.25***	0.09					
Supervisor Inclusion	-0.08	0.1					
Higher Management Inclusion	-0.08	0.09					
3. Inclusion predicts stress:			0.07	0.059/0.076	0.84	0.82	0.08
Disengagement							
Working Group Inclusion	0.05	0.23					
Organization Inclusion	-0.83***	0.3					
Supervisor Inclusion	-0.08	0.17					
Higher Management Inclusion	0.32	0.21					
Exhaustion							
Working Group Inclusion	-0.03	0.22					
Organization Inclusion	-0.39	0.29					
Supervisor Inclusion	-0.04	0.18					
Higher Management Inclusion	0.22	0.20					

^{*}p < .05

^{**}p < .01

^{**}p < .01

^{***}p < .001

Table 7. Testing modified models.

Model	RMSEA	90% CI RMSEA	CFI	TLI	SRMR
1. Considering COVID-19 impact, stress and organization inclusion	0.08	0.069/0.086	0.84	0.82	0.09
2. Considering COVID-19 impact, stress-disengagement and organization inclusion	0.07	0.060/0.085	0.89	0.87	0.08

https://doi.org/10.1371/journal.pone.0295743.t007

The regression results indicated that COVID-19's impact affected stress and the perception of inclusion. Inclusion likewise had effects on stress, and particularly disengagement. Therefore, the hypothetical model was evaluated through a structural equation model to advance in testing the hypotheses. The hypothetical model did not have a good fit (RMSEA 0.08, 90% CI [0.0.76, 0.089]; CFI 0.79; TLI 0.77; SRME 0.12).

However, considering the results of the regressions, we assessed two new models. The first considered the effect of COVID-19 on organization inclusion, as it seemed to be the one that presented meaningful results in this context. The second one was the same but only considered the subdimension disengagement in stress. In all cases, gender, age, tenure, SES, and race were controlled for. The results are shown in Table 7.

Based on the adjustment indices of the second model, it was possible to determine that there was a direct relationship between COVID-19's impact and stress -particularly due to its disengagement dimension- and an indirect relationship between both variables, mediated by inclusion with the organization. The indirect results are described in Table 8.

In light of the conducted tests, it is tentatively plausible to conclude that the impact of COVID-19 affects stress levels in social service workers, both directly and indirectly, through their level of inclusion within their respective organizations. and considering the gender, age, ethnicity, and SES of the workers.

Discussion

The study conducted on nonprofit human service organization workers in Chile has revealed that the impact of COVID-19 is directly associated with increased workplace stress. At the same time, the study has shown that the relationship is mediated by organizational inclusion. In other words, individuals who experienced a more significant disruption in their lives due to COVID-19 were more likely to experience heightened work-related stress. This heightened stress was a direct consequence of the pandemic's adverse effects on their quality of life and the negative impact of COVID-19 on their perception of inclusion within the organization. In essence, the negative impact of COVID-19 on quality of life not only generated stress but also had an adverse effect on individuals' perception of inclusion, which, in turn, was negatively correlated with their stress levels.

Following the premises of the job demands-resources theory [40], these results assume that the effect of COVID-19 on mental health, physical health, and personal safety introduced an additional demand for these workers. Consequently, they experienced elevated levels of stress,

Table 8. Testing indirect effect models.

	Direct effect	Indirect effect	Total effect
Impact of COVID on disengagement, mediated by organizational	0.32***	0.17**	0.49**
inclusion			

p < .05

^{**}p < .01

^{***}p < .001

notably reflected in their disengagement from work, as evidenced by the measure developed by Demerouti [56]. These results align with previous research, such as Khodami et al. [36], which reported an increased stress associated with COVID-19, particularly as the duration of quarantine extended, confirming that the effects of COVID-19 acted as cognitive, physical, and emotional demands.

Moreover, the pandemic reshaped the dynamics of relationships, impacting their nature and frequency. Individuals were not only required to maintain distance from their workplace or adopt remote work but also had to carry out their tasks in a more solitary manner [60]. This transformation affected the traditional spaces for interaction, socialization, and support that were previously available [61].

Our study provides several noteworthy insights into the realm of inclusion. First, it underscores the pivotal role of organizational inclusion in influencing stress levels. It reaffirms the importance of inclusion in organizational outcomes, a trend corroborated by previous research. However, it was not possible to observe the effect of inclusion with the working group, higher management, or supervisors on stress. This outcome may be linked to the fact that teams and supervisors found more effective ways to adapt to the new context, while the organizational and structural dimensions posed greater challenges, thus affecting inclusion processes and stress levels.

Considering the impact of COVID-19 on stress and inclusion within organizations, it is pertinent to question how human service organizations and social services are addressing the well-being of their workers in times of crisis—a topic that has been underexplored by both organizations and academics, whether as research or a dimension for COVID-19 adaptation [2, 11]. Often, worker conditions receive less attention compared to the well-being of their clients, as if there were an inherent conflict between the welfare of workers, service quality, and organizational sustainability [62].

Research has established that in human service organizations, the quality of job relationships plays a crucial role in mitigating the impact of stress [63]. While workers who actively choose to work for social causes tend to perform better, this alone is insufficient [64]. Our study underscores the need for post-COVID interventions aimed at ensuring equal access to information, equitable participation, and decision-making.

Furthermore, it is essential to explore ways to promote inclusion and create inclusive environments amid catastrophic situations when decisions need to be efficient, actions swift, and participation diligent. As previously emphasized, leaders must commit to fostering inclusive climates, a factor shown in this sector to be associated with favorable outcomes for individuals and organizations [15]. In this context, the role of inclusive leaders who facilitate meaningful connections beyond formal roles and offer equal and equitable treatment becomes paramount [65].

In this regard, harnessing information and communication technologies to enhance social services management, particularly in extreme situations, seems crucial. However, it is important to note that, despite work organization adjustments, social services still require a substantial in-person dimension and must continue their on-site work. This necessitates the development of strategies to address the demands and stress inherent in a crisis context, characteristic of the "turn of business."

Conclusions

The connection between the impact of COVID-19 on quality of life and stress has not been extensively explored within nonprofit organizations and social services. This study represents one of the initial investigations to propose both a direct and indirect association through the

mediating factor of inclusion. In this context, our findings in the examined sample provide evidence that individuals who experienced greater stress due to the pandemic also exhibited heightened levels of workplace stress.

The study results should be treated with caution, especially given the unique conditions that social service workers in Chile contend with. These conditions include limited budgets and the introduction of new public management models, which often add administrative tasks that can become general stressors [66, 67]. Another limitation of the study is related to the measure of inclusion, which did not encompass the informal participation subscale due to quarantine restrictions. In cultures such as the Chilean, informality plays a significant role in labor relations.

Regarding practical implications, our results underscore the need for ongoing stress prevention efforts. Nonprofit organizations must take steps to reduce stress and exhaustion, as workers are particularly prone to heightened stress levels during catastrophes. This heightened stress can lead to increased levels of burnout and even attrition from organizations. It is essential to bolster mindfulness and explore job-crafting at the individual level [68, 69], strengthen social support and the role of supervision at the group level [70, 71], and ensure the review of tasks, job redesign, technology integration, information sharing, and the mechanisms of participation in decision-making at the organizational level [72].

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References

- Clary PA, Rose PV. The Impact of COVID-19: The Phenomenological Effect of Burnout on Women in the Nonprofit Sector and Implications for the Post-Pandemic Work World. Merits [Internet]. 2022 Oct 20 [cited 2023 Mar 30]; 2(4):331–41. Available from: https://www.mdpi.com/2673-8104/2/4/23/htm
- Finchum-Mason E, Husted K, Suárez D. Philanthropic Foundation Responses to COVID-19. Nonprofit and Voluntary Sector Quarterly [Internet]. 2020 Dec 23; 49(6):1129–41. Available from: http://journals.sagepub.com/doi/10.1177/0899764020966047

- Saeed BA, Shabila NP, Aziz AJ. Stress and anxiety among physicians during the COVID-19 outbreak in the Iraqi Kurdistan Region: An online survey. Lahiri A, editor. PLOS ONE [Internet]. 2021 Jun 29; 16(6): e0253903. Available from: http://dx.doi.org/10.1371/journal.pone.0253903
- García-Batista ZE, Guerra-Peña K, Nouri Kandany V, Marte MI, Garrido LE, Cantisano-Guzmán LM, et al. COVID-19 pandemic and health worker stress: The mediating effect of emotional regulation. Martínez Molina A, editor. PLOS ONE [Internet]. 2021 Nov 24; 16(11):e0259013. Available from: https://dx.plos.org/10.1371/journal.pone.0259013
- Benfante A, Di Tella M, Romeo A, Castelli L. Traumatic Stress in Healthcare Workers During COVID-19 Pandemic: A Review of the Immediate Impact. Frontiers in Psychology [Internet]. 2020 Oct 23 [cited 2022 Oct 28]; 11:2816. Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2020.569935/full PMID: 33192854
- Yin Q, Sun Z, Liu T, Ni X, Deng X, Jia Y, et al. Posttraumatic stress symptoms of health care workers during the corona virus disease 2019. Clinical Psychology & Psychotherapy [Internet]. 2020 May 31 [cited 2020 Oct 7]; 27(3):384–95. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/cpp.2477 PMID: 32415733
- Asaoka H, Koido Y, Kawashima Y, Ikeda M, Miyamoto Y, Nishi D. Post-traumatic stress symptoms among medical rescue workers exposed to COVID-19 in Japan. Psychiatry and clinical neurosciences [Internet]. 2020 Sep 21 [cited 2022 Oct 28]; 74(9):503–5. Available from: https://onlinelibrary.wiley.com/ doi/10.1111/pcn.13092 PMID: 32691955
- González Ramírez LP, Martínez Arriaga RJ, Hernández-Gonzalez M, De la Roca-Chiapas JM. Psychological Distress and Signs of Post-Traumatic Stress in Response to the COVID-19 Health Emergency in a Mexican Sample. Psychology Research and Behavior Management [Internet]. 2020 Jul [cited 2022 Oct 28]; 13:589–97. Available from: https://doi.org/10.2147/PRBM.S259563 PMID: 32801956
- Afulani PA, Gyamerah AO, Nutor JJ, Laar A, Aborigo RA, Malechi H, et al. Inadequate preparedness for response to COVID-19 is associated with stress and burnout among healthcare workers in Ghana. Lionetti V, editor. PLOS ONE [Internet]. 2021 Apr 16; 16(4):e0250294. Available from: http://dx.doi.org/10.1371/journal.pone.0250294
- 10. Kulkarni A, Khasne RW, Dhakulkar BS, Mahajan HC. Burnout among Healthcare Workers during COVID-19 Pandemic in India: Results of a Questionnaire-based Survey. Indian Journal of Critical Care Medicine [Internet]. 2020 Sep 21 [cited 2022 Oct 28]; 24(8):664–71. Available from: https://creativecommons. https://doi.org/10.5005/jp-journals-10071-23518 PMID: 33024372
- Santos MRC, Laureano RMS. COVID-19-Related Studies of Nonprofit Management: A Critical Review and Research Agenda. VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations [Internet]. 2022 Oct 29 [cited 2023 Mar 30]; 33(5):936–51. Available from: https://link.springer.com/article/10.1007/s11266-021-00432-9 PMID: 34866809
- 12. Schwartz Tayri TM. On the Frontlines: The Impact of the COVID-19 Pandemic on Social Workers' Well-Being. Social Work [Internet]. 2022 Dec 23 [cited 2023 Feb 4]; 68(1):69–80. Available from: https://academic.oup.com/sw/article/68/1/69/6835786 https://doi.org/10.1093/sw/swac050 PMID: 36409997
- 13. Beal SJ, Nause K, Greiner M V. Understanding the impact of COVID-19 on stress and Access to Services for Licensed and Kinship Caregivers and Youth in Foster Care. Child and Adolescent Social Work Journal [Internet]. 2022 Oct 15 [cited 2022 Oct 28]; 39(5):633–40. Available from: https://doi.org/10.1007/s10560-022-00833-9 PMID: 35855445
- Calderón-Orellana M, Díaz Bórquez D, Miranda Sánchez P. COVID-19 and client violence toward healthcare social workers in Chile. International Social Work [Internet]. 2023 Jan 12 [cited 2023 Feb 4]; 66(1):144–57. Available from: https://journals.sagepub.com/doi/abs/10.1177/00208728221104395
 PMID: 36687131
- 15. Brimhall KC. Inclusion Is Important...s But How Do I Include? Examining the Effects of Leader Engagement on Inclusion, Innovation, Job Satisfaction, and Perceived Quality of Care in a Diverse Nonprofit Health Care Organization. Nonprofit and Voluntary Sector Quarterly [Internet]. 2019 Aug 10 [cited 2020 Jan 20]; 48(4):716–37. Available from: http://journals.sagepub.com/doi/10.1177/0899764019829834
- 16. Lizano EL, Mor Barak M. Job burnout and affective wellbeing: A longitudinal study of burnout and job satisfaction among public child welfare workers. Children and Youth Services Review [Internet]. 2015 Aug 1 [cited 2022 Nov 28]; 55:18–28. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0190740915001541
- 17. Mata KKC, Tarroja MCH. Impact of Emotional Exhaustion and Self-efficacy on the Psychological Well-Being of Child Care Workers in the Philippines. Psychological Studies [Internet]. 2022 Sep 14 [cited 2022 Nov 28]; 67(3):352–61. Available from: https://doi.org/10.1007/s12646-022-00662-x
- Beer OWJ, Phillips R, Stepney L, Quinn CR. The Feasibility of Mindfulness Training to Reduce Stress among Social Workers: A Conceptual Paper. The British Journal Of Social Work [Internet]. 2019 Jan 1 [cited 2023 Feb 5]; 50(1):243–63. Available from: https://academic.oup.com/bjsw/article/50/1/243/5574508

- Solomonidou A, Katsounari I. Experiences of social workers in nongovernmental services in Cyprus leading to occupational stress and burnout. International Social Work [Internet]. 2022 Jan 13; 65(1):83– 97. Available from: http://journals.sagepub.com/doi/10.1177/0020872819889386
- Jones LP, Okamura A. Reprofessionalizing Child Welfare Services: An Evaluation of a Title IVE Training Program. Research on Social Work Practice [Internet]. 2000 Sep 29; 10(5):607–21. Available from: http://journals.sagepub.com/doi/10.1177/104973150001000504
- 21. Wilberforce M, Jacobs S, Challis D, Manthorpe J, Stevens M, Jasper R, et al. Revisiting the Causes of Stress in Social Work: Sources of Job Demands, Control and Support in Personalised Adult Social Care. British Journal of Social Work [Internet]. 2014 Jun 1; 44(4):812–30. Available from: https://academic.oup.com/bjsw/article-lookup/doi/10.1093/bjsw/bcs166
- 22. Brimhall KC, Lizano EL, Mor Barak M. The mediating role of inclusion: A longitudinal study of the effects of leader–member exchange and diversity climate on job satisfaction and intention to leave among child welfare workers. Children and Youth Services Review [Internet]. 2014 May; 40:79–88. Available from: http://dx.doi.org/10.1016/j.childyouth.2014.03.003
- 23. Mor Barak M. Managing Diversity: Toward a Globally Inclusive Workplace. fifth. SAGE Publications Inc.; 2022. 512 p.
- Mor Barak M, Lizano EL, Kim A, Duan L, Rhee MK, Hsiao HY, et al. The Promise of Diversity Management for Climate of Inclusion: A State-of-the-Art Review and Meta-Analysis. Human Service Organizations: Management, Leadership & Governance [Internet]. 2016 Aug 7; 40(4):305–33. Available from: https://www.tandfonline.com/doi/full/10.1080/23303131.2016.1138915
- 25. Andhavarapu S, Yardi I, Bzhilyanskaya V, Lurie T, Bhinder M, Patel P, et al. Post-traumatic stress in healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. Psychiatry Research [Internet]. 2022 Nov; 317(October):114890. Available from: https://doi.org/10.1016/j.psychres.2022.114890 PMID: 36260970
- 26. d'Ettorre G, Ceccarelli G, Santinelli L, Vassalini P, Innocenti G Pietro, Alessandri F, et al. Post-Traumatic Stress Symptoms in Healthcare Workers Dealing with the COVID-19 Pandemic: A Systematic Review. International Journal of Environmental Research and Public Health [Internet]. 2021 Jan 12 [cited 2022 Oct 28]; 18(2):601. Available from: https://doi.org/10.3390/ijerph18020601 PMID: 33445712
- 27. Giorgi G, Lecca LI, Alessio F, Finstad GL, Bondanini G, Lulli LG, et al. COVID-19-Related Mental Health Effects in the Workplace: A Narrative Review. International Journal of Environmental Research and Public Health [Internet]. 2020 Oct 27 [cited 2022 Apr 26]; 17(21):7857. Available from: https://www.mdpi.com/1660-4601/17/21/7857/htm https://doi.org/10.3390/ijerph17217857 PMID: 33120930
- Schubert P, Ressler RW, Paarlberg LE, Boenigk S. The Evolution of the Nonprofit Research Field: An Emerging Scholar Perspective. Nonprofit and Voluntary Sector Quarterly [Internet]. 2023 Apr 25; 52 (1_suppl):102S–129S. Available from: http://journals.sagepub.com/doi/10.1177/08997640221078824
- 29. Martínez-López JÁ, Lázaro-Pérez C, Gómez-Galán J. Burnout among Direct-Care Workers in Nursing Homes during the COVID-19 Pandemic in Spain: A Preventive and Educational Focus for Sustainable Workplaces. Sustainability [Internet]. 2021 Mar 4 [cited 2022 Oct 28]; 13(5):2782. Available from: https://www.mdpi.com/2071-1050/13/5/2782/htm
- Dima G, Meseşan Schmitz L, Şimon MC. Job Stress and Burnout among Social Workers in the VUCA World of COVID-19 Pandemic. Sustainability [Internet]. 2021 Jun 24; 13(13):7109. Available from: https://www.mdpi.com/2071-1050/13/13/7109
- Holmes MR, Rentrope CR, Korsch-Williams A, King JA. Impact of COVID-19 Pandemic on Posttraumatic Stress, Grief, Burnout, and Secondary Trauma of Social Workers in the United States. Clinical Social Work Journal [Internet]. 2021 Dec 2 [cited 2022 Apr 5]; 49(4):495–504. Available from: https://link.springer.com/article/10.1007/s10615-021-00795-y PMID: 33678920
- 32. Seng BK, Subramaniam M, Chung YJ, Syed Ahmad SAM, Chong SA. Resilience and stress in frontline social workers during the COVID-19 pandemic in Singapore. Asian Social Work and Policy Review [Internet]. 2021 Oct 26 [cited 2022 Oct 28]; 15(3):234–43. Available from: https://onlinelibrary.wiley.com/doi/10.1111/aswp.12237 PMID: 35655794
- 33. Alsabti KA. The effects of social, familial, and economic stress on social workers working with disabled individuals. Journal of Social Work [Internet]. 2022 Sep 5 [cited 2022 Oct 28]; 22(5):1207–26. Available from: https://journals.sagepub.com/doi/abs/10.1177/14680173221083466
- **34.** Rabacal JS, Oducado RMF, Tamdang KA. COVID-19 impact on the quality of life of teachers: A cross-sectional study. Asian Journal for Public Opinion Research. 2020; 8(4):478–92.
- Guillasper JN, Oducado RMF, Soriano GP. Protective role of resilience on COVID-19 impact on the quality of life of nursing students in the Philippines. Belitung Nursing Journal [Internet]. 2021 Feb 22 [cited 2022 Apr 6]; 7(1):43–9. Available from: https://www.econstor.eu/handle/10419/232498 https://doi.org/10.33546/bnj.1297 PMID: 37469791

- 36. Ahsan Khodami M, Hassan Seif M, Sadat Koochakzadeh R, Fathi R, Kaur H. Perceived stress, emotion regulation and quality of life during the Covid-19 outbreak: A multi-cultural online survey. Annales Médico-psychologiques, revue psychiatrique [Internet]. 2022 Jun 15 [cited 2022 Apr 6]; 180(6):514–8. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0003448721000615 https://doi.org/10.1016/j.amp.2021.02.005 PMID: 33612843
- Islam MM, Alharthi M. Impact of COVID-19 on the Quality of Life of Households in Saudi Arabia. International Journal of Environmental Research and Public Health [Internet]. 2022 Jan 29 [cited 2022 Apr 6]; 19(3):1538. Available from: https://www.mdpi.com/1660-4601/19/3/1538/htm https://doi.org/10.3390/ijerph19031538 PMID: 35162560
- 38. Ang CS, Das S/O A Sudha Ann Nancy AAELE. 'Dirty foreigners' are to blame for COVID-19: impacts of COVID stress syndrome on quality of life and gratitude among Singaporean adults. Current Psychology [Internet]. 2022 Jan 15 [cited 2022 Apr 6]; 1:1–13. Available from: https://link.springer.com/article/10.1007/s12144-021-02560-3 PMID: 35068903
- 39. Maric NP, Pejovic-Milovancevic M, Vukovic O, Colovic O, Miljevic C, Pejuskovic B, et al. Determinants of quality of life among individuals seeking mental health care after termination of state of emergency due to the coronavirus disease 2019 pandemic. Medicine [Internet]. 2021 Aug 6 [cited 2022 Apr 6]; 100 (31):e26854. Available from: /pmc/articles/PMC8341307/ https://doi.org/10.1097/MD. 0000000000026854 PMID: 34397861
- Demerouti E, Bakker AB, Nachrei F, Schaufeli WB. The job demands-resources model of burnout. Journal of Applied psychology. 2001; 86(3):499–512. PMID: 11419809
- Bakker AB, Demerouti E. The Job Demands-Resources model: state of the art. Journal of Managerial Psychology [Internet]. 2007 Apr 3; 22(3):309–28. Available from: https://www.emerald.com/insight/content/doi/10.1108/02683940710733115/full/html
- 42. Bakker AB, Demerouti E. La teoría de las demandas y los recursos laborales. Revista de Psicología del Trabajo y de las Organizaciones [Internet]. 2013 Dec; 29(3):107–15. Available from: http://journals.copmadrid.org/jwop/article.php?id=46072631582fc240dd2674a7d063b040
- 43. Holmes O, Jiang K, Avery DR, McKay PF, Oh IS, Tillman CJ. A Meta-Analysis Integrating 25 Years of Diversity Climate Research. Journal of Management [Internet]. 2021 Jul 29 [cited 2020 Aug 17]; 47 (6):1357–82. Available from: https://journals.sagepub.com/doi/full/10.1177/0149206320934547?casa_token=nWDeh8mFSVAAAAAA%3Ad_FyNYNeXVF950f66L7lLKx1iXXZcrR7I91lAfPlhYKvuZy2T3af_kb4wlRWzhv3sjNyL0sHtSQ_YQ
- 44. Chung BG, Ehrhart KH, Shore LM, Randel AE, Dean MA, Kedharnath U. Work Group Inclusion: Test of a Scale and Model. Group & Organization Management [Internet]. 2020 Feb 3 [cited 2020 Jan 20]; 45 (1):75–102. Available from: http://journals.sagepub.com/doi/10.1177/1059601119839858
- 45. Shore LM, Cleveland JN, Sanchez D. Inclusive workplaces: A review and model. Human Resource Management Review [Internet]. 2018 Jun [cited 2017 Dec 21]; 28(2):176–89. Available from: https://acels-cdn-com.ezproxy.puc.cl/S1053482217300529/1-s2.0-S1053482217300529-main.pdf?_tid=01923bf8-e6b3-11e7-8a4d-00000aab0f02&acdnat=1513904396_4920182b3a128d5c936ad110532a36b4
- 46. Chan F, Tansey TN, Iwanaga K, Bezyak J, Wehman P, Phillips BN, et al. Company Characteristics, Disability Inclusion Practices, and Employment of People with Disabilities in the Post COVID-19 Job Economy: A Cross Sectional Survey Study. Journal of Occupational Rehabilitation [Internet]. 2021 Sep 2 [cited 2022 Nov 2]; 31(3):463–73. Available from: https://doi.org/10.1007/s10926-020-09941-8 PMID: 33136220
- 47. Parker J, Sayers J, Young-Hauser A, Barnett S, Loga P, Paea S. Gender and ethnic equity in Aotearoa New Zealand's public service before and since Covid-19: Toward intersectional inclusion? Gender, Work & Organization [Internet]. 2022 Jan 26 [cited 2022 Nov 2]; 29(1):110–30. Available from: https://onlinelibrary.wiley.com/doi/https://doi.org/10.1111/gwao.12759
- **48.** Ahmad US, Nawab S, Shafi K. The Role of Islamic Work Ethics in Spiritual Leadership and Inclusion Practices Relationship During COVID-19. Journal of Asian Finance, Economics and Business. 2021; 8 (3):943–52.
- 49. Rodprayoon N, Maj SP. Workplace Diversity Influence on Employee Retention in Organizations during the COVID-19. AU-GSB e-JOURNAL [Internet]. 2021 [cited 2022 Nov 2]; 14(2):130–43. Available from: http://www.assumptionjournal.au.edu/index.php/AU-GSB/article/view/5708/3301
- 50. Kuknor SC, Bhattacharya S. Inclusive leadership: new age leadership to foster organizational inclusion. European Journal of Training and Development [Internet]. 2022 Nov 29 [cited 2022 Nov 2]; 46(9):771–97. Available from: https://www.emerald.com/insight/2046-9012.htm
- Nishii LH. The benefits of climate for inclusion for gender-diverse groups. Academy of Management Journal [Internet]. 2013 Dec; 56(6):1754–74. Available from: http://journals.aom.org/doi/10.5465/amj. 2009.0823

- Hopkins KM, Cohen-Callow A, Kim HJ, Hwang J. Beyond intent to leave: Using multiple outcome measures for assessing turnover in child welfare. Children and Youth Services Review [Internet]. 2010; 32 (10):1380–7. Available from: https://doi.org/http%3A//dx.doi.org/10.1016/j.childyouth.2010.06.006
- 53. Hitlan RT, Noel J. The influence of workplace exclusion and personality on counterproductive work behaviours: An interactionist perspective. European Journal of Work and Organizational Psychology [Internet]. 2009 Dec [cited 2023 Mar 8]; 18(4):477–502. Available from: https://doi.org/10.1080/13594320903025028
- 54. Travis DJ, Mor Barak M. Fight or flight? factors influencing child welfare workers' propensity to seek positive change or disengage from their jobs. Journal of Social Service Research [Internet]. 2010 Apr 22 [cited 2021 Mar 3]; 36(3):188–205. Available from: /record/2010-16137-003
- 55. Repišti S, Jovanović N, Kuzman MR, Medved S, Jerotić S, Ribić E, et al. How to measure the impact of the COVID-19 pandemic on quality of life: COV19-QoL—the development, reliability and validity of a new scale. Global Psychiatry [Internet]. 2020 Jun 25 [cited 2021 Apr 9];0(0). Available from: https://www.sciendo.com/article/10.2478/qp-2020-0016
- Demerouti E, Mostert K, Bakker AB. Burnout and work engagement: A thorough investigation of the independency of both constructs. Journal of Occupational Health Psychology [Internet]. 2010 Jul [cited 2020 Dec 16]; 15(3):209–22. Available from: /record/2010-13667-001 https://doi.org/10.1037/a0019408 PMID: 20604629
- 57. Pizarro-Galleguillos P, Calderón-Orellana M. Diversity Climate and Perception of Inclusion in a Chilean Company: Spanish Adaptation of Mor Barak Scales. The International Journal of Organizational Diversity [Internet]. 2022; 22(2):51–66. Available from: https://cgscholar.com/bookstore/works/diversity-climate-and-perception-of-inclusion-in-a-chilean-company
- **58.** Mor Barak M, Levin A, Nissly JA, Lane CJ. Why do they leave? Modeling child welfare workers' turnover intentions. Children and Youth Services Review. 2006; 28(5):548–77.
- 59. Astvik W, Welander J, Larsson R. Reasons for Staying: A Longitudinal Study of Work Conditions Predicting Social Workers' Willingness to Stay in Their Organisation. The British Journal of Social Work [Internet]. 2020 Jul 1 [cited 2022 Sep 27]; 50(5):1382–400. Available from: https://academic.oup.com/bjsw/article/50/5/1382/5565253
- 60. Yarberry S, Sims C. The Impact of COVID-19-Prompted Virtual/Remote Work Environments on Employees' Career Development: Social Learning Theory, Belongingness, and Self-Empowerment. Advances in Developing Human Resources [Internet]. 2021 Aug 21 [cited 2023 Apr 17]; 23(3):237–52. Available from: https://journals.sagepub.com/doi/abs/10.1177/15234223211017850?journalCode=adha
- Pulido-Martos M, Cortés-Denia D, Lopez-Zafra E. Teleworking in Times of COVID-19: Effects on the Acquisition of Personal Resources. Frontiers in Psychology [Internet]. 2021 Jun 23 [cited 2023 Apr 17]; 12:2485. Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2021.685275/full PMID: 34248789
- 62. Banks S, Cai T, de Jonge E, Shears J, Shum M, Sobočan AM, et al. Practising ethically during COVID-19: Social work challenges and responses. International Social Work [Internet]. 2020 Sep 20 [cited 2021 Jun 14]; 63(5):569–83. Available from: https://doi.org/10.1177/0020872820949614
- 63. Breaugh J. Too Stressed To Be Engaged? The Role of Basic Needs Satisfaction in Understanding Work Stress and Public Sector Engagement. Public Personnel Management [Internet]. 2021 Mar 16; 50 (1):84–108. Available from: http://journals.sagepub.com/doi/10.1177/0091026020912516
- 64. Jeworrek S, Mertins V. Mission, Motivation, and the Active Decision to Work for a Social Cause. Non-profit and Voluntary Sector Quarterly [Internet]. 2022 Apr 15 [cited 2023 Apr 17]; 51(2):260–78. Available from: https://journals-sagepub-com.pucdechile.idm.oclc.org/doi/full/10.1177/08997640211007206
- 65. Chung Y, DeNisi A, Mor Barak M, Nishii LH, Volpone SD. The Present and Future of Diversity Climate Research: Where Are We Now and Where Do We Have to Go? Academy of Management Proceedings [Internet]. 2016 Jan 30 [cited 2020 Jul 13]; 2016(1):12379. Available from: https://journals.aom.org/doi/ abs/10.5465/ambpp.2016.12379symposium
- 66. Cunill-Grau N. ¿Qué ha pasado con lo público en los últimos 30 añios? Balance y perspectivas. Reforma y Democracia. 2012; 52:5–44.
- **67.** Godoy N, Barrientos N, Gambra X, Araya-Castillo L, Reyes J. Evolución del Modelo Neoliberal en Chile: Implicancias para su Actual Implementación. Opción. 2020; 36(92):713–37.
- 68. Harker R, Pidgeon AM, Klaassen F, King S. Exploring resilience and mindfulness as preventative factors for psychological distress burnout and secondary traumatic stress among human service professionals. Work [Internet]. 2016 Jul 26; 54(3):631–7. Available from: https://www.medra.org/servlet/aliasResolver?alias=iospress&doi=10.3233/WOR-162311 PMID: 27286075

- 69. Meng Y, Wang Y, Tian X. Job Crafting Paths for Job Engagement: An Empirical Study among Chinese Social Workers. Human Service Organizations: Management, Leadership & Governance [Internet]. 2021 Mar 15; 45(2):142–67. Available from: https://doi.org/10.1080/23303131.2021.1873213
- 70. Canavera M, Akesson B. Supervision during social work education and training in Francophone West Africa: Conceptual frameworks and empirical evidence from Burkina Faso and Côte d'Ivoire. European Journal of Social Work [Internet]. 2018 May 4; 21(3):467–82. Available from: https://www.tandfonline.com/doi/full/10.1080/13691457.2018.1441131
- 71. Anderson GS, Di Nota PM, Groll D, Carleton RN. Peer Support and Crisis-Focused Psychological Interventions Designed to Mitigate Post-Traumatic Stress Injuries among Public Safety and Frontline Health-care Personnel: A Systematic Review. International Journal of Environmental Research and Public Health [Internet]. 2020 Oct 20; 17(20):7645. Available from: https://www.mdpi.com/1660-4601/17/20/7645 https://doi.org/10.3390/ijerph17207645 PMID: 33092146
- Morilla-Luchena A, Muñoz-Moreno R, Chaves-Montero A, Vázquez-Aguado O. Telework and social services in Spain during the COVID-19 pandemic. International Journal of Environmental Research and Public Health. 2021; 18(2):1–14. https://doi.org/10.3390/ijerph18020725 PMID: 33467723