

Original Article in Occupational Health and COVID-19

The work-related well-being of social service workers post COVID-19 pandemic: The psychosocial impact of remote vs in-person work

Venusia COVELLI^{1*}, Morena TAFFARELLO², Marina Angela VISCO³, Francesco CHIRICO⁴ Pietro CRESCENZO⁵, Luca COPPETA⁶, Kavita BATRA⁷, Alessandra MARELLI⁸

Affiliations:

¹Department of Theoretical and Applied Sciences, eCampus University, Italy. E-mail: venusia.covelli@unicampus.it
ORCID: <https://orcid.org/0000-0002-5965-2658>.

²Department of Theoretical and Applied Sciences, eCampus University, Italy. E-mail: morenataffarello78@gmail.com

³Department of Theoretical and Applied Sciences, eCampus University, Italy. E-mail: marina.visco@unicampus.it
ORCID: <https://orcid.org/0009-0009-7593-1292>.

⁴Post-Graduate School of Occupational Health, Catholic University of the Sacred Heart, Rome, Italy. E-mail: francesco.chirico@unicatt.it ORCID: <https://orcid.org/0000-0002-8737-4368>.

⁵ Department of Theoretical and Applied Sciences, eCampus University, Italy. E-mail: pietro.crescenzo@unicampus.it
ORCID: <https://orcid.org/0000-0001-5240-315X>.

⁶ Department of Biomedicine and Prevention, University of Rome Tor Vergata, Italy. E-mail luca.coppeta@uniroma2.it
ORCID: <https://orcid.org/0000-0003-2470-6107>.

⁷ Department of Medical Education and Office of Research, Kirk Kerkorian School of Medicine at UNLV, University of Nevada, Las Vegas, USA. Office of Research, Kirk Kerkorian School of Medicine at UNLV, University of Nevada, Las Vegas, USA. E-mail: kavita.batra@unlv.edu ORCID: <https://orcid.org/0000-0002-0722-0191>.

⁸ Department of Theoretical and Applied Sciences, eCampus University, Italy. E-mail: alessandra.marelli@unicampus.it
ORCID: <https://orcid.org/0009-0009-7593-1292>.

*Corresponding Author:

Venusia Covelli, Associate Professor, eCampus University, Isimbardi 10 street, Novedrate (Co), Italy. E-mail: venusia.covelli@unicampus.it

Abstract

Introduction: The COVID-19 emergency and the subsequent restrictive measures forced an internal reorganization of social services, including a remote working model. These changes forced Social Service Workers (SSW) to change their work using new technologies, which might have affected their job satisfaction and general well-being. Therefore, the current research aims to compare the remote working situation during the pandemic with the return to in-person work to evaluate how these two models affected the SSW's job satisfaction and well-being.

Methods: SSW working in social service delivery organizations were recruited to participate in an online semi-structured survey comprising the Job Satisfaction Scale, Psychological General Well-Being Index-S, Work-Related Stress Indicator Tool, Organizational Identification Scale, and Positive and Negative Affect Schedule. The survey tool had several open-ended questions to examine participants' views about the existing interventions in their workplace and what could be improved and implemented on a permanent basis to enhance their well-being at work.

Results: A total of 119 social workers accepted to complete the survey. 77 experienced both in-person and remote working. Comparing working in-person with remote working, the quality of life and satisfaction with one's health do not change. Whereas the perception of the risk of contracting COVID-19 increases when working in-person (M=3.88) than in remote working (M=1.96; p<.05), and the levels of anxiety increase in remote conditions (M=4.51) if compared to in-person working

($M=4.06$; $p<.05$). Job satisfaction about the relationship with the superior is better when working in-person than in remote working ($M=4.87$ vs 4.61 ; $p<.05$) and job satisfaction about the relations between the service and the workers is better when working in-person than in remote working ($M=4.87$ vs $M=4.61$; $p<.05$). Significant differences emerge also from the "in-person vs. remote working" comparison regarding all the dimensions of work-related stress.

Discussion: Results lead to useful reflections regarding the management of relations with users and colleagues, the psycho-physical well-being of operators, and, more generally, the quality of the services provided about the mode of service delivery and whether they work in-person vs. remote working.

Take-home message: These results indicate that remote working and some dimensions of organizational (affective state, social, and professional life) and personal well-being are linked both positively and negatively. Reported quality of life, in complexity, doesn't change in remote working and the presence of social service workers during the COVID-19 pandemic.

Keywords: COVID-19 pandemic; job satisfaction; psychological well-being; remote work; social service workers; work-related stress.

Cite this paper as: Covelli V, Taffarello M, Visco MA, Chirico F, Crescenzo P, Coppeta L, Batra K, Marelli A. The work-related well-being of social service workers after the COVID-19 pandemic: the psychosocial impact of remote vs in-person work. *J Health Soc Sci.* 2024;9(3):399-415. Doi: 10.19204/2024/THWR6.

Received: 28 April 2024; Accepted: 10 August 2024; Published: 15 September 2024

INTRODUCTION

In late March 2020, people around the world faced unprecedented changes to their daily lives as the transmission of the coronavirus disease 2019 (COVID-19) surged leading to mandatory "shelter-in-place" orders in nearly all sectors. However, essential services, including a range of health and social services, were largely exempt from these orders. Within these essential services, many social workers risked their health and that of their colleagues by continuing to engage with clients and organizations [1]. However, media coverage has largely overlooked the risks faced by social workers, their access to personal protective equipment (PPE), and their professional responses to the pandemic, especially when compared to other helping professions. The COVID-19 pandemic and subsequent restrictions required Social Service Workers (SSW) to adopt new ways of working to comply with public health guidelines while addressing emerging psychosocial needs, including the use of PPE, adherence to physical distancing, and maintaining clients amidst workplace closures for non-essential workers [2-5]. SSWs have faced significant challenges in continuing their work, necessitating adaptation and innovation to meet new demands and reprioritize the most urgent aspects of their roles [6-8].

A recent study by Schwartz Tayri [9] found that SSWs who experienced more severe work restrictions during the pandemic reported a significant decline in job satisfaction and increased work-related stress. Additionally, the COVID-19 emergency and subsequent restrictive measures compelled social and educational services to reorganize by adopting remote work models [10]. In Italy, some research has begun to explore this transition. Petrella and colleagues [11] highlighted that the health crisis prompted many SSWs to modify and redesign their meeting methods to maintain continuity in their work with clients and collaboration among colleagues. Physical distancing and the inability to hold in-person meetings led to a shift toward online communication messaging services and video calls on tablets or smartphones, allowing SSWs to continue their work during the pandemic. However, factors such as remote work conditions and inadequate protection

or security significantly impacted the quality of SSWs' work [12-16]. Previous studies on remote work and work-related stress have identified several potential challenges for those who rapidly transitioned to remote environments. These, include stress and overload stemming from the need to balance work responsibilities with family issues, a perceived lack of organizational support, the influence of the physical work environment on job performance, and the how the subjective experience of time can affect job stress [17-21]. While remote workers may experience slightly higher job satisfaction and lower role stress, their overall work-life wellness appears contingent on several factors, such as the tendency to overwork and the interference of work with personal life [22]. During the pandemic, George and colleagues [23] found that the intrusion of work into daily life due to remote working had significant negative effects on multiple aspects of workers' well-being. Ingusci and colleagues [24] noted that work overload, particularly under the condition of extensive remote working and technology use, positively influenced behavioral stress during this period. Furthermore, research by, Hayes and colleagues [25] suggested that working from home may contribute to increased perceived stress and work-related burnout. Some of the most significant challenges faced by the workers were primarily related to communication, collaboration, and time management with colleagues through technology.

Currently, no studies have investigated the impact of remote and in-person work on the well-being of social service workers following the COVID-19 pandemic. During the pandemic, Holmes and colleagues [26] studied the prevalence of post-traumatic stress, grief, burnout, and secondary trauma among employed social workers in the United States. They found that social workers faced a unique challenge: they not only provided services to clients in crisis but also dealt with similar trauma in their personal lives. This dual exposure may have heightened their risk of burnout and secondary trauma. Their findings indicated that social workers reported higher rates of PTSD than the national average [27].

McCoyd and colleagues [28] examined the responses of SSWs in a northeastern U.S. state to the COVID-19 pandemic. They explored how these workers felt about transitioning to remote interactions with clients and the potential for burnout- occurring when the structural and emotional demands of work exceed an individual's capacity to cope [29]. According to the authors, SSWs' responses to the pandemic reflected both unprecedented crises and significant efforts at adaptation, innovation, and resilience. They reported evidence of burnout among their sample, driven by increased productivity demands for productivity and a lack of support, [30] alongside feelings of emotional exhaustion and diminished personal accomplishment [31]. The combination of work-related pressures and personal challenges—ranging from family responsibilities to blurred boundaries in remote work and health concerns—intensified feelings of burnout. Additionally, their findings indicated that work-life balance was particularly compromised during the early months of the pandemic [32]. Respondents described the transition to remote services as their largest pandemic-related challenge.

Schwartz Tayri [33] used a mixed-methods design to examine the relationship between external and personal stressors experienced by a sample of Israeli social workers during the COVID-19 outbreak, aiming to characterize their emotional reactions to the onset of the pandemic. The social workers reported an average of at least one negative change in their work environment due to COVID-19 restrictions, leading to decreased job satisfaction, moderate to high stress levels, and significant somatization. The authors concluded that service restrictions contributed to declines in job satisfaction and increases in psychological stress, which subsequently resulted in heightened job-related health problems. During the pandemic, social workers faced multiple stressors [34], including excessive work demands, the need to adapt to constantly changing social distancing regulations, partially remote communications with clients, and shortages of personal protective equipment, all of which negatively affected their well-being.

Building on existing literature about the challenging transition to remote services and its impact on psychological stress, the present research aims to investigate the effects of remote versus in-person work on the perceived well-being SSWs as they recover from the COVID-19 pandemic. Based on

prior studies, we hypothesized that the work overload associated with the rapid transition to remote work is positively associated with the perceived stress during the pandemic. Additionally, we sought to explore social service workers' perceptions of changes in their work due to COVID-19, the interventions implemented in their workplaces, and the interventions they believe should have been enacted to enhance their well-being at work.

METHODS

Study design and procedure

This descriptive and exploratory study employed a concurrent or parallel mixed-method design. Data were collected using an internet-based semi-structured survey created with Google Forms, from September 1, 2022, to November 30, 2022. The nationwide survey was distributed online via email and social media. The online questionnaire required an estimated 15-25 minutes for the participant to complete it. Before starting the survey, participants received information about the aims and procedures of the survey and were asked to provide informed consent. Participation was completely voluntary, and participants could withdraw from the study at any time. No personal identifiers were collected.

Study participants and sampling

The target population consisted of social service workers (e.g. social workers, service coordinators/managers, professional educators, psychologists, and occupational health technicians). Participants were recruited using a snowball sampling method, with requests for participation sent via e-mail and social media platforms such as LinkedIn, Facebook, and WhatsApp. Individuals over the age of 18 years who were employed in social service delivery organizations during the COVID-19 restrictions were invited to participate.

Study instruments

The online survey consists of 113 items divided over the three following parts: (1) a first section for sociodemographic data and information about work conditions (14 items); (2) a second section about COVID-19 infection, physical and psychological health status, risk perception, qualitative description about changes in work condition (16 items); (3) a third section about job satisfaction and work-related stress (83 items).

Sociodemographic section

All participants were asked to provide socio-demographic information (e.g. gender, age, level of education, marital status, region of residence, number of children, profession, and changes in work conditions).

COVID-19 and health

Information was collected about exposure to COVID-19, family members infected by COVID-19, or loss of a family member due to the virus (3 items). Perceived quality of life and health satisfaction were assessed with two items on the five-point Likert Scale of the World Health Organization Quality of Life Assessment (WHOQOL) [35]. We measured subjects' self-reported perceptions of risk conditions using a modified version of the risk perception measure developed by [36]. We also asked whether their health condition was aggravated by the virus and about their perceived risk of contracting the virus. The general well-being was assessed with the 6 items on a six-point Likert scale of the Brief Psychological General Well-Being Index (PGWBI-S) [37-38]. Excluding the first three questions about exposure to COVID-19, for each item of the scales used, we asked participants to respond by comparing their work situation in person and how they would have responded during the remote work mode. We used a subjective retrospective evaluation, used in previous research [39].

Additionally, to collect qualitative data we asked participants to describe via four open-ended questions what has changed in their work due to the COVID-19 pandemic, what interventions have been carried out in their workplace and what interventions should have been implemented: 1) *Tell what has changed in your work due to Covid-19 in the last two years. If you do not feel like telling, you can also indicate words, adjectives or verbs that would describe the changes in your work.* We also asked participants what interventions have taken place in their workplace and which interventions should

have been implemented: 2) *In the last two years, because of COVID-19, what interventions have taken place in your workplace? What has changed compared to before?* 3) *“In your opinion, which interventions should have been implemented?”*. Finally, we ask for their opinion about what interventions in their opinion could be permanently adopted to improve their well-being at work: 4) *“Given your experience over the last two years of health emergencies, in your opinion, what interventions could be implemented permanently to improve your well-being at work?”*.

Job satisfaction, work-related stress, and organizational identification

We administered the Health and Safety Executive’s Management Standards Work-Related Stress Indicator Tool (HSE) [40-42] to assess employees' work-related stress. This is a 38 items five-point Likert scale questionnaire for the screening of common psychosocial risk factors leading to work-related stress that allows employers to calculate a global measure of stress based on average scores across the seven subscales (Demands, Control, Managerial Support, Peer Support, Relationships, Role, and Change).

We measured job satisfaction with the Job Satisfaction Scale (JSS) [43,44], a 16-item seven-point Likert scale questionnaire to evaluate nine dimensions of job satisfaction related to overall satisfaction.

Organizational Identification (OI) was measured using nine items on a five-point Likert scale of the Organizational Identification Scale [45,46]. This measure consists of three dimensions of organizational identification: affective, cognitive, and evaluative.

The Positive and Negative Affect Schedule (PANAS) [47,48] was used as a self-report measure of positive and negative affect. Participants were asked to rate the extent to which they experienced each of the 20 emotions reported on a five-point Likert scale (1=not at all, 2=a little, 3=moderate, 4=quite a lot, 5=very much).

Again, for each item of the scales used in this section, we asked participants to respond by comparing their work situation in person and how they would have responded during the remote work mode.

Data analysis

Data were analyzed using the JAMOVI software program (Version 2.2.5). Descriptive statistics were computed to describe the socio-demographic characteristics of the sample. The difference between means was assessed by the non-parametric Wilcoxon signed-rank test for paired data. Data were reported as mean \pm SD. A $p < 0.05$ was considered significant.

We performed a thematic analysis following the steps of the thematic analysis of Braun & Clarke [49] on the four open questions about what has changed in work conditions due to the COVID-19 pandemic. The thematic analysis aimed to identify and describe the implicit and explicit themes emerging from the open-ended responses provided by the participants. Two members of the research team (VC&AM) analyzed people's responses and independently identified the themes that emerged.

Ethical aspects

Ethical permission was obtained from the eCampus University Ethics Commission (protocol ID 07/2021). Informed consent was obtained from all subjects involved in the study. Confidentiality and privacy were ensured through secure data transfer and storage while the study followed the guidelines from the Declaration of Helsinki.

RESULTS

The sample consisted of 119 social service workers, including 108 females (90.8%). Out of 119, 77 participants experienced both in-person and remote working conditions. Their ages ranged from 19-64 years, with a mean age of 37 years (SD 10.8). The descriptive analysis of the socio-demographic data is reported in Table 1. Respondents were not equally distributed in Italian territorial areas, 61.4% in the North, 19.3% in the Center, and 19.3% in the South-Islands of Italy. Most participants had a high level of education (60.8% having completed a university degree or a post-university degree; 39.2% having completed high school). Most of the sample are married or cohabiting (50.8%) and professional educators with a contract as permanent employees of a Cooperative/Foundation or Consortium (44%). Finally, 63% of the sample reported having been infected by COVID-19; 98.8%

reported that they had loved ones infected by COVID-19 and 73.9% that they had not lost friends and/or family members due to COVID-19.

Table 1. Participants' sociodemographic characteristics and working conditions (N=119).

Total sample (N=119)	n%
<i>Sex at birth/current gender (same results)</i>	
Male/men	11 (9.2)
Female/women	108 (90.8)
<i>Age in years, mean ± SD</i>	M=37.0 (SD=10.8)
<i>Education</i>	
Secondary school	47 (39.2)
Bachelor's degree	39 (32.5)
Master's degree	25 (20.8)
PhD/Master	9 (7.5)
<i>Marital status</i>	
Married/Cohabitant	61 (50.8)
Separated/Divorced/Widowed	9 (7.5)
Never married	50 (41.7)
<i>Region of residence</i>	
Northern Italy	73 (61.4)
Central Italy	23 (19.3)
Southern Italy & The Islands	23 (19.3)
<i>Work condition</i>	
Social Worker	12 (10.0)
Socio Assistant Auxiliary (A.S.A.)	3 (2.5)
Coordinator / Service Manager	8 (6.7)
Professional Educator	48 (40.0)
Neutral Space Operator	2 (1.7)
Socio-sanitary Operator (O.S.S.)	24 (20.0)
Psychologist	12 (10.0)
Occupational Technician	1 (0.8)
Administrative employee	10 (8.3)
<i>Working environment</i>	
Child Protection	15 (12.5)
Professional Service	13 (10.8)
Neutral Space	4 (3.3)
Day Care Centre	9 (7.5)
Sanitary Residence for the Elderly	6 (5.0)
Community or Family Home	12 (10.0)
Family Counselling or Listening Point	3 (2.5)
Hospital or Health Care Institution	7 (5.8)
User location	5 (4.3)
Private or associated practice	36 (30.0)
Public sector	10 (8.3)
<i>Work contract</i>	
Permanent public employee	6 (21.7)

Temporary public employee	10 (8.3)
Permanent employee of a cooperative, foundation or consortium	44 (36.6)
Temporary employee of a cooperative, foundation or consortium	17 (14.2)
Self-employed	9 (7.5)
Occasional performance contract	8 (6.7)
Other	6 (5.0)
About your work, since the pandemic started...	
I continued to work (even during lockdowns), working only in-person	55 (45.8)
I have continued to work (even during lockdowns), working exclusively in remote working.	6 (5.0)
I continued to work (even during lockdowns), alternating periods of remote working with periods of in-person working.	32 (26.7)
I resumed working in-person after periods of lockdown when I did not work.	27 (22.5)
How long have you been working in social services? (years)	M=8.52 (SD=8.01)
How long have you been working for your current service? (years)	M=5.60 (SD=7.08)
How long have you been working with your team? (years)	M=4.19 (SD=5.26)

Note: M= Mean; SD=Standard deviation

Quality of life, health satisfaction, risk perception, and general well-being

Table 2 summarizes the comparison between the two work conditions (remote vs. in-person) about quality of life, health satisfaction, risk perception, and general well-being. Statistical analyses show that quality of life and health satisfaction did not significantly change in remote or in-person working, whereas the perceived risk of contracting COVID-19 was significantly lower in remote working (M=1.96; SD 1.10) than in in-person (M=3.88; SD 1.05) (p<.001). Regarding general well-being, statistical analyses showed a higher level of anxiety in remote working (M=4.51; SD 1.50) when compared to in-person work conditions (M=4.06; SD 1.42) (p < .05). No significant differences were found between the other dimensions of PGWBI-S in remote working and in-person.

Table 2. Comparing mean scores of quality of life, health satisfaction, risk perception, and general well-being: comparison between in-person and remote work models (N=77).

	Remote work model		In-person	
	N**	Mean (SD)	Mean (SD)	p*
How do you rate your quality of life?	77	3.57 (.94)	3.70 (.74)	0.367
Are you satisfied with your health?	77	3.60 (1.05)	3.51 (.99)	0.492
To what extent do you perceive the risk of contracting Coronavirus?	77	1.96 (1.10)	3.88 (1.05)	<.001
PGWBI-S Anxiety	72	4.51 (1.50)	4.06 (1.42)	<.05
PGWBI-S Vitality	70	2.43 (1.04)	2.36 (.99)	0.715

PGWBI-S Depression	70	2.19 (.99)	2.40 (.94)	0.152
PGWBI-S Self-Control	73	3.82 (1.25)	3.81 (1.24)	0.795
PGWBI-S Positive Well-Being	73	3.64 (1.12)	3.64 (1.11)	0.868
PGWBI-S General Health	68	2.15 (.98)	1.90 (1.04)	0.108

Note: *Wilcoxon’s signed rank test for comparison within groups at remote working versus in-person working. **The number of subjects who effectively responded is reported out of 77 participants who experienced both in-person and remote working conditions.

Work-related stress, job satisfaction, identification with the organization, and affects

Regarding work-related stress, statistical analyses showed a significant difference between means of all dimensions (demand, control, peer support, superior support, relationships, role, change, and physical work environment) (Table 3). For instance, comparing the remote condition to in-person, participants reported to work more intensively, they might decide to take a break more and they are more involved in work-related changes. Otherwise, comparing the in-person to remote working conditions, they feel more supported by colleagues and superiors, they feel they have fewer disagreements with colleagues, they are more aware of what others expect from them, and they think that the physical working environment is more comfortable than in-person.

Table 3. Work-related stress: comparison between in-person and remote work (N=77).

	N**	Remote working	In-person	p*
		Mean (SD)	Mean (SD)	
Demand	63	3.46 (.65)	3.22 (.59)	< .001
Control	65	3.71 (.67)	3.49 (.71)	0.002
Peer support	62	4.03 (.67)	4.11 (.72)	0.016
Superior support	64	3.59 (1.04)	3.67 (1.04)	0.011
Relationships	64	4.34 (.59)	3.84 (.82)	< .001
Role	66	4.19 (.87)	4.36 (.73)	0.005
Change	64	3.59 (.93)	3.12 (.62)	< .001
Physical work environment	61	4.14 (.79)	3.81 (.98)	0.010

*Wilcoxon’s signed rank test for comparison within groups at remote working versus in-person working. **The number of subjects who effectively responded is reported out of 77 participants who experienced both in-person and remote working conditions.

Concerning job satisfaction, statistical analyses showed a significant difference between the means of only two dimensions related to the relationship with the superior (“How satisfied are you with the superior?”) and the relationships between the Service and the workers (“How satisfied are you with the relationships between the Service and the workers?”), which are lower in remote working (M=4.61; SD 1.71) than in-person (M=4.87; SD 1.56) (p<0.05). No significant differences were found between the identification with the organization perceived in remote working (M=3.98; SD .64) and in-person (M=3.98; SD .67) (p<.903).

Finally, participants reported being more attentive, interested, focused, active, and determined (positive affect dimensions) in-person (M=3.75; SD .72) than in remote working (M=3.52; SD .89) (p < .05) compared to the changes introduced by COVID-19 at work. They also reported feeling more nervous, restless, agitated, and impaired (negative affect dimensions) in person (M=2.03; SD .78) than in remote working (M=1.92; SD .79) (p<05).

Qualitative insights about working changes due to COVID-19

For each open-ended question, most recurring themes were identified from the responses provided by survey participants. For each theme, examples of the respondents' responses have been

provided. Concerning the answers to the first open-ended question about what has changed in work conditions due to COVID-19 four recurring themes were identified. The first theme concerns physical and emotional distancing. Most of the sample reported that the immediate protection restrictions imposed by governments due to COVID-19 (including lockdown, use of personal protective equipment, remote working, etc.) led to a reduction in physical interactions and emotional closeness between individuals. For example, participants reported: *"Physical and emotional distance from people around me is the perceived change"* and *"As a child educator, many things have changed in my work. In particular, I missed the physical contact with the children and the big smiles"*. The second theme concerns the teleworking mode. One of the spin-offs has occurred in the world of work, particularly with the advent of technology. Chats on web platforms for messaging with colleagues and managers, video calls, and online meetings have replaced face-to-face meetings. For example, participants reported: *"There has been a big shift to telematics, which was almost non-existent before"* and *"In our company, we have started to have more telematic meetings rather than face-to-face meetings"*. The third theme concerns protection measures. Most of the sample reported that personal protective equipments (PPEs) were used in their workplace. These included, for example, using surgical masks, eye protection, and gloves to reduce the transmission of coronavirus. For example, participants reported: *"The protocols for entering the facilities changed, for two years we had to change and put on our uniforms, which we did not do before. We always wore masks, visors, and gloves."* and *"Use of PPEs, disinfection of working tools, more attention to hygiene"*. The fourth theme concerns emotional states. The largest part of the sample reported that fear of coronavirus infection and the isolation created by quarantine and other physical distancing measures may have the adverse effect of increasing loneliness, anxiety, and panic. For example, participants reported: *"Anxiety, tension"* and *"Distraught, lots of uncertainty, sadness"*.

For answers to the second open question about what interventions were carried out in your workplace due to COVID-19 three recurring themes were identified. The first theme concerns protection measures. Most participants reported that all the necessary personal protection measures had been taken in their workplace. For example, participants reported: *"Introduced masks, temperature control"*, *"temperature measurement, free access closure, entrance disinfection"* and *"They have implemented the most advanced protection methods"*. The second theme concerns the remote working mode. Most participants said that one of the biggest changes in their workplace was the introduction of working from home. Work, meetings, and breaks between colleagues were managed through common web-based communication platforms. For example, participants reported: *"At the height of the pandemic, shift work was introduced with colleagues in remote mode"* and *"more meetings from home and not in-person"*. Finally, participants reported that nothing had changed at work since COVID-19. For example, participants reported: *"As for the work, the activity has continued with an alternation of in-person/remote working, incorporating teleconferences that have optimized the connection with the other services and maintaining the meetings in-person with the people who are an integral part of the work"* and *"Nothing has changed"*.

For the answers to the third open question about which interventions should have been implemented in the workplace, three recurring themes were identified. Firstly, participants did not want to implement any of the interventions carried out. Most participants said that the measures taken in their workplace were sufficient to make them feel safe. They were satisfied and did not need further action, and they did not need further action. For example, participants reported: *"In my opinion, the interventions implemented in my community are more than sufficient and well implemented, both in terms of prevention and isolation in case of infection"* and *"those made. I am satisfied"*. The second theme is the improvement of the physical working environment. Most respondents suggested that preventive measures should be taken in the physical working environment, such as regular upgrading and cleaning of the ventilation system, increased use of outside air, or using physical barriers made of Plexiglas, to minimize the likelihood of exposure to COVID-19. For example, participants reported: *"cleaning the air systems"* and *"working in larger spaces where people can be separated by greater distances"*. The third theme concerns the maintenance of protective measures. The use of personal protective equipment should be considered an integral part of the COVID-19 control

strategy. Workers feel that they still need PPEs, including face masks, face shields, safety glasses, gloves, and gowns, based on their job duties as well as their level of risk. For example, participants reported: *"Wear masks for longer periods and in extremely crowded areas"*, *"wash hands regularly"* and *"periodic swabs for staff and users"*.

In the analysis of the answers to the fourth question about the interventions that could be implemented permanently to improve well-being at work, three recurring themes were identified. The first theme is the alternation between remote working and in-person working. Most participants said that they would like to be able to continue remote working for a few days a week, alternating between remote and in-person work. For example, participants reported: *"Maintain the remotel/in-person working alternation"* and *"Have the possibility to work in remote working mode two days a week"*. The second theme concerns maintaining protective measures. Most participants said they still wanted to be able to use the personal protective equipment adopted for COVID-19 for prevention purposes. For example, participants reported: *"Continue with preventive measures: disinfection of the working environment and tools, use of masks during meetings, hand gel, etc."* and *"Safety and PPEs"*. The third theme concerns the recruitment of staff to promote shift work. Most participants hope that the companies they work for will consider hiring more workers. This would allow them to work more shifts and with more security. For example, participants reported: *"Recruitment of more staff to have better work-shift planning"* and *"Recruit more staff so we can work quietly. The ratio is 13 patients to 4"*.

DISCUSSION

Comparing in-person working and remote working, some significant differences emerge regarding the SSW's health status and work-related stress level. The quality of life and satisfaction with one's health do not change, whereas the perception of the risk of contracting COVID-19 increases when working in person, and the levels of anxiety increase in remote working. Job satisfaction does not change, except for the reference to the relationship with the superior and relations between the service and the workers (better if working in-person). The identification with the organization does not change either. Significant differences emerge from the comparison of in-person vs. remote working regarding all the dimensions of work-related stress.

These results of our study seem consistent with literature that found remote working and some dimensions of organizational (affective state, social, and professional life) and personal well-being linked both positively and negatively [50,51]. If the reported quality of life didn't change in the sample of SSW in remote or in-person working, the participants reported more intense work and higher levels of anxiety when they worked remotely. Other studies conducted during the COVID-19 pandemic linked remote working with increased levels of anxiety [52,53]. In the same direction, some authors [25,26] evidenced that work overload, particularly under the condition of heavy remote working, positively influenced the level of perceived stress during the COVID-19 pandemic. About our study, it is worth noting that most of the sample is female. This data is coherent with the statistics of the Ministry of Health's Statistics System, which show that 69.5% of those working in the Italian National Health Service are women [54]. Moreover, previous research [55] has shown that they were more prone than men to stress and psychological adjustment problems during the COVID-19 period. The pandemic situation adversely affected the women's efforts to balance professional life with family life, due to an increase in their domestic work burden, a change in family balance and relationship, and a shift in their workstation to home [56,57].

From the perspective of social relationships at work, it seems interesting that SSW in our sample reported they feel supported by colleagues and can rely on their boss for help more in-person rather than in remote working. In this line, concerning the variable job satisfaction, there emerges a significant difference between the average of the dimensions related to the relationship with the superior and the relationship between the service and the workers, which are lower in remote than in-person working. These results seem to indicate a sense of "social isolation" that literature highlighted as typical of working from home already before the COVID-19 pandemic [58-60]. During the COVID-19 pandemic, Prasad and colleagues [61] evidenced that remote working had challenging aspects, such as social isolation, family interference, absence of colleagues, and lack of organizational

support which can contribute to occupational stress. These aspects of lack of social and organizational support would be added to other factors, such as work restrictions, extreme work demands, and the need to adapt to remote communications with clients [34], which may have increased the level of work-related stress in SSW. In this line, [52] assumed that social isolation due to COVID-19 has increased negative emotions and irritability, so canceling some of the positive psychological effects of working from home, such as higher work engagement, work-related flow, and connectivity among staff described by workers before the pandemic [62,63]. Likewise, low support from colleagues when dealing with difficult tasks or working troubles could have prompted negative emotional and mental health conditions among workers.

Positive aspects of remote working reported by SSW are fewer disagreements with colleagues, more involvement in work-related changes, and a physical working environment more comfortable. These aspects may balance other dimensions of work-related stress contributing to a perception of quality of life that, in complexity, does not change in remote working and in-person. Moreover, remote working could also be useful for workers to implement practices that have been shown in the literature to help reduce work-related stress, such as mindfulness techniques and introspective meditation [64-71]. Grant and colleagues [72] found that positive mediators of the relationship between well-being and remote working were the effective management of work flexibility, a greater degree of control over one's work, and higher levels of role autonomy. Gajendran and Harrison [73] found autonomy to fully mediate the positive effects of telework on job satisfaction and partially mediate the impact of telework on employee stress (i.e., role stress). Morganson and colleagues [74] reported that home-based teleworkers experience more work-life balance support than client-based workers and those working from remote telecentres. This may be due, in part, to increased autonomy, flexibility, and a decreased commute time experienced when working from home. Remote home-based workers also report higher ratings of job satisfaction than client-based workers, referring to the benefits of working from one's home, specifically, versus remote work in and of itself.

Support that remote working seemed to be perceived partially positively by social workers emerged from open-ended questions, where social service workers expressed a request to alternate remote and in-person working as a permanent intervention to improve their well-being at work. These results are consistent with the study of Fiorini and colleagues [75], which aims to investigate the expectations of a sample of Italian social operators toward assistive technology before and during the COVID-19 emergency. Social professionals see great potential in the use of technology during the COVID-19 pandemic and particularly, after the COVID-19 emergency, they slightly increased their positive view about the use of assistive technology in their work. The authors also underline the necessity to educate the social operators and formal caregivers in using this technology because they need to be trained in the use of technology in their jobs to exploit its potentiality and benefits. Other researchers [76-78] found that one of the main critical aspects of remote working during the pandemic concerned employees' training and their unpreparedness in terms of digital skills and tools, which forced many employees to develop the necessary technological and digital skills in a very short time so affecting well-being, reducing the positive role of flexibility and work-life balance because of an augmented level of technostress.

The global COVID-19 pandemic forced many organizations to move quickly to develop or expand remote working arrangements for those who otherwise would not have had this flexibility. This situation created both opportunities and additional sources of potential stress and conflict for employees [10]. During the pandemic, social workers were exposed to multiple stressors, including extreme work demands, the need to adapt to continually changing social distancing regulations, and partially remote communications with clients, which affected their well-being [35,79-83]. If it is crucial to develop and implement best practices for working from home to maintain a good level of productivity, this is especially true for social service workers who redesigned their modality of work to respond adequately to new and emerging psychosocial needs [84-91].

This study has some important limitations due to the sampling technique that could have introduced important selection bias, as suggested by the highly unbalanced gender ratio. As reported

above, most of the sample is female, we recommend future research improve balanced gender sampling to promote research reliability. Another limitation is that the study relied on a fairly small group of subjects. As the sample is very limited, we can consider this a pilot study for further investigation. Moreover, social isolation was decreed in March 2020 and the data for this research were collected from the 1st September till the 30th November 2022. The survey referred to the onset of social distancing measures that redesigned the modality of work of social service workers and thus it was subject to a recall bias.

Despite these limitations, from a methodological point of view, this study highlights the importance of integrating information from validated quantitative instruments with information gathered in depth by qualitative insight. A mixed-method approach made it possible, on the one hand, to quantitatively understand the impact of COVID-19 on social service workers and how the transition to remote service impacted their level of well-being, work-related stress, and job satisfaction through the use of validated instruments; on the other hand, to collect and understand in depth how participants experienced the changes in their work through the use of a narrative stimulus. Another innovative aspect of the current study is that, to our knowledge, it is the first to investigate the impact of remote working and in-person work on the work well-being of social service workers after the COVID-19 pandemic.

CONCLUSION

The results of our study show that remote working and some dimensions of organizational (affective state, social, and professional life) and personal well-being are linked both positively and negatively in SSWs during the COVID-19 pandemic.

On one side, participants reported more intense work, higher levels of anxiety, and a sense of “social isolation” when they worked remotely. Positive aspects of remote working reported by SSW are instead fewer disagreements with colleagues, more involvement in work-related changes, and a physical working environment more comfortable. These aspects may balance other dimensions of work-related stress contributing to a perception of quality of life that, in complexity, doesn’t change in remote working and in-person.

Author Contributions: Conceptualization: MT and VC. Methodology: VC and MT. Formal analysis: VC, AM, and PC. Investigation: MT, VC, MAV, and PC. Data curation: VC, AM, MT, MAV, FC, and PC. Writing—original draft preparation: VC, MT, AM, MAV, FC, LC and PC. Writing—review, and editing: VC, MT, AM, MAV, LC, KB, and PC. All authors have read and agreed to the published version of the manuscript.” Authorship must be limited to those who have contributed substantially to the work reported.

Funding: None.

Conflicts of Interest: None.

Publisher’s Note: Edizioni FS stays neutral with regard to jurisdictional claims in published maps and institutional affiliation.

References

1. Chirico F, Nucera G. Tribute to healthcare operators threatened by COVID-19 pandemic. *J Health Soc Sci.* 2020;5(2):165-168. Doi:10.19204/2020/trbt1.
2. Ashcroft R, Sur D, Greenblatt A, Donahue P. The impact of the COVID-19 pandemic on social workers at the frontline: A survey of Canadian social workers. *Br J Soc Work.* 2022;52(3):1724-1746. Doi: 10.1093/bjsw/bcab158.
3. Chirico F, Afolabi AA, Ilesanmi OS, Nucera G, Ferrari G, Sacco A, et al. Prevalence, risk factors and prevention of burnout syndrome among healthcare workers: an umbrella review of systematic reviews and meta-analyses. *J Health Soc Sci.* 2021;6(4):465-491. Doi: 10.19204/2021/prvl3.pp.
4. Szadejko K, Scarcella C, Fioravanzo RE, Cadei L, Bonometti S, Goglioni R, et al. The impact of the COVID-19 pandemic on mental well-being of healthcare workers at Lago di Garda hospitals, Northern Italy. *G Ital Psicol Med Lav.* 2021;1(2):206-224. Doi: 10.69088/2021/THMP7.
5. Jochmannova L, Charvat M, Slukova PZ, Sucha M, Viktorova L. The decline in the provision of psychosocial services during the COVID-19 pandemic and the barriers to moving to online forms of

- care from providers' perspectives. *G Ital Psicol Med Lav.* 2023;3(3):106-117. Doi: 10.69088/2023/THDC4.
6. 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. *Int Soc Work.* 2020;63(5):569-583. Doi: 10.1177/002087282094.
 7. Chirico F. Navigating in the global workplace: Innovative strategies for combating new approach to preventing burnout, violence, preventing and workplace enhancing psychosocial well-being. *Adv Med Psychol Public Health.* 2024;1(3):108-109. Doi: 10.5281/zenodo.10897920.
 8. Crescenzo P, Chirico F, Ferrari G, Szarpak L, Nucera G, Marciano R, et al. Prevalence and predictors of burnout syndrome among Italian psychologists following the first wave of the COVID-19 pandemic: A cross-sectional study. *J Health Soc Sci.* 2022;6(4):509. Doi: 10.19204/2021/prv15.
 9. Schwartz Tayri TM. On the frontlines: The impact of the COVID-19 pandemic on social workers' well-being. *Soc Work.* 2023;68(1):69-80.
 10. Hayes SW, Priestley JL, Moore BA, Ray HE. Perceived stress, work-related burnout, and working from home before and during COVID-19: An examination of workers in the United States. *Sage Open.* 2021;11(4):21582440211058193. Doi: 10.1177/21582440211058193.
 11. Petrella A, Tracchi M, Ius M, Milani P. I servizi sociali e socio-educativi in tempi di Covid-19: strategie di digitalizzazione in due programmi nazionali di contrasto alla povertà e alla vulnerabilità familiare. In: *AIUCD 2021-DH per la società: e-guaglianza, partecipazione, diritti e valori nell'era digitale. Raccolta degli abstract estesi della 10° conferenza nazionale.* 2021. p. 415-422.
 12. Chirico F, Magnavita N. COVID-19 infection in Italy: an occupational injury. *S Afr Med J.* 2020;110(6):436. Doi: 10.7196/SAMJ.2020.v110i6.14855.
 13. Cacciatori I, D'Auria C, Bruneri A, Rozza S. Prevalence of burnout syndrome among newly hired healthcare workers in Italy before and during the COVID-19 pandemic: A comparative cross-sectional study. *G Ital Psicol Med Lav.* 2021;1(2):225-237. Doi: 10.69088/2021/PRVL8.
 14. Minniti D, Presutti M, Alesina M, Brizio A, Gatti P, Maran DA. Antecedents and consequences of work-related and personal bullying: A cross-sectional study in an Italian healthcare facility. *Adv Med Psychol Public Health.* 2024;1(4):225-242. Doi: 10.5281/zenodo.11077436.
 15. Sanfelici M, Mordegli S, Gui L. Il servizio sociale nell'emergenza COVID-19. *Il servizio sociale nell'emergenza COVID-19.* 2020;1-200.
 16. Eldor L, Vigoda-Gadot E. The nature of employee engagement: Rethinking the employee-organization relationship. *Int J Hum Resour Manag.* 2017;28(3):526-552. Doi: 10.1080/09585192.2016.1180312.
 17. Rizzo A, Alfa R, Carlotta V, Sturniolo G, Trazzi L, Viola F. Burnout, decision-making and coping among healthcare workers: How the world was before the COVID-19 pandemic. *G Ital Psicol Med Lav.* 2022;2(2):105-116. Doi: 10.69088/2022/BRNT3.
 18. Cacciatori I, D'Auria C, Bruneri A, Rozza S. Prevalence of burnout syndrome among newly hired healthcare workers in Italy before and during the COVID-19 pandemic in Italy: A comparative cross-sectional study. *G Ital Psicol Med Lav.* 2021;1(2):225-237. Doi: 10.69088/2021/PRVL8.
 19. Crescenzo P, Tarchi L, Rizzo A. Prevalence of Burnout Syndrome among volunteer psychologists providing psychological support in Italy during the COVID-19 pandemic: The role of workload. *G Ital Psicol Med Lav.* 2024;4(2):131-139. Doi: 10.69088/2024/BRNT5.
 20. Grant L, Kinman G. 'Bouncing back?' Personal representations of resilience of student and experienced social workers. *Practice.* 2013;25(5):349-366. Doi: 10.1080/09503153.2013.860092
 21. Rauvola RS, Rudolph CW, Ebbert LK, Zacher H. Person-environment fit and work satisfaction: Exploring the conditional effects of age. *Work Aging Retire.* 2020;6(2):101-117. Doi: 10.1093/workar/waz011.
 22. Como R, Hambley L, Domene J. An exploration of work-life wellness and remote work during and beyond COVID-19. *Can J Career Dev.* 2021;20(1):46-56.
 23. George TJ, Atwater LE, Maneethai D, Madera JM. Supporting the productivity and wellbeing of remote workers: Lessons from COVID-19. *Organ Dyn.* 2022;51(2):100869.
 24. Ingusci E, Signore F, Giancaspro ML, Manuti A, Molino M, Russo V, et al. Workload, techno overload, and behavioral stress during COVID-19 emergency: The role of job crafting in remote workers. *Front Psychol.* 2021;12:655148. Doi: 10.3389/fpsyg.2021.655148.
 25. Hayes SW, Priestley JL, Moore BA, Ray HE. Perceived stress, work-related burnout, and working from home before and during COVID-19: An examination of workers in the United States. *Sage Open.* 2021;11(4):21582440211058193. Doi: 10.1177/21582440211058193.

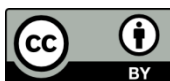
26. Holmes MR, Rentrop CR, Korsch-Williams A, King JA. Impact of COVID-19 pandemic on posttraumatic stress, grief, burnout, and secondary trauma of social workers in the United States. *Clin Soc Work J*. 2021;49(4):495-504. Doi: 10.1007/s10615-021-00795-y.
27. Chirico F, Rizzo A. Tackling mental health disorders, burnout, workplace violence, post-traumatic stress disorders amidst climate change, and new global challenges: The crucial role of emotional management education. *Adv Med Psychol Public Health*. 2024;2(1):5-7. Doi: 10.5281/zenodo.11248392.
28. McCoyd JL, Curran L, Candelario E, Findley PA, Hennessey K. Social service providers under COVID-19 duress: Adaptation, burnout, and resilience. *J Soc Work*. 2023;23(1):85-102. Doi: 10.1177/1468017322110941.
29. Lizano EL. Examining the impact of job burnout on the health and well-being of human service workers: A systematic review and synthesis. *Hum Serv Organ Manag Leadersh Gov*. 2015;39(3):167-181. Doi: 10.1080/23303131.2015.1014122.
30. Kadushin G, Kulys R. Job satisfaction among social work discharge planners. *Health Soc Work*. 1995;20(3):174-186. Doi: 10.1093/hsw/20.3.174.
31. Rizzo A, Yildirim M, Maggio MG, Khabbache H, Gomez-Salgado J, Bahramzadeh M, et al. Novel measures to assess work-life balance: A systematic review of the last 5 years (2018-2023). *J Health Soc Sci*. 2023;3:0174-5912. Doi: 10.19204/2023/NVLM2.
32. Maslach C, Jackson SE. The measurement of experienced burnout. *J Organ Behav*. 1981;2(2):99-113. Doi: 10.1002/job.4030020205.
33. Schwartz Tayri TM. On the frontlines: The impact of the COVID-19 pandemic on social workers' well-being. *Soc Work*. 2023;68(1):69-80.
34. Nyashanu M, Pfende F, Ekpenyong MS. Triggers of mental health problems among frontline healthcare workers during the COVID-19 pandemic in private care homes and domiciliary care agencies: Lived experiences of care workers in the Midlands region, UK. *Health Soc Care Community*. 2020;30. Doi: 10.1111/hsc.13204.
35. Group TW. The World Health Organization quality of life assessment (WHOQOL): Development and general psychometric properties. *Soc Sci Med*. 1998;46(12):1569-1585. Doi: 10.1016/S0277-9536(98)00009-4.
36. Lerman C, Croyle RT, Tercyak KP, Hamann H. Genetic testing: Psychological aspects and implications. *J Consult Clin Psychol*. 2002;70(3):784. Doi: 10.1037/0022-006X.70.3.784.
37. Dupuy HJ. The psychological general well-being (PGWB) index. In: *Assessment of quality of life in clinical trials of cardiovascular therapies*. 1984. p. 170-183.
38. Grossi E, Mosconi P, Groth N, Niero M, Apolone G. Il Questionario psicologico general well-being. Versione Italiana. Istituto di Ricerche Farmacologiche "Mario Negri," Milan; 2002.
39. Covelli V, Camisasca E, Manzoni GM, Crescenzo P, Marelli A, Visco MA, et al. After the first lockdown due to the COVID-19 pandemic: Perceptions, experiences, and effects on well-being in Italian people. *Front Psychol*. 2023;14:1172456. Doi: 10.3389/fpsyg.2023.1172456.
40. Edwards JA, Webster S, Van Laar D, Easton S. Psychometric analysis of the UK Health and Safety Executive's Management Standards work-related stress Indicator Tool. *Work Stress*. 2008;22(2):96-107.
41. Marcatto F, Colautti L, Larese Filon F, Luis O, Ferrante D. The HSE management standards indicator tool: Concurrent and construct validity. *Occup Med*. 2014;64(5):365-371. Doi: 10.1093/occmed/kqu038.
42. Marcatto F, D'Errico G, Di Blas L, Ferrante D. La valutazione dello stress lavoro correlato: Adattamento italiano dell'HSE Management Standards Work-Related Stress Indicator Tool. *G Ital Med Lav Ergon*. 2011;33(4):403-408. ISSN 1592-7830.
43. Warr P, Cook J, Wall T. Scales for the measurement of some work attitudes and aspects of psychological well-being. *J Occup Psychol*. 1979;52:129-148.
44. Magnavita N, Fileni A, Magnavita L, Mammi F. Soddisfazione da lavoro: Uso della job satisfaction scale (JSS). *G Ital Med Lav Ergon*. 2007;29(3):655-657.
45. Ellemers N, Kortekaas P, Ouwerkerk JW. Self-categorisation, commitment to the group and group self-esteem as related but distinct aspects of social identity. *Eur J Soc Psychol*. 1999;29(2-3):371-389. Doi: 10.1002/(SICI)1099-0992(199903/05)29:2/3<371::AID-EJSP932>3.0.CO;2-U.
46. Manuti A, Bosco A. Identificazione organizzativa: Un contributo alla verifica delle proprietà psicometriche di due strumenti di misura. *G Ital Psicol*. 2012;39(4):881-902.
47. Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: The PANAS scales. *J Pers Soc Psychol*. 1988;54(6):1063. Doi: 10.1037/0022-3514.54.6.1063.

48. Terraciano A, McCrae RR, Costa PT Jr. Factorial and construct validity of the Italian Positive and Negative Affect Schedule (PANAS). *Eur J Psychol Assess*. 2003;19(2):131. Doi: 10.1027//1015-5759.19.2.131.
49. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3:77-101. Doi: 10.1191/1478088706qp063oa.
50. Chirico F, Zaffina S, Di Prinzio RR, Giorgi G, Ferrari G, Capitanelli I, et al. Working from home in the context of COVID-19: A systematic review of physical and mental health effects on teleworkers. *J Health Soc Sci*. 2021;6(3):319-332. Doi: 10.19204/2021/wrkn8.
51. Marino L, Capone V. Smart working and well-being before and during the COVID-19 pandemic: A scoping review. *Eur J Investig Health Psychol Educ*. 2021;11(4):1516-1536. Doi: 10.3390/ejihpe11040108.
52. Buomprisco G, Ricci S, Perri R, De Sio S. Health and telework: New challenges after COVID-19 pandemic. *Eur J Environ Public Health*. 2021;5(2). Doi: 10.21601/ejeph/9705.
53. Moran MR, Heller O, Chun Y, Shlomo Y, Grinstein-Weiss M. Examining associations between remote work and anxiety and depression: A longitudinal survey study in Israel. *BMJ Public Health*. 2023;1(1):100133. Doi: 10.1136/bmjph-2023-000133.
54. Ministero della salute. Il personale del servizio sanitario nazionale, i dati del 2022 [online]. 2024. Available from: https://www.salute.gov.it/portale/news/p3_2_1.jsp?lingua=italiano&menu=notizie&area=statisticheSSN&btnCerca=. [Accessed 29 August 2024].
55. Reizer A, Koslowsky M, Geffen L. Living in fear: The relationship between fear of COVID-19, distress, health, and marital satisfaction among Israeli women. *Health Care Women Int*. 2020;41:1273-1293. Doi: 10.1080/07399332.2020.1829626.
56. Camisasca E, Covelli V, Cafagna D, Manzoni GM, Cantoia M, Bavagnoli A, et al. From economic difficulties to psychological maladjustment in Italian women during the COVID-19 pandemic: Does marital dissatisfaction moderate or mediate this association? *Front Psychol*. 2023;14:1166049. Doi: 10.3389/fpsyg.2023.1166049.
57. Tayal D, Mehta AK. The struggle to balance work and family life during the COVID-19 pandemic: Insights based on the situations of working women in Delhi. *J Fam Issues*. 2023;44(6):1423-1465. Doi: 10.1177/0192513X211058817.
58. Lal B, Dwivedi YK. Homeworkers' usage of mobile phones; social isolation in the home-workplace. *J Enterp Inf Manag*. 2009;22(3):257-274. Doi: 10.1108/17410390910949715.
59. Collins AM, Hislop D, Cartwright S. Social support in the workplace between teleworkers, office-based colleagues and supervisors. *New Technol Work Employ*. 2016;31(2):161-175. Doi: 10.1111/ntwe.12068
60. Lal B, Dwivedi YK, Haag M. Working from home during COVID-19: Doing and managing technology-enabled social interaction with colleagues at a distance. *Inf Syst Front*. 2023;25(4):1333-1350. Doi: 10.1007/s10796-021-10182-0.
61. Prasad DK, Mangipudi DMR, Vaidya DR, Muralidhar B. Organizational climate, opportunities, challenges and psychological wellbeing of the remote working employees during COVID-19 pandemic: A general linear model approach with reference to the information technology industry in Hyderabad. *Int J Adv Res Eng Technol*. 2020;11(4).
62. Chirico F. Adjustment Disorder as an Occupational Disease: Our Experience in Italy. *Int J Occup Environ Med*. 2016 Jan;7(1):52-57.
63. Chirico F. The assessment of psychosocial risk: only "work-related stress" or something else? *Med Lav*. 2015 Jan 9;106(1):65-66.
64. Finistrella M, Luchina E. The effect of a Mindfulness-based stress reduction program on the mental health of a sample of Italian healthcare workers: A quasi-experimental study design. *G Ital Psicol Med Lav*. 2024;4(1):27-40. Doi: 10.69088/2024/THFF4.
65. Makkaoui M, Hannoun FZ, Ouazizi K, Rizzo A, Ait Ali D, Cherqui A, et al. Spirituality as a predictor of psychological well-being at work in the Moroccan context: A cross-sectional study. *J Health Soc Sci*. 2024;9(2):279-293. Doi: 10.19204/2024/SPRT8.
66. Sharma M. A protocol for assessing the readiness for practicing introspective meditations (manan dhyana) as a tool for reduction of stress among high-stress occupations. *G Ital Psicol Med Lav*. 2021;1(1):105-116. Doi: 10.69088/2021/PRTC11.

67. Qourrichi A, Ouazizi K, Saaliti E, Ait Ali D, El Alami L, Hilal M, et al. The effect of learned helplessness on the psychological health of healthcare workers. *J Health Soc Sci*. 2024;9(1):129-143. Doi: 10.19204/2024/THFF6.
68. Chirico F. Religious Belief and Mental Health in Lay and Consecrated Italian Teachers. *J Relig Health*. 2017 Jun;56(3):839-851. doi: 10.1007/s10943-016-0242-7.
69. Chirico F, Magnavita N. The Spiritual Dimension of Health for More Spirituality at Workplace. *Indian J Occup Environ Med*. 2019;23(2):99. doi:10.4103/ijoem.IJOEM_209_18.
70. Chirico F, Khabbache H, Rizzo A, Nucera G, Yildirim M, Batra K, et al. Bridging ethics and spirituality in healthcare policies for a holistic response to climate change, new pandemics, and global health challenges: A call to action. *Adv Med Psychol Public Health*. 2024;1(4):170-173. Doi: 10.5281/zenodo.11068942.
71. Gharib M, Borhaninejad V, Rashedi V. Mental health challenges among older adults. *Adv Med Psychol Public Health*. 2024;1(3):106-107. Doi: 10.5281/zenodo.10899226.
72. Grant CA, Wallace LM, Spurgeon PC. An exploration of the psychological factors affecting remote e-workers' job effectiveness, well-being and work-life balance. *Employee Relat*. 2013;35(5):527-546. Doi: 10.1108/ER-08-2012-0059.
73. Gajendran RS, Harrison DA. The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *J Appl Psychol*. 2007;92(6):1524-1541. Doi: 10.1037/0021-9010.92.6.1524.
74. Morganson VJ, Major DA, Oborn KL, Verive JM, Heelan MP. Comparing telework locations and traditional work arrangements: Differences in work-life balance support, job satisfaction, and inclusion. *J Manag Psychol*. 2010;25:578-595. Doi: 10.1108/02683941011056941.
75. Fiorini L, Rovini E, Sorrentino A, Khalid O, Coviello L, Radi L, et al. Can assistive technology support social services during COVID-19 emergency? Barriers and opportunities. *Int J Interact Des Manuf (IJIDeM)*. 2022;16(1):359-370.
76. Todisco L, Tomo A, Canonico P, Mangia G. The bright and dark side of smart working in the public sector: Employees' experiences before and during COVID-19. *Manag Decis*. 2023;61(13):85-102. Doi: 10.1108/MD-02-2022-0164.
77. Maggio MG, Rizzo A, Stagnitti MC, Manuli A, Calabro' RS. System usability, stress and mood among teachers using distance learning. *G Ital Psicol Med Lav*. 2022;2(2):117-124. Doi: 10.69088/2022/PBLC6.
78. Crescenzo P, Ritella G, Ligorio MB. The relationship between occupational health surveillance, emotions, and technology use in teachers. *G Ital Psicol Med Lav*. 2024;4(2):164-166. Doi: 10.69088/2024/THRL7.
79. Magnavita N, Chirico F, Sacco A. COVID-19: from hospitals to courts. *Lancet*. 2021;397(10284):1542. Doi: 10.1016/s0140-6736(21)00472-4.
80. Chirico F, Nucera G, Szarpak L. COVID-19 mortality in Italy: The first wave was more severe and deadly, but only in Lombardy region. *J Infect*. 2021 Jul;83(1):e16. doi: 10.1016/j.jinf.2021.05.006. Epub 2021 May 14.
81. Pandey TD, Pathak J. Impact of the COVID-19 pandemic on the mental and physical health of Indian working women: A cross-sectional study of District Rajkot, Gujarat. *G Ital Psicol Med Lav*. 2024;4(2):140-153. Doi: 10.69088/2024/MPCT4.
82. Hossan D, Mansor ZD, Islam MdR, Khan AN, Jaharuddin NS, Jesmin NS. Relationship between motivational factors and employee engagement in Bangladesh's Readymade Garments (RMG) industry. *G Ital Psicol Med Lav*. 2022;2(2):91-104. Doi:10.69088/2022/RLTN2.
83. Jochmannova L, Charvat M, Slukova PZ, Sucha M, Viktorova L. The decline in the provision of psychosocial Services during the COVID-19 pandemic and the barriers to moving to online forms of care from providers' perspectives. *G Ital Psicol Med Lav*. 2023;3(3):106-117. Doi: 10.69088/2023/THDC4.
84. Chirico F, Sacco A, Ferrari G. "Total Worker Health" strategy to tackle the COVID-19 pandemic and future challenges in the workplace. *J Health Soc Sci*. 2021;6(4):452-457. Doi: 10.19204/2021/ttlw1.
85. Lakhani R, Sharma M. Global health: A priority that persists. *Adv Med Psychol Public Health*. 2025;2(2):78-80. Doi: 10.5281/zenodo.12738127.
86. Bruno E, Turay T, Titi T. Il futuro della salute e sicurezza sul lavoro in Italia attraverso il coordinamento degli attori pubblici e i programmi di promozione della salute scolastici tra pari [The future of occupational health and safety system in Italy through public actor's coordination and school-based peer education programs]. *G Ital Psicol Med Lav*. 2023;3(1):34-37. Doi: 10.69088/2023/LFTR6.

Italian.

87. Chirico F, Sacco A, Magnavita N. La medicina basata sulle evidenze scientifiche e l'attività di sorveglianza sanitaria: una revisione dei principi e delle esperienze in medicina del lavoro. [Evidence-based Medicine (EBM) and occupational health surveillance: A review of the principles and experiences in occupational health]. *G Ital Psicol Med Lav.* 2022;2(1):6-24. Doi:10.69088/2022/LMDC2. *Italian.*
88. Bruno F, Mautone A, Ait Ali D, Fassima A, Khabbache H, Rizzo A. Evaluating Facebook scales: A systematic review of the psychological assessment tools. *Adv Med Psychol Public Health.* 2025;2(3):142-156. Doi: 10.5281/zenodo.13351015.
89. Rizzo A, Calandi L, Faranda M, Rosano MG, Carlotta V, Vinci E. Stigma against mental illness and mental health: The role of social media. *Adv Med Psychol Public Health.* 2025;2(2): 125-130. Doi: 10.5281/zenodo.13223184.
90. Zhussipbek G. The human right to health: Empathy and universal human dignity versus apathetic capitalism. *Adv Med Psychol Public Health.* 2025;2(1):60-71. Doi: 10.5281/zenodo.11672488.
91. Chirico F, Khabbache H, Rizzo A, Nucera G, Yildirim M, Batra K, et al. Bridging ethics and spirituality in healthcare policies for a holistic response to climate change, new pandemics, and global health challenges: A call to action. *Adv Med Psychol Public Health.* 2024;1(4):170-173. Doi: 10.5281/zenodo.11068942.



© 2024 by the authors. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).