

Mitigating the effect of COVID-19 in a postemergency phase: The role of sense of community and individual resilience

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Abstract

To identify and confirm patterns of relationships connecting sense of community (SOC) and individual resilience with psychological well-being, via the mediation of coronavirus disease 2019 (COVID-19) impacts on life domains. An online survey was conducted with a sample of adults ($n = 650$) 1 year after the COVID-19 outbreak in Italy and the United States (April–December 2021). Utilizing a Structural Equation Model, we tested a mediation model ($n = 563$) to identify the associations between SOC and individual resilience and the perceived impacts of the emergency situation and psychological well-being. Results revealed that during the crisis, SOC had an influence on psychological well-being, but only by mediating the effects of COVID-19 impacts on life domains. Independently, individual resilience had a direct influence on psychological well-being. The findings support the importance of the interaction of individual and collective variables that played different roles at different phases of the pandemic. The findings suggest for possible interventions to enhance well-being during crises.

KEYWORDS

COVID-19, individual resilience, psychological well-being, sense of community

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1 | INTRODUCTION

Over the past 3 years, a large body of psychosocial literature has highlighted the impact of the coronavirus disease 2019 (COVID-19) pandemic on various aspects of life. The COVID-19 pandemic has been found to be inextricably linked to feelings of helplessness and the loss of a basic sense of safety, financial stability, and the ability to envision a better future (Polizzi et al., 2020).

In particular, the impact on psychological well-being under COVID-19 has been extensively studied in relation to a range of populations (e.g., youth, elderly, and women), geographic locales, and cultural affiliations (e.g., rural vs. urban populations; individual vs. collective cultures) (for a review, Esposito et al., 2021; Luthra et al., 2023; Moss et al., 2023). The most relevant for these reports are those studies conducted in a salutogenic approach (Antonovsky, 1987) aimed to investigate the factors that contributed to maintaining and promoting physical and mental well-being during the pandemic (Barni et al., 2020). These studies are important to understanding patterns that may protect well-being under pandemic conditions and to design interventions to improve individual and collective well-being (e.g., Zarowsky & Rashid, 2023). In addition, they have demonstrated that individual and collective factors interacted to mitigate or exacerbate the impact of the pandemic on people's lives (Gattino et al., 2022; Mannarini et al., 2022; Procentese et al., 2023; Rudert et al., 2021).

On the individual side, resilience has been one of the most studied variables. The APA Dictionary of Psychology (2023; <https://dictionary.apa.org/resilience>) defines resilience as "the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands." Psychological resilience is an active process, made up of resistance, self-repair, and growth in response to crisis and difficulty. It derives from a range of personal, social, and environmental factors that enable people to cope positively with traumatic events, even severe ones, without long-term negative consequences to their psychophysical health (Migliorini et al., 2021).

Among the general adult population, resilience has been identified as one of the most important protective factors for an individual's adaptive response in stressful situations, such as a pandemic, and has been demonstrated to have a direct effect on psychological health (e.g., Kocjan et al., 2021; Manchia et al., 2022; World Health Organization, 2020; Yıldırım & Arslan, 2022). Research has indicated that during the COVID-19 pandemic, resilience was effective in reducing the negative effects of stress on the psychological well-being of student nurses (Labrague, 2021) and in protecting mental, psychological, and emotional health of young people and healthcare workers (Croghan et al., 2021; Grande et al., 2021).

On the collective side, psychological sense of community (SOC), "an internalized we" that encompasses mutual influence, membership, integration and fulfillment of needs, and shared emotional connection (McMillan & Chavis, 1986), had a protective role in both directly maintaining or enhancing well-being (e.g., older people; Mau et al., 2022) and indirectly mitigating the negative effects of COVID-19 across diverse life domains (Mannarini et al., 2022). Other studies highlighted the importance of SOC to increased individual awareness of personal (e.g., fear of being infected) and social (e.g., fear of an economic downturn) concerns about the COVID-19 emergency and the perception of the postpandemic future (Gattino et al., 2022).

Existing studies have also shed light on how the salience and nature of significant factors impacting well-being might change depending on the particular pandemic phase during which data was collected (Esposito et al., 2021). As COVID-19 has become "the new normal" (Tam et al., 2021), it continues to have both clear and subtle effects on people lives (Gradidge et al., 2023) in a way that differed from the early stage of the pandemic (e.g., the additional stress due to managing the consequences of COVID-19 on their own lives and their loved ones). Moreover, although vaccines boosted the hopes of people around the world (Mullard, 2021), the emergence of new and highly transmissible variants that showed resistance to the full treatment effect of the existing vaccines led to feelings of hopelessness. The emergence of vaccines as a political issue also undercut hopes of speedy resolutions. These, together with feelings of resentment in the face of policies that had limited mobility, freedom and sociality (e.g.,

avoiding crowded place, being masked, work from home) likely had detrimental effects on people's well-being (Zarowsky & Rashid, 2023).

The present study builds on these and other studies and expands upon the first wave of research conducted in 2020 during the initial period of the pandemic emergency (Mannarini et al., 2022). The results of the first wave of data showed the positive role of SOC in promoting well-being both directly and indirectly through COVID-19 impacts on life domains. Simultaneously, there were no significant associations between community resilience and psychological well-being, either directly or indirectly through COVID-19 impacts. In the second wave of that study, we investigated whether 1 year later, in the first half of 2021 when much of the world began a slow return to normality, psychological well-being continued to be associated with the same collective and individual variables. As in the previous work, we examined the role of SOC on psychological well-being in mediating the impacts of COVID-19 on life domains. We expected the same relationship as in the previous work, although we could not exclude that a change in the impact of COVID-19 in this postemergency period would lead to a weaker effect. On these bases, we tested the following hypothesis:

H1: We expected a positive association between SOC and psychological well-being, both directly and indirectly mediating the effects of COVID-19 impact. In particular, consistent with the previous study, we hypothesized that a strong SOC would act as a buffer against the negative impact of COVID-19 and hence be associated with a higher level of psychological well-being.

In this follow-up study, we examined the role of individual resilience rather than the collective resilience we had explored in our prior study. This change is due to theoretical and statistical reasons: (1) statistically, no significant relationship between well-being and collective resilience was found in the previous study; and (2) theoretically, there exists robust empirical evidence to suggest that psychological well-being, of which resilience is one measure, is significant in both protecting and promoting individual well-being after the pandemic-related emergency. Therefore, we formulated the following hypothesis:

H2: We expected a positive association between individual resilience and psychological well-being, both directly and indirectly mediating the effects of COVID-19 impact. Based on the literature, we hypothesized that individual resilience would contribute to reducing the negative impact of COVID-19 and thus be related to higher levels of psychological well-being.

In keeping with the previous study, we collected data in the same national contexts (Italy and the United States) and checked that the results were comparable, in the same way we did in the previous work (see Section 3 below and Mannarini et al., 2022).

2 | MATERIALS AND METHODS

2.1 | Procedures

Data was collected via an online questionnaire administered with Qualtrics and Google Form and available in English and Italian. The questionnaire was constructed of validated scales, many of which were repeated from the prior study. Prior questionnaire completers were asked to participate again, but in large part a new sample was recruited through snowball sampling and data collected between the end of April to the end of December 2021. Participants were provided the consent form, a brief introduction to the study and a privacy statement that ensured the anonymity of the participants in accordance with applicable data protection law. Participants could stop the survey at any time and the estimated time to complete the questionnaire was 15 min. The minimum age criterion for

participation was 18 years. An email from the researcher was available for any doubts. Participants' anonymity was respected according to the 1964 Helsinki Declaration and each participant provided their informed consent before starting the questionnaire. The project was reviewed and approved by the UMBC Institutional Review Board (IRB Y20AB20211). The participation was voluntary, and no compensation was specified.

2.2 | Participants

Six hundred and fifty participants responded to this wave of online questionnaire. Ten participants were excluded because they reported an age under 18 years. Seventy-seven participants were also excluded because they missed at least one of the total scale measures included in the questionnaire. The final sample constituted 563 participants, with a majority being Italian (60%). Most respondents were female (70%), and the mean age was 30.4 years (standard deviation [SD] = 12.8), ranging from 18 to 88 years. A high school diploma was the most common educational level selected (47.1%), followed by an associate degree or technical certification (20.1%), and a bachelor's or higher degree (26.8%). Only the 5.9% of the sample did not have at least a high school diploma. Most of the respondents reported not having children (75.5%).

Concerning the state of the COVID-19 pandemic at the time of the survey completion, the majority of participants (39.6%) reported a fairly high number of COVID-19 infection cases in their living environment, and the majority (63.6%) evaluated the measures adopted by their government to address the pandemic as adequate. Finally, most of the participants were vaccinated (first dose or fully vaccinated; 60.4%).

2.3 | Instruments

General sociodemographic variables (e.g., gender, age, and educational level) as well as contextual COVID-19 information were collected (e.g., level of infections, vaccination, effectiveness of measures adopted by state). For the purposes of this brief report, the four main measures were all treated as continuous variables and were averaged to obtain a total mean score.

2.3.1 | Sense of Community Index-2

We used the revised Sense of Community Index (Chavis et al., 2008). It consists of 24 items rated on a 4-point Likert-type scale ranging from 1 "Not at all" to 4 "Completely." Reliability was excellent ($\alpha = 0.95$).

2.3.2 | Individual resilience

We used the Brief Resilience Scale (Smith et al., 2008). It includes six items (three item positively and three item negatively worded) rated on a 5-point Likert-type scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree". Reliability was good ($\alpha = 0.70$).

2.3.3 | COVID-19 impacts

We used a six-items scale developed and applied in our previous study (Mannarini et al., 2022) which assesses the impact of COVID-19 on the following life domains: Family relationships, Social life/Leisure, Employment, Income,

Physical Health, and Mental Health. Items are rated on a 10-point Likert-type scale ranging from 0 "Become much worse" to 10 "Become much better." Reliability was good ($\alpha = 0.75$).

2.3.4 | Psychological well-being

We used 3 items from the interpersonal, community, occupation, physical, psychological, and economic scale (ICOPPE; Prilleltensky et al., 2015) to measure the psychological well-being in three moments: at the present moment, 1 year before the COVID-19 restrictions, and 1 year after their end. Items are rated on a 10-point Likert-type scale ranging from 0 "Worst" to 10 "Best" (Reliability was satisfactory ($\alpha = 0.61$)).

2.4 | Data analysis

SPSS 28.0 (IBM SPSS Statistics, IBM Corporation) and MPLUS 8 (Muthén & Muthén, 2017) were used to perform statistical analyses. Pearson's correlation (r) was used to test the relationship between variables, and reliability of each scale was performed with Cronbach's α . Preliminary CFAs confirmed the measurement properties in line with the original scale studies.

Structural equation modeling (SEM) with mediation was utilized to test all the scales measured by their corresponding items. Gender (0 = female), age, educational level (0 = low educational level), level of COVID-19 infection currently, and children (0 = no children) were included as control variables.

Because the data violated the multinormality condition, the estimator for the analysis was the Asparouhov and Muthén (2010) mean- and variance-adjusted ML method of estimation (MLMV). Sense of Community scale, an ordinal variable due to its four-response categories, was tested with mean- and variance-adjusted weighted least squares (WLSMV) (Li, 2016). Root mean square error of approximation (RMSEA) ≤ 0.080 , comparative fit index (CFI) ≥ 0.900 , and root mean square residual (SRMR) ≤ 0.080 (only for continuous variables) were considered to assess the model fit (Browne & Cudeck, 1993; Hu & Bentler, 1999). Bootstrap estimation with 10,000 samples was tested for indirect effects (Hayes, 2018); the bias-corrected 95% confidence interval (CI) was used by determining the effects at the 2.5th and 97.5th percentiles; when 0 was not included in the CI the indirect effects were significant.

Since our participants were recruited in two countries (Italy and United States), we also checked for equality across the samples. First, we confirmed with measurement invariance the equality of measures across samples. Structural invariance across Italian and American participants was used to determine whether the relationships between the antecedent and the outcome variables were the same in the two samples. A χ^2 difference was calculated to compare the constrained and unconstrained model (Schermelel-Engel et al., 2003).

3 | RESULTS

In a preliminary phase of analysis, we used the multiple imputation (MI) procedure after we assessed that data was not missing completely at random. The percentage of missing values for each scale under study ranged from 0.4% to 4.0%.

Table 1 reports means, standard deviations, and bivariate correlations among the scale scores. All the scale scores showed a positive correlation, except for the correlation between SOC and individual resilience. Among sociodemographic variables, age was positively correlated with all the scale scores, except for having a negative correlation with SOC. Identifying as a man was positively correlated with COVID-19 impacts and psychological well-being and negatively correlated with individual resilience.

TABLE 1 Means, standard deviations, and bivariate correlations among scale study and socio-demographic variables.

	M	SD	Range	1	2	3	4	5	6	7
1. Sense of community	2.13	0.57	1.00–4.00	–						
2. Individual resilience	3.15	0.78	1.00–5.00	0.05	–					
3. COVID-19 impacts	4.54	1.63	0.00–10.00	0.09*	0.13**	–				
4. Psychological well-being	6.05	1.81	1.00–10.00	0.13**	0.21***	0.42***	–			
5. Age	30.36	12.78	18–88	–0.10*	0.17***	0.11*	0.13**	–		
6. Gender	–	–	–	0.04	–0.09*	0.11*	0.09*	–	–	
7. Education	–	–	–	0.06	0.004	0.01	–0.01	–	–	–

Note: Gender was coded 0 if the respondent was a woman and 1 if a man. Education was coded 0 if the respondent has low-middle educational levels and 1 if has high educational levels.

Abbreviations: COVID-19, coronavirus disease 2019; SD, standard deviation.

****p* < 0.001; ***p* < 0.01; **p* < 0.05.

TABLE 2 Direct, indirect, and total effects of sense of community and individual resilience on psychological well-being through the mediation of COVID-19 impacts.

	β	B (SE)	BC 95% CI
Direct effects			
SOC → COVID-19 impacts	0.12*	0.12* (0.06)	[0.03–0.22]
Individual resilience → COVID-19 impacts	0.11	0.12 (0.08)	[–0.002, 0.24]
SOC → psychological well-being	0.07	0.09 (0.07)	[–0.01, 0.22]
Individual resilience → psychological well-being	0.14*	0.18 (0.10)	[0.04–0.34]
COVID-19 Impacts → psychological well-being	0.59***	0.75*** (0.12)	[0.57–0.97]
Indirect effects			
SOC → COVID-19 impacts → psychological well-being	0.07*	0.09 (0.05)	[0.02–0.18]
Individual resilience → COVID-19 impacts → psychological well-being	0.07	0.09 (0.06)	[0.00–0.19]
Total effects			
SOC → psychological well-being	0.14*	0.19* (0.08)	[0.07–0.32]
Individual resilience → psychological well-being	0.20*	0.27* (0.12)	[0.09–0.47]

Note: Bootstrap 10000.

Abbreviations: CI, confidence interval; COVID-19, coronavirus disease 2019; SE, standard error; SOC, sense of community.

****p* < 0.001; **p* < 0.05.

To test the measurement model, a series of CFA was conducted. In keeping with prior study we confirmed the one-factor solution of SOC, COVID-19 impacts, and psychological well-being in keeping with our prior COVID study findings. Following Chmitorz et al. (2018) we found an excellent one-factor solution for Individual Resilience via a method-factor. For all the CFAs, factor loadings were freely estimated, and the latent variance was fixed at 1.0.

Table 2 reports the results of the direct, indirect effect, and total effect of the SEM model. The model showed a good fit: $\chi^2(762) = 1939.9, p < 0.05$; RMSEA = 0.053, 90% CI [0.050–0.056]; CFI = 0.950.

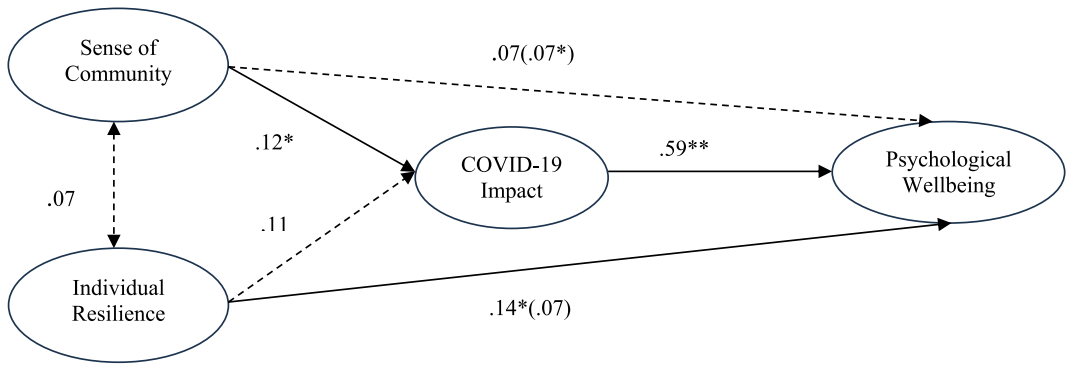


FIGURE 1 Structural mediation model. Control variables not included for clarity. Standardized coefficients; indirect effects in brackets; solid lines indicate significant paths, whereas dashed lines indicate nonsignificant paths. ** $p < 0.01$; * $p < 0.05$.

Figure 1 shows the significant and not significant paths.

We partially confirmed our hypotheses. Concerning H1, only an indirect association was found between SOC and psychological well-being via the mediation of COVID-19 impacts. Regarding H2, we found a direct association of individual resilience with psychological well-being, while no indirect association emerged via the mediation of COVID-19 impacts.

The model was controlled for sociodemographic variables (gender, age, education, level of COVID-19 infection currently, and income) and positive associations were found between both gender (0 = female) and age with COVID-19 impacts ($\beta = 0.12$, $p < 0.05$; $\beta = 0.15$, $p < 0.01$, respectively); therefore, only age and gender were included in the final model.

The lack of a significant χ^2 difference (after correction) confirmed the equality of the relationships across Italian and American participants ($\chi^2(6) = 3.49$, $p = 0.75$).

4 | DISCUSSION AND CONCLUSION

The present study has found that in 2021–1 year after the beginning of the pandemic in Italy and United States both collective and individual variables were important for psychological well-being in both settings. In the case of collective resources, we confirmed that SOC (as a social variable) is relevant in shaping psychological well-being in times of pandemic. Specifically, our findings suggest that, in a time in which COVID-19 is still a personal and collective concern, SOC acted as a powerful force supporting peoples' well-being, but only to the extent to which it reduced the ongoing negative impacts of the pandemic on significant life domains, such as family relationships, social life, employment, income, physical and mental health (as measured by the ICOPPE; Prilleltensky et al., 2015). Indeed, SOC appeared significant only through the full mediation of the COVID-19 impacts.

Regarding our second hypothesis, individual resources in the form of individual resilience were found to play a role in directly fostering psychological well-being. Individual resilience appeared to promote well-being regardless of the impacts of COVID-19 on peoples' life domains; that is, that individual resilience acted as a nonspecific resource that operates at the individual level across different life situations and contexts.

Some differences from our earlier study (Mannarini et al., 2022) deserve further attention. In the former investigation, the results showed a positive significant association of SOC and psychological well-being, both directly and indirectly mediating the effects of COVID-19 impact, while collective resilience was neither directly nor

indirectly related to psychological well-being. At time of the current follow-up study, with fewer social restrictions than during the state of emergency, the main direct association between SOC and psychological well-being ceased to be visible. We might argue that, as COVID-19 exacerbated social conflicts (Jetten, 2020) and had profound effects on social cohesion (Jetten, 2020; Silveira et al., 2023), SOC somehow functioned more as a self-interested than a collectively oriented force (Nowell & Boyd, 2014). In this view, community is seen as a resource to meet key personal needs that emerged through the experiences of the COVID-19 pandemic.

Based on these findings, we can reason that—during the COVID-19 pandemic—SOC had a direct impact on people's well-being in the early stages of the pandemic, but, as time passed and the pandemic “normalized” (Gradidge et al., 2023; Tam, 2021), the “honeymoon phase” was over. As in other types of disasters, the first moments of the pandemics could have been characterized by community cohesion and a feeling of bonding over a shared experience. This perception of common destiny (Lewin, 1948) can increase a SOC, but this phase typically lasts a limited time before converting to feelings of anger, dissatisfaction, and frustration (Silver & Grek-Martin, 2015). In the case of COVID-19, many studies (e.g., Haktanir et al., 2022; Jetten, 2020; Zarowsky & Rashid, 2023) have highlighted people's fatigue and stress related to social restriction and isolation due to the measures adopted to contain the pandemic, and—in a longitudinal perspective—to the experience of repeated collective stressors (Silveira et al., 2023). The effect of a positive SOC might have diminished as people grew tired of the collective responses and sacrifices. In addition, the natural decline in the feeling of sharing, the emergence and increase of individual problems (e.g., the higher probability of being directly infected or having a relative who is infected, the emergence of economic problems related to job impacts such as business closure and long-term unemployment) might have weakened the effect of SOC, which continued to indirectly buffer the negative effects of COVID-19 but no longer functioned directly. At the same time, it is important to acknowledge that these conclusions must be considered in light of the cross-sectional nature of the data. Specifically, the diminished effect of the SOC could be explained by dynamic situational factors influencing the mediation effect that, however, cannot be fully captured by cross-sectional data.

Taken together, the results add to those obtained in the previous studies (Mannarini et al., 2022) and suggest the need to consider both individual and collective resources in times of community crisis. Indeed, even some years after the previous study, it is (still) important to manage perceptions of the effects of COVID-19 and to protect psychological well-being. More specifically, the results suggest the need to contextualize SOC in time and space and in relation to the specific situation in which we call it into action, rather than considering it as an absolute protective factor that works the same way in every situation. It indeed makes logical sense that the measure of feelings towards endogenous experiences is impacted by the setting characteristics themselves. Meanwhile, individual resilience seems to play a more general and nonspecific protective role regardless of the situation.

Since this is a cross-sectional study, the above results should be taken with caution, as no causal conclusions can be drawn. Furthermore, considering the cross-sectional nature of the data, the sequential association between the variables cannot be fully confirmed. In this regard, it is worth mentioning that the sequential relationship between the study variables was elaborated based on existing literature supporting the mediation effect of COVID-19 impacts on the relationship between SOC and well-being. In addition, the sample collected for the present study was different than the sample of the first wave. This did not allow us to directly compare the results between the first and second wave nor consider longitudinal change. Given the stressors respondents were already dealing with, and the limited budget available to us, we chose to start with samples of convenience and hope that future studies might look follow up on these potential longitudinal leads. Furthermore, the present sample was not balanced with respect to relevant sociodemographic aspects, such as gender or vaccine attitudes, so further work is needed to refine our conclusions regarding the impact of these and other variables on our results.

Despite these limitations, the present study and the previous one (Mannarini et al., 2022), support the importance of exploring the interaction of individual and collective variables and the different roles they play at different phases of a crisis. This has important practice implications related to any community-level intervention to improve well-being, including: (1) there is no “one size fits all” solution; (2) the context and

even the phase of the context matter; (3) interventions need to balance who they are responding to, in what timeframe they are responding; and (4) interventions should aim to foster both collective and individual sources of support and coping.

This study, although limited by its cross-sectional design stands in contrast to the few longitudinal studies on the impact of the pandemic have been conducted in specific populations (e.g., people with severe mental illness, Barone et al. (2023); racialized groups, Audet et al. (2023); domestic violence survivors, Chiamonte et al. (2022); students, von Keyserlingk et al. (2022) and draws attention to the need for study of pandemic and crisis resources and well-being among general, cross-national populations.

At time of this writing, there is much more work to be done to improve individual and collective well-being, particularly in light of the ways that the pandemic and other contemporaneous social crises continue to make an impact in the form of collective fatigue and degraded community cohesion. In times of ongoing crisis, when every resource matters and there is no one size fits all solution, knowing that SOC may mitigate negative impacts of a crisis on other life domains in the later phases of a crisis, makes it an important community level resource to promote.

AUTHOR CONTRIBUTIONS

Rizzo Marco: Conceptualization; formal analysis; investigation; methodology; project administration; resources; supervision; visualization; writing—original draft; writing—review & editing. **Fedi Angela:** Conceptualization; investigation; methodology; project administration; resources; visualization; writing—original draft; writing—review & editing. **Brodsky Anne E.:** Conceptualization; investigation; methodology; project administration; resources; visualization; writing—review & editing. **Rochira Alessia:** Conceptualization; investigation; methodology; project administration; resources; writing—review & editing. **Zhao Jenny:** Investigation; project administration; resources; visualization. **Mannarini Terri:** Conceptualization; investigation; methodology; project administration; resources; supervision; visualization; writing—review & editing.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy and ethical restrictions.

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REFERENCES

- Antonovsky, A. (1987). *Unraveling the mystery of health - how people manage stress and stay well*. Jossey-Bass.
- APA (2023). Dictionary of psychology. <https://dictionary.apa.org/>
- Asparouhov, T., & Muthén, B. (2010). Simple second order chi-square correction. Mplus technical appendix (pp. 1–8). Muthén & Muthén. http://www.statmodel.com/download/WLSMV_new_chi21.pdf
- Audet, É. C., Thai, H., Holding, A. C., Davids, J., Fang, X., & Koestner, R. (2023). The depth of stories: how black young adults' disclosure of high arousal negative affect in narratives about the COVID-19 pandemic and the BLM protests improved adjustment over the year 2020. *Journal of Community Psychology*, 51(4), 1504–1517. <https://doi.org/10.1002/jcop.22929>
- Barni, D., Danioni, F., Canzi, E., Ferrari, L., Ranieri, S., Lanz, M., Iafra, R., Regalia, C., & Rosnati, R. (2020). Facing the COVID-19 pandemic: the role of sense of coherence. *Frontiers in Psychology*, 11, Article 578440. <https://doi.org/10.3389/fpsyg.2020.578440>
- Barone, A., Billeci, M., D'Amore, S., De Prisco, M., De Simone, G., Ermini, E., Freda, V., Iannotta, F., Luciani, A., Pistone, L., Rifici, L. M., Saia, V. M., Spennato, G., Subosco, F., Vellucci, L., D'Urso, G., Galletta, D., Fornaro, M., Iasevoli, F., & de Bartolomeis, A. (2023). The effects of sustained COVID-19 emergency and restrictions on the mental health of subjects with serious mental illness: A prospective study. *Journal of Community Psychology*, 51(1), 154–167. <https://doi.org/10.1002/jcop.22886>
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing structural equation models* (pp. 111–135). Sage.
- Chavis, D., Lee, K., & Acosta, J. (2008). *Sense of community index 2 (SCI-2): Background, instrument, and scoring instructions*. Second International Conference on Community Psychology.
- Chiaromonte, D., Simmons, C., Hamdan, N., Ayeni, O. O., López-Zerón, G., Farero, A., Sprecher, M., & Sullivan, C. M. (2022). The impact of COVID-19 on the safety, housing stability, and mental health of unstably housed domestic violence survivors. *Journal of Community Psychology*, 50(6), 2659–2681. <https://doi.org/10.1002/jcop.2276>
- Chmitorz, A., Wenzel, M., Stieglitz, R. D., Kunzler, A., Bagusat, C., Helmreich, I., Gerlicher, A., Kampa, M., Kubiak, T., Kalisch, R., Lieb, K., & Tüscher, O. (2018). Population-based validation of a German version of the Brief Resilience Scale. *PLoS One*, 13(2), e0192761. <https://doi.org/10.1371/journal.pone.0192761>
- Croghan, I. T., Chesak, S. S., Adusumalli, J., Fischer, K. M., Beck, E. W., Patel, S. R., Ghosh, K., Schroeder, D. R., & Bhagra, A. (2021). Stress, resilience, and coping of healthcare workers during the COVID-19 pandemic. *Journal of Primary Care & Community Health*, 12, 21501327211008448. <https://doi.org/10.1177/21501327211008448>
- Esposito, C., Di Napoli, I., Agueli, B., Marino, L., Procentese, F., & Arcidiacono, C. (2021). Well-Being and the COVID-19 pandemic. *European Psychologist*, 26(4), 285–297. <https://doi.org/10.1027/1016-9040/a000468>
- Gattino, S., Rizzo, M., Gatti, F., Compare, C., Procentese, F., Guarino, A., Di Napoli, I., Barbieri, I., Fedi, A., Aresi, G., Marta, E., Marzana, D., Prati, G., Rochira, A., Tzankova, I., & Albanesi, C. (2022). COVID-19 in our lives: sense of community, sense of community responsibility, and reflexivity in present concerns and perception of the future. *Journal of Community Psychology*, 50(5), 2344–2365. <https://doi.org/10.1002/jcop.22780>
- Gradidge, S., Yap, W. M., Liem, A., & Dass, G. (2023). Taking on the "new normal": Emerging psychologists' reflections on the COVID-19 pandemic. *Journal of Humanities and Applied Social Sciences*, 5(2), 144–157. <https://doi.org/10.1108/JHASS-08-2022-0101>
- Grande, R. A. N., Berdida, D. J. E., Villagracia, H. N., Cornejo, L. T. O., Villacorte, L. M., & Borja, M. V. F. (2021). Association between perceived resilience and mental well-being of Saudi nursing students during COVID-19 pandemic: A Cross-Sectional study. *Journal of Holistic Nursing*, 39(4), 314–324. <https://doi.org/10.1177/08980101211009063>
- Haktanir, A., Can, N., Seki, T., Kurnaz, M. F., & Dilmaç, B. (2022). Do we experience pandemic fatigue? Current state, predictors, and prevention. *Current Psychology*, 41(10), 7314–7325. <https://doi.org/10.1007/s12144-021-02397-w>
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Jetten, J. (2020). *Together apart: The psychology of COVID-19*. SAGE Publications.
- von Keyserlingk, L., Yamaguchi-Pedroza, K., Arum, R., & Eccles, J. S. (2022). Stress of university students before and after campus closure in response to COVID-19. *Journal of Community Psychology*, 50(1), 285–301. <https://doi.org/10.1002/jcop.22561>
- Kocjan, G., Kavčič, T., & Avsec, A. (2021). Resilience matters: Explaining the association between personality and psychological functioning during the COVID-19 pandemic. *International Journal of Clinical and Health Psychology*, 21(1), 100198. <https://doi.org/10.1016/j.ijchp.2020.08.002>

- Labrague, L. J. (2021). Resilience as a mediator in the relationship between stress-associated with the Covid-19 pandemic, life satisfaction, and psychological well-being in student nurses: A cross-sectional study. *Nurse Education in Practice*, 56, 103182. <https://doi.org/10.1016/j.nepr.2021.103182>
- Lewin, K. (1948). *Resolving social conflicts; selected papers on group dynamics*. Harper.
- Luthra, S., Agrawal, S., Kumar, A., Sharma, M., Joshi, S., & Kumar, J. (2023). Psychological well-being of young adults during COVID-19 pandemic: Lesson learned and future research agenda. *Heliyon*, 9(5), e15841. <https://doi.org/10.1016/j.heliyon.2023.e15841>
- Manchia, M., Gathier, A. W., Yapici-Eser, H., Schmidt, M. V., de Quervain, D., van Amelsvoort, T., Bisson, J. I., Cryan, J. F., Howes, O. D., Pinto, L., van der Wee, N. J., Domschke, K., Branchi, I., & Vinkers, C. H. (2022). The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves. *European Neuropsychopharmacology*, 55, 22–83. <https://doi.org/10.1016/j.euroneuro.2021.10.864>
- Mannarini, T., Rizzo, M., Brodsky, A., Buckingham, S., Zhao, J., Rochira, A., & Fedi, A. (2022). The potential of psychological connectedness: Mitigating the impacts of COVID-19 through sense of community and community resilience. *Journal of Community Psychology*, 50(5), 2273–2289. <https://doi.org/10.1002/jcop.22775>
- Mau, M., Fabricius, A.-M., & Klausen, S. H. (2022). Keys to well-being in older adults during the COVID-19 pandemic: Personality, coping and meaning. *International Journal of Qualitative Studies on Health and Well-Being*, 17(1), 2110669. <https://doi.org/10.1080/17482631.2022.2110669>
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14, 6–23.
- Migliorini, L., Cecchini, C., & Chiodini, M. (2021). Resilienza [Resilience]. In C. Arcidiacono, N. De Piccoli, T. Mannarini, & E. Marta (Eds.), *Psicologia di Comunità [Community Psychology]* (pp. 122–135). FrancoAngeli.
- Moss, S. J., Mizen, S. J., Stelfox, M., Mather, R. B., FitzGerald, E. A., Tutelman, P., Racine, N., Birnie, K. A., Fiest, K. M., Stelfox, H. T., & Parsons Leigh, J. (2023). Interventions to improve well-being among children and youth aged 6–17 years during the COVID-19 pandemic: A systematic review. *BMC Medicine*, 21(1), 131. <https://doi.org/10.1186/s12916-023-02828-4>
- Mullard, A. (2021). COVID-19 vaccines buoy hope. *Nature Reviews Drug Discovery*, 20(1), 8. <https://doi.org/10.1038/d41573-020-00215-9>
- Muthén, L., & Muthén, B. (2017). *Mplus Version 8 User's guide. Statistical analysis with latent variables: User's guide (Version 8)*. 1998–2017.
- Nowell, B., & Boyd, N. M. (2014). Sense of community responsibility in community collaboratives: Advancing a theory of community as resource and responsibility. *American Journal of Community Psychology*, 54(3), 229–242. <https://doi.org/10.1007/s10464-014-9667-x>
- Polizzi, C., Lynn, S. J., & Perry, A. (2020). Stress and coping in the time of COVID-19: Pathways to resilience and recovery. *Clinical Neuropsychiatry*, 17(2), 59–62. <https://doi.org/10.36131/CN20200204>
- Prilleltensky, I., Dietz, S., Prilleltensky, O., Myers, N. D., Rubenstein, C. L., Jin, Y., & McMahon, A. (2015). Assessing multidimensional well-being: Development and validation of the I COPPE scale. *Journal of Community Psychology*, 43(2), 199–226. <https://doi.org/10.1002/jcop.21674>
- Procentese, F., Gatti, F., Rochira, A., Tzankova, I., Di Napoli, I., Albanesi, C., & Marzana, D. (2023). The selective effect of lockdown experience on citizens' perspectives: A multilevel, multiple informant approach to personal and community resilience during COVID-19 pandemic. *Journal of Community & Applied Social Psychology*, 33(3), 719–740. <https://doi.org/10.1002/casp.2651>
- Rudert, S. C., Gleibs, I. H., Gollwitzer, M., Häfner, M., Hajek, K. V., Harth, N. S., Häusser, J. A., Imhoff, R., & Schneider, D. (2021). Us and the virus. *European Psychologist*, 26(4), 259–271. <https://doi.org/10.1027/1016-9040/a000457>
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23–74.
- Silveira, S., Hecht, M., Voelkle, M. C., & Singer, T. (2023). Tend-and-befriend and rally around the flag effects during the COVID-19 pandemic: Differential longitudinal change patterns in multiple aspects of social cohesion. *European Journal of Social Psychology*, 53, 1276–1293. <https://doi.org/10.1002/ejsp.2974>
- Silver, A., & Grek-Martin, J. (2015). "Now we understand what community really means": Reconceptualizing the role of sense of place in the disaster recovery process. *Journal of Environmental Psychology*, 42, 32–41. <https://doi.org/10.1016/j.jenvp.2015.01.004>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194–200. <https://doi.org/10.1080/10705500802222972>
- Tam, K. P., Leung, A. K., & Khan, S. (2021). The new normal of social psychology in the face of the COVID-19 pandemic: Insights and advice from leaders in the field. *Asian Journal of Social Psychology*, 24(1), 8–9. <https://doi.org/10.1111/ajsp.12468>

- World Health Organization. (2020). Pandemic fatigue—reinvigorating the public to prevent COVID-19. Policy framework for supporting pandemic prevention and management. *Copenhagen: WHO Regional Office for Europe*. <https://apps.who.int/iris/handle/10665/337574>
- Yıldırım, M., & Arslan, G. (2022). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Current Psychology*, 41(8), 5712–5722. <https://doi.org/10.1007/s12144-020-01177-2>
- Zarowsky, Z., & Rashid, T. (2023). Resilience and wellbeing strategies for pandemic fatigue in times of Covid-19. *International Journal of Applied Positive Psychology*, 8(1), 1–36. <https://doi.org/10.1007/s41042-022-00078-y>

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