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Community coherence during COVID-19 – a pilot study

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Abstract: Using a salutogenic perspective, this qualitative pilot study aimed to explore the experiences of university staff and students in various Western countries with community coherence during COVID-19. This entailed a focus on individual and community assets that contributed to positive experiences with community coherence during the pandemic. Sixteen participants from University staff and postgraduate students in Europe and Canada interested in Public Health were included. The study was conducted online via Microsoft Teams using the Structured Interview Matrix method. This participatory facilitating method enabled participants to dialogue about their experiences with community coherence during COVID-19. The results show that during COVID-19, participants primarily engaged in activities related to personal health and well-being, related to close family, friends and neighbours and an increased need to use digital technologies in their free time and during working hours. Key themes observed across the various international communities during the times when high levels of restrictions were in place, were a greater sense of loneliness and vulnerability. This pilot study indicates that there was a high level of community cohesion during COVID-19 and that people, despite living in different countries, were active in very similar ways.

Keywords: community coherence; salutogenesis; structured interview matrix; well-being; public health

Introduction

Communities are important settings for health promotion. A community can be described as "a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings



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(McQueen & Metger, 2021, p1929). Vaandrager & Kennedy (2017) describe common definitions of community, of which we use the community as an individual and collective identity in this paper - where a 'sense of community' is defined merely by the experience rather than the physical attributes (Chavis & Wandersman, 1990; Vaandrager & Kennedy, 2017). In line with our definition, community is the social cohesion we experience as part of a collective identity. Social cohesion can be considered at different levels: in interpersonal relations, relations between individuals and institutions, and as a general common good (Schiefer & van der Noll, 2017; Dragolov et al., 2016).

The COVID-19 pandemic and the restrictions imposed to combat it have tested social cohesion and its strength. The strength of social cohesion is likely to be a protective factor when facing events of disaster, a strong predictor of recovering from stressful adversities, and a catalyst for community resilience (Braun-Lewensohn and Sagy 2011; Braun-Lewensohn & Sagy, 2014; Jewett et al., 2021; Ludin et al., 2019). Previous research provided evidence of the role of social cohesion and networks both during and after calamities (Aldrich & Meyer, 2015; Townshend et al., 2015). A strong sense of community cohesion could provide "another resource to rely on when needed" (Braun-Lewensohn & Sagy, 2011; Pijpker et al., 2022). As such, community cohesion has acted as a protective mechanism against both health anxiety and stress during the COVID-19 pandemic (Svensson & Elntib, 2021).

To explore the strength of community cohesion, we used the salutogenic approach for this pilot study, which states that life experiences help shape one's Sense of Coherence or SoC—a life orientation providing the ability to choose various strategies for managing life events based on three dimensions: comprehensibility, manageability and meaningfulness (Antonovsky, 1987). A strong SoC helps one to mobilise resources to cope with stressors and manage tension successfully in such a way that it promotes health and well-being (Antonovsky, 1987; Lindström and Eriksson, 2010, Mana et al., 2021). Experiencing SoC has been confirmed to be a stable coping resource during adulthood.

Earlier research has found strong correlations between the level of SoC at the beginning of the COVID-19 pandemic and people's mental health a year later (Mana et al., 2021). To our knowledge, there is a lack of evidence of experiences of community cohesion during the COVID-19 pandemic. To explore these experiences during the pandemic and to develop an online protocol to collect qualitative data, we focused on academic members because this was the researcher's community and this group had more experience of conducting research online. The research question for this study was: What are the experiences of international University staff and Postgraduate students with community cohesion in action during COVID-19 in different countries?



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Methodology

Our method is based on a constructivist ontology and subjectivist epistemology, assuming that people actively construct and then act upon social realities they assign to events, actions, processes, ideologies, and conditions (Sparkes & Smith, 2014).

A facilitation technique was used that allows for engaging larger focus groups of participants in dialogue with each other. The Structured Interview Matrix (SIM) is a participatory qualitative method used to address the pitfalls of traditional focus groups. Its protocol also includes one-on-one interviews, ensuring that every voice is heard (O'Sullivan et al., 2013). The SIM has been used by different researchers and in different settings (O'Sullivan et al., 2022). The recommended sample size for an online SIM session is 16 (O'Sullivan et al., 2022). The SIM, therefore, provided an opportunity for the researchers to engage with a pilot group of diverse participants while simultaneously creating a community of people interested in this topic. The pilot study was conducted between March 1st 2022, and December 31st, 2022, with ethical approval obtained from the principal investigator's HAN University of Applied Sciences ethics review board as well as from the relevant participating country co-investigators' research ethics boards before the start of the study.

Approach to Data collection

To gather data and further develop our online protocol, we focused our pilot study on University staff and Postgraduate students from European and North American countries who were recruited using snowball sampling (Parker et al., 2019). Starting point were the connections through the 29th European Training Consortium in Public Health and Health Promotion (ETC-PHHP) summer school. We opted for this research population for our pilot study as participants would be familiar with the salutogenic approach. 19 participants registered to attend, of which 16 participated in the SIM session; Six Countries were identified for this study, with three participants from Kosovo, three from Poland, one from Canada, one from the United Kingdom, one from Ukraine, one from Norway and six from the Netherlands. The study included six PhD Students, seven lecturers/researchers, one researcher, one participant from a professional services department.

Four subgroups of four people were created in which nationalities were spread over the groups as much as possible to enable rich data generation and flow of the session (O'Sullivan et al., 2015).

The SIM session was conducted online, in English, using MS Teams. It lasted three hours. Before the session, all participants attending this session consented to participate in the study and to the recordings in MS Teams.



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Data collection was anchored around four questions to explore a salutogenic approach to communities during COVID-19:

- 1. How has a community helped you cope during COVID-19?
- 2. How did you experience community coherence during COVID-19?
- 3. How did you contribute to a community during COVID-19?
- 4. What health-related lesson have you learned in a community from COVID-19?

The SIM focus group generated data using four steps. During a plenary start, the participants were introduced to the SIM method. Then, four subgroups were assigned one of the four interview questions. They discussed and operationalised their question in breakout rooms (step 1). Next, three rounds of one-on-one interviews between the members of the different subgroups were performed in break-out rooms. In each round, both participants were alternatively interviewer and, after a switch at the 5-minute mark, interviewee (step 2). The participant who was interviewer asked their question and wrote down notes, while the interviewee-participant voiced their thoughts about the question. Afterwards, participants returned to their subgroups to compare, share, summarise and categorise their findings in the deliberation phase (step 3). Finally, subgroups presented their main findings during a facilitated plenary discussion (step 4). Generated data were the audio recordings of plenary and subgroup sessions.

Data analysis

Participants produced the first synthesis of the data for each question when discussing the findings from their interviews in the subgroups. For this study, we used the transcripts from the Teams recordings of the SIM subgroup sessions for analysis. First, the researchers paired up to analyse the results per the SIM question. They first individually identified preliminary themes, which they then discussed together. Next, the themes that were identified per question were proposed to and discussed by the whole group of researchers. We noted that several themes could be identified across several subgroup transcripts. The discussion led to a final set of themes reflecting the international experiences with community cohesion in action during COVID-19. These themes were rechecked with the original transcripts.

Findings and themes

From the conversations about community coherence, several themes could be recognised across one or more subgroup dialogues.

Personal health and well-being

Participants of the SIM session mentioned both individual support, like paying the bills for people with COVID and also community-based support - starting sports groups, playing



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games, gardening etc. The activities were driven by the government or by the community itself. When organised by the government or professionals, they were also prevention measures provided, like messages to wear masks or keep their distance.

"There were lots of activities in the community. And although some of them did not need help from the community, they were pleased to see people being active, doing a lot of activities, games and buying things for families and neighbours in the neighbourhood."

People mentioned they had more free time because they did not need to travel to work. This made them engage in activities to improve their health, especially at the beginning of the lockdown. However, as the lockdown continued

"it became more difficult to motivate yourself to do something".

The majority of participants gave examples of supporting others in one way or another – like taking care of the mental health of family members and relatives, doing groceries for them, looking after the vulnerable, providing information, and proposing fun activities.

"I provided 'homework' for family and friends by creating fun challenges and activities for each other, to keep them busy".

One of the respondents mentioned it was difficult to contribute to care-taking activities, as it was important to stay away from others to prevent the spreading of the virus.

Respondents also spoke about showing gratitude to health care services and their staff.

"We clapped for the NHS [British] National Health Service] and service workers, every Thursday at 8 o'clock for a year. It was a very powerful heart of the action and was a massive help to feeling connected with the community."

Overall the COVID-19 pandemic showed how important the sense of community was during the pandemic. People learnt new things about hygiene and other preventive measures and understood themselves and others better.

"With COVID, we learnt that masks helped, for example, we almost had no disease such as colds. There is more awareness about bacteria and viruses".

People mentioned that in health promotion recommendations, the community was not considered. "There were many recommendations made for individuals. There is a feeling that the community was missed."



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Family, friends and neighbours

Respondents mentioned that the pandemic affected their relationships with friends, family and neighbours, as physical contact was missing. One of the interviewees said:

"I remember telling my children, instead of hugging, to touch each other and feel the physical contact." Loved ones are valued more, and for them, there were constant worries. "After the lockdown, we could visit each other; we also used open spaces for family gatherings, at least to see each other".

People were interested in meeting, although meeting places changed from

"houses to parks and open spaces".

The routine changed. Time spent at home with family allowed deeper connections with children and other family members. A participant said she

"felt closer to her own family. Her sister lives alone, and they had a lot more time to talk and discuss". So this "helped to prioritise the family members that you could not spend so much time with, but you had now, due to lock-down and the loss of activities."

Concerns about friends raised the desire to talk to them. Someone mentioned contacting a friend "I had not spoken to in about eight years".

There were reported worries and a desire "to hear something from them". There were notes left with messages that "if you need help, you can call us or you can connect with us". The willingness of neighbours and friends, constant communication and numerous support activities happened. People were more in favour of supporting each other, and paying attention to vulnerable neighbours, such as "distributing meals, especially for the elderly, buying flowers, financial support", but this was reported that decreased over time. Some people bought a lot of things, and "so they were kind of frantic, missing out on stuff like toilet paper or food clothing, they were kind of, you know, borrowing and the stocking up."

Individuals, other institutions, and all sectors were also mobilised to work together, offer daily tasks, understand and help each other, and be more aware of the "value of friendship and care". 'Being able to sort of and to go out and help" is an expression that was heard from participants during our conversation.

This situation had an impact on both personal experiences and interpersonal relationships in the close and broader social community.



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Tools for community coherence

Participants reported that they used modern technologies to a large extent during the COVID-19 pandemic. "Connecting to each other and using digital tools was one of the benefits of the community." Most often, social networking sites and applications that enable communication, learning and work were used. Some people complained that this caused some problems regarding the effective use of these technologies, while others emphasised that it was the only way to keep in touch with others. "One of the negatives about it was that communication was online, and it did not feel as connected". The organisation of online training courses and conferences was mentioned as a positive aspect; they provided the opportunity to keep learning and exchanging knowledge even when being miles apart. Working online became more innovative and made it possible to share and learn new techniques and gain skills. New technologies were used for work, study and private life. Examples were, that many people did their everyday shopping using the Internet and visited museums in an online way. One participant mentioned that she: "felt more connected to the country she lived in because everyone was one and was in the same situation and she felt more connected to them." On the other hand, several participants indicated a kind of emotional impoverishment, manifested by the lack of interpersonal bonds typical of face-to-face meetings in the real world.

Sense of loneliness and vulnerability

Several other themes emerged from the dialogues, especially related to questions two and three. Online communication, enabling social contact during lockdowns, caused a sense of loneliness in some participants

"as I was only talking online". "[I was] retrieving evidence-based information from credible sources, listening to authorities, getting informed about immunisation, I was hoping a lot, I was in an "isolation bubble" - no visitors or family, and I did a lot of online shopping to avoid physical contact."

The feeling of loneliness was sometimes reinforced for people due to limited living conditions, such as living in a small flat, especially mentioned by students:

"I'm sort of stuck out on my own sort of thing. I might be a student. And I'm sort of on my own, you know."

A public health professional commented:

"We saw a lot of distress among young people" and "COVID-19 added to mental health instead of disease". "[We learned that] the vital importance of physical encounters, especially for youngsters, is so vital for development."



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Ordinary things like going for a walk and meeting somebody became scary experiences as people did not know if others had COVID-19. "[There was a] change of consciousness. [That there was] a sense of danger when more people were in the same room." The lockdown was an eye-opening experience of feeling vulnerable: "we depend on each other. We need each other, especially when we are vulnerable".

Another participant said

"I learned the importance of mental health. I learned that I am not invincible; I am mortal. Therefore, I became more health-conscious."

Another participant concluded:

"We need to be aware of our mental health. Sometimes, when we are too busy, we are not aware of how is our mental health. At the beginning [of the pandemic], it was OK. In the middle, it was hard."

The COVID-19 pandemic also caused feelings of helplessness because people did not know what to do anymore and felt stuck: "You did not have any kind of perspective anymore into the future. Like when is this going to end? So there was a kind of reluctance."

Other participants also mentioned positive experiences related to the COVID pandemic experience. They mentioned: "[There was a] change of habits; it took time to cope with the pandemic, good, happy memories as a bond for a group of friends."

Discussion

This qualitative pilot study aimed to explore the experiences of university staff and students in various Western countries with community coherence during COVID-19 using a salutogenic perspective and asset approach. Connecting the four main themes of the findings (Personal health and well-being, family, friends and neighbours, digital technologies, and a sense of loneliness and vulnerability) to the research questions, three overarching community assets and challenges became clear: personal health and community support, mental health and tools for community coherence.

Personal health and community support

Social activities were more important than what participants did individually. Whether they were active in engaging people in activities or doing activities themselves, everyone did something to get together with others. In this study, this social aspect came across as essential for participants, despite the physical risks involved. Also, Long et al. (2022) describe the key importance of social interaction for identity within and across groups. The pandemic caused a constant re-examination of possible interactions. Online alternatives



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could be beneficial but did not compare to real-life interaction (Long et al., 2022; Sommerlad et al., 2022). Many participants stayed connected through their close relatives, providing opportunities through daily activities.

Furthermore, people were more aware of hygiene and better informed about public health measures. However, the community aspect often got lost in the governmental health messages, as their focus was on personal health. Related to this, Maaravi et al. (2021) report the positive relationship between individualistic countries and their COVID-19 cases and mortalities. This shows that not including the community aspect in health policy, could impact the spread of the pandemic. As an example, it is worth mentioning that in the United Kingdom, confidence in the government's response to the COVID-19 pandemic was high at first but declined sharply over time, while high levels of trust in other people also fell, but has since strengthened again and remained at this level for a long period. Also, people's sense of neighbourliness had its ups and downs, but when increased, it was at a high level (Abrams et al., 2021). Similarly, taking into account the overall cohesion of the community, it can be seen that in the first days of the COVID-19 pandemic, a growing national unity was observed. However, as of June 2020, it has faded. In contrast, the sense of local unity grew longer, and even as it began to fade, the level of local unity was still higher than the level of local division compared to national unity and division (Abrams et al., 2021).

Mental Health

The lockdown restrictions caused in many participants, a feeling of loneliness, loss of perspective and fear for themselves and their loved ones, in addition to fear of others. Barni et al., (2020) noticed that when people knew someone diagnosed with COVID-19, they felt more fear of getting sick. All this resulted in a decrease in their psychological well-being. People felt overwhelmed and helpless due to the low sense of control over the situation (Barni et al., 2020 p5). Feeling vulnerable and alone had an impact on the participants' experiences of the COVID-19 restrictions, with a negative outcome for many on how to deal with the change in daily life. Therefore, COVID-19 highlighted the vulnerability of individuals' mental health during a crisis. The mental health threat of the COVID-19 pandemic has been shown in various studies (Hossain et al., 2020; Talevi et al., 2020). For example, some children and young people reported being-lonely, they missed their friends from school, romantic relationships, and complained about the loss of autonomy and freedom (Nahkur et al., 2022 p18)

Tools for community coherence

During the COVID-19 pandemic, the need to use digital technologies concerned everyone and forced a new way of communication, using digital tools to maintain personal connections. For example, children wanting to compensate for the deficiencies caused by the need to maintain physical distance, more and more often used virtual opportunities to



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maintain contact with peers (Nahkur et al., 2022). Other people became socially excluded in many areas of everyday life because of a lack of digital proficiency and insufficient support during the lockdown. Some of the respondents were teachers whose work had changed significantly during COVID-19. This group had to switch from face-to-face to online teaching using new technologies in a short time. Some of them coped with this change quite well. It is interesting to note that some studies show that the skill level in the use of digital technology varied and often led to a lack of confidence and a need for support during the pandemic. However, when teachers adapted to this new way of teaching, they indicated that using new technologies was very useful (Winter, Costello, O'Brien, Hickey 2021; Pozo et al 2021).

Culture was also mentioned as an important factor in coping with and adapting to stressful situations, such as a pandemic (Braun-Lewensohn & Sagy, 2011; Trickett, 2009).

Conclusion

The findings of this study generated new insights into how the participants from different countries experienced community cohesion during lockdowns. However, as we conducted a pilot study, we cannot draw generalised conclusions covering all experiences of all communities in all the participating countries. All participants came from academic backgrounds and had an understanding of the salutogenic approach and experiences of conducting research online. This may have influenced their perspectives and ways of coping.

Regarding the methodology, the fast developments in digital technology to communicate and our increasing digital literacy allowed us to set up and conduct this pilot study. We further developed and tested the SIM protocol for its online use. An additional advantage was having the software provide a preliminary transcript of the conversations during our session. Participants and organisers saved on travel time and costs. The downside is that the session required more time than a live session and that fewer people could participate. This was mainly due to the need for the host to create new break-out rooms for interview rounds and needed to enter each room to start the transcription mode. This would have been even more complex with a larger group of participants, specifically during the one-on-one interview part of the SIM protocol. Despite this limitation, this online format allowed for vivid conversations and connections between participants. Therefore, not only was the research purpose of the SIM satisfied, but the method as an intervention turned out to work well in the online mode.

The three community assets and challenges, personal health and community support, mental health and tools for community coherence, were noticeably interlinked across our four research questions. Indeed, whether it was the community helping people cope or individuals contributing to the community during COVID-19, there were commonalities across different countries when presented with the same health-related questions, despite



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the different national approaches used to cope with the pandemic. Community cohesion was apparent through experiences of personal health and well-being, community support, mental health and tools for community coherence.

The basis for dealing with any crisis would be for people to develop a sense of being able to cope, by understanding the problem as clearly as possible, and having the resources to deal with their situation paying attention to what makes it worth it for people to do so (Barni et al., 2020). Therefore, it seems important to support connections, spread knowledge and maintain good relations at all levels of the social community.

A limitation of this study was that all the participants worked in academic and public sectors although most did undertake professional practice in health care and business settings. Therefore, the group was relatively homogeneous. Involving people from different social groups and backgrounds may have provided more diverse experiences. Another possible limitation is the use of English as the common language, as participants mostly used English as a second language. This may have affected the level of detail in which participants were able to express themselves.

People participating in the study were from different countries. However, because of a rather small number of participants per country, this pilot study did not focus on country-specific experiences nor compared differences/similarities in experiences related to different national approaches to dealing with the pandemic. Rather, the study highlighted people's experiences at the level of the neighbourhood rather than country-level using the SIM method, our line of questioning and our online protocol for data gathering, This is why the term 'community' coherence seems to fit (Colic-Peisker & Robertson, 2015). For future studies, a more diverse group of participants could be included to analyse whether the interpretation of the experiences in our pilot study can be generalised. Further research should also involve a more heterogenous sample and more online SIM sessions to validate the findings. It could be interesting to conduct larger SIM studies involving different countries, to add another dimension to community coherence.

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References

Abrams D., Broadwood J., Lalot F., Davies Hayon K., Dixon A. (2021). Beyond us and them - societal cohesion in britain through eighteen months of covid-19

Aldrich, D. P., & Meyer, M. A. (2015). Social capital and community resilience. *American behavioural scientist*, 59(2), 254-269.



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- Antonovsky, A. (1987). The salutogenic perspective: Toward a new view of health and illness. *Advances*.
- Barni D., Danioni F., Canzi E., Ferrari L, Ranieri S., Lanz M., Iafrate R., Regalia C. & Rosnati R. (2020). Facing the COVID-19 Pandemic: The Role of Sense of Coherence. *Frontiers in Psychology*, Vol.11, doi.org/10.3389/fpsyg.2020.578440.
- Boonekamp, Gwendolijn M.M., John A. J. Dierx, Pepijn Van Hove, en Erik Jansen. (2020). Interactive interviewing and imaging: engaging Dutch PVE-students in dialogue. *Educational Action Research* 28(5), 807–22. https://doi.org/10.1080/09650792.2019.1693410.
- Braun-Lewensohn, O., & Sagy, S. (2011). Salutogenesis and culture: Personal and community sense of coherence among adolescents belonging to three different cultural groups. *International review of psychiatry*, 23(6), 533-541.
- Braun-Lewensohn, O., & Sagy, S. (2014). Community resilience and sense of coherence as protective factors in explaining stress reactions: Comparing cities and rural communities during missiles attacks. *Community mental health journal*, 50(2), 229-234.
- Braun-Lewensohn, O., & Sagy, S. (2011). Salutogenesis and culture: Personal and community sense of coherence among adolescents belonging to three different cultural groups. *International Review of Psychiatry*, 23(6), 533–541. https://doi.org/10.3109/09540261.2011.637905
- Chavis, D. M., & Wandersman, A. (1990). Sense of community in the urban environment: A catalyst for participation and community development. *American Journal of Community Psychology*, 18(1), 55–81. https://doi.org/10.1007/BF00922689
- Colic-Peisker, V., & Robertson, S. (2015). Social change and community cohesion: An ethnographic study of two Melbourne suburbs. *Ethnic and racial studies*, 38(1), 75-91.
- De Bot, C., & Dierx, J. (2019). De methodologie van SIM [the SIM methodology]. TVZ-Verpleegkunde in praktijk en wetenschap, 129(6), 56-57.
- Dragolov G., Ignácz ZS., Lorenz J., Delhey J., Boehnke K., Unzicker K. (2016). Social Cohesion in the Western World. What Holds Societies Together: Insights from the Social Cohesion Radar. *Springer*, p.1
- Eriksson, M., & Lindström, B. (2010). Bringing it all together: The salutogenic response to some of the most pertinent public health dilemmas. In *Health assets in a global context* (pp. 339-351). Springer, New York, NY.
- Hossain, M. M., Tasnim, S., Sultana, A., Faizah, F., Mazumder, H., Zou, L., ... & Ma, P. (2020). Epidemiology of mental health problems in COVID-19: a review. *F1000Research*, 9.
- Jewett, R. L., Mah, S. M., Howell, N., & Larsen, M. M. (2021). Social cohesion and community resilience during COVID-19 and pandemics: A rapid scoping review to inform the United Nations research roadmap for COVID-19 recovery. *International Journal of Health Services*, *51*(3), 325-336.



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- Long, E., Patterson, S., Maxwell, K., Blake, C., Pérez, R. B., Lewis, R., ... & Mitchell, K. R. (2022). COVID-19 pandemic and its impact on social relationships and health. *Journal of Epidemiol Community Health*, 76(2), 128-132.
- Ludin, S. M., Rohaizat, M., & Arbon, P. (2019). The association between social cohesion and community disaster resilience: A cross-sectional study. *Health & Social Care in the Community*, 27(3), 621-631.
- Maaravi, Y., Levy, A., Gur, T., Confino, D., & Segal, S. (2021). The tragedy of the commons: How individualism and collectivism affected the spread of the COVID-19 pandemic. *Frontiers in public health*, *9*, 627559.
- Mana, A., Sagy, S., Srour, A., & Mjally-Knani, S. (2012). Perceptions of collective narratives and identity strategies: The case of Palestinian Muslims and Christians in Israel. *Mind & Society*, 11(2), 165-182.
- Mana, A., Bauer, G. F., Magistretti, C. M., Sardu, C., Juvinyà-Canal, D., Hardy, L. J., ... & Sagy, S. (2021). Order out of chaos: Sense of coherence and the mediating role of coping resources in explaining mental health during COVID-19 in 7 countries. *SSM-Mental Health*, *1*, 100001.
- MacQueen KM, McLellan E, Metzger DS, et al. (2001). What is community? An evidence-based definition for participatory public health. *American Journal of Public Health*, *91*(12), 1929-1938. doi: 10.2105/AJPH.91.12.1929
- Nahkur O & Kutsar D. (2022). The change in children's subjective relational social cohesion with family and friends during the COVID-19 pandemic: A multinational analysis. *Frontiers in Sociology. Health*, *1*, 100001.Vol. 7. doi.org/10.3389/fsoc.2022.974543
- O'Sullivan, T., Tracey, S. & Corneil, W. (2022). Structured Interview Matrix (SIM) Facilitators' Guide. University of Ottawa.
- O'Sullivan TL, Amaratunga CA, Phillips KP et al. (2009). If schools are closed, who will watch Our kids? ... Family caregiving and other sources of role conflict among nurses during large-scale outbreaks. *Prehospital and Disaster Medicine*, 24(4): 321–325
- O'Sullivan, T. L., Corneil, W., Kuziemsky, C. E., & Toal-Sullivan, D. (2015). Use of the structured interview matrix to enhance community resilience through collaboration and inclusive engagement. *Systems Research and Behavioral Science*, 32(6), 616-628.
- O'Sullivan, T. L., Kuziemsky, C. E., Toal-Sullivan, D., & Corneil, W. (2013). Unravelling the complexities of disaster management: A framework for critical social infrastructure to promote population health and resilience. *Social Science & Medicine*, 93, 238-246.
- Parker, M., Hanson, T. M., Vandi, A., Sao Babawo, L., & Allen, T. (2019). Ebola, community engagement, and saving loved ones. *The Lancet*, *393*(10191), 2585.
- Pijpker, R., Kamp, D. van der, Vader, S., Broeder, L. den, & Wagemakers, A. (2022). Socioeconomic status and mental health during the COVID-19 crisis: Are a sense of coherence, sense of community coherence and sense of national coherence predictors for mental health? *Health Psychology Report*, 10(2), 149–155. https://doi.org/10.5114/hpr.2022.114527



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- Pozo, J. I., Pérez Echeverría, M. P., Cabellos, B., & Sánchez, D. L. (2021). Teaching and learning in times of COVID-19: uses of digital technologies during school lockdowns. *Frontiers in Psychology*, 12, 1511.
- Schiefer D. & van der Noll J. (2017). The Essentials of Social Cohesion: A Literature Review. *Social Indicators Research*. Vol. 132, p. 583
- Sparkes, A. C., & Smith, B. (2013). Qualitative research methods in sport, exercise and health: From process to product. Routledge.
- Sommerlad, A., Marston, L., Huntley, J., Livingston, G., Lewis, G., Steptoe, A., & Fancourt, D. (2021). Social relationships and depression during the COVID-19 lockdown: longitudinal analysis of the COVID-19 Social Study. *Psychological medicine*, 1-10.
- Svensson, S. J., & Elntib, S. (2021). Community cohesion during the first peak of the COVID-19 pandemic: A social antidote to health anxiety and stress. *Journal of Applied Social Psychology*, 51(8), 793-808.
- Talevi, D., Socci, V., Carai, M., Carnaghi, G., Faleri, S., Trebbi, E., Bernardo, A. di, Capelli, F., & Pacitti, F. (2020). Mental health outcomes of the CoViD-19 pandemic. *Rivista di Psichiatria*, 55(3), 137–144.
- Townshend, I., Awosoga, O., Kulig, J., & Fan, H. (2015). Social cohesion and resilience across communities that have experienced a disaster. *Natural Hazards*, 76(2), 913-938.
- Vaandrager, L., & Kennedy, L. (2017). The Application of Salutogenesis in Communities and Neighborhoods. In M. B. Mittelmark, S. Sagy, M. Eriksson, G. F. Bauer, J. M. Pelikan, B. Lindström, & G. A. Espnes (Eds.), *The Handbook of Salutogenesis*. Springer. http://www.ncbi.nlm.nih.gov/books/NBK435839/
- Winter, E., Costello, A., O'Brien, M., & Hickey, G. (2021). Teachers' use of technology and the impact of Covid-19. *Irish Educational Studies*, 40(2), 235-246.

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