

# Exploring experiences with stressors and coping resources among Dutch socioeconomic groups during the COVID-19 pandemic

**Author(s)**

van der Kamp, Dani; Torensma, Marieke; Vader, Sarah; Pijpker, Roald; den Broeder, Lea; Fransen, Mirjam P; Wagemakers, Annemarie

**DOI**

[10.1093/heapro/daac198](https://doi.org/10.1093/heapro/daac198)

**Publication date**

2023

**Document Version**

Final published version

**Published in**

Health Promotion International

**License**

CC BY-NC

[Link to publication](#)

**Citation for published version (APA):**

van der Kamp, D., Torensma, M., Vader, S., Pijpker, R., den Broeder, L., Fransen, M. P., & Wagemakers, A. (2023). Exploring experiences with stressors and coping resources among Dutch socioeconomic groups during the COVID-19 pandemic. *Health Promotion International*, 38(1), 1-12. Article daac198. <https://doi.org/10.1093/heapro/daac198>

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please contact the library: <https://www.amsterdamuas.com/library/contact/questions>, or send a letter to: University Library (Library of the University of Amsterdam and Amsterdam University of Applied Sciences), Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

## Article

# Exploring experiences with stressors and coping resources among Dutch socioeconomic groups during the COVID-19 pandemic

Dani van der Kamp<sup>1</sup>, Marieke Torensma<sup>2,3,4,†</sup>, Sarah Vader<sup>2,†</sup>, Roald Pijpker<sup>1</sup>,  
Lea den Broeder<sup>5,6</sup>, Mirjam P. Fransen<sup>2,3,4</sup>, and Annemarie Wagemakers<sup>1,\*</sup>

<sup>1</sup>Health and Society, Social Sciences Group, Wageningen University & Research, the Netherlands

<sup>2</sup>Centre for Nutrition, Prevention and Health Services, National Institute for Public Health and the Environment, Bilthoven, Wageningen, the Netherlands

<sup>3</sup>Amsterdam UMC, location University of Amsterdam, Department of Public and Occupational Health, Amsterdam, the Netherlands

<sup>4</sup>Amsterdam Public Health Research Institute, Program Quality of Care, Amsterdam, the Netherlands

<sup>5</sup>Centre for Health and Society, National Institute for Public Health and the Environment, Bilthoven, the Netherlands

<sup>6</sup>Achieve, Faculty of Health, Amsterdam University of Applied Sciences, Amsterdam, the Netherlands

\*Corresponding author. E-mail: [annemarie.wagemakers@wur.nl](mailto:annemarie.wagemakers@wur.nl)

†Shared second authorship/order by agreement.

## Summary

The COVID-19 crisis impacts populations globally. This impact seems to differ for groups with low- and high-socioeconomic status (SES). We conducted a qualitative study in the Netherlands using a salutogenic perspective to examine experiences with stressors and coping resources during the pandemic among both SES groups to gain insight on how to promote the health and well-being of these groups. We conducted 10 focus group discussions and 20 interviews to explore the experiences, including resources and stressors, of respondents from low- ( $N = 37$ ) and high-SES ( $N = 38$ ) groups (25–55 years, Dutch speaking). We analyzed the findings at individual, community, and national levels. The results show that coping depends on government-imposed measures and the way individuals handle these measures; restriction to the home context with positive and negative consequences for work and leisure; psychological negative consequences and resourcefulness; and social effects related to unity (e.g. social cohesion or support) and division (including polarization). Respondents with lower SES expressed more problems with COVID-19 measures and experienced more social impact in their neighborhood than those with higher SES. Where low-SES groups especially mentioned the effects of staying at home on family life, high-SES groups mentioned effects on work life. At last, psychological consequences seem to differ somewhat across SES groups. Recommendations include consistent government-imposed measures and government communication, support for home schooling children, and strengthening the social fabric of neighborhoods.

**Keywords:** salutogenesis, COVID-19, socioeconomic status, resilience

## INTRODUCTION

By January 2022, the COVID-19 pandemic has caused over 305 million infections and about 5.5 million deaths worldwide (WHO, 2022). As a public health response, each country has developed their

own strategies to flatten the hospitalizations and death curves, generally including social distancing measures, like working from home, and hygiene measures, such as the use of face masks (Khanna *et al.*, 2020). Overall, people are confronted with the COVID-19 crisis via direct pathways, like

dealing with the fear of being infected, and indirect pathways, such as dealing with continuously changing societal measures (Torales *et al.*, 2020). Simultaneously, evidence about the impact of the COVID-19 crisis on the everyday lives of people is emerging, suggesting that existing health inequalities between different socioeconomic status (SES) groups are increasing (Bambra *et al.*, 2020; RIVM, 2020; WHO, 2020; Campo-Arias and De Mendieta, 2021; Kraaij-Dirkzwager *et al.*, 2021; Wu *et al.*, 2021). For example, in the context of the Netherlands, socioeconomic inequalities in health cause people of low SES to have a 4-year shorter life expectancy and live 15 years in poor health compared with people with high SES (Pharos, 2022). Moreover, the risk of dying from COVID-19 in the Netherlands was found to be higher for certain subpopulations, including men, people of advanced age (80+), people with a migration background and people with low income (CBS, n.d.).

Studies suggest that people with low SES are more prone to becoming infected by the virus than high-SES individuals (Bambra *et al.*, 2020; Wu *et al.*, 2021; Reme *et al.*, 2022). In addition, low-SES individuals are at greater risk of adverse effects from the pandemic because they are more likely to have chronic diseases, such as obesity and diabetes, which are known risk factors for becoming more severely ill from the virus (Bambra *et al.*, 2020; RIVM, 2020). Moreover, it has been assumed that low-SES groups have fewer resources to cope well with crisis situations (Bambra *et al.*, 2020; RIVM, 2020; Campo-Arias and De Mendieta, 2021; Wu *et al.*, 2021), and are thereby not able to maintain or improve their health and well-being during adverse stressor exposures such as the pandemic (Crielaard *et al.*, 2021). In general, less-educated people also have a lower healthy life expectancy compared with more educated people (Bilal *et al.*, 2019; VZinfo, n.d.). In contrast, Campo-Arias and De Mendieta (Campo-Arias and De Mendieta 2021) found that people with low SES were likely to be more resilient during the pandemic than high-SES groups, because they have often had more experience of adverse and chronic stressors during their life course. Whereas in a recent explorative cross-sectional study, Pijpker *et al.* (Pijpker *et al.*, 2022) found that people from both low- and high-SES groups did not experience differences regarding their mental health and well-being and were both able to cope well during the pandemic. Regarding the contradictory findings on SES and resilience, the aim of this study was to gain a more in-depth understanding of the experiences of both SES groups and the factors that support successful coping with the COVID-19 pandemic and the concomitant measures.

## Salutogenic model of health

We use the Salutogenic model of health (SMH) to examine and understand people's experiences and coping resources, i.e. the resources that enable people to successfully cope with life's stressors (Antonovsky, 1987; Mittelmarmark, 2021), such as stressor exposure caused by the COVID-19 pandemic. Central concepts in the SMH are: The Sense of Coherence (SOC), General Resistance Resources (GRRs), and Specific Resistance Resources (SRRs) (Eriksson, 2022; Mittelmarmark *et al.*, 2022). People with a strong SOC understand the stressors they are faced with (*comprehensibility*—a knowledge component), feel that they possess the resources to deal with the stressors (*manageability*—a behavioral component), and have a strong sense that their lives have enough meaning as to deal with the stressor (*meaningfulness*—an emotional—motivational component) (Antonovsky, 1993; Mana *et al.*, 2019; Eriksson and Contu, 2022). In addition, Sense of Community Coherence (SOCC) and Sense of National Coherence (SONC) are, respectively, about the comprehensibility, manageability, and meaningfulness of the community or nation of which one is a part (Braun-Lewensohn and Sagy, 2011; Mana *et al.*, 2016, 2019). The different SOC levels have consistently shown to be predictive of good levels of health and well-being, specifically individual SOC before the pandemic (Eriksson and Lindström, 2006), and all the three levels of SOC during the pandemic (Super *et al.*, 2020; Mana *et al.*, 2021; Pijpker *et al.*, 2022). The GRRs can be material, such as having money to provide for one's life, or non-material, such as knowledge or skills (Antonovsky, 1987; Mittelmarmark, 2021). Besides GRRs, SRRs are more specific resources for certain stressors (Mittelmarmark *et al.*, 2022), for example hygiene measures to prevent getting infected by the COVID-19 virus. A strong SOC enables people to adaptively use GRRs/SRRs to cope with stressors, which subsequently strengthens their SOC and supports the maintenance of their health and well-being (Braun-Lewensohn and Sagy, 2011; Mittelmarmark, 2021; Eriksson, 2022).

The relevance of the SMH for the context of this study is that the model assumes that every person, regardless of their SES, experiences stressors in life and attempts to use GRRs/SRRs to cope with these stressors in a health-promoting way. Although studies showing that the various SOC levels and GRRs, such as social support from friends, colleagues, and family, relate to good health and well-being during the pandemic are emerging (Super *et al.*, 2020; Mana *et al.*, 2021), little empirical attention has been given to the underlying experiences of people from different SES groups in coping with the COVID-19 crisis (Pijpker *et al.*, 2022). Therefore, the central question in this study is: What are the experiences of people

from low- and high-SES groups with the COVID-19 pandemic and concomitant measures and what resources were applied to help cope with the pandemic? By understanding possible differences in experiences with stressors and resources among different SES groups, health promotion policies and measures can be adjusted accordingly to reduce the adverse impact of the current pandemic, and possible future pandemics.

## METHODS

### Study design

We conducted a qualitative study with a phenomenological design, to explore the lived experiences of individuals from low- and high-SES groups during the COVID-19 pandemic. We held 10 focus group discussions (FGDs) (5 low SES and 5 high SES) and 20 semi-structured individual interviews (10 low SES and 10 high SES). The interviews took place online and the FGDs in real life to allow for optimal group dynamics. While the FGDs provided insight into how the topic was discussed in society, the individual interviews provided the opportunity to delve deeper into the people's personal situations. This study was part of a larger research project on health disparities as a result of the COVID-19 pandemic. For this project, we also conducted a quantitative survey measuring mental health, SOC, SOCC, SONC, and social support between low- and high-SES groups (Pijpker *et al.*, 2022).

For their participation in either an FGD or an individual interview, respondents received financial compensation. This study was approved by the Social Science Ethics Committee (SEC) of Wageningen University & Research.

### Study sample and recruitment

We contracted an external agency to recruit respondents for both studies. Respondents had to have registered themselves with this agency, had to be between 25 and 55 years old and had to speak Dutch. We based the classification into SES groups on educational level and income, which was in line with standards of the Dutch Central Bureau for Statistics (CBS, 2020a). Respondents were classified as having low SES if they (i) had not completed primary school or (ii) had not completed secondary school or (iii) their highest level of education was a vocational degree. In addition, they had to earn less than the median Dutch income. Respondents were classified as having high SES if they (i) had completed both primary and secondary education or (ii) held a (professional) bachelor's or master's degree, and had an (above) median income.

### Data collection

We held the FGDs and the interviews in September 2021. We used interview guides based on the theoretical framework of salutogenesis for both the FGDs and the interviews (Eriksson, 2022; Mittelmark *et al.*, 2022) (Supplementary File 1). For the FGDs, we used a visual timeline (printed and displayed in large) on the course of the COVID-19 pandemic and concomitant measures in the Netherlands to guide discussion and elicit thought on change in resources and stressors over time (Supplementary File 2). For the interviews, instead of using the visual timeline, the structure of the interview questions followed the timeline of the COVID-19 pandemic (Sheridan *et al.*, 2011). This method has been proven successful in previous studies among low- and high-SES groups (Super *et al.*, 2014; Herens *et al.*, 2016; Polhuis *et al.*, 2020; Pijpker *et al.*, 2021).

### Procedure

We conducted the 10 FGDs in three Dutch cities, at locations arranged by the external agency. Three researchers (DvdK, RP, and SV) conducted the FGDs, which lasted about 2 hours. We held the 20 individual in-depth interviews online via MS Teams, an approach that is now often used in qualitative 'fieldwork' (Samuels, 2020), and they lasted approximately 45 minutes. We conducted both the FGDs and the interviews in Dutch.

We obtained informed consent prior to the FGDs and interviews; the interviewer explained the procedure, addressed the rights of the respondents, emphasized confidentiality of the data, gave respondents the opportunity to ask questions and asked for verbal consent. We recorded the FGDs and interviews for transcription and removed respondents' identifiable information.

### Data analysis

Data were analyzed using thematic analysis, following the phases of thematic analysis of Braun and Clarke (2006, 2021) in an iterative way. After familiarizing with the data and making notes (phase 1), two researchers (DvdK and MT) inductively and systematically coded the transcripts using data analysis software MAXQDA 2020 (phase 2). Simultaneously, the data were also coded with a deductive approach based on the theoretical framework of salutogenesis and topics from the FGDs and interviews. For example, a code was 'SOC' and subcodes of 'SOC' were stressors and resources. Based on inductive coding, the codes were supplemented. The code 'SOC' was, for example supplemented with the inductive codes 'behavioral', 'emotional', 'psychological', and 'social'. To ensure intercoder reliability, DvdK and MT coded

and compared four of the same transcripts (two FGDs and two interviews) and had frequent meetings during the whole coding process. Next, initial themes were generated from the coded and collected data (phase 3). These themes were further developed, redefined and reviewed into four themes through multiple discussion and reflection sessions with AW, MF, and RP (phase 5). In this phase, we also extensively discussed the similarities and differences between low- and high-SES for each of the themes, by comparing the data from low-SES and high-SES groups. Finally, we reported the data by using quotes from the interviewees (phase 6).

## RESULTS

A total of 75 respondents participated in our study, 37 respondents had a low SES, and 38 respondents had a high SES. Within both SES groups there was an approximately equal distribution of respondents in terms of sex and employment status, with the highest participation of respondents aged 45–54 ([Supplementary File 3](#)).

Four themes were constructed and defined from the data: (i) COVID-19 measures, (ii) Staying at home, (iii) Psychological impact, and (iv) Social unity and divides. Theme 1, which dealt with the government's response to the COVID-19 pandemic, was found only at SOC and SONC levels. Theme 2, the confinement of life to the home context, was encountered at SOC and SOCC levels. Theme 3 and theme 4, regarding the psychological impact of the pandemic and various forms of social unity and division, were found at all the three SOC levels, i.e. SOC, SOCC, and SONC. Presented findings concern both low- and high-SES groups, unless SES differences are explicitly stated. We have included a detailed overview of stressors and resources at all SOC levels in [Supplementary File 4](#).

### Theme 1: COVID-19 measures

We found that the government-imposed COVID-19 measures were perceived as a resource in dealing with uncertainty and fear of being infected with the COVID-19 virus at the national level, especially at the start of the pandemic. The Dutch response allowed for relative freedom of movement which helped respondents to cope. Measures that limited freedom (e.g. curfew) caused personal and nationwide distress, including riots.

I really did experience that as a punishment, especially the curfew. In my opinion, that was a measure that went too far and was also unnecessary. It was such a hindrance to everyone's life... The feeling that you're not allowed to do something, while

you're used to always being able and allowed to do it. (Q01, low SES)

For all the respondents, the changeability of COVID-19 measures became a prominent stressor, exacerbated by perceptions of limited government accountability. Low-SES respondents also observed this stressor in their personal lives, mainly impacting their work. In addition, whereas government communication and national press conferences first served as resources, the content and form of the communicated messages, i.e. rapid changeability, were increasingly experienced as problematic. This is not consistent with respondents' comprehension of the Netherlands as a well-off, well-organized nation, with strong government and institutions.

And they keep coming out with new things and then I just think what you said last week... I think they [ministers] could use some extra media training because they contradict themselves all the time. That creates distrust. I think that trust in the Netherlands has plummeted recently. And that's a shame because it's a great country to live in. (Q02, high SES)

Overall, the respondents observed a decrease in society's trust in the national response, the government, and science. National figures, i.e. ministers or royal family members, not adhering to the COVID-19 measures added insult to injury. Low-SES respondents experienced restrictive the COVID-19 measures as a punishment; high-SES respondents disagreed with government's course of action and condemned disrespectful treatment of the population.

Nonetheless, high-SES respondents continued to identify the COVID-19 measures, including testing and vaccines, as a resource at the national level, simultaneously indicating the alleviation of measures over time helped them cope. Respondents in both groups identified the availability of vaccines as a resource gained over the course of the pandemic. Low-SES respondents noticed a decrease in compliance with the COVID-19 measures over time in their community. All the respondents indicated their individual SOC strengthened as they gradually found their own way to manage restrictive COVID-19 measures, ranging from adhering to measures (strictly) to deliberately not following measures at all. Several respondents remained cautious despite announced alleviation of measures, when over the course of the pandemic it became apparent that these had been announced at times when infection risk was still high. Remaining cautious helped respondents feel more in control and calm.

The face mask and the 1.5 meter [distancing] measures were the ones that really helped me. I still stick to them... Because I interact with people who are not all vaccinated. (Q03, low SES)

Finally, social security, such as access to health-care and financial support (a variety of compensation schemes and concessions for entrepreneurs and companies that lost income due to the pandemic), were perceived as important resources for coping with the pandemic. The financial support for entrepreneurs was perceived as a national resource that other countries did not offer according to respondents, although the support was not sufficient to adequately cope with the financial stress of recurring lockdowns.

How many countries exist where everyone has been paid all this time? ...I think that is very Dutch, this social security. We are no longer a welfare state... But then when a crisis hits: I think a lot of people really have been helped very well. (Q04, low SES)

## Theme 2: Staying at home

The confinement to the home context created stressors and resources at an individual level. High-SES respondents faced difficulties maintaining business contacts and communication. Moreover, working from home was experienced as particularly stressful when combined with home schooling children. The respondents saw in their communities that this was especially difficult for (single) parents.

You have to fulfil multiple roles in the house... I had two children who had to follow remote online classes. I also had to work myself, so you're constantly making phone calls... That really was very stressful. (Q05, high SES)

Besides the negative sides of working from home, high-SES respondents experienced resources related to working from home for themselves (e.g. easy switching between meetings) and their communities (e.g. increased trust of employers in employees). All the respondents experienced an improvement in individual and community resources related to private life, as they found meaning in the benefits of life at home, such as more time for themselves and their families, less travel, and fewer expenses.

The work/life balance, that opportunity was presented itself, unexpectedly. And I just love it. I just notice a much better bond... with my acquaintances, friends, and family... I can schedule certain [private] appointments during the week, because I know that I can continue [work] at home in the evening. (Q06, high SES)

Limited opportunities to engage in leisure activities or (intensive) sports at home were perceived as a challenge. It robbed respondents of a resource they would generally access to cope. On the contrary, respondents shared experiencing their resourcefulness to find alternatives and new hobbies. High-SES respondents were most resourceful in finding new hobbies (e.g. gardening) and leisure activities but also indicated this resilience ceased over time.

Yes, the fact that I couldn't work out for four months really bothered me, because it didn't give me the outlet that I normally need in order to do my job or to get on well with people. Because that [work-out] is a kind of 'me time'. (Q07, high SES)

## Theme 3: Psychological impact

### *Confinement to the home was also perceived as causing psychological distress*

And then you are immediately confined to your home for twenty-four hours seven days a week (24/7). Except for that one half hour of freedom for shopping and that one walk... I really did feel a bit trapped, in that sense. (Q08, high SES)

Low-SES respondents experienced difficulties in relation to pre-existing psychological conditions, a psychological impact of isolation, and overstimulation (e.g. resulting from the combination of work and home schooling). The latter contrasts with high-SES respondents, who expressed the ability to 'take it easy' as a psychological resource in coping with the pandemic. In turn, high-SES respondents found it difficult to understand and adapt to the pandemic-induced situation, its continued duration, and the feeling that their lives were 'on hold'.

It feels like nothing happened in the past year. And I don't mean that you've forgotten it, but more of that it's been kind of a year that you've lost. (Q09, high SES)

Moreover, both the groups experienced fear. Low-SES respondents feared spreading the COVID-19 virus and simultaneously had to endure fear of others (of getting and spreading the virus); high-SES respondents, mostly feared getting the virus and experienced specific worries, such as on the spread of fake news.

Respondents also observed a large psychological impact of the pandemic on community members, such as for the bereaved families and for the elderly and vulnerable who were lonely as a result of isolation to prevent infection. Finally, the respondents observed uncertainty, stress, and fear about the pandemic at the

national level. They could not imagine this happening in the Netherlands and perceived that the pandemic was a challenge for the country. Especially at the start of the pandemic, there was little preparedness, and uncertainty persisted, for example regarding possible vaccines.

At first it was very unreal, like it wasn't true or something. We'd never experienced that in the Netherlands. I'm from the post-war period anyway, so all those things that turn your world upside down, I didn't know that at all. So, for me it was really a moment when I thought: Is this really the Netherlands, is this really true? (Q10, low SES)

For high-SES respondents the gradual increase in (access to) information on the COVID-19 virus over time served as a resource. Although access to information remained useful for some, over time distancing oneself from both press conferences, news- and social media became a resourceful behavior to avoid negativity.

Just pulling the plug, reset, back to square one, no outside information/communication because I just couldn't handle that. (Q11, high SES)

Simultaneously, and over time, respondents identified a variety of psychological resources helping them find meaning and manage the crisis, like, for example investing time in education and personal development, adaptability, and seeing perspective. Hope was a resource that disappeared, as it became clear the crisis was less temporary than anticipated.

I think... I can easily adapt. That's why I haven't had so many problems with it. I can accept that I have to wear a face mask, for example, or that the hospitality industry has closed down. I don't go around whining and complaining and all that, I just accept it and I'm like: it's easier than if you really fight everything. (Q12, low SES)

Psychological resourcefulness was seen at the community level, such as adaptability, creativity, and continued involvement in activities or hobbies. Children coped well with the situation and learned to be more hygienic. The latter was emphasized mostly by high-SES respondents. High-SES respondents also observed affluence in their community, both in positive life course developments (e.g. financial opportunities) and positive attitudes, which demonstrates the resourcefulness of people.

... for example, the alternative birthday celebrations, such as people driving down the street and

honking their horns, or eating a pastry with each other outside at 1,5-meter distance. Then you see how resourceful people actually are, while also staying safe. (Q13, high SES)

At the community level, another resource observed by high-SES respondents was increased attention for and conversation about mental health, and a reduced taboo on mental illness. Low-SES respondents found the increased appreciation of, for example the health care sector, a psychological resource. A final resource resulted from the physical environment: the peace and quiet on city streets and fewer planes flying overhead.

Yes, just wonderful, walking down the [main street] without being run over, or only seeing pigeons and no tourists on the [main square]. And I also noticed at work in the [park] that no planes passed overhead. That was also very nice. (Q14, low SES)

A national resource was the resilience shown by finding meaning in positive consequences of life grinding to a halt, such as the appreciation of local travel destinations, reduced emissions, and revival of nature in the country. The (awareness of) impact of human behavior on climate change was emphasized, mostly by high-SES respondents. For both SES groups, this resource ceased to exist as the pandemic persisted.

Well, I saw nature reviving. I thought that was very beautiful... People went outside more in their own surroundings. They started to walk around more, and went to the woods more, and went on holiday in their own country. (Q15, low SES)

#### Theme 4: Social unity and divides

All the respondents experienced a variety of stressors related to their social life, such as loss of (live) social interaction and care for and concerns about (vulnerable) relatives which at times also led to reduced interaction.

I'm used to going to bars, so actually almost eighty percent (80%) of my entire social life had disappeared. So that was very hard. (Q16, low SES)

Social stressors were also observed in the community, i.e. specific groups in society were disproportionately affected by the pandemic and measures. For example, young people were perceived to be more affected: developing mental health problems over time or receiving the blame for rising infection rates. Respondents also found it stressful that other people, especially young people, did not comply with the COVID-19 measures. Among high-SES respondents, the debate on compliance was more nuanced, with understanding

of the stressors experienced by young people; among low-SES respondents, there was a higher tendency to condemn non-compliance.

I have had two students who attempted suicide. I have had students who came in super happy and excited and then after six months had become a kind of ghost... And then also [having to resort to] a screen to see your friends. Yes, and when for once you do meet up with a few people, you get the blame from all the people around you because you didn't stick to the rules... It's unnatural, what is asked of them. (Q17, high SES)

Furthermore, low-SES respondents perceived lonely neighbors and lack of (visible) social support in their neighborhood as stressors. Another both community and national stressor was the perception of antisocial behavior, such as hoarding and rioting, and the emergence of polarization particularly regarding vaccination. The latter particularly concerned policies limiting access to public spaces based on vaccination status, and was seen as disguised coercion, considered unfair (low SES) and undemocratic (high SES).

Corona has now become a chasm in society... The first question when you see people is: have you been vaccinated? And actually that's it. Are you vaccinated or are you not? And whether you are or you're not, right away some kind of label is put on you... Now all of a sudden, it's a split in society. (Q18, high SES)

At last, the respondents lost a sense of meaning following the emergence of social divides at the national level as the pandemic persisted. They particularly cited growing socio-economic disparity and waning adherence to the COVID-19 measures. The combination of changing measures, inadequate communication, and emergence of disinformation left room for growing dissidence. Respondents valued freedom of speech but struggled with acceptance of antivaxxers, personally, and experienced stress from the lack of acceptance of public dissidence by government and (social) media. The increase in political engagement, however, was positively evaluated by a few low-SES respondents.

We are now seeing that this unclear policy, [changing] at various times over the past year has also led to a kind of two- or three-way split between groups of people, who don't quite agree with what is happening. (Q19, high SES)

Notwithstanding the aforementioned, the respondents spoke of social support as a resource they relied on, while at the same time they experienced less social

pressure during the pandemic, which added to manageability of the pandemic. Digital/online contact served as a resource to maintain or form friendships, despite physical distance. And several respondents stressed the importance of continuing live social contact within their 'bubble', a term used for a selected group of people who gather physically, whether small or large (and therefore in line with the COVID-19 measures or not).

You don't have to feel alone. For example, I walked around on the phone with my friend 24/7 and in the meantime I was cooking dinner and such. You didn't even have to say anything, but you weren't alone, because you felt each other's presence. (Q20, low SES)

Broader cohesion and support of the community provided a resource. For high-SES groups, similarity in experiences and approach to the pandemic and measures was an important resource. For low-SES groups, neighborhood initiatives, such as apps and activities, combined with an increase in social cohesion in the neighborhood, were important resources. As hardship increased over time, especially for small businesses, perceived solidarity at the community level waned.

Trying to help each other out when necessary. I often cooked for my neighbor... I think that at that time some people in our neighborhood became closer than they normally were... People started talking to each other again suddenly. (Q21, low SES)

Finally, the unity and solidarity portrayed at the start of the pandemic acted as a national resource. The equal impact of COVID-19 measures at the onset of the pandemic gave the impression that 'we're all in this together', and the respondents recalled nationwide initiatives to express gratitude toward healthcare professionals and provide social support during lockdowns. However, the respondents perceived this resource to wane over time.

It was especially during the first period, the first wave actually, when it was all new. There was a kind of solidarity, people had the feeling we were all fighting the same enemy and that we were looking out for each other. Everyone had to work at home. A lot of things suddenly closed down and people wanted to support each other and love each other, they were applauding healthcare workers, I thought that was very positive... (Q22, low SES)

## DISCUSSION

The aim of this study was to examine experiences of both low and high-SES groups in coping with the COVID-19 pandemic and measures. We aimed to



understand both similarities and differences between SES groups, we used a salutogenic perspective and we examined SOC at three levels: SOC concerning one's own life; SOC concerning life as a member of a community; and SOC concerning life as a citizen of a nation. To our knowledge, our study is the first qualitative study to explore experiences of both low- and high-SES groups, as to date research on COVID-19 and SES has mainly focused on the disproportionate impact of the pandemic on low-SES groups (Bambra *et al.*, 2020; RIVM, 2020; WHO, 2020; Campo-Arias and De Mendieta, 2021; Kraaij-Dirkzwager *et al.*, 2021; Wu *et al.*, 2021; Pijker *et al.*, 2022).

Our study shows that there are many similarities between low- and high-SES groups. The ability to cope for both the groups seemed to depend on the government's response to the pandemic in the form of the COVID-19 measures; the confinement of life to the home context; the psychological impact of the pandemic; and various forms of social unity and division. We found the following resources strengthened individual SOC in both SES groups: people finding their own way of coping with the COVID-19 measures, psychological resourcefulness, social support, and maintaining digital social contacts. A main resource that strengthened community SOC was a strong social environment, which was visible in coping with working from home, coping with mental challenges (e.g. positive attitudes), and coping with social stress (e.g. social support and neighborly contact). Finally, consistent government action and clear and effective government communication were resources that strengthened national SOC. Low-SES groups more often described encountering problems with government-imposed (changing) measures, reducing compliance and trust in measures. Moreover, low-SES groups focused more on positive and negative effects of staying at home on family life, while high-SES groups also focused on work-related stressors and resources both for themselves and their community. An explanation might be that the jobs of high-SES groups are generally more conducive to working at home compared to the jobs of low-SES groups. Furthermore, psychological stressors and psychological resourcefulness related to the pandemic seemed to differ somewhat across SES groups, and low-SES groups expressed more social stressors and resources at the neighborhood level.

Government-imposed COVID-19 measures seemed to affect individual and national SOC. Both SES groups reported that measures, including vaccination, helped to cope with the pandemic, most evidently at the beginning. Similarly, Wang *et al.* (2020) related specific COVID-19 measures, such as wearing a mask, to a lower psychological impact of the pandemic. However, we found that the rapid changeability of measures

over time and related government communication had implications for trust and consequent adherence to and appreciation of these measures as a resource. In general, over time, people with low-SES experienced different and more difficulties with this (e.g. feeling punished), than people with high SES (e.g. lack of understanding). Adherence to and trust in government-imposed measures therefore decreased more among the low-SES group. Our study, as well as other studies, indicates that timely and accurate health information and effective risk communication during the pandemic are important to reduce uncertainty and psychological impact (Benke *et al.*, 2020; Wang *et al.*, 2020; Pavani *et al.*, 2021; Su *et al.*, 2021). Furthermore, people in our study expressed a preference for consistency of measures over time, and caution about alleviations.

Staying at home seemed to be both a stressor and a resource at the individual and community level. At home, high-SES groups experienced work-related challenges but also resources for themselves and others in their community. The ability of both SES groups to find meaning in the increased time at home for themselves and their communities contributed to successful coping. Ipsen *et al.* (2021) similarly found that better work-life balance was a main advantage of working from home during the pandemic. This shows the importance of paying attention to maintaining or establishing a healthy work-life balance after the COVID-19 measures are lifted. Our data shows that the combination of work and home schooling is a prominent stressor for both groups. In accordance with these findings, Callear *et al.* (2022) also found that home schooling of children during the pandemic hinders work and social life (including leisure activities) and causes similar psychological problems for parents and caregivers. Based on these insights, it is important to identify and acknowledge the challenges of home schooling for (working) parents and provide them with tailored support. In general, because of the pandemic and measures, both SES groups expressed limitations in leisure activities, while at the same time demonstrating resourcefulness in seeking out new and alternative opportunities that helped them cope with the pandemic. Liu *et al.* (2021) also found that leisure participation contributes to coping with stress during the COVID-19 pandemic.

Our results demonstrate that both the SES groups experienced psychological impact of confinement to the home context. Previous research also found that home confinement during the COVID-19 pandemic has a long-term negative psychological effect on mental health and well-being (Sang *et al.*, 2021). We found that additional pandemic-induced psychological stressors challenging SOC differed slightly between SES groups. Witnessing losses and loneliness in the community challenged SOCC. The great uncertainty, e.g.

regarding development of vaccines, and stress and anxiety caused by the pandemic challenged SONC. In general, adequate attention must be paid to the mental health consequences of life during pandemic, including the development of stress and loneliness. Both the SES groups demonstrated psychological resourcefulness in themselves and their community enhancing SOC and SOCC, albeit with minor differences. For example, high-SES groups perceived positive attitudes and life course developments in their communities. Moreover, all respondents found meaning in the positive consequences of the pandemic, such as time for self-reflection at the individual level; quietude in the physical environment at the community level; and reduced emissions at the national level. Sandín *et al.* (2020) similarly report that people learn to appreciate things they were previously unaware of and explore new interests as a positive effect at the beginning of the COVID-19 pandemic. Dawson and Golijani-Moghaddam (2020) found *psychological flexibility* – ‘the ability to recognize and adapt to situational demands in pursuit of personally meaningful longer-term outcomes’ (p. 127) – was associated with increased well-being during the pandemic. Finally, Fredrickson (2004) argues in the broaden-and-build theory that positive emotions (e.g. viewing positive attitudes in the community) can broaden mindsets and build up personal (psychological) resources that help people to cope better with difficult situations, such as the COVID-19 pandemic, which underlie the need for efforts to strengthen positive attitudes in low-SES communities, e.g. by providing (modeling) examples.

Finally, participants in our study experienced a large social impact of the pandemic: halting social lives were a stressor for both SES groups, whereas social support and cohesion served as important resources, e.g. through digital/online contact for SOC. Moreover, increased interaction between community members was a resource for SOCC; and nationwide initiatives were a resource for SONC. Differences between SES groups were found on the community level: high-SES groups stressed the importance of similarities in experiences and approach to the pandemic with those around them as a resource; and there was an overall higher prominence of challenges (e.g. receiving little support) and resources (e.g. activities and initiatives) on the neighborhood level for low-SES groups. Killgore *et al.* (2020) found greater resilience (i.e. the ability to bounce back) in those individuals who experienced more social support from relatives and friends. Pijpker *et al.* (2022) also found SES differences in the relevance of community: SOCC was a predictor for mental health in low-SES groups but not in high-SES groups. Den Broeder *et al.* (2021) suggest that the pandemic disrupts the ‘social fabric’ in disadvantaged neighborhoods, where

community involvement is important for building community resilience (i.e. SOCC in our study). This engagement can be created by employing new (digital) ways to engage the entire community (Den Broeder *et al.*, 2021). Although the digital skills of the Dutch population are above average compared with the other European countries, there is room for improvement, particularly among those with lower educational levels (CBS, 2020b). Moreover, it is a basic human need to have access to the digital world, and it is recommended that the costs of connecting to the digital world should be reduced or compensated for (Den Broeder *et al.*, 2021). At last, we have found that the disproportionate impact of the pandemic for certain societal groups and the polarization of the public debate (particularly regarding vaccination), over time, threatened SOCC and SONC by widening existing (socioeconomic) disparities and causing anti-social behavior.

### Limitations

Some limitations should be considered when interpreting the results. Several factors may have contributed to a selection bias: an external agency recruited respondents for this study from their pre-existing panel. We presume that several respondents were registered with this agency to participate in research as a source of income, as they indeed indicated frequent participation in research. In addition, the chosen classifications into low- and high-SES groups, i.e. based on the educational level and income, may have obscured the view of those who have both a very low educational level and income. The low-SES group in the current sample includes people who completed secondary education at the highest level but earned less than the median Dutch income at the time of data collection. However, an important strength of this study is the large sample size ( $N = 75$ ) which ensures data saturation. Finally, this study was conducted in the Dutch context and the COVID-19 measures that were taken in the Netherlands; the experiences and resources of high- and low-SES groups may be different in other countries (Braun-Lewensohn and Sagy, 2011).

### CONCLUSION

Both the low- and high-SES groups experienced, from a salutogenic perspective, stressors and resources during the COVID-19 pandemic. A few notable differences between the SES groups were found. First, low-SES groups experienced more difficulties with government-imposed (changing) measures. As a result, compliance with and trust in these imposed measures seemed to decrease, more so in low-SES groups than in high-SES groups. In addition,

high-SES groups expressed more work-related stressors and resources for themselves and their communities, while low-SES groups seemed to primarily focus on the family life when it comes to staying at home during the pandemic. Furthermore, pandemic-induced psychological stressors and psychological resourcefulness differed slightly across SES groups. Finally, a notable difference is that low-SES groups specifically mentioned stressors and resources at the neighborhood level, while these were not reported by the high-SES groups.

The resources used by low- and high-SES groups to cope with the COVID-19 pandemic and measures are supported, first, by consistent government-imposed measures and government communication. Second, it is important to strengthen work–life balance, provide support for home schooling children, and ensure the preservation of resources related to leisure and lifestyle activities at home. Finally, psychological resourcefulness should be supported and, finally, social support and the social fabric of neighborhoods should be strengthened.

### Recommendations for policy

Based on our findings we suggest the following to support and strengthen the resources used by low- and high-SES groups to cope with the COVID-19 pandemic and measures. First, strive for consistent government-imposed measures where caution is preferred over repeated imposing and ceasing of measures. Invest in timely and comprehensible health information explaining the purpose and effectiveness of measures in understandable language. Second, help strengthen work–life balance by providing support for home schooling children, and ensuring the preservation of resources related to leisure and lifestyle activities at home (e.g. maintaining availability of parks and public workout areas). Psychological resourcefulness can be supported by providing (modeling) examples of positive attitudes, and positive impact of life amidst the pandemic, in particular among low-SES communities where these were not quite so visible. And, finally, set-up and sustain community-based interventions that enhance social support and strengthen the social fabric of low-SES neighborhoods, for example by employing new (digital) ways to engage the community and supporting those with digital access barriers either financially or by improving their digital skills.

### Supplementary Material

Supplementary material is available at *Health Promotion International* online.

### Acknowledgements

The authors thank Motivaction for recruiting the study participants and Het Notuleercentrum for transcribing all audio recordings.

### Funding

This work was funded by the National Institute for Public Health and the Environment (Rijksinstituut voor Volksgezondheid en Milieu; RIVM). This paper is published within the context of the RIVM Covid-19 Research Program, Theme 17: Health Economics.

### Ethics Approval

This study was approved by the Social Sciences Ethics Committee of Wageningen University and Research on July 8th 2021.

### REFERENCES

- Antonovsky, A. (1987) *Unraveling the Mystery of Health. How People Manage Stress and Stay Well*. Jossey-Bass.
- Antonovsky, A. (1993) Some salutogenic words of wisdom to the conferees. retrieved from: <http://www.angelfire.com/ok/soc/agoteborg.html> (Accessed on 29- 09-2021)
- Bambra, C., Riordan, R., Ford, J. and Matthews, F. (2020) The COVID-19 pandemic and health inequalities. *Journal of Epidemiology and Community Health*, 74, 964–968, doi:10.1136/jech-2020-214401.
- Benke, C., Autenrieth, L. K., Asselmann, E. and Pané-Farré, C. A. (2020) Lockdown, quarantine measures, and social distancing: associations with depression, anxiety and distress at the beginning of the COVID-19 pandemic among adults from Germany. *Psychiatry Research*, 293, 1134621–1134629, doi:10.1016/j.psychres.2020.113462.
- Bilal, U., Cainzos-Achirica, M., Cleries, M., Santauegènia, S., Corbella, X., Comin-Colet, J. et al. (2019) Socioeconomic status, life expectancy and mortality in a universal health-care setting: an individual-level analysis of > 6 million Catalan residents. *Preventive Medicine*, 123, 91–94, doi:10.1016/j.ypmed.2019.03.005.
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101, doi:10.1191/1478088706qp0630a.
- Braun, V. and Clarke, V. (2021) One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18, 328–352, doi:10.1080/14780887.2020.1769238.
- Braun-Lewensohn, O. and 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, 533–541, doi:10.1090/09540261.2011.637905.
- Calear, A. L., McCallum, S., Morse, A. R., Banfield, M., Gulliver, A., Cherbuin, N. et al. (2022) Psychosocial impacts of home-schooling on parents and caregivers

- during the COVID-19 pandemic. *BMC Public Health*, 22, 1–8, doi:10.1186/s12889-022-12532-2.
- Campo-Arias, A. and De Mendieta, C. T. (2021) Social determinants of mental health and the COVID-19 pandemic in low-income and middle-income countries. *The Lancet Global Health*, 9, e10291029–e102e1030, doi:10.1016/S2214-109X(21)00253-9.
- Centraal Bureau voor de Statistiek (CBS). (2020b) The Netherlands ranks among the EU top in digital skills. retrieved from: <https://www.cbs.nl/en-gb/news/2020/07/the-netherlands-ranks-among-the-eu-top-in-digital-skills> (Accessed on 21-09-2022)
- Centraal Bureau voor de Statistiek (CBS). (2020a) Sociaaleconomische status van huishoudens in Nederland. retrieved from: <https://www.cbs.nl/nl-nl/maatwerk/2020/49/sociaaleconomische-status-van-huishoudens-in-nederland> (Accessed on 03-11-2021)
- Centraal Bureau voor de Statistiek (CBS). (n.d.) Hoe vergaat het verschillende bevolkingsgroepen tijdens de coronacrisis? retrieved from: <https://www.cbs.nl/nl-nl/dossier/cbs-cijfers-coronacrisis/hoe-vergaat-het-verschillende-bevolkingsgroepen-tijdens-de-coronacrisis-> (Accessed on 21-09-2022)
- Crielaard, L., Nicolau, M., Sawyer, A., Quax, R. and Stronks, K. (2021) Understanding the impact of exposure to adverse socioeconomic conditions on chronic stress from a complexity science perspective. *BMC Medicine*, 19, 1–20, doi:10.1186/s12916-021-02106-1.
- Dawson, D. L. and Golijani-Moghaddam, N. (2020) COVID-19: psychological flexibility, coping, mental health, and wellbeing in the UK during the pandemic. *Journal of Contextual Behavioral Science*, 17, 126–134, doi:10.1016/j.jcbs.2020.07.010.
- Den Broeder, L., South, J., Rothoff, A., Bagnall, A. M., Azarhoosh, F., van der Linden, G. et al. (2021) Community engagement in deprived neighbourhoods during the COVID-19 crisis: perspectives for more resilient and healthier communities. *Health Promotion International*, 37, 1–15, doi:10.1093/heapro/daab098.
- Eriksson, M. (2022) The sense of coherence: the concept and its relationship to health. In Mittelmarm, M. et al. (eds), *The Handbook of Salutogenesis*, 2nd edition. Springer, Cham, pp. 61–68. doi:10.1007/978-3-030-79515-3
- Eriksson, M. and Contu, P. (2022) The sense of coherence: measurement issues. In Mittelmarm, M. et al. (eds), *The Handbook of Salutogenesis*, 2nd edition. Springer, Cham, pp. 79–91. doi:10.1007/978-3-030-79515-3
- Eriksson, M. and Lindström, B. (2006) Antonovsky's sense of coherence scale and the relation with health: a systematic review. *Journal of Epidemiology and Community Health*, 60, 376–381, doi:10.1136/jech.2005.041616.
- Fredrickson, B. L. (2004) The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society of London, Series B: Biological Sciences*, 359, 1367–1377, doi:10.1098/rstb.2004.1512.
- Herens, M., Wagemakers, A., Vaandrager, L., van Ophem, J. and Koelen, M. (2016) Contexts, mechanisms, and outcomes that matter in Dutch community-based physical activity programs targeting socially vulnerable groups. *Evaluation & the Health Professions*, 40, 294–331, doi:10.1177/0163278716652940.
- Ipsen, C., van Veldhoven, M., Kirchner, K. and Hansen, J. P. (2021) Six key advantages and disadvantages of working from home in Europe during COVID-19. *International Journal of Environmental Research and Public Health*, 18, 18261–18217, doi:10.3390/ijerph18041826.
- Khanna, R. C., Cicinelli, M. V., Gilbert, S. S., Honavar, S. G. and Murthy, G. V. (2020) COVID-19 pandemic: lessons learned and future directions. *Indian Journal of Ophthalmology*, 68, 703–710, doi:10.4103/ijo.IJO\_843\_20.
- Killgore, W. D., Taylor, E. C., Cloonan, S. A. and Dailey, N. S. (2020) Psychological resilience during the COVID-19 lockdown. *Psychiatry Research*, 291, 1132161–1132162, doi:10.1016/j.psychres.2020.113216.
- Kraaij-Dirkzwager, M. M., Tromp, M. U. Y. and Van der Torn, P. (2021) COVID-19: over welke mensen maken we ons extra zorgen? *Tijdschrift voor Gezondheidswetenschappen*, 99, 24–29, doi:10.1007/s12508-020-00290-8.
- Liu, H. L., Lavender-Stott, E. S., Carotta, C. L. and Garcia, A. S. (2021) Leisure experience and participation and its contribution to stress-related growth amid COVID-19 pandemic. *Leisure Studies*, 41, 70–84, doi:10.1080/02614367.2021.1942526.
- Mana, A., Sagy, S., Srour, A. (2016) Sense of community coherence and inter-religious relations. *The Journal of Social Psychology*, 156, 469–482, doi:10.1080/00224545.2015.1129302.
- Mana, A., Srour, A. and Sagy, S. (2019) A sense of national coherence and openness to the 'others' collective narrative: the case of the Israeli-Palestinian conflict. *Peace and Conflict: Journal of Peace Psychology*, 25, 226–233, doi:10.1037/pac0000391.
- Mana, A., Super, S., Sardu, C., Juvinya Canal, D., Moran, N. and Sagy, S. (2021) Individual, social and national coping resources and their relationships with mental health and anxiety: a comparative study in Israel, Italy, Spain, and the Netherlands during the Coronavirus pandemic. *Global Health Promotion*, 28, 17–26, doi:10.1177/1757975921992957.
- Mittelmarm, M. B. (2021) Resilience in the salutogenic model of health. In Ungar, M. (eds), *Multisystem Resilience: Adaptation and Transformation in Contexts of Change*. Oxford University Press, Oxford, pp. 153–164. doi:10.1093/oso/9780190095888.003.0009
- Mittelmarm, M. B., Daniel, M. and Urke, H. (2022) Specific resistance resources in the salutogenic model of health. In Mittelmarm, M. et al. (eds), *The Handbook of Salutogenesis*, 2nd edition. Springer, Cham, pp. 107–114. doi:10.1007/978-3-030-79515-3
- Pavani, F. M., Silva, A. B. D., Olschowsky, A., Wetzel, C., Nunes, C. K. and Souza, L. B. (2021) Covid-19 and repercussions in mental health: a narrative review of literature. *Revista Gaúcha de Enfermagem*, 42, 1–14, doi:10.1590/1983-1447.2021.20200188.
- Pharos. (2022) Sociaaleconomische Gezondheidsverschillen (SEGV). retrieved from: <https://www.pharos.nl/factsheets/sociaaleconomische-gezondheidsverschillen-segv/> (Accessed on 20-10-2022)
- Pijpker, R., Vaandrager, L., Veen, E. J. and Koelen, M. A. (2021) Seizing and realizing the opportunity: a salutogenic perspective on rehabilitation after burnout. *Work*, 68, 551–561, doi:10.3233/WOR-203393.
- Pijpker, R., Van der Kamp, D., Vader, S., Den Broeder, L. and Wagemakers, A. (2022) Socioeconomic status and mental

- health during the COVID-19 crisis: are sense of coherence, sense of community coherence and sense of national coherence predictors for mental health? *Health Psychology Report*, **10**, 149–155, doi:10.5114/hpr.2022.114527.
- Polhuis, C. M. M., Vaandrager, L., Soedamah-Muthu, S. S. and Koelen, M. A. (2020) Salutogenic model of health to identify turning points and coping styles for eating practices in type 2 diabetes mellitus. *International Journal for Equity in Health*, **19**, 1–20, doi:10.1186/s12939-020-01194-4.
- Reme, B. A., Wörn, J. and Skirbekk, V. (2022) Longitudinal evidence on the development of socioeconomic inequalities in mental health due to the COVID-19 pandemic in Norway. *Scientific Reports*, **12**, 1–8, doi:10.1038/s41598-022-06616-7.
- RIVM. (2020) Corona-effecten op termijn vooral voor kwetsbare groepen ingrijpend. retrieved from: <https://www.rivm.nl/nieuws/corona-effecten-op-termijn-vooral-voor-kwetsbare-groepen-ingrijpend> (Accessed on 20-08-2021)
- Samuels, F. (2020) Tips for collecting primary data in a Covid-19 era. retrieved from: <https://odi.org/en/publications/tips-for-collecting-primary-data-in-a-covid-19-era/> (Accessed on 01-09-2021)
- Sandín, B., Valiente, R. M., García-Escalera, J., Campagne, D. M. and Chorot, P. (2020) Psychological impact of the COVID-19 pandemic: negative and positive effects in Spanish population during the mandatory national quarantine. *Journal of Psychopathology and Clinical Psychology*, **25**, 1–21, doi:10.5944/rppc.28107.
- Sang, X., Menhas, R., Saqib, Z. A., Mahmood, S., Weng, Y., Khurshid, S. et al. (2021) The psychological impacts of COVID-19 home confinement and physical activity: a structural equation model analysis. *Frontiers in Psychology*, **11**, 1–12, doi:10.3389/fpsyg.2020.614770.
- Sheridan, J., Chamberlain, K. and Dupuis, A. (2011) Timelining: visualizing experience. *Qualitative Research*, **11**, 552–569, doi:10.1177/1468794111413235.
- Su, Z., McDonnell, D., Wen, J., Kozak, M., Abbas, J., Šegal, S. et al. (2021) Mental health consequences of COVID-19 media coverage: the need for effective crisis communication practices. *Globalization and Health*, **17**, 1–8, doi:10.1186/s12992-020-00654-4.
- Super, S., Hermens, N., Verkooijen, K. and Koelen, M. (2014) Enhancing life prospects of socially vulnerable youth through sport participation: a mixed methods study. *BMC Public Health*, **14**, 1–13, doi:10.1186/1471-2458-14-703.
- Super, S., Pijpker, R., Polhuis, K. (2020) The relationship between individual, social and national coping resources and mental health during the COVID-19 pandemic in the Netherlands. *Health Psychology Report*, **9**, 186–192, doi:10.5114/hpr.2020.99028.
- Torales, J., O’Higgins, M., Castaldelli-Maia, J. M. and Ventriglio, A. (2020) The outbreak of COVID-19 coronavirus and its impact on global mental health. *International Journal of Social Psychiatry*, **66**, 317320–317320, doi:10.1177/0020764020915212.
- VZinfo. (n.d.) Gezonde levensverwachting | Opleiding. retrieved from: <https://vzinfo.nl/gezonde-levensverwachting/opleiding> (Accessed on 03-03-2022)
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S. et al. (2020) Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, **17**, 17291–17225, doi:10.3390/ijerph17051729.
- WHO Coronavirus (COVID-19) Dashboard. (2022) With vaccination data. retrieved from: <https://covid19.who.int> (Accessed on 06-10-2021)
- WHO. (2020) Extent, scope and impacts of COVID-19 on health inequities: the evidence. retrieved from: [https://www.who.int/docs/default-source/documents/social-determinants-of-health/overview---covid-19-impacts-\(nicole-valentine\).pdf](https://www.who.int/docs/default-source/documents/social-determinants-of-health/overview---covid-19-impacts-(nicole-valentine).pdf) (Accessed on 03-11-2021)
- Wu, X., Li, X., Lu, Y. and Hout, M. (2021) Two tales of one city: unequal vulnerability and resilience to COVID-19 by socioeconomic status in Wuhan, China. *Research in Social Stratification and Mobility*, **72**, 1005841–1005848, doi:10.1016/j.rssm.2021.100584.