



Experiences of resilience during the COVID-19 pandemic: A qualitative study among high and low socio-economic status individuals in the Netherlands

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ABSTRACT

Resilience to adverse events is increasingly recognized as important for human health. Socio-economic status (SES) is also frequently identified as a predictor of resilience. However, it is not well-understood how people define resilience in their everyday lives, and whether individuals have different experiences of resilience based on their SES. This study sought to fill these gaps, in the context of the COVID-19 pandemic and pandemic mitigation policies in the Netherlands.

We interviewed high (n = 38) and low (n = 37) SES participants about their understanding and experiences of resilience during this period. Participants took part in individual interviews and focus groups in September 2021. Transcripts were analyzed thematically.

A key theme was coping with adversity, in line with commonly-used definitions of resilience. However, we found that resilience was often defined more broadly. Resilience also encompassed aspects of self-reflection and improvement, and faith in oneself, the community and the nation. There were also key differences by SES background: elaborate and optimistic definitions and experiences of resilience were more often described by high SES individuals. For instance, high SES participants more frequently defined resilience as growing and improving. In contrast, low SES participants more commonly experienced resilience as enduring until better times arrived.

Having a higher SES seemed to support resilience during the COVID-19 pandemic. This indicates that adverse events may exacerbate pre-existing financial and material difficulties among low SES individuals. This finding underscores the importance of addressing financial precarity prior to adverse events.

1. Introduction

The concept of resilience has been applied in a number of academic disciplines, including anthropology, climate science, economics, sociology, and, most relevantly for this study, psychology and public health (Martin & Sunley, 2015; Tyler & Moench, 2012; Wulff et al., 2015). In these latter two fields, resilience is commonly defined as an individual's ability to cope with or withstand adversity (Jackson et al., 2007; Mittelmark, 2021). Individuals who are more resilient are perhaps able to transform for the better from that experience (Moore, 2023; Zautra

et al., 2010).

Further, adversity and resilience can also be experienced at the individual, community and national levels. These levels appear to be related to one another. For instance, there is evidence that community-level resilience may support individuals when coping with traumatic events (Eachus, 2014; Kimhi, 2016).

Research also suggests that resilience is associated with various health outcomes, both mental and physical (Hopkins et al., 2015; Ungar & Theron, 2020; Wulff et al., 2015). Greater resilience appears to help individuals cope better with acute and chronic stressors (Wulff et al.,

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2015). As a result, individuals with greater resilience tend to have less severe physiological responses to stressors (Cal et al., 2015; Hopkins et al., 2015). The World Health Organisation's European policy framework for health and wellbeing has accordingly argued that 'building resilience is a key factor in protecting and promoting health and well-being at both the individual and community levels' (World Health Organisation Regional Office for Europe, 2017, p. 20).

To foster and support resilience, understanding the 'building blocks' of resilience is important (Scoloveno, 2016). Based on a review of the literature, Scoloveno (2016) found that the three factors that distinguished resilience from related concepts were self-esteem, self-reliance (or independence), and social responsiveness (or the ability to engage productively with others). A number of studies have also focused on socio-economic status (SES)'s relationship to resilience. Generally, individuals with higher SES are thought to have more resources to cope with adversity, and therefore to be more resilient (Wister et al., 2016).

Resilience was particularly relevant in the context of the COVID-19 pandemic, which saw the cessation of business-as-usual during lockdowns, and worse health for individuals across the globe. As of July 2023, nearly 7 million people have died from COVID-19, with 769 million confirmed cases worldwide (World Health Organisation, 2023). Anxiety, depression and feelings of loneliness increased dramatically during the height of the COVID-19 pandemic (Varga et al., 2021). Consequently, individuals, communities and nations have been challenged to cope with various forms of adversity, with resilience identified as an important factor in successfully doing so (Catussi Paschoalotto et al., 2023). In particular, policymakers and institutions have emphasized that returning to the status quo prior to the pandemic is insufficient for planetary and human health (Organisation for Economic Development & Co-operation, 2020). Rather, the COVID-19 pandemic has perhaps offered an opportunity to re-build systems so that they are more sustainable for individuals, economies, societies and the environment more broadly (Organisation for Economic Development & Co-operation, 2020).

Accordingly, a growing body of research has studied resilience in the context of the COVID-19 pandemic. However, a majority of these studies examined healthcare patients (Margolies et al., 2021), healthcare providers (Hanna et al., 2022), and students (Ang et al., 2022), groups among the most acutely affected by the COVID-19 pandemic. Less attention has been paid to resilience in the population overall. Further, to our knowledge, no study has yet examined how individuals defined and experienced resilience during the COVID-19 pandemic. Doing so may shed further light on how resilience is maintained and formed during adverse events more broadly (Moore, 2023). This study helped to address these two gaps, by exploring experiences of resilience among adults during the COVID-19 pandemic.

Further, special attention was paid to SES's relationship to resilience. This was done to help to settle questions about SES's relationship to coping during the pandemic. Despite evidence that SES is an important facilitating factor of resilience (Lindström, 2001; Wister et al., 2016), it is debated whether high or low SES individuals are better able to cope with the COVID-19 pandemic. For instance, Bambra et al. (2020) argued that low SES groups have fewer resources to cope with the pandemic. Likewise, Jaspal and Breakwell (2022) found that people receiving state benefits were more likely to report poorer mental health and more loneliness, in a survey conducted among London residents during the first six months of the COVID-19 pandemic. In contrast, Campo-Arias & Mendieta (2021) suggested that low SES individuals had more resources to cope with the pandemic, by virtue of having more experience coping with stressors. Pijpker et al. (2022) found no difference in sense of coherence (SOC), or individuals' abilities to manage, comprehend, and find meaning in their lives and the world around them, between high and low SES groups during the COVID-19 pandemic in the Netherlands.

In this study, we were therefore interested in exploring how individuals from different SES backgrounds experienced and defined resilience during the COVID-19 pandemic. This may enhance

professionals', policymakers' and researchers' understanding of resilience, and may ultimately provide evidence to tackle SES-related inequities in times of crisis. We did so with a qualitative study of Dutch people conducted in 2021. Therefore, the central research question addressed in this study was: How did high and low SES individuals define and experience resilience during the COVID-19 pandemic?

2. Methods

This study took a qualitative approach, by conducting a combination of focus groups and semi-structured interviews. This research was conducted as part of a larger study, 'Socio-economic differences in resilience related to COVID-19 and the measures'. This larger study also included a quantitative survey measuring mental health, sense of coherence, sense of community coherence, sense of national coherence, and social support between low and high SES groups (Pijpker et al., 2021) and a phenomenological qualitative study exploring the lived experiences of individuals from low and high SES groups during the COVID-19 pandemic (van der Kamp et al., 2023). The same interviews and focus groups that van der Kamp et al. (2023) used were also used in the present study, although different aspects of the collected data were included in the two studies. While van der Kamp et al. (2023) focused on responses relating to stressors and resources during the COVID-19 pandemic, the present study concentrated on responses relating to participants' definitions and experiences of resilience. Because of these different focuses, we elected to write two separate papers.

2.1. Research setting

The Netherlands is an interesting context in which to examine resilience during COVID-19. The Netherlands is undoubtedly a wealthy country: the gross domestic product per capita in 2021 US dollars is \$63,445, compared to an Organisation for Economic Cooperation and Development (OECD) average of \$48,750 (OECD, 2022). Both prior to and during the COVID-19 pandemic, the Netherlands also had lower unemployment rates compared to OECD and EU countries. Still, OECD metrics for the Netherlands provide some evidence of socio-economic inequality. For instance, the Netherlands has a slightly higher poverty gap ratio, or the ratio of the poor's mean income falling below the poverty line, which stands at 0.32 compared to an OECD average of 0.30 (OECD, 2022).

In terms of the COVID-19 pandemic, the Netherlands appears to have fared comparatively well. The Netherlands experienced lower COVID-19 mortality than other countries: it had a case fatality rate of 0.3%, compared to an OECD average of 0.8% (Johns Hopkins Coronavirus Resource Center, 2023). There were also fewer COVID-19 deaths in the population: the Netherlands saw 134.47 deaths per 100,000 population, compared to an OECD average of 208.87 per 100,000 population (Johns Hopkins Coronavirus Resource Center, 2022).

The economic effects of lockdowns in the Netherlands were also relatively mild. Unemployment rates did increase from 3.4% in December 2019 to a high of 4.7% in August 2020, but rebounded to pre-pandemic levels by early 2021 (Statistics Netherlands, 2023). The Dutch government offered financial compensation to companies with earnings negatively impacted by COVID-19, in order to pay employees with permanent or temporary contracts from March 2020 to March 2022 (UVW, 2023).

However, there is evidence of socio-economic inequalities in the COVID-19 burden in the Netherlands: municipalities that were poorer and had lower average health statuses had higher rates of COVID-19 infections during the first three months of the pandemic (Coyer et al., 2021). The Netherlands also experienced a series of lockdowns between early 2020 and early 2022, in which shops, schools, university and non-essential businesses were closed. Flexible and self-employed workers were hardest-hit by these measures (Statistics Netherlands, 2023).

2.2. Study sample and recruitment

An external recruitment agency, Motivaction, was used to recruit study participants. Inclusion criteria were: being between the ages of 25 and 55 years old, so that they were of working age; and speaking Dutch, so that they shared a language with the interviewers. A roughly equal number of high (n = 38) and low SES (n = 37) participants were recruited, yielding a total sample of 75 participants. Participants' SES levels were classified based on a combination of educational level and income, using standards from Statistics Netherlands (Statistics Netherlands, 2020). 'Low SES' was defined as having a vocational education diploma or below, and earning less than the Dutch median income. 'High SES' was defined as having at least a secondary education diploma or higher, and earning the median income or higher. Of this sample, 55 participants took part in 10 focus group interviews, 5 consisting of low SES participants (n = 27 participants total) and 5 consisting of high SES participants (n = 28 participants total). Focus groups ranged in size between three and six participants.

Focus groups were conducted in three Dutch cities, Amsterdam, Rotterdam and Amersfoort. Additionally, 20 participants took part in semi-structured individual interviews (10 low SES and 10 high SES participants). Table 1 presents these participants' characteristics.

2.3. Data collection

Data from the focus groups and semi-structured individual interviews were collected in September 2021, when restrictions surrounding bars and restaurants were in place, but when social gatherings were allowed (Rijksinstituut voor Volksgezondheid en Milieu [Royal Institute for Public Health and the Environment], 2023). For both focus groups and individual interviews, interview guides based on a salutogenic theoretical framework were used, meaning that both positive and negative challenges were addressed, as well as the resources to deal with these challenges (Appendix A). Salutogenesis is concerned with the study of health, as opposed to the study of disease. Salutogenic theory posits that health is a state on a continuum of disease to ease (Antonovsky, 1979). To take a salutogenic perspective, an appreciative inquiry approach was used during data collection. This approach focuses "... on exploring ideas that people have about what is valuable in what they do and then [trying] to work out ways in which this can be built on" (Reed, 2006, p. 2). For example, interviewees were asked what

opportunities they experienced during the COVID-19 pandemic, how they managed to use these opportunities and what other opportunities might have been possible for them. Focus groups participants and interviewees were asked what resilience means to them, and to provide examples at the individual, community and national level. Follow-up questions like 'Can you explain a bit more?' or 'Do you have another example?' were asked to explore the concept of resilience in greater depth.

The ten focus group discussions were held in person, to better facilitate group interactions and to elicit longer responses (Woodyatt et al., 2016). Three researchers (DvdK, SV, RP) facilitated these discussions, which took place over an average period of two hours. All three researchers are relatively young (between the ages of 25 and 35), white, and have at least a master's degree. Two identify as women (DvdK and SV), and one as a man (RP). The interviewers' educational background might have meant that high SES interviewees connected more immediately with them. Further, the interviewers' younger ages may have enabled them to foster a more open dialogue with younger participants.

In the first two focus groups, all three researchers were present, to establish consistent ways of working. One researcher acted as interviewer, one as note-taker, and the other as observer. The remaining eight focus groups were conducted by two of the three researchers, with one acting as interviewer and one as note-taker.

In the focus groups, a visual timeline method was used (Fig. 1). The timeline was printed on paper, and was used to help guide discussion on the course of the COVID-19 pandemic and mitigation strategies in the Netherlands. This timeline was also used to spark discussion on resilience, stressors and resources over the course of the pandemic.

The procedure differed for the semi-structured individual interviews, as – compared to focus groups – these interviews provided the opportunity to delve deeper into people's personal perceptions. In addition, the interviews were held virtually, via Microsoft Teams, an approach that is increasingly common and is increasingly considered appropriate for qualitative research, particularly during the COVID-19 pandemic (Archibald et al., 2019; Rahman et al., 2021). Therefore, instead of using a visual timeline, questions were asked that followed the timeline of the COVID-19 pandemic. There is evidence that this method is suitable for participants from low and high SES backgrounds (Herens et al., 2017; Pijpker et al., 2021; Polhuis et al., 2020; Super et al., 2014).

Both focus group and individual interview participants received financial compensation. All focus groups and interviews were conducted in Dutch, the shared language of research participants and interviewers. Prior to the focus groups and individual interviews, informed consent was obtained: the interviewer explained the procedure, described the rights of the participants and data confidentiality, asked participants if they had any questions, and asked for verbal consent. All focus groups and individual interviews were recorded for transcription, with participants' identifying information removed. This study was approved by the Social Science Ethics Committee of Wageningen University and Research.

Table 1 Sample characteristics.

	Focus groups		Individual interviews		Total sample	
	Low SES	High SES	Low SES	High SES	Low SES	High SES
Total # of participants	27	28	10	10	37	38
Gender						
Woman	15	15	5	5	20	20
Man	12	13	5	5	17	18
Age group						
25–34	7	6	3	3	10	9
35–44	6	8	5	4	11	12
45–55	14	14	2	3	16	17
Employment-status^a						
Employed	14	17	5	6	19	23
Not employed	13	11	5	4	18	15
Ethnicity^b						
Dutch	21	17	7	7	28	24
Ethnic minority background	2	7	3	2	5	9
Both	4	4	0	1	4	5

^a The category "not employed" includes: unemployed, sick leave, not working, not currently employed, disabled, looking for a new job, volunteering, student.

^b Ethnicity is self-identified.

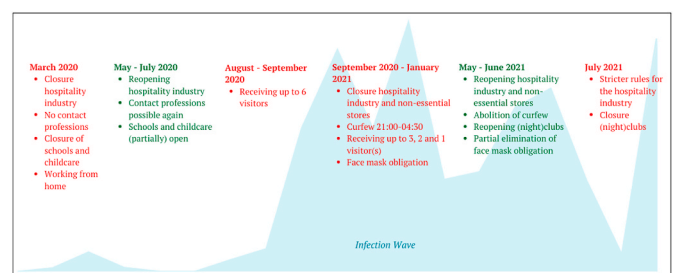


Fig. 1. Visual timeline on course of COVID-19 pandemic in the Netherlands, for focus group discussions (van der Kamp et al., 2023).

2.4. Data analysis

All interviews were transcribed verbatim. These transcriptions were translated from Dutch to English by the first author (KT), and were checked by the second (DvdK) and last (AW) authors. The three researchers are white women with master's and/or Ph.D. degrees. All three live and work in the Netherlands. Responses regarding (1) the definition of resilience, (2) individual resilience, (3) community resilience, and (4) national resilience were included in this study. A reflexive thematic analysis was conducted, following the stages outlined in Braun & Clarke (2021) and Braun & Clarke (2019). First, the three researchers familiarized themselves with the data (phase 1). Then, they developed codes inductively and over multiple sessions using MAXQDA 2020 (phase 2). Next, initial themes were generated from the codes (phase 3). These themes were refined in several discussion sessions with the three researchers, and were discussed until consensus was reached (phases 4 and 5). This resulted in four related themes: (1) coping with adversity; (2) growing from setbacks; (3) believing in oneself, the community, and the Netherlands; and (4) being socially supported. These themes were narratively analyzed and supported with quotations (phase 6). At this stage, the three researchers also explored whether responses differed based on participants' SES. Finally, all authors checked these findings and interpretations. Illustrative quotations from the individual interviews (I#) and focus groups (F#) are presented in the results section. We also provided the number of times a theme or sub-theme was mentioned by participants across interviews and focus groups, in order to show each theme or sub-theme's prevalence.

3. Results

3.1. Coping with adversity

When considering resilience during the COVID-19 pandemic, participants frequently described it as coping with adversity, or 'dealing with setbacks' (I9, high SES). This was mentioned 21 times in interviews and focus groups. Five participants described resilience as an internal strength that helps individuals overcome challenges, or as "a kind of reserveA kind of balance" (F3, high SES).

Participants also discussed how an individual's ability to cope with adversity could change over time, because it was contingent on other factors. One such factor was mental health: "I think you have more resilience when you're already feeling positive about yourself when you're going through it" (F3, high SES). Other factors included pre-existing illnesses or disabilities. Two participants described their existing health issues as making them less resilient, because they were less equipped to cope with the stress of the pandemic, while nine participants mentioned that it made them more resilient, by helping them to put the COVID-19 pandemic in perspective.

Participants described three main coping mechanisms: being persistent, remaining positive, and relativizing the situation. In terms of being persistent, rebounding when encountering setbacks was described by nine participants. Nine participants also described remaining positive, both by thinking that better days were ahead, and by focusing on good things in the present moment. In terms of relativizing, participants mentioned fifteen times how their situation could have been worse.

While coping with adversity was mentioned by both high and low SES participants, difficulty coping with the COVID-19 pandemic and restrictions was mentioned seven times by low SES participants, and only once by a high SES participant.

Then you might think I can bounce back a bit, that's the way I see it, in a positive sense, but also when it goes badly. But to do that every time again - I found it tough after the umpteenth time (F2, low SES).

3.2. Growing from setbacks

Growing during the COVID-19 pandemic was a key theme mentioned by participants. For three participants, this took the form of learning a new creative or practical skill, such as a new language or cooking.

I have learned to be more handy again. I have started working again, I see that I do not only have skills in the kitchen, but also many other skills. And so I was able to survive [the pandemic] in a good way. So ... at the beginning I thought: how can I make myself useful? Because I felt like I was useless. And I wasn't ... It took a while, but now I'm on the rise again. You know, something comes in, I feel useful again, I help others around me, I make people happy, and that makes me happy again. So it did show me that I have more to offer than I thought (I1, low SES).

Other participants discussed how the COVID-19 pandemic caused them to reflect on and to develop their personal characteristics. For instance, becoming more flexible was mentioned four times.

You also become more creative in doing things, talking to people and arranging things for Christmas. It was quite an experience that way. To get Christmas arranged, to get presents arranged, while everything is closed You become more flexible. And that was really necessary for me, because I was quite rigid in things and did things according to a strict routine (I5, high SES).

While participants from high and low SES backgrounds described self-development during the COVID-19 pandemic, there were key differences in this theme based on SES. High SES participants were more explicit that "despite the setback, you still get back on top" (I11, high SES). Rather than just returning to a previous level of well-being, "you will get much further, another step further. Or a step higher, however you want to see it" (I11, high SES). This was mentioned five times by high SES participants. Surpassing a previous level of well-being was not discussed by low SES participants. Instead, enduring through difficult times was mentioned nine times by low SES participants.

3.3. Faith in oneself, the community, and the nation

Participants described faith in themselves, their community and social networks, and the Netherlands overall in relation to the COVID-19 pandemic. However, high and low SES participants expressed this faith differently. In terms of individual resilience, being more capable than previously thought was mentioned seven times by low SES participants, and twice by high SES participants.

I'm stronger than I actually suspected. At first I thought I'll never get through that, I won't make it. At some point, you get used to it, and you have to deal with it. I managed to keep all the balls in the air, so to speak (F10, low SES).

In contrast, reflecting on their own lives, and identifying what was important to them was mentioned six times by high SES participants.

I am now a little more aware of how I want to give meaning to my life. What do I find important? What do I want to do in the coming periods? How do I go in that direction? (I11, high SES).

Participants also discussed how their communities experienced resilience during the COVID-19 pandemic. Particularly, they commented on specific sectors, including healthcare and consumer-facing industries, being resilient in the face of economic challenges.

... People are also stronger than I thought before. A lot of people manage to get through it, by having a positive attitude. I have a friend who has his own taxi company, but the conversations we ... have had over the past year are really very different. But he has always remained positive about it: 'This is going really bad now, but I'm sure it will be all right. And then I can do my job again. And also do all the other things I want to do.' So I

thought that was a nice thought that people eventually want to get through it all ... (I13, high SES).

Further, participants discussed the way in which the Netherlands, both the population overall and its government, have been resilient in the face of the COVID-19 pandemic, and that *“the Netherlands has always been a good country. You should be glad you live here”* (I8, low SES). Although participants were generally positive about the Dutch government, three low SES participants mentioned losing faith in the government overall.

I think the Dutch population has been very resilient to all the measures and everything that has been done [by the government]. But at a certain point, that resilience is almost gone, and you will notice that now. People are fed up. Then that resilience goes out.... (I2, low SES).

In contrast, six high SES participants commented on policy responses to the COVID-19 pandemic, and viewed the pandemic as an opportunity to improve Dutch society, for instance by fostering greater social cohesion.

3.4. Being socially supported

Participants described the importance of social connection and support during the lockdowns. Keeping up with friends digitally was mentioned three times by high SES participants, and once by a low SES participant. Instead, four low SES participants discussed supporting people in person.

I often cooked for my neighbor Such a small thing. But we do that for each other again. And the neighbor across the street came to bring cupcakes Yes, such little things I think at that time some people and I got a little closer than usual. Although you should actually keep your distance at that moment, but still the bond with people is present (I7, low SES).

Eight participants also mentioned a lack of social support, and/or feeling lonely during lockdowns.

I missed my friends I did bump into the walls at home on my own because I've been sitting very much alone and then you miss a relationship and things like that and indeed physical contact with someone. I do know that when we got together more or less illegally, we secretly touched each other because I just missed that (F10, low SES).

Although there were considerable similarities across participants of different SES backgrounds, high SES participants were more likely to describe social support in their broader communities. This was mentioned four times by high SES participants. For instance, one participant cited *“several initiatives”* in their neighborhoods or municipalities, where *“people help each other one way or another”* (I3, high SES). In contrast, low SES participants only described being socially supported by people they knew well, such as close friends and family members.

4. Discussion

In this study, we examined experiences of resilience during the COVID-19 pandemic among Dutch individuals. We did so qualitatively, with both focus groups and individual interviews. Regarding this study's key findings, four themes emerged: (1) coping with adversity, the primary way in which participants defined resilience; (2) growing from setbacks, another way resilience was commonly defined, through self-development and/or learning a new skill; (3) having faith in themselves, their community and the nation, which participants discussed valuing more than they did prior to the pandemic; and (4) being socially supported, in which participants commented on growing closer to their social network, and/or missing friends during lockdowns.

We also examined responses based on participants' SES background. Participants from high and low SES backgrounds described broadly

similar experiences of resilience, although some notable differences were present. These differences are discussed below, to gain deeper insight into how resilience is formed, maintained and experienced.

Examining the theme coping with adversity, low SES participants were more likely to discuss difficulties coping with lockdowns, while high SES participants were more likely to define resilience as an opportunity to develop. This was also evident in the theme growing from setbacks: among high SES participants, the concept of resilience was more closely related to growing, rather than to enduring. For low SES participants, resilience was much more frequently defined as holding out until times were better.

This may be due to low and high SES participants' different experiences during the pandemic, when pre-existing inequalities may have been magnified. Workers who were unable to work from home, particularly those in the service industry and manual occupations, were more likely to not be working. Individuals in white collar jobs were more likely to continue working (Statistics Netherlands, 2023). Low SES individuals were therefore more likely to have their routines disrupted and, particularly for workers without permanent contracts, to earn less money than they had prior to the pandemic.

To interpret our findings in this context, examining Maslow's hierarchy of needs theory may be useful. This theory posits that individuals' higher-order needs, such as socialization and self-actualization, cannot be met when lower-order needs, such as safety and housing, are unmet (Maslow, 1943). In the context of an emergent COVID-19 pandemic, Ryan et al. (2020) developed a framework combining Maslow's hierarchy of needs with the social determinants of health. The authors argued that lockdown conditions would prevent vulnerable communities from meeting their lower-order needs (Ryan et al., 2020). In the Netherlands, this is also plausible, although the financial impact of COVID-19 lockdowns was brief and less acute than in other countries. Perhaps low SES participants in this study were less likely to describe thriving and growing during lockdowns due to the greater financial strain that they were under both before and during the COVID-19 pandemic.

Further, one of this study's themes, being socially supported, has been shown to be an important building block of resilience (Poortinga, 2012; Scoloveno, 2016; van Doren et al., 2023). Social support appears to reduce individuals' physiological stress responses, ultimately helping to buffer individuals from adverse experiences (Kamin et al., 2021; Ozbay et al., 2007; Qiu et al., 2021). However, Lewin et al. (2023) found that, while robust social networks decreased negative mental health symptoms during the COVID-19 pandemic among low SES individuals, they were not sufficient to fully buffer them.

In our study, low SES participants were more likely to describe their immediate social networks, while high SES participants were more likely to describe feeling supported by their broader communities. This finding is echoed by research showing that low SES individuals tend to have social networks with fewer ties within a smaller geographic radius (Cook-Craig et al., 2012). For low SES individuals, social networks are more likely to consist of immediate family members and neighbors. Weyers et al. (2008) argues that this is because 'poverty can lead to social exclusion', due to the financial cost of participating in social events with less close relational ties (e.g. going out to dinner, buying gifts for special occasions) (p. 7). Low SES individuals are also less likely to move away for tertiary education or for employment opportunities (Busch & Weigert, 2010). It is therefore unsurprising that low SES participants in this study seemed to have smaller, geographically closer social networks.

Further, the SES differences in social networks found in this study aligns with the literature on social capital. This concept describes a feature of society concerning social networks and the norms of reciprocity and trustworthiness that arise from them (Putnam, 2000). Communities with high levels of social capital have been shown to more quickly and fully rebound from crises than other communities (Aldrich, 2010). Research has also identified SES-related inequalities in social

capital: high SES individuals have been found to have more social capital, particularly in more distant connections outside their immediate network (Uphoff et al., 2013). In this study, low SES participants less frequently discussing connections to their broader community may be due to having less social capital. This may mean that low SES individuals in the Netherlands were less likely to have an important facilitating factor of resilience (Walsh-Dilley & Wolford, 2015).

In terms of the theme, faith in oneself, the community and the nation, participants from different SES backgrounds commented that their broader communities were more resilient than they had previously thought. However, low SES participants were more likely to express surprised by this than high SES participants. In contrast, high SES participants were more likely to reflect on ways their broader social environment could be improved. High SES participants were also more likely to discuss specific pandemic mitigation policies, and sympathy for the government.

It is possible that this finding can be explained by high SES participants having more time and energy for reflection during the pandemic. It is also possible that high SES participants were more likely to express these views because they felt more seen by, involved with and trust in government, an explanation in line with existing literature (Dalton, 2005; Lee & Schachter, 2019). Increased trust in government among high SES individuals has also been observed in the context of the COVID-19 pandemic (Schernhammer et al., 2022; Trent et al., 2022). This is important, because faith in themselves, their community and the nation has been linked to increased levels of community resilience following adverse events. Kim (2016) found that participants' levels of satisfaction with their governments in South Korea and China were positively related to their level of trust in government. This relationship may be due to high SES individuals having more to gain and less to lose from political engagement, and/or from high SES individuals feeling more socially proximate, either literally or due to shared characteristics, to policymakers (Lee & Schachter, 2019; Pietryka & Debats, 2017).

More broadly, these findings indicate that being high SES supported resilience during the COVID-19 pandemic. This aligns closely with existing literature, but is nonetheless concerning. Being less able to cope with and rebound from the pandemic may further deepen inequities, related to both health and SES.

4.1. Strengths and limitations

This study stood out for its use of a large number of participants, and for its use of both individual interviews and focus groups. This enabled us to gather more comprehensive data. Findings were similar across individual interviews and focus groups, helping to increase the trustworthiness of our findings.

Nonetheless, this study had several weaknesses that should be considered when interpreting its results. Particularly, this study used a relatively imprecise measure of SES, by only taking into account education level and income. Other measures of SES, namely occupation, was not considered. Occupational choice has been found to impact social networks: people employed in certain types of sectors, with similar levels of prestige, are more likely to associate with one another (Lambert & Griffiths, 2018; Morris, 2012). Whether someone was high or low SES may not have been fully captured in this study.

4.2. Conclusions

Better-understanding resilience during the COVID-19 pandemic may teach us how and why individuals recover and improve from experiencing adverse events. However, how individuals define and experience resilience is not yet known in the context of the COVID-19 pandemic. With this study, we sought to fill this gap, by examining individuals' experiences and perceptions of resilience during the second year of the pandemic in the Netherlands. We also considered whether high and low SES participants had different experiences. We found that resilience was

defined primarily as coping with adversity. However, resilience also encompassed aspects of self-reflection and improvement, as well as engagement with broader social and political contexts. Importantly, having a higher SES seemed to support resilience during the COVID-19 pandemic. This indicates that low SES individuals may be more vulnerable when experiencing adverse events, which may amplify and magnify existing socio-economic inequalities. Addressing financial precarity may be important to buffering future crises' effects on low SES individuals.

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Ethics approval

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

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssmqr.2023.100322>.

References

- Aldrich, D. P. (2010). Fixing recovery: Social capital in post-crisis resilience. SSRN Scholarly Paper No. 1599632 <https://papers.ssrn.com/abstract=1599632>.
- Ang, W. H. D., Shorey, S., Lopez, V., Chew, H. S. J., & Lau, Y. (2022). Generation Z undergraduate students' resilience during the COVID-19 pandemic: A qualitative study. *Current Psychology*, 41(11), 8132–8146. <https://doi.org/10.1007/s12144-021-01830-4>
- Antonovsky, A. (1979). *Health, stress, and coping. New perspectives on mental and physical well-being*. San Francisco: Jossey-Bass.
- Archibald, M. M., Ambagtsheer, R. C., Casey, M. G., & Lawless, M. (2019). Using zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods*, 18, Article 1609406919874596. <https://doi.org/10.1177/1609406919874596>
- Bambra, C., Riordan, R., Ford, J., & Matthews, F. (2020). The COVID-19 pandemic and health inequalities. *Journal of Epidemiology & Community Health*, 74(11), 964–968. <https://doi.org/10.1136/jech-2020-214401>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE Publications. <https://us.sagepub.com/en-us/nam/thematic-analysis/book248481>.
- Busch, O., & Weigert, B. (2010). Where have all the graduates gone? Internal cross-state migration of graduates in Germany 1984–2004. *The Annals of Regional Science*, 44(3), 559–572. <https://doi.org/10.1007/s00168-008-0274-3>
- Cal, S. F., Sá, L. R.de, Glustak, M. E., & Santiago, M. B. (2015). Resilience in chronic diseases: A systematic review. *Cogent Psychology*, 2(1), Article 1024928. <https://doi.org/10.1080/23311908.2015.1024928>
- Campo-Arias, A., & Mendieta, C. T. D. (2021). Social determinants of mental health and the COVID-19 pandemic in low-income and middle-income countries. *Lancet Global Health*, 9(8), e1029–e1030. [https://doi.org/10.1016/S2214-109X\(21\)00253-9](https://doi.org/10.1016/S2214-109X(21)00253-9)
- Catussi Paschoalotto, M. A., Lazzari, E. A., Rocha, R., Massuda, A., & Castro, M. C. (2023). Health systems resilience: Is it time to revisit resilience after COVID-19?

- Social Science & Medicine, 115716. <https://doi.org/10.1016/j.socscimed.2023.115716>
- Cook-Craig, P., Ely, G., Flaherty, C., Dignan, M., & White, C. R. (2012). Seeking health advice from social networks in low-income urban neighborhoods. *American Journal of Health Behavior*, 36(6), 723–735. <https://doi.org/10.5993/AJHB.36.6.1>
- Coyer, L., Wynberg, E., Buster, M., Wijffels, C., Prins, M., Schreijer, A., van Duijnhoven, Y. T. H. P., van Dam, A. P., van der Lubben, M., & Leenstra, T. (2021). Hospitalisation rates differed by city district and ethnicity during the first wave of COVID-19 in Amsterdam, The Netherlands. *BMC Public Health*, 21(1), 1721. <https://doi.org/10.1186/s12889-021-11782-w>
- Dalton, R. J. (2005). The social transformation of trust in government. *International Review of Sociology*, 15(1), 133–154. <https://doi.org/10.1080/03906700500038819>
- van Doren, T. P., Zajdman, D., Brown, R. A., Donndi, P., Heintz, R., Busch, L., Simmons, C., & Paddock, R. (2023). Risk perception, adaptation, and resilience during the COVID-19 pandemic in Southeast Alaska Natives. *Social Science & Medicine*, 317, Article 115609. <https://doi.org/10.1016/j.socscimed.2022.115609>
- Eachus, P. (2014). Community resilience: Is it greater than the sum of the parts of individual resilience? *Procedia Economics and Finance*, 18, 345–351. [https://doi.org/10.1016/S2212-5671\(14\)00949-6](https://doi.org/10.1016/S2212-5671(14)00949-6)
- Hanna, K., Giebel, C., Butchard, S., Tetlow, H., Ward, K., Shenton, J., Cannon, J., Komuravelli, A., Gaughan, A., Eley, R., Rogers, C., Rajagopal, M., Limbert, S., Callaghan, S., Whittington, R., Shaw, L., Donnellan, W., & Gabbay, M. (2022). Resilience and supporting people living with dementia during the time of COVID-19: A qualitative study. *Dementia*, 21(1), 250–269. <https://doi.org/10.1177/14713012211036601>
- Herens, M., Wagemakers, A., Vaandrager, L., van Ophem, J., & Koelen, M. (2017). Contexts, mechanisms, and outcomes that matter in Dutch community-based physical activity programs targeting socially vulnerable groups. *Evaluation & the Health Professions*, 40(3), 294–331. <https://doi.org/10.1177/01632787166652940>
- Hopkins, K. D., Shepherd, C. C. J., Taylor, C. L., & Zubrick, S. R. (2015). Relationships between psychosocial resilience and physical health status of western Australian urban aboriginal youth. *PLoS One*, 10(12), Article e0145382. <https://doi.org/10.1371/journal.pone.0145382>
- Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing*, 60(1), 1–9. <https://doi.org/10.1111/j.1365-2648.2007.04412.x>
- Jaspal, R., & Breakwell, G. M. (2022). Socio-economic inequalities in social network, loneliness and mental health during the COVID-19 pandemic. *International Journal of Social Psychiatry*, 68(1), 155–165. <https://doi.org/10.1177/0020764020976694>
- Johns Hopkins Coronavirus Resource Center. (2023). Mortality analyses. <https://coronavirus.jhu.edu/data/mortality>
- Kamin, T., Perger, N., Debevec, L., & Tivadar, B. (2021). Alone in a time of pandemic: Solo-living women coping with physical isolation. *Qualitative Health Research*, 31(2), 203–217. <https://doi.org/10.1177/104973232097160>
- 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), daac198. <https://doi.org/10.1093/heapro/daac198>
- Kim, S. (2016). Public trust in government in China and South Korea: Implications for building community resilience. *Chinese Public Administration Review*, 7(1), 35–76. <https://doi.org/10.22140/cpar.v7i1.118>
- Kimhi, S. (2016). Levels of resilience: Associations among individual, community, and national resilience. *Journal of Health Psychology*, 21(2), 164–170. <https://doi.org/10.1177/1359105314524009>
- Lambert, P., & Griffiths, D. (2018). Evaluating CAMS scales. In P. Lambert, & D. Griffiths (Eds.), *Social inequalities and occupational stratification: Methods and concepts in the analysis of social distance* (pp. 107–137). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-02253-0_5
- Lee, Y., & Schachter, H. L. (2019). Exploring the relationship between trust in government and citizen participation. *International Journal of Public Administration*, 42(5), 405–416. <https://doi.org/10.1080/01900692.2018.1465956>
- Lewin, A. C., Shamai, M., & Novikov, S. (2023). Surviving in crisis mode: The effect of material hardship and social support on emotional wellbeing among people in poverty during COVID-19. *Social Indicators Research*, 165(1), 245–265. <https://doi.org/10.1007/s11205-022-03011-7>
- Lindström, B. (2001). The meaning of resilience. *International Journal of Adolescent Medicine and Health*, 13(1), 7–12. <https://doi.org/10.1515/IJAMH.2001.13.1.7>
- Margolies, S. O., Patidar, S. M., Chidgey, B. A., Goetzinger, A., Sanford, J. B., & Short, N. A. (2021). Growth in crisis: A mixed methods study of lessons from our patients with chronic pain during the COVID-19 pandemic. *Journal of Contextual Behavioral Science*, 19, 12–16. <https://doi.org/10.1016/j.jcbs.2020.10.010>
- Martin, R., & Sunley, P. (2015). On the notion of regional economic resilience: Conceptualization and explanation. *Journal of Economic Geography*, 15(1), 1–42. <https://doi.org/10.1093/jeg/lbu015>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Mittelmark, M. B. (2021). Resilience in the salutogenic model of health. In M. Ungar (Ed.), *Multisystemic resilience* (pp. 153–164). Oxford: Oxford University Press. <https://doi.org/10.1093/oso/9780190095888.003.0009>
- Moore, T. L. (2023). The lived experience and meaning of resilience in the setting of chronic illness and low- resource communities of African Americans that reside in Tallahatchie County, Mississippi. *International Journal of Qualitative Studies on Health and Well-Being*, 18(1), Article 2218221. <https://doi.org/10.1080/17482631.2023.2218221>
- Morris, R. (2012). Assessment of occupation and social performance. In J. R. E. Fox, & K. P. Goss (Eds.), *Eating and its disorders* (pp. 61–74). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118328910.ch5>
- Organisation for Economic Development & Co-operation. (2020). Building back better: A sustainable, resilient recovery after COVID-19. <https://www.oecd.org/coronavirus/policy-responses/building-back-better-a-sustainable-resilient-recovery-after-covid-19-52b869f5/>
- Organisation for Economic Development & Co-operation. (2022a). Income. OECD better life index. <https://www.oecdbetterlifeindex.org/topics/income/>
- Organisation for Economic Development & Co-operation. (2022b). *Inequality: Poverty gap*. OECD Data. <http://data.oecd.org/inequality/poverty-gap.htm>
- Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress. *Psychiatry (Edgmont)*, 4(5), 35–40.
- Pietryka, M. T., & Debats, D. A. (2017). It's not just what you have, but who you know: Networks, social proximity to elites, and voting in state and local elections. *American Political Science Review*, 111(2), 360–378. <https://doi.org/10.1017/S000305541600071X>
- Pijpker, R., Vaandrager, L., Veen, E. J., & Koelen, M. A. (2021). Seizing and realizing the opportunity: A salutogenic perspective on rehabilitation after burnout. *Work*, 68(3), 551–561. <https://doi.org/10.3233/WOR-203393>
- Pijpker, R., van der Kamp, D., Vader, S., den Broeder, L., & 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(2), 149–155. <https://doi.org/10.5114/hpr.2022.114527>
- Polhuis, C. M. M., Vaandrager, L., Soedamah-Muthu, S. S., & 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), 80. <https://doi.org/10.1186/s12939-020-01194-4>
- Poortinga, W. (2012). Community resilience and health: The role of bonding, bridging, and linking aspects of social capital. *Health & Place*, 18(2), 286–295. <https://doi.org/10.1016/j.healthplace.2011.09.017>
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and Schuster.
- Qiu, Y., Huang, Y., Wang, Y., Ren, L., Jiang, H., Zhang, L., & Dong, C. (2021). The role of socioeconomic status, family resilience, and social support in predicting psychological resilience among Chinese maintenance hemodialysis patients. *Frontiers in Psychiatry*, 12. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.723344>
- Rahman, S. A., Tuckerman, L., Vorley, T., & Gherhes, C. (2021). Resilient research in the field: Insights and lessons from adapting qualitative research projects during the COVID-19 pandemic. *International Journal of Qualitative Methods*, 20, Article 16094069211016106. <https://doi.org/10.1177/16094069211016106>
- Reed, J. (2006). *Appreciative inquiry: Research for change*. SAGE Publications.
- Royal Institute. (2023). For Public Health and the Environment [Rijksinstituut voor Volksgezondheid en Milieu]. Timeline of Corona Regulations 2021 [Tijdlijn van coronamaatregelen 2021] <https://www.rivm.nl/gedragsonderzoek/tijdlijn-van-coronamaatregelen-2021>
- Ryan, B. J., Coppola, D., Canyon, D. V., Brickhouse, M., & Swinton, R. (2020). COVID-19 community stabilization and sustainability framework: An integration of the Maslow hierarchy of needs and social determinants of health. *Disaster Medicine and Public Health Preparedness*, 14(5), 623–629. <https://doi.org/10.1017/dmp.2020.109>
- Schernhammer, E., Weitzer, J., Laubichler, M. D., Birmann, B. M., Bertau, M., Zenk, L., Caniglia, G., Jäger, C. C., & Steiner, G. (2022). Correlates of COVID-19 vaccine hesitancy in Austria: Trust and the government. *Journal of Public Health*, 44(1), e106–e116. <https://doi.org/10.1093/pubmed/fdab122>
- Scaloveno, R. (2016). A concept analysis of the phenomenon of resilience. *Journal of Nursing & Care*, 5(4). <https://doi.org/10.4172/2167-1168.1000353>
- Statistics Netherlands [Centraal Bureau voor de Statistiek]. (2023). COVID-19 impact on labour and income. <https://www.cbs.nl/en-gb/dossier/coronavirus-crisis-cbs-fi-gures/covid-19-impact-on-labour-and-income>
- Statistics Netherlands [Centraal Bureau voor de Statistiek]. (2020). Socio-economic status of households in The Netherlands [Socialeconomische status van huishoudens in Nederland]. <https://www.cbs.nl/nl-nl/maatwerk/2020/49/socialeconomische-status-van-huishoudens-in-nederland>
- Super, S., Hermens, N., Verkooijen, K., & Koelen, M. (2014). Enhancing life prospects of socially vulnerable youth through sport participation: A mixed methods study. *BMC Public Health*, 14(1), 703. <https://doi.org/10.1186/1471-2458-14-703>
- Trent, M., Seale, H., Chughtai, A. A., Salmon, D., & MacIntyre, C. R. (2022). Trust in government, intention to vaccinate and COVID-19 vaccine hesitancy: A comparative survey of five large cities in the United States, United Kingdom, and Australia. *Vaccine*, 40(17), 2498–2505. <https://doi.org/10.1016/j.vaccine.2021.06.048>
- Tyler, S., & Moench, M. (2012). A framework for urban climate resilience. *Climate & Development*, 4(4), 311–326. <https://doi.org/10.1080/17565529.2012.745389>
- Ungar, M., & Theron, L. (2020). Resilience and mental health: How multisystemic processes contribute to positive outcomes. *The Lancet Psychiatry*, 7(5), 441–448. [https://doi.org/10.1016/S2215-0366\(19\)30434-1](https://doi.org/10.1016/S2215-0366(19)30434-1)
- Uphoff, E. P., Pickett, K. E., Cabieses, B., Small, N., & Wright, J. (2013). A systematic review of the relationships between social capital and socioeconomic inequalities in health: A contribution to understanding the psychosocial pathway of health inequalities. *International Journal for Equity in Health*, 12(1), 54. <https://doi.org/10.1186/1475-9276-12-54>
- Varga, T. V., Bu, F., Dissing, A. S., Elsenburg, L. K., Bustamante, J. J. H., Matta, J., Zon, S. K. R., van Brouwer, S., Bültmann, U., Fancourt, D., Hoeyer, K., Goldberg, M., Melchior, M., Strandberg-Larsen, K., Zins, M., Clotworthy, A., & Rod, N. H. (2021). Loneliness, worries, anxiety, and precautionary behaviours in response to the COVID-19 pandemic: A longitudinal analysis of 200,000 western and northern

- Europeans. *The Lancet Regional Health – Europe*, 2. <https://doi.org/10.1016/j.lanepe.2020.100020>
- Walsh-Dilley, M., & Wolford, W. (2015). (Un)defining resilience: Subjective understandings of 'resilience' from the field. *Resilience*, 3(3), 173–182. <https://doi.org/10.1080/21693293.2015.1072310>
- Weyers, S., Dragano, N., Möbus, S., Beck, E.-M., Stang, A., Möhlenkamp, S., Jöckel, K. H., Erbel, R., & Siegrist, J. (2008). Low socio-economic position is associated with poor social networks and social support: Results from the Heinz Nixdorf Recall Study. *International Journal for Equity in Health*, 7(1), 13. <https://doi.org/10.1186/1475-9276-7-13>
- Wister, A. V., Coatta, K. L., Schuurman, N., Lear, S. A., Rosin, M., & MacKey, D. (2016). A lifecourse model of multimorbidity resilience: Theoretical and research developments. *International Journal of Aging and Human Development*, 82(4), 290–313. <https://doi.org/10.1177/0091415016641686>
- Woodyatt, C. R., Finneran, C. A., & Stephenson, R. (2016). In-person versus online focus group discussions: A comparative analysis of data quality. *Qualitative Health Research*, 26(6), 741–749. <https://doi.org/10.1177/1049732316631510>
- World Health Organisation. (2023). Coronavirus (COVID-19) dashboard. <https://covid19.who.int>.
- World Health Organization Regional Office for Europe. (2017). *Strengthening resilience: A priority shared by health 2020 and the sustainable development goals*. p. 40.
- Wulff, K., Donato, D., & Lurie, N. (2015). What is health resilience and how can we build it? *Annual Review of Public Health*, 36(1), 361–374. <https://doi.org/10.1146/annurev-publhealth-031914-122829>
- Zautra, A. J., Arewasikporn, A., & Davis, M. C. (2010). Resilience: Promoting well-being through recovery, sustainability, and growth. *Research in Human Development*, 7(3), 221–238. <https://doi.org/10.1080/15427609.2010.504431>