




How social capital matters for receiving social support: on the complementary role of civil society in the COVID-19 pandemic

Gesine Höltmann ^a, Swen Hutter ^a and Jule Specht ^b

^aFreie Universität Berlin & WZB Berlin Social Science Center, Berlin; ^bHumboldt-Universität zu Berlin, Berlin

ABSTRACT

The Covid-19 pandemic has created a widespread need for social support. Similar to previous crises, we can observe activation in society to meet these needs: citizens have offered practical, emotional, and financial support, often within their social networks, but also to strangers and civil society organizations. In this paper, we examine the role of social capital in *receiving social support* during the Covid-19 pandemic in Germany using unique micro-level survey data. We investigate the importance of three aspects of social capital – the size of one’s support network, social trust, and organizational membership – for receiving (sufficient) social support. We focus on three types of support networks: family and friends, neighbors, and civil society actors. First, we find that while all three elements of social capital matter for receiving social support, a larger support network and organizational embeddedness matter primarily for receiving support beyond family and friendship networks. Second, civil society actors have been less likely to provide sufficient support in the pandemic, mainly acting *in addition* to strong ties and providing complementary support for individuals in particular need.



ARTICLE HISTORY Received 11 March 2022; Accepted 31 January 2023


EDITED BY Patrick Präg

KEYWORDS Social capital; social support; social trust; civic engagement; civil society; coronavirus crisis; COVID-19

Introduction

The Covid-19 pandemic has brought about not only a health crisis but an economic and social crisis, creating new and multifaceted demands for

CONTACT Gesine Höltmann  gesine.hoeltmann@wzb.eu  Freie Universität Berlin & WZB Berlin Social Science Center, Berlin

 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/14616696.2023.2176528>.

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

social support in the population. Beyond the disease itself, cuts or complete losses of income made financial support necessary. Home-schooling, closed childcare facilities, and relatives at risk created additional caretaking responsibilities on top of an unfamiliar and psychologically taxing work situation, either from home or from a position of exposure (for an overview, see Grasso et al. 2021). Further, pre-existing support relationships – both within formal and informal civil society – were interrupted or became more difficult to maintain because of far-reaching contact restrictions (e.g. Carlsen et al. 2020; Kövér 2021; van den Berg et al. 2020; Worschech 2021).

From the scholarly literature on natural disasters, we know that while social capital may suffer in times of crisis, individual citizens and civil society organizations move to offer support, generating new social capital in the form of spontaneous informal volunteering or other forms of – primarily prosocial – emergent behavior (e.g. Rodríguez et al. 2006; Wang & Ganapati 2018). At the onset of the coronavirus crisis, such emergent behavior became very visible in the media, with citizens clapping on balconies, offers for grocery shopping for risk groups, or donating clothes, goods, and money for social purposes (e.g. Borbáth et al. 2021; Finlay et al. 2022; Kavada 2020). Simultaneously, measures to slow down the spread of the virus saw unprecedented constraints on social contacts. Thus, the jury is still out on whether this activation could meet the demands for social support. From the perspective of those *in need of support* (demand-side), this highlights the importance of social networks and whether one can rely on a solid support network in times of need. From the perspective of those who *offered support* (supply-side), it poses the question of whether informal and organized civil society was able to reach those in need. Both aspects seem particularly relevant during a crisis that systematically hinders (new) social contacts.

In this paper, we take the perspective of the recipients of social support. We examine recipients' relationships with different providers of support (support networks) to better understand the interplay of demand and supply of social support during the coronavirus crisis. We set out to answer two central research questions: First, we explore the importance of different aspects of social capital – the size of one's support network, levels of social trust, and organizational membership – for receiving support. Specifically, we are interested in how the 'social capital-support' link varies across three different types of support networks: (1) family and friends, (2) neighbors, and (3) civil

society actors. Second, we ask whether these networks were equally likely to offer *sufficient* social support to those in need. To answer these questions, we use unique micro-level survey data from Germany collected in October 2020, asking respondents to recall their experiences from the onset of the pandemic in March 2020 onwards.

To date, two research teams – one in Denmark (Carlsen et al. 2020) and one in Germany (Bertogg and Koos 2021, 2022) – have presented their findings on social networks and (insufficient) social support during the early months of the coronavirus crisis. Both find that support relationships at the beginning of the pandemic were primarily informal, organized via strong rather than weak ties. For Denmark, Carlsen et al. (2020) show that having access to strong ties was decisive for receiving sufficient support in the pandemic. Access to weak ties did not appear to make a difference. Bertogg and Koos' (2022) findings in the case of Germany indicate that especially individuals with smaller support networks report insufficient support. In another contribution, Bertogg and Koos (2021) expand on the functions of support providers, showing that individuals with more extensive strong-tie networks were more likely to provide support to family and friends. In contrast, those who supported strangers were more firmly embedded in civil society (membership in associations).

In the present study, we build on these findings and expand on them in two crucial ways: First, we examine how different elements of social capital (size of support network, organizational membership, social trust) impact receiving (sufficient) social support from different types of support networks. Second, we pay particular attention to civil society actors as a source of social support. We examine civil society actors' interplay with other sources of support and how they faced the dilemma of increasing demands for social support coupled with strong contact restrictions. Our results show that all three aspects of social capital matter for receiving social support in general. Yet, the size of one's support network and organizational embeddedness matter primarily for receiving support beyond family and friendship networks. Furthermore, we find that civil society actors have been less likely to provide sufficient support, mainly acting in addition to family, friends, and neighbors. Thus, they played a complementary, not compensatory, role in the pandemic.

Theoretical framework: social capital and social support in times of crisis

In moments of crisis, scholars have repeatedly documented the activation of spontaneous prosocial helping behaviors and lived solidarity – be it in the context of natural disasters, such as Hurricane Katrina (Rodríguez et al. 2006), or in the context of social crises such as the Great Recession (Simiti 2017) or the so-called refugee crisis of 2015 (Schiffauer et al. 2017). Scholars often portray the spontaneous crisis engagement that arises in these contexts as ‘informal engagement’ (Einolf et al. 2016) or ‘emergent behavior’ (Quarantelli 1983; Rodríguez et al. 2006). In the Covid-19 pandemic this included acts such as grocery shopping for elderly neighbors or people in quarantine, supporting families with child-care or home-schooling, sewing masks, or performing other small acts of service.

This surge in social support in response to the pandemic could be observed across Europe. Based on cross-national survey data, Borbáth et al. (2021) show that large shares of the population in Germany, France, Italy, the UK, and Spain were involved in providing neighborhood help and donating money and goods in the early phase of the pandemic. In the United Kingdom, for example, over 4,000 informal ‘Mutual Aid Groups’ formed swiftly after the onset of the pandemic, and the National Health System NHS was able to recruit a ‘volunteer army’ of 750,000 volunteers for 1.5 million Britons registered as vulnerable (Kavada 2020). Similarly, Carlsen et al. (2020) report the emergence of almost 250 support groups on Facebook, with several hundred thousand members, within three weeks.

We use the concept of ‘social support’ (our main dependent variable of interest) to do justice to the hybrid nature of the acts of solidarity and helpfulness observed during the pandemic. More broadly than volunteering, the concept accounts for the fact that many of these support acts were organized by family, friends, and neighbors and not only by ‘classical’ civil society actors. Social support is ‘generally considered to include the provision of instrumental aid, information, or emotional sustenance to an individual’ (House et al. 1988: 306) and constitutes ‘a principal way by which people and households get resources’ (Wellman and Wortley 1990: 559). We therefore believe the concept is a good fit for capturing the forms of (often spontaneous and informal) help and support behaviors observed during the pandemic.

Our primary independent variable of interest – the concept of social capital – has a central standing in civil society research and beyond. As a major reference point in the scholarly debate on social capital, Robert Putnam (2001: 2) defines it as ‘features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit’. Based on this definition, we operationalize social capital to include social ties, social trust, and organizational membership. We, therefore, include both structural (size of one’s support network, membership in civil society organizations) and attitudinal elements (social trust) of social capital, as distinguished by Hooghe and Stolle (2003). Reviewing the sociological origins of social capital, Portes (1998: 6) has emphasized that ‘social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures’. This remark suggests close proximity between the concepts of social capital and social support, where ‘the most common function attributed to social capital is as a source of network-mediated benefits *beyond the immediate family*’ (Portes 1998: 12; emphasis added).

Each of the three aspects of social capital listed above – having a larger support network, being embedded in associational life, and being more trusting of others – should improve individuals’ chances of receiving social support in times of crisis. The structural elements of social capital usually capture the number and types of ties a person has. In our case, we can draw on two measures for structural social capital: First, we use an item which asks respondents about the size of their personal support network in a moment of need, which can be viewed as an indicator of respondent’s strong-tie networks. Second, we use membership in civil society organizations, which is usually viewed as an indicator of the availability of weak ties, and especially contacts into civil society. We would expect a larger support network and organizational membership to be conducive to higher availability and provision of social support overall (Finfgeld-Connett 2005; Heany and Israel 2008). However, organizational membership should be more likely to open up access to social support beyond the immediate circle of family and friends. Lastly, while social trust is often theorized as being both a prerequisite and an outcome of civic engagement (Portes 1998; Putnam 2000), we argue that from the perspective of the *recipients* of social support, more trusting individuals should also be more willing to actively reach out to and receive support from networks other than immediate family. Thus, on the most general level, *we expect that individuals with higher levels of*

social capital should be more likely to receive overall social support (hypothesis 1).

We dive further into the link between social capital and social support by examining the *types of support relationships* in the pandemic context. Primarily, we are interested in whether and how support was provided via strong ties, weak ties, and civil society actors. While the distinction of strong versus weak ties originally made by Granovetter (1973) focuses on the frequency and intensity of contact, in our analysis, we make use of a slightly more generalized distinction that places a stronger emphasis on the *type* of relationship: we differentiate between social support received from (1) family and friends, (2) neighbors, (3) strangers, and (4) civil society organizations. While we do not fully adhere to the strong- vs. weak-tie terminology, family and friends can be read as a proxy for strong ties. In contrast, neighbors are often closer to the definition of weak ties. Civil society organizations and ‘strangers’ – individuals who were spontaneously motivated to help and had no pre-existing relationship with the recipients of support – can be thought to constitute formal and informal civil society actors respectively. While these four support networks can be seen to lie on a spectrum between the private sphere and (in)formal civil society, we are primarily interested in the distinction between (1) family and friends, (2) neighbors and (3) civil society actors as a whole. We therefore conduct our main analyses for these three types of support networks and discuss strangers and organizations separately only where there are theoretical and empirical differences between them.

Next, we hypothesize about the general role of the three support networks during the Covid-19 pandemic before further elaborating on how they might relate to structural and attitudinal social capital. The literature on social support shows us that ‘not all types of ties provide similar kinds of support’ (Wellman and Wortley 1990: 559). In ‘normal times,’ strong ties are often the primary providers of social support, and it is especially family (kin) that ‘[provide] large services, while neighbors may provide small services’ (Wellman and Wortley 1990: 560). In a crisis context, patterns of support often differ. In assessing the post-crisis support efforts after Hurricane Katrina, Hawkins and Maurer (2010: 1789) find that while strong ties (or in their framework ‘bonding social capital’) ‘provides one layer of connection and security, it alone may not sustain wellbeing in difficult times’. Notably, the authors find that while strong ties were often the first source of support, essential resources (in terms of survival, livelihood, and information) also came through ‘heterophilous bridging

social capital,' and thus from individuals outside of the primary, strong-tie support network (Hawkins and Maurer 2010: 1783). This observation resonates strongly with the original argument made by Granovetter (1973) that weak ties are crucial in activating communities to take collective action, and the sole reliance on strong (or bonding) ties can even have a demobilizing effect.

While in a disaster situation, weak ties and civil society actors may be a crucial complement to (or even compensation for the lack of) support offered by strong ties, the case is less evident in the context of the Covid-19 pandemic. The pandemic presented a dilemma for civil society: while the demand for social support increased, contact restrictions and health risks faced by both providers and recipients of support rendered many forms of routine helping behaviors more difficult, at times impossible. Empirical studies on organized civil society in Germany have documented the immense difficulties experienced by large shares of civil society organizations to maintain their everyday operations (Hutter et al. 2021; Krimmer et al. 2020; Schrader et al. 2020; van den Berg et al. 2020), potentially undermining their full capacity to offer social support.

Furthermore, compared to previous crises, just 'encountering' weak ties or unknown supporters was more difficult during the pandemic: the need for support was simply less visible, if not invisible, behind closed doors. Thus, receiving support from strangers and civil society organizations involved actively searching and asking for support (both online and offline) or activating contacts through networks or official bodies such as health authorities. Since a big part of practical social support during the Covid-19 pandemic consisted of caring for people in their homes (be it shopping for people in quarantine, caretaking, or home-schooling), spatial proximity is a further factor in whether certain networks were able to offer support. Thus, neighbors held a special position in the pandemic simply because they live next door and often have pre-existing relationships of mutual acknowledgment.

Because of the widespread contact restrictions and the importance of pre-existing ties in finding social support, we thus expect family and friends (as the natural providers of social support) and neighbors (due to their spatial proximity and the importance of 'remaining at home') to act as primary support networks during the coronavirus crisis. Gauging the role of civil society actors is more ambiguous. It can go in two possible directions: On the one hand, receiving support from civil society actors may be dependent on one's previous networks and

connections. In this case, civil society would take a *complementary role*, providing support primarily to those who also have access to other support networks. On the other hand, and during the pandemic specifically, health authorities, online platforms, and neighborhood initiatives actively tried to connect individuals in need with support from civil society. Thus, civil society actors may have played a *compensatory role* in this crisis by offering social support to less socially embedded individuals – i.e. those who did not have access to other support networks. We therefore take an explorative perspective in assessing the social support role of civil society actors in comparison to family, friends and neighbors. Consequently, *we expect family, friends, and neighbors to likely hold a primary support role in the pandemic. Civil society may take a complementary or a compensatory function in providing social support (hypothesis 2).*

We have already argued that higher levels of social capital should increase one's likelihood of receiving social support overall. However, we expect the different aspects of social capital, i.e. the size of one's social network, organizational membership, and social trust, to have differing relevance depending on the type of support network under scrutiny. First, we expect the size of one's support network to be more relevant for receiving support from family, friends, and neighbors than from civil society actors. These contacts should depend more on pre-existing ties, whereas civil society actors can also be reached differently. Second, membership in an association – be it a choir, a football club or charity organization – might facilitate access to informal or formal civil society actors, because people have a larger weak-tie network and are familiar with the potential availability of organized support networks. We therefore expect organizational membership to be particularly relevant for receiving support from civil society actors, both in terms of direct support from an organization as well as from strangers, who were often also coordinated and connected through more formal civil society actors. Relatedly, social trust should become more relevant for receiving support from civil society as it requires either an act of reaching out and asking for help or a willingness to accept help from often-times previously unknown ties (strangers or organizational actors). *In sum, we expect a larger support network to matter the most for receiving support from family, friends, and neighbors. By contrast, organizational membership and higher levels of social trust should increase one's chances of receiving support from civil society actors (hypothesis 3).*

Lastly, we ask to what extent the three support networks were able to offer *sufficient support* during the crisis. We expect family and friends to

be most willing and able to provide a large amount of support, especially in times of crisis. This rationale is less plausible for neighbors and least for civil society actors, who are likely to provide a more limited amount of support to a larger number of people. Given the dilemma sketched above, we also expect civil society actors (both organizations and strangers) to have been much more restricted in reaching out and offering support during the pandemic. Yet, we should also note that civil society may have been more likely than other support networks to specifically seek out people in particular need. Therefore, civil society actors may have been in a particularly difficult position to offer *sufficient* support, given that their likely target groups had a higher need for support than the average population. *Thus, we expect that reporting insufficient support is more likely for people who received support from civil society actors than those who received support from family, friends, and neighbors (hypothesis 4).*

To summarize our theoretical framework, we expect that higher levels of social capital increase one's chances of receiving social support during the coronavirus crisis. We also expect that while family, friends, and neighbors acted as primary sources of social support, civil society actors may have taken either a complementary or a compensatory role in providing social support. Regarding the different aspects of social capital, we expect the size of one's support network to be most relevant for receiving support from family, friends, and neighbors. In contrast, organizational membership and social trust should matter most for receiving support from networks beyond one's pre-existing social connections, especially support networks that may need to be actively approached (civil society actors). Lastly, we also expect that civil society actors are less able to offer sufficient support compared to family, friends, and neighbors.

Data and methods

In the present paper, we use unique micro-level survey data for Germany collected via an online access panel during the first year of the coronavirus crisis (Höltmann et al. 2023).¹ The data collection took place in October 2020 (N = 3,330) after seven full months of an ongoing crisis with relative relaxation of many pandemic-related regulations during

¹The replication data and syntax can be accessed under the following link on the Harvard dataverse: <https://doi.org/10.7910/DVN/HK2VM0>

the summer months. The respective recall time frame lay between March and October 2020. The respondents were sampled according to socio-demographic quotas modelled on the European Social Survey (ESS). In addition, we have created sampling weights so that our sample is representative of the German population. Furthermore, our sample was limited to age groups between 18 and 69 years, thus excluding more elderly age groups who were most at risk during the pandemic and more likely to have received social support based on health risks.²

Our dependent variables are measured as follows. For our primary dependent variable *received support*, respondents were asked to recall: ‘Since the beginning of the coronavirus crisis until today: How often did you receive support from people outside of your household?’ (Response options being: (1) Never, (2) seldom, (3) sometimes, (4) often, (5) very often). We recode this as a binary variable of 0 = ‘Never’ and 1 = ‘seldom’ to ‘very often’ as we consider there to be a crucial qualitative difference between receiving any support versus no support at all. For our second dependent variable of *insufficient support*, respondents were asked, ‘Would you have needed more support from other people?’ (Response options being: (1) No, (2) partly, (3) a bit more, (4) a lot more). We again code a binary variable where those who said they needed ‘a bit’ or ‘a lot more’ support are labelled as ‘needed more support.’ We purposely opt for a higher cut-off point here because the wording of the second category (‘partly’ needed more support) is very moderate. However, we used the full scale of both dependent variables (receiving support and receiving insufficient support), running ordinal logistic regression as a robustness check in Appendix 1.

To examine the roles of different types of support networks in providing support during the pandemic, we asked respondents to select one or more of the following in response to the question ‘Did you receive support from one of the following groups of people or organizations?’ (Response options being: (1) Family, friends, acquaintances; (2) Neighbors; (3) People you did not know before; (4) Initiatives, Associations or helping organizations). In our analysis, these four groups are reduced to three, where we combine support from strangers – ‘people respondents did not know before’ – and support from civil society organizations into the category of civil society actors. We do so because we have similar expectations for both support networks in the pandemic. In the main text, we present empirical results for ‘civil society actors’

²Bertogg and Koos (2022) include older age groups in their sample and show that while respondents over 65 were more likely recipients of support, they were also more likely to receive *sufficient* support.

as a whole, while discussing them separately whenever results might differ between the two groups. We also test them separately for every regression analysis (see Appendix 1, Table A1.2 and Table A1.4).

For our independent variables, we operationalize social capital by examining the size of one's support network, social trust, and respondent's organizational membership. For the *size of one's support network*, respondents were asked, 'How large is the circle of people that you can count on in times of difficulty?' with response options being (1) very small, (2) rather small, (3) medium, (4) rather large, (5) very large. We acknowledge that this measurement is limited in two ways: Firstly, the ordinal scale can only provide a *subjective* measure of respondent's size of social support network. These subjective perceptions may also be impacted by the amount of support one received during the pandemic. Because of this, it should be emphasized that our concept comes closer to one's *perceived* size of support network and we discuss possible reverse causality in our limitations. Secondly, the crisis framing probably leads to a downward bias compared to a measurement that asks for the size of one's support network more generally. For *social trust*, the item 'generally speaking, most people can be trusted' was used with a 5-point response scale from (1) 'is not true at all' to (5) 'is completely true'. We use both variables as continuous variables in our regression models. For *organizational membership*, respondents could choose from a list of ten types of civil society organizations, select 'other' or declare that they were members of no organization. We code a dummy that indicates whether respondents are members of any organization listed.

Lastly, we include a set of standard socio-demographic control variables: sex (1 = female, 0 = male); age (recoded as four categories between 18-69); education (1 = high education, 0 = low education), income (1 = 'finding it difficult financially' or 'finding it very difficult' vs. 0 = 'coping' or 'living comfortably'), and income change during the pandemic (1 = 'very negative' or 'rather negative', 0 = 'no change', 'rather positive', or 'very positive'). We also include pandemic-specific burdens, namely, being in home office, having experienced a Corona infection in the household (here, we combine when respondents say they were infected themselves or experienced an infection in their household), having a child at home (caretaking or home-schooling), or having another caretaking responsibility in the household (caring for a relative at home). Finally, we control for the type of settlement (a four-point urban-rural scale) and respondents living in Eastern Germany (see Appendix 2 for the exact question wordings, summary statistics, and distributions of key variables).

Our data analysis follows four steps. First, we examine whether social capital is associated with receiving support in general (Dependent variable: receiving support vs. no support). Second, we test the same model for the subgroup of the sample that received support: Here we are interested in how the different elements of social capital differ when receiving support from different support networks (Dependent variable: receiving support from one of the three networks vs. receiving other support). Third, we regress the three support networks on receiving insufficient support (Dependent variable: received insufficient support vs. received sufficient support). We use logistic regression models throughout our analyses. To understand the relative roles of the different types of support networks (complementary vs compensatory function) we descriptively illustrate the overlap between them and provide additional regression analyses of their overlapping support.

We also conduct robustness tests: First, we run ordered logit models for both dependent variables showing that our results are robust to these specifications (see Appendix 1, Table A1.5). Second, we examine possible psychological markers that could explain why some people are less likely to ask for support. Specifically, the survey data allowed us to control for perceived loneliness and respondents' personality traits (Big-5). Again, the additional regression analyses reported in Appendix 1 (Table A1.6 and A1.7) show that our empirical findings on social capital are robust to adding either of the two psychological cofounders. Third, we replicate our main analyses with standardized independent variables and using linear regression instead of logistic regression to better compare coefficients across models as suggested by Karlson, Holm and Breen (2012) (see Appendix 1, Tables A1.8 and A1.9 as well as respective figures). Since the results are highly similar to our main analyses, we have decided to keep the original scales in the main text so as to ease interpretation.

Finally, we acknowledge some limitations to our study. We are dealing with cross-sectional data measured eight months into the pandemic. Thus, we cannot isolate the 'pandemic effect,' i.e. we are unable to compare social support structures during the pandemic to social support structures in 'normal times.' This also applies to our independent social capital variables, which were measured at the same time as social support behaviors, meaning that we cannot make causal claims about a pre-crisis stock of social capital. Especially, the subjective measure of the size of one's support network might be impacted by the amount of social support respondents received, possibly leading to reverse causality. We thus cannot rule out some interrelations between our dependent and independent variables and refrain from making causal claims.

Empirical results

What role did different social support networks play in the pandemic?

To begin with, we find that around 45% of our sample received social support from someone outside of their household during the pandemic.³ This share may be even larger in the German population, given that our sample is limited to individuals up to age 69, and the elderly were one of the most prominent recipients of social support in this crisis. At the same time, around 10% of respondents say they *did not receive enough* support. Regarding the sources of support, the vast majority of respondents received support from family and friends (83% of those who received support), followed by support from neighbors (41%), strangers (14%), and civil society organizations (13%). Importantly, we find a very strong overlap between these support networks (see [figure 1](#)): of those who received support, most received it exclusively from *family and friends* (41%), 26% *additionally* received support from *neighbors*, and 11% received support *from all three groups*, i.e. family and friends, neighbors, and civil society actors. Only a handful of people received support from neighbors or civil society actors alone.⁴

These descriptive findings already provide initial evidence on the relative roles of the three support networks (hypothesis 2). The Venn diagram suggests that family and friends held a primary support role in the pandemic, followed by neighbors. In contrast, civil society held a *complementary* role in providing social support as indicated by the pronounced overlap between the circles. This suggests that both civil society organizations and neighbors were not very present where strong ties were lacking. Instead, they acted mainly as an additional support layer on top of strong-tie networks. We explore the prerequisites of receiving social support further by examining the differing effects of social capital for the three types of support networks.

³With a stricter definition that only includes receiving support (3) “sometimes” to (5) “very often”, around 25% of our sample received social support during the pandemic.

⁴For example, only 2% of those who received support did so from civil society actors or neighbors alone. Please see Appendix 1, Table A1.1 for a tabulation of key combinations and absolute numbers in the different categories.

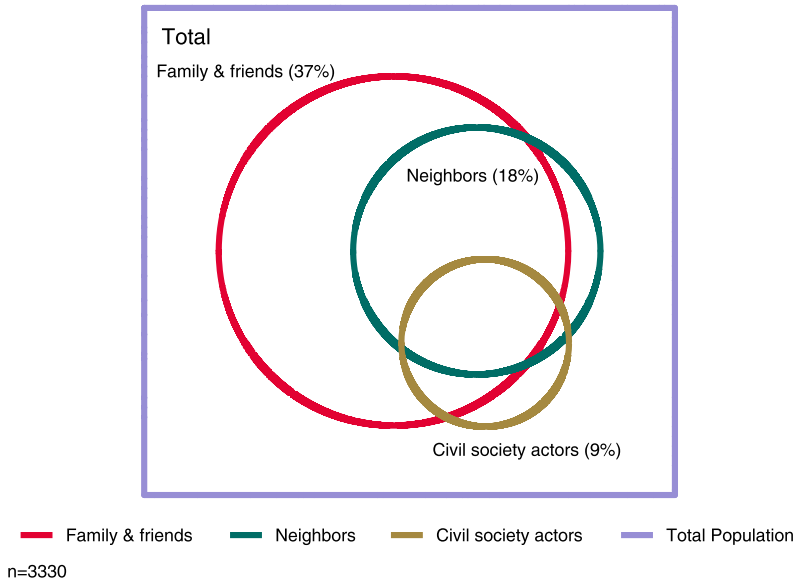


Figure 1. Overlap between different support networks.

Note: The circles of the Venn diagram represent recipients of support from the different support networks. It illustrates how strongly the different support networks overlap and that barely anyone received support from neighbors or civil society alone. Percentages are relative to the entire sample. The Venn diagram is proportional to the relation between variables (see Appendix 1, Table A1.1 for further details).

How did social capital matter for receiving social support from different networks?

We use logistic regression analyses to examine the importance of social capital for receiving social support overall, before looking at the different types of support networks separately. In a first step, we assess the impact of all three elements of social capital on receiving social support (from any support network) during the Covid-19 pandemic (for the full regression tables see Appendix 1, Table A1.2, Model 1). The results confirm hypothesis 1 as we find statistically significant and positive relationships for all three indicators: a larger support network, associational involvement, and higher levels of social trust are positively associated with higher chances of receiving social support in our sample.⁵ Substantively, we find relatively large effects: keeping all other variables constant, a one-point increase in the size of one's support network leads to a 4% increase ($p = 0.000$;

⁵These findings also hold when examining the dependent variable "received support" via ordered logit regression. We report these results in Appendix 1, Table A1.5, Model 1.

95% CI [.027, .062]) in the probability of receiving social support, while a one-point increase on the trust scale yields a 3% increase ($p = 0.003$; 95% CI [.010, .049]). Compared to being a member of no organization, membership has an impact of 7% ($p = 0.000$; 95% CI [.030, .100]) on the likelihood of receiving support. Figure A1.3 in Appendix 1 illustrates these effect sizes once more.

In a second step, we shift attention to the differences among the three support networks, relying only on the subset of the 45% of respondents who received some form of social support. As the marginal effects in [figure 2](#) (and the corresponding regression table A1.2) indicate, we find no statistically significant relationship between the perceived size of one's support network and receiving support from family and friends (Model 2). In contrast, compared to other recipients of support, those who receive support from neighbors (Model 3) and from civil society actors (Model 4) tend to have larger support

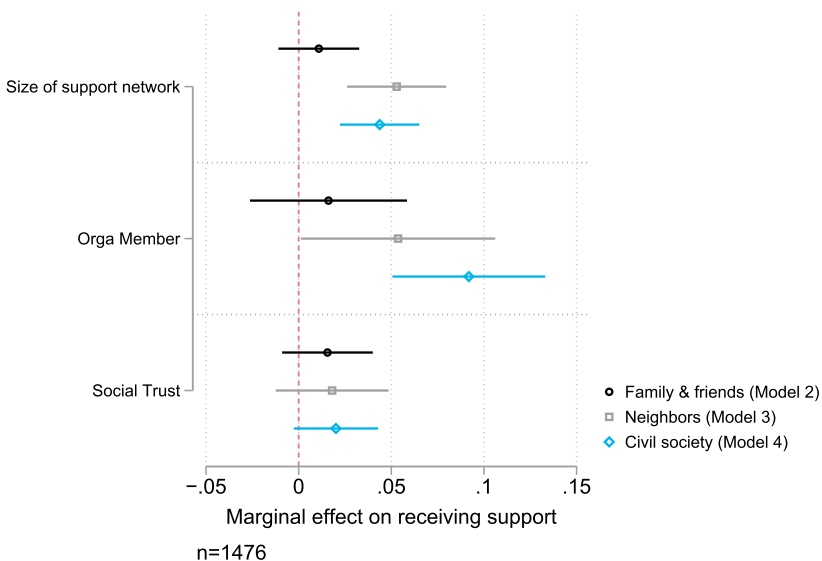


Figure 2. Marginal effects of the three elements of social capital on the probability of receiving social support from different support networks (comparing three separate models).

Note: [Figure 2](#) presents marginal effects of the three independent variables of interest: size of one's support network, organizational membership and social trust on the probability of receiving support from one of the three support networks ((1) Family and friends, (2) Neighbors, (3) Civil society) among all people receiving any social support. For example, an increase of one unit in the size of one's support network increases the probability of receiving support from family and friends by 0.01, from neighbors by 0.05, and from civil society by 0.04. Marginal effects are calculated on the basis of Models 2, 3 and 4 in [Table A1.2](#), [Appendix 1](#).

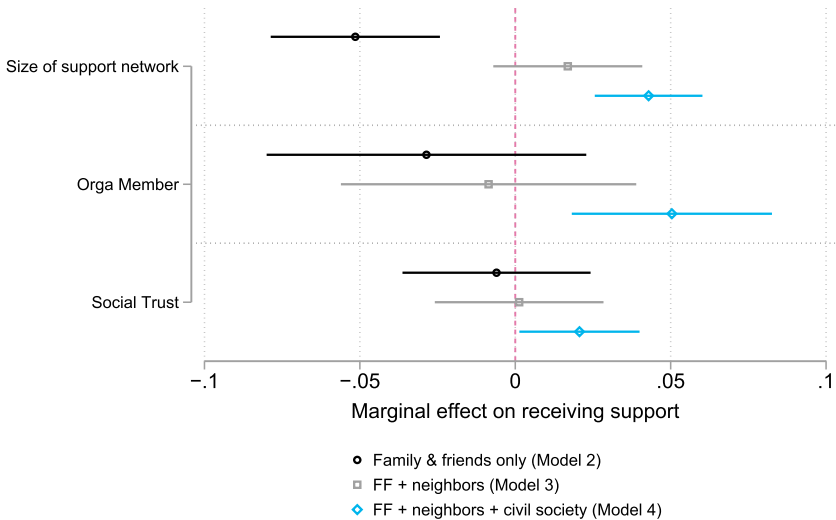
networks. The same can be observed for organizational membership. In contrast, social trust does not have a statistically significant effect for any of the three support networks, suggesting that trust is equally important for each. In other words, while social trust, like the two structural aspects of social capital, is associated with receiving any kind of support during the pandemic, it does not help us differentiate by whom that support has been provided. Lastly, the effects of the three elements of social capital are practically identical for strangers and organizations respectively (see Appendix 1 Table A1.2 and Figure A1.4).⁶

Overall, the results provide mixed evidence for hypothesis 3, where we argued that a larger support network should be most relevant for receiving support from family, friends, and neighbors, whereas the other two aspects of social capital (organizational involvement and social trust) should increase respondents' chances for support from civil society actors. In contrast, the results indicate that a larger perceived support network and associational involvement are in fact what connects individuals to support from weaker ties (such as neighbors and civil society actors). The unexpected finding that the size of perceived support networks is associated with support connections *beyond* friends and family might reflect the restrictive nature of the pandemic when it comes to encountering weak ties and forging new ties. At the same time, it suggests that support provided by strong ties is less dependent on the size of one's overall support network.

When assessing these results however, one should keep in mind just how strongly the different support networks overlap (again, see [Figure 1](#)). In an attempt to capture this overlap between support networks, we replicated our models by building mutually exclusive categories for dependent variables: receiving support (i) from family and friends *only*, (ii) from family, friends *plus neighbors*; and (iii) from all three support networks, i.e. family, friends, neighbors *plus civil society actors* (Table A1.3 in Appendix 1 provides the regression results for [Figure 3](#) below).

The empirical findings for the mutually exclusive dependent variables ([figure 3](#)) differ markedly from the non-exclusive categories in [figure 2](#).

⁶It should be noted that when analyzing strangers and organizations separately, the effect for social trust very briefly passes the threshold for significance while it does not when analyzing the two support networks combined (as 'civil society actors'). However, this difference is small given that for strangers, the p -value for social trust is $p=0.047$; while for organizations the p -value for the effect of social trust is $p=0.038$.



N=1476

Figure 3. Marginal effects of the three elements of social capital on the probability of receiving social support from overlapping support networks (comparing three separate models).

Note: Figure 3 presents the effect of the three independent variables of interest: size of one's support network, organizational membership and social trust on receiving support from one of three mutually exclusive support constellations: (1) Family and friends only, (2) Family, friends + neighbors, and (3) Family and friends + neighbors + civil society. Marginal effects are calculated on the basis of Models 2, 3 and 4 in Table A1.3, Appendix 1.

First, we observe that those who received support *exclusively from family and friends* have a significantly *smaller* support network compared to all others recipients of support; the likelihood of support coming exclusively from family and friends decreases by 5% with every unit increase in the size of one's support network ($\beta = -0.05$; $p = 0.000$; 95% CI [-0.079, -0.024]). *Second*, we observe no significant associations regarding respondents who received support from family, friends, and neighbors for any of the social capital aspects, thus highlighting that they do not differ notably. *Finally*, and most importantly for our argumentation, we find statistically significant positive associations for all three elements of social capital when considering respondents who receive *support from all three support networks*. A larger support network, associational membership, and greater social trust tend to increase people's chances to receive support from *all support layers combined*. Substantively, keeping all else constant, a one-unit increase in the size of one's support network increases the likelihood of receiving support from all three support networks by 4% ($p = 0.000$; 95% CI [.026, .060]); a one-unit increase in social

trust leads to a 2% increase ($p = 0.036$; 95% CI [.001, .040]) in the likelihood of receiving support from all three support networks, while membership in an organization (compared to no membership) leads to an increase of 5% ($p = 0.002$; 95% CI [.018, .083]). This is an important finding because it sheds light on the role of civil society actors in the pandemic: civil society did not act as an exclusive provider of support but rather as a *complementary* support network to strong ties and neighbors.

To what extent could the different support networks offer sufficient support?

Moving on to our last hypothesis, we are interested in whether the different support networks could offer *sufficient* support. We expected civil society actors to be less likely than family, friends, and neighbors to fully meet individuals' needs for social support. Regressing the three support networks on our second dependent variable, 'needed more support,' confirms this idea (Figure 4; for the full regression tables, see Appendix 1 Table A1.4). Respondents who received support from civil

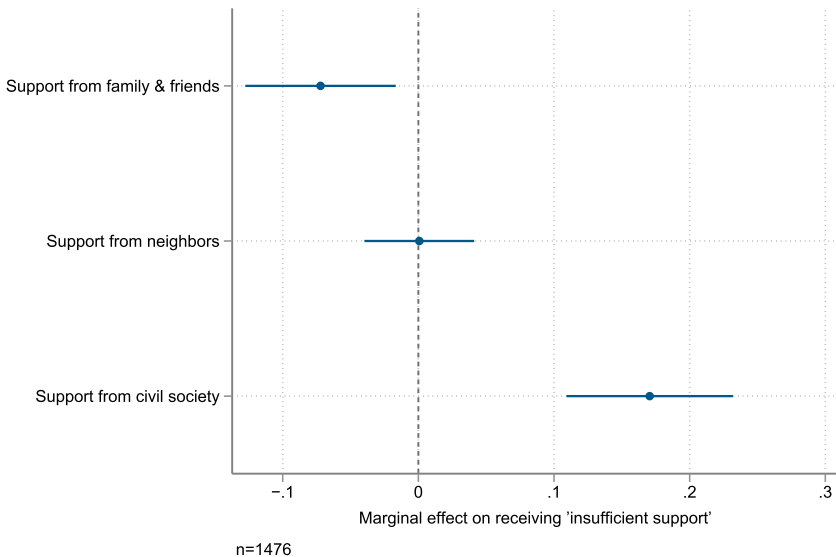


Figure 4. Marginal effects of receiving support from the different support networks on the probability of receiving insufficient support.

Note: Figure 4 presents marginal effects of receiving support from the different support networks on the probability of receiving insufficient support. Marginal effects are calculated on the basis of Model 1 in Table A1.4, Appendix 1. The different support networks are included as independent variables in the same model.

society actors are significantly more likely to report that they would have needed more support than they received. This effect is quite pronounced: Receiving support from civil society increases respondents' likelihood to report insufficient support by 17% ($p = 0.000$; 95% CI [.109, .232]). This finding also holds when examining support from strangers and organizations separately, which increase the likelihood of insufficient support by 11% and 12% respectively (See Appendix 1 Table 1.4 and Figure A1.6). In contrast, we even find a small and statistically significant *negative* effect when looking at the support received from family and friends, suggesting that they were more often able to offer sufficient social support ($\beta = -0.072$; $p = 0.011$; 95% CI [-.128, -.017]).

The findings appear to support hypothesis 4, suggesting that family, friends, and neighbors were more likely than civil society actors to offer *sufficient* social support during the early phase of the Covid-19 pandemic in Germany. The limited and rather complementary role of civil society is not as surprising given the dilemma of increasing demands for support coupled with increasing restrictions on routine procedures and the health risks associated with engagement for both volunteers and recipients of support. However, this finding merits some closer inspection. As argued earlier, it is quite likely that civil society actors specifically reached out to individuals who were in particular need. To illustrate this, we examine the distribution of pandemic-related burdens across the three exclusively defined support networks. Specifically, we take a look at people working remotely, experiencing a Covid-19 infection in their household, having children at home (either for caretaking or homeschooling), or having to care for another relative (care responsibility).

Figure 5 shows that respondents who experienced a pandemic burden (except home office) were most likely to receive support from all three networks (family and friends, neighbors, and *civil society actors*) and least likely to receive support from family and friends only.⁷ This is a very different picture from the distribution of support in the overall sample, where 41% received support from *family and friends only*, 26% received support from family, friends and *neighbors*, and 11% received support from *all three networks*.

This strongly suggests that individuals who received support from multiple support networks (including civil society actors) *were also*

⁷A similar picture arises when looking at types of support received (Appendix 1, Figure A1.7): those who received support from all three networks were also most likely to receive financial support and state aid.

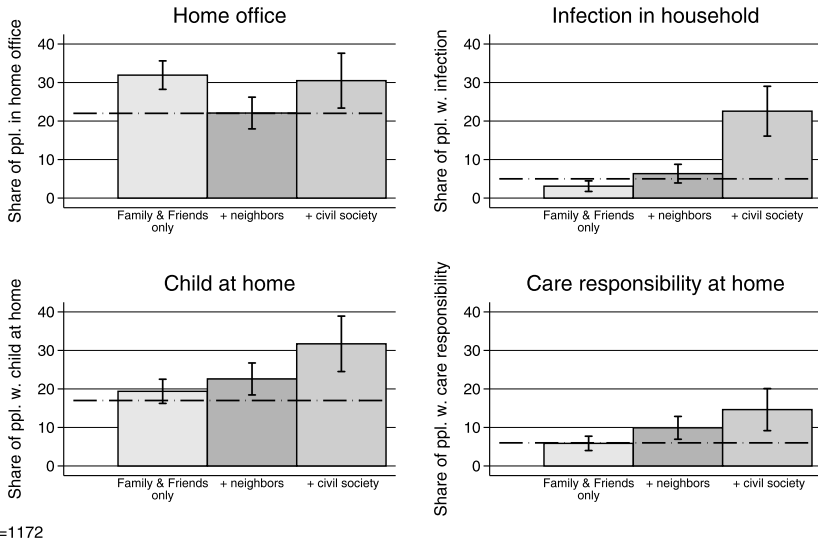


Figure 5. Share of people with pandemic-related burdens who received support from different support networks.

Note: Figure 5 displays different pandemic burdens by different support networks, which are defined mutually exclusively (1) Family and friends only, (2) Family, friends + neighbors, and (3) All three networks present (Family & friends, neighbors + civil society). The dotted horizontal lines represent the population average for each of the four pandemic burdens. Of those who received support in the overall sample, 41% received support from family & friends only, 26% received support from family, friends + neighbors, and 11% received support from all three groups (+ civil society).

most in need of support. Therefore, we would argue that the evidence for hypothesis 4 is more complex: It may very well be true that civil society actors could not offer sufficient support, also owing to the difficulties that organized and spontaneous civil society experienced during the pandemic in pursuing their regular activities. However, it is essential to note that for the vast majority of cases, they acted in concertation with other support networks (family, friends and neighbors) and were predominantly present in providing support to individuals in particular need of support.

Conclusion

In the present paper, we have taken up the scholarly debate on the demand and supply of social support during the coronavirus crisis with the intention of (a) adding a systematic test of how different elements of social capital (the size of one's support network, associational involvement, and social trust)

matter for receiving support from different groups and (b) putting special emphasis on civil society actors as a source of social support.

We set out assuming that while strong-tie networks should provide a primary layer of support for most people, civil society actors could take on either a complementary or a compensatory support role in this crisis. While we find that family and friends are indeed the most widespread source of social support, we find a substantial overlap with support provided by neighbors and civil society actors. This suggests that weaker social ties (i.e. neighbors) and civil society actors played *a complementary rather than a compensatory role* in this crisis.

Our findings on the different elements of social capital further support this idea: we show that being a member of an organization and having a larger support network are primarily relevant for receiving support from weaker ties (neighbors and civil society actors) but not so much for receiving support from family and friends. This result suggests that support from civil society actors depended more on personal networks than expected. Importantly, we found that different actors within civil society (strangers and organizations) were extremely similar in this regard. While this phenomenon may be due to pandemic-related contact restrictions, it becomes apparent that civil society was much less likely to reach individuals with smaller support networks or who are less well connected in civil society. This association became most visible when focusing on the respondents receiving support from all three support layers, i.e. family/friends, neighbors, and civil society actors.

Lastly, we show that respondents who received support from civil society actors were also the ones who would have needed *more* support. This is in line with research which has shown that both organized and spontaneous civil society had serious difficulties in mobilizing support in the pandemic, indicating a crisis of civil society itself. Yet, we also observe that civil society actors provided support mostly alongside other support networks, and particularly to people struggling with what we call pandemic-related burdens, thereby reaching out to households in particular need.

In sum, we can say that during the coronavirus crisis, a remarkable share of the population received sufficient social support from various networks. At the same time, we find that social capital (in terms of the size of one's support network, social trust, and organizational membership) was crucial for gaining access to social support in the first place. Especially when it comes to receiving support from weaker ties (neighbors) and civil society actors, networks and embeddedness in civil society make a

difference. This also suggests that civil society could not take on a compensatory support role for those lacking these connections. In combination with other studies that highlight the unequal effects of the pandemic on those who were already disadvantaged, we add the finding that the unequal impact of the crisis also runs along the lines of social capital, inequalities in connectedness, and the availability of reliable support networks.

To conclude, we wish to point out some avenues for further research. Since our data does not allow us to distinguish which network offered 'how much' support (i.e. which network was the primary support network), we believe that the respective qualitative role of different support networks in the pandemic merits further research, advancing our understanding of how different layers work together in the context of different crises. For example, it may very well be that while family and friends carried the most considerable support burden, civil society actors supported with more minor acts – or vice versa. We suggest that such fine-grained dynamics be studied in future with use of repeated panel data and qualitative interviews.

Overall, our results echo previous findings by Bertogg and Koos (2021, 2022) and Carlsen et al. (2020): we further corroborate the tendency that a more extensive network facilitates support and that stronger ties are more likely than other networks to provide *sufficient* support. However, we add to these findings in three ways: first, by showing that access to support from weaker ties, especially civil society actors, seems heavily dependent on individual-level social capital (especially a larger perceived support network and organizational membership). Second, by pointing to the strong interrelationship between the different types of support networks, which tend to work in a complementary way: weaker ties provide support to individuals who already receive support from stronger ties. Third, civil society held a complex position during the pandemic. Our results suggest that civil society acted in complementarity to other support networks and was present when households experienced particular burdens. Conversely, civil society largely failed to take on a compensatory role, i.e. it could not support those who lacked social ties and a primary support network of family, friends, or neighbors.

Acknowledgements

We would like to thank members of the SolZiv project, members of the Center for Civil Society Research at WZB and FU Berlin, Moritz Sommer, and four anonymous reviewers for their helpful comments and suggestions along the way.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The authors gratefully acknowledge funding by the Berlin University Alliance (Special Call 'Pandemic Research'). Gesine Hoeltmann and Swen Hutter also acknowledge funding by the Volkswagen Foundation (Lichtenberg Grant 93598). The authors report there are no competing interests to declare.

Notes on contributors

Gesine Höltmann is a doctoral researcher at Freie Universität Berlin and WZB Berlin Social Science Center.

Swen Hutter is Lichtenberg-Professor in Political Sociology at Freie Universität Berlin and Director of the Center for Civil Society Research, a joint initiative of WZB and Freie Universität Berlin.

Jule Specht is a Professor of Personality Psychology at Humboldt-Universität zu Berlin and Research Fellow at the German Institute for Economic Research (DIW Berlin).

ORCID

Gesine Höltmann  <http://orcid.org/0000-0003-2652-5385>

Swen Hutter  <http://orcid.org/0000-0002-1107-1213>

Jule Specht  <http://orcid.org/0000-0003-2840-697X>

References

- Bertogg, A. and Koos, S. (2021) 'Socio-economic position and local solidarity in times of crisis. The COVID-19 pandemic and the emergence of informal helping arrangements in Germany', *Research in Social Stratification and Mobility* 74: 100612. doi:10.1016/j.rssm.2021.100612.
- Bertogg, A. and Koos, S. (2022) 'Who received informal social support during the first COVID-19 lockdown in Germany, and who did not? The role of social networks, life course and pandemic-specific risks', *Social Indicators Research*, doi:10.1007/s11205-022-02890-0.
- Borbáth, E., Hunger, S., Hutter, S. and Oana, I. (2021) 'Civic and political engagement during the multifaceted COVID-19 crisis', *Swiss Political Science Review* 27: 311–324. doi:10.1111/spsr.12446.
- Carlsen, H.B., Toubøl, J. and Brincker, B. (2020) 'On solidarity and volunteering during the COVID-19 crisis in Denmark: the impact of social networks and

- social media groups on the distribution of support', *European Societies* 23: 122–140. doi:10.1080/14616696.2020.1818270.
- Einolf, C.J., Prouteau, L., Nezhina, T. and Ibrayeva, A. (2016) 'informal, unorganized Volunteering', in D.H. Smith, R.A. Stebbins and J. Grotz (eds.), *The Palgrave Handbook of Volunteering, Civic Participation, and Nonprofit Associations*, Houndmills: Palgrave Handbooks, pp. 223–241.
- Fingfeld-Connett, D. (2005) 'Clarification of social support', *Journal of Nursing Scholarship* 37: 4–9. doi:10.1111/j.1547-5069.2005.00004.x.
- Finlay, J., Meltzer, G., Cannon, M. and Kobayashi, L. (2022) 'Aging in place during a pandemic: neighborhood engagement and environments since the COVID-19 pandemic onset', *The Gerontologist* 62(4): 504–518. doi:10.1093/geront/gnab169.
- Granovetter, M.S. (1973) 'The strength of weak ties', *American Journal of Sociology* 78: 1360–1380. doi:10.1086/225469.
- Grasso, M., Klicperová-Baker, M., Koos, S., Kosyakova, Y., Petrillo, A. and Vlase, I. (2021) 'The impact of the coronavirus crisis on European societies. what have we learnt and where do we go from here? – introduction to the COVID volume', *European Societies* 23: 2–32. doi:10.1080/14616696.2020.1869283.
- Hawkins, R.L. and Maurer, K. (2010) 'Bonding, bridging and linking: how social capital operated in New Orleans following hurricane Katrina', *British Journal of Social Work* 40: 1777–1793. doi:10.1093/bjsw/bcp087.
- Heany, C.A. and Israel, B.A. (2008) 'social networks and social support', in k. Glanz, B. Rimer and K. Viswanath (eds.), *Health Behavior and Health Education: Theory, Research and Practice*, San Francisco: Jossey-Bass, pp. 189–210.
- Höltmann, G., Hutter, S. and Specht, J. (2023) 'Replication data for: how social capital matters for receiving social support: on the complementary role of civil society in the COVID-19 pandemic', *Harvard Dataverse*, doi:10.7910/DVN/HK2VM0.
- Hooghe, M. and Stolle, D. (eds) (2003) *Generating Social Capital: Civil Society and Institutions in Comparative Perspective*, 1st ed., New York: Palgrave Macmillan.
- House, J.S., Umberson, D. and Landis, K.R. (1988) 'Structures and processes of social support', *Annual Review of Sociology* 14: 293–318.
- Hutter, S., Teune, S., Daphi, P., Nikolas, A.-M., Rößler-Prokhorenko, C., Sommer, M., Steinhilper, E. and Zajak, S. (2021) Deutschlands Zivilgesellschaft in der Corona-Pandemie. Eine Befragung von Vereinen und Initiativen (No. 3/2021), ipb working paper series. ipb, Berlin.
- Karolson, K.B., Holm, A. and Breen, R. (2012) 'Comparing regression coefficients between same-sample nested models using logit and probit: a new method', *Sociological Methodology* 42: 286–313. doi:10.1177/0081175012444861.
- Kavada, A. (2020) Creating a hyperlocal infrastructure of care: COVID-19 Mutual Aid Groups. Open Movements. URL <https://www.opendemocracy.net/en/openmovements/creating-hyperlocal-infrastructure-care-covid-19-mutual-aid-groups/>.
- Kövér, Á. (2021) 'The relationship between government and civil society in the era of COVID-19', *Nonprofit Policy Forum* 12(1): 1–24. doi:10.1515/npf-2021-0007.
- Krimmer, H., Bork, M., Markowski, L. and Gorke, J. (2020) Lokal kreativ, finanziell unter Druck, digital herausgefordert. Die Lage des freiwilligen Engagements in der ersten Phase der Corona-Krise.

- Portes, A. (1998) 'Social capital: its origins and applications in modern sociology', *Annual Review of Sociology* 24: 1–24.
- Putnam, R.D. (2000) 'Bowling alone: America's declining social capital: originally published in journal of democracy 6 (1), 1995', in L. Crothers and C. Lockhart (eds.), *Culture and Politics*, New York: Palgrave Macmillan US, pp. 223–234. doi:10.1007/978-1-349-62965-7_12
- Quarantelli, E.L. (1983) Emergent Behavior at the Emergency Time Periods of Disaster. Disaster Research Center Ohio State University 48.
- Rodríguez, H., Trainor, J. and Quarantelli, E.L. (2006) 'Rising to the challenges of a catastrophe: the emergent and prosocial behavior following hurricane Katrina', *The ANNALS of the American Academy of Political and Social Science* 604: 82–101. doi:10.1177/0002716205284677.
- Schiffauer, W., Eilert, A. and Rudloff, M. (2017). *So Schaffen wir das - Eine Zivilgesellschaft im Aufbruch: 90 Wegweisende Projekte mit Geflüchteten, Kultur und Soziale Praxis*, Transcript, Bielefeld.
- Schrader, M., Roth, J. and Strachwitz, R.G. (2020) Ein Rettungsschirm für die Zivilgesellschaft? Eine explorative Studie zu Potenzialen, Bedarfen und Angeboten in und nach der COVID-19 Krise (No. Opuscula 144). Maecenata Institut für Philanthropie und Zivilgesellschaft, Berlin.
- Simiti, M. (2017) 'Civil society and the economy: Greek civil society during the economic crisis', *Journal of Civil Society* 13: 357–373. doi:10.1080/17448689.2017.1355033.
- van den Berg, C., Grande, E. and Hutter, S. (2020) 'Was wird aus dem harten Kern? Auswirkungen der Corona-krise auf das Engagement für Geflüchtete', *Voluntaris* 8: 226–242. doi:10.5771/2196-3886-2020-2-226.
- Wang, L. and Ganapati, N.E. (2018) 'Disasters and social capital: exploring the impact of hurricane katrina on gulf coast Counties', *Social Science Quarterly* 99: 296–312. doi:10.1111/ssqu.12392.
- Wellman, B. and Wortley, S. (1990) 'Different strokes from different folks: community ties and social support', *American Journal of Sociology* 96: 558–588. doi:10.1086/229572.
- Worschech, S. (2021) 'Civil society and civic activism in the pandemic: the case of Germany', *The International Journal of Social Quality* 11(1–2): 176–199. <https://www.berghahnjournals.com/view/journals/ijsq/11/1-2/ijsq11010211.xml>.