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The impact of social networks and social media groups on the distribution of support

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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

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Abstract: This paper unfolds how informal civil society quickly mobilised citizen-to-citizen support when government and non-government organisations locked down during the COVID-19 pandemic. The paper focuses on two elements of the mobilisation: the role of social networks and social media groups. It reveals that the vast majority of this support was distributed through existing social networks and, therefore, not available to those lacking social connections. However, we also find that social media groups played an important role in the mobilisation, that support organised on social media does not diverge significantly in commitment or kind from support organised in other settings. The paper concludes by discussing the potential of social media to mitigate the impact of social networks on the distribution of support, pointing to some of the potential barriers to social media groups' successful facilitation of support to those without a social network.

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Introduction

As an immediate reaction to the pandemic, many states issued far-reaching lockdown measures and closed their borders. Both government and non-government welfare providers had to downscale or completely put on hold social and health support and services in order to contribute to the prevention of the spread of the virus. Consequently, a large group of citizens did not receive the support they depended on. The present paper explores how informal civil society quickly mobilised to provide support and fill the void that emerged when state, market, and formal civil society welfare providers locked down. This includes satisfying existing support needs as well as catering to new needs that arose during the lockdown such as, among other things, support in relation to homeschooling, shopping, transport, and comfort for people who experienced mental stress while being in isolation (Andersen and Kirkegaard, 2020; Christensen et al., 2020; Toubøl and Carlsen, 2020). In so doing, the paper offers insights into the organisation and distribution of informally organised support during the COVID-19 pandemic and contributes to the growing literature that engages with this topic by offering a perspective from Denmark to existing research into the German (Koos and Bertogg, 2020) and Chinese cases (Woodman, 2020).

Throughout the paper, we distinguish between, on the one hand, support provided by state and formal civil society actors, including formally organised voluntary work (Red Cross etc.) and, on the other hand, support and help organised in informal civil society. In doing so, we build upon existing research on volunteering that stresses the importance of mapping both informal and formal help (e.g., Boje, 2017; Grubb and Henriksen, 2019). In this context, the COVID-19 pandemic may be considered a paradigmatic case that offers unique insights into the dynamics between (the distribution of) welfare provisions by formal state and non-state actors, on the one hand, and (the distribution of) welfare support offered by informal voluntary civil society, on the other hand. Thereby, the paper contributes to the scholarly debate about right-based access to welfare goods and services (von Essen, Frederiksen, and Loga, 2019; Kirkegaard and Andersen, 2018) versus a welfare system that relies on volunteers for the provision of goods and services (Henriksen, Smith, and Zimmer, 2015; Sivesind and Saglie, 2017). This includes considerations about what role governments may attribute to informally organised civil society actors. This is a particularly pressing issue for generous welfare states like the Scandinavian ones that face the challenge of dealing with the economic and social consequences of COVID-19.

In this paper, we focus on two types of informal society and their role in the mobilisation of support in response to the COVID-19 crisis: social networks and social media groups. Research on social support has found that social networks act as support networks and are vital in facilitating support for those in need (House et al. 1988; Smith and Christakis 2008). Barry Wellman and Scot Wortley (1990) argue that social networks supply stable and adaptive support, especially important in crises like the COVID pandemic where needs of citizens are hard to predict and require continuous attention and adaptation (Marston et al. 2020). Research has also found that following Mark S. Granovetter's distinction between strong and weak ties (1973), the type of tie is important in determining whether and which kind of support is provided (Wellman & Wortley 1990; Smith and Christakis 2008). In a situation where state and formal NGO welfare provision is closed down, we

would expect that social networks play a vital role in facilitating help, hence leaving those with limited or no social networks without the help they need. This raises the question if other parts of informal civil society share the capacity of informal social networks to act quickly and with flexibility in response to a crisis. Some scholars have argued that social media groups are effective in organising social support during emergencies (Albris 2018). Yet, others have argued that social media participation is often characterised by being a cheap and insincere form of activism (Lewis el al. 2014) referred to as 'slacktivism' (Morozov, 2011) or 'keyboard activism' (Laer and Aelst, 2010). To us, this is an open question that our results allow us to address. Initially, we provide an overview of our methods and design. We then unfold our empirical findings. First, we map the mobilisation, repertoire, and organisation of informally organised volunteering, engaging with the importance of social networks in determining whether one gets the help needed. Second, we turn to social media as a platform for organising support, exploring the amount of help coming from social media groups, the commitment from the average helper, and the type of help social media groups facilitate. Our conclusion presents our main findings and discusses how they contribute to the debate about voluntarism, welfare, and social media.

Methods and Design

This paper reports on data drawn from a comprehensive survey on solidarity, volunteering, and support during the COVID-19 crisis conducted between 3 April and 11 May 2020 in Denmark. The survey section of Statistics Denmark (DST Survey) collected the responses from a random sample of Danes in the age range of 16–99 years old. The online questionnaire was distributed electronically to the inbox of e-Boks, which the vast majority of the population have and use to communicate with public authorities and institutions as well as private companies such as banks and insurance companies. The small group that has opted out of e-Boks received an invitation by post. The invitations were followed by telephone reminders offering the opportunity of being interviewed by phone.

Out of a total sample of 7,964 individuals, 42.6 per cent (3,389 respondents) completed the survey. The response rate compares to the general level of response rates in these types of studies (e.g. Toubøl and Frederiksen, 2019). When testing for representativity, our data set displays the expected patterns of under-representation of ethnic minorities and over-representation of the elderly, people with higher education, and people with high incomes. To account for this, we weighted the reported results in terms of gender, age, and occupation.

To investigate the question of the consequences of network embeddedness for the distribution of help, we have calculated three indices. The first two indices measure *strong* and *weak network ties,* respectively. They were based on five variables measuring how often the respondents met with different categories of relations on a scale from 0-4 where 0 reflects not having any relations with the given class and 4 means the respondents report they meet on a weekly basis. Strong ties include relations with 1) family outside the household and 2) friends. Weak ties include relations to 3) colleagues outside the workplace, 4) in religious communities, and 5) from clubs and voluntary associations. The indices were calculated as the normalised average score across the

included variables (Tables A1–A3 in the appendix report the survey question and the respondents' distributions as well as the resulting indices). In the same manner, we measure the *need for help* as a normalised index of the expressions of lack of seven individually measured kinds of support on a scale ranging 0–2 where zero is the value of respondents whose need for help is fully satisfied and two is the value of respondents expressing that they need help but do not receive any (see Tables A4 and A5 in the appendix for more details). In the analysis reported below, we estimate their relationship in an OLS regression model. To exclude potential confounders, we control for the sociodemographic factors of occupation, income, educational attainment, urbanisation, gender, age, family type, and whether the respondent has children (for the full list of model estimates, see Table A6 in the appendix).

We also analysed data collected from Facebook. Employing an inclusive search strategy used jointly with researcher validation, we carried out what comes close to a complete and comprehensive mapping of all Danish Facebook groups that offer support specifically related to the COVID-19 pandemic. Those groups that have COVID-19-related support as their sole purpose constitute an ethnographic field in which we have carried out online fieldwork with the acceptance of the administrators who were informed of our purpose as researchers upon our applying for membership of the groups. Also, we collected qualitative interviews with group administrators and participants. The ethnographic and qualitative part of the study allowed us to enquire into the issues raised in the survey. Furthermore, they offered comparative insights into support offered via social media and support offered through other means.

Danish informal civil society's mobilisation, repertoire of help, and organisation

In response to the COVID-19 pandemic lockdown, formal state, market, and civil society organisations had to downscale and, in some cases, completely put on hold their provisions of welfare goods and services (Andersen and Kirkegaard 2020; Toubøl and Carlsen 2020). Figure 1 shows the online mobilisation of COVID-19 support groups which indicate that informal civil society mobilised rapidly to offer support as an alternative to the suspended formally organised welfare services. On 11 March, when the lockdown was announced, 56 new support groups were established on Facebook. Within three weeks, 247 support groups had emerged, and membership added up to hundreds of thousands.

These numbers pertain only to the online mobilisation, which is by no means the largest organisational setting of support. Previous research indicates that approximately half of the population regularly provides help on an informal basis (Boje, 2017). Hence, the degree of informally (as well as formally) organised support was quite extensive before the COVID-19 pandemic. According to our survey data, roughly 53 per cent of the population provided support. Given that COVID-19-specific needs for support constitute new additional needs, the total sum of support provided is likely to have increased quite substantially during the crisis. In support of that, results from a German survey study by Sebastian Koos and Ariane Bertogg (2020) suggest that not only has the total sum of support activities increased but also the number of helpers. They find that around a quarter of the COVID-19 helpers are newcomers who did not provide support before the

crisis (Koos and Bertogg 2020:3). It appears the COVID-19 lockdown instigated a substantial release of additional support capacity.

Figure 1. *The mobilisation of COVID-19 support groups on Facebook*
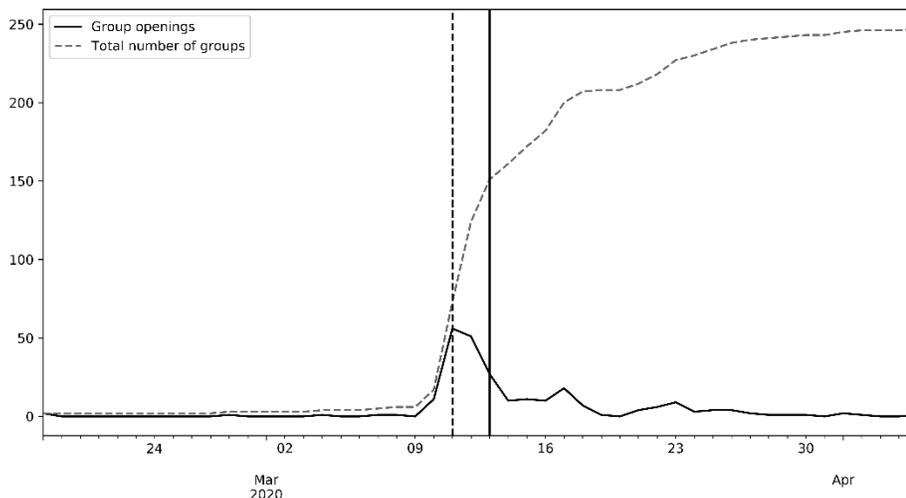

Note: Dotted drop line is the date the lockdown was announced in Denmark (11 March 2020). Solid drop line is the day the lockdown took effect.

The repertoire of the support offered varied greatly. The provision of information was the most dominant type of support with c. 28 per cent of the population participating. We detected a significant stream of information about the virus itself, on behavioural aspects, for instance, about what precautions to take to avoid infection, on the lockdown and gradual reopening of society, economic aid packages, and more. Also, one in five provided help and assistance to individuals and groups who went into isolation during the COVID-19 crisis. Finally, one in 10 provided economic or other forms of material support, supported families or individuals who suffered during isolation, or assisted families with children who needed homeschooling. In total, the repertoire of types of support cover 1) information sharing; 2) caretaking; 3) practical, material, and economic support; and 4) donations.

      Moving on to the question of how support was organised, Figure 2 shows that c. 66 per cent of the volunteers provided support to individuals in their network. Approximately 10 per cent offered support via digital networks on social media, almost exclusively on Facebook. Finally, nine per cent individually organised help to someone outside their network. In comparison, 14 per cent organised through formal voluntary civil society organisations. This is to be expected given that large parts of formal civil society downscaled their activities significantly during the COVID-19 lockdown. Our research unfolds the existence of strong informal social support networks that command a significant amount of resources. This is in line with previous research conducted in

the area of social capital and trust in Denmark (Boje, 2017). Social networks' significant conse-
quences for the distribution of support in the COVID-19 crisis is in line with the existing literature
(e.g., Lahusen and Grasso, 2018; Boje 2017) and draws attention to the fact that decoupling from
social networks may have detrimental consequences (Smith and Christakis, 2008). This is partic-
ularly pronounced in cases in which formal state, market, and civil society welfare provisions are
limited or, in the worst of cases, almost completely absent, as in the case of the COVID-19 lock-
down. Our research shows that 27 per cent of the respondents received support during the crisis.
In comparison, 14 per cent of the respondents replied that they had not received the support they
needed. A crucial question is whether this unfulfilled need for help can be ascribed to these re-
spondents not being embedded in social support networks and having little if any access to help
and support.

Figure 2. The distribution of volunteers by organisational setting
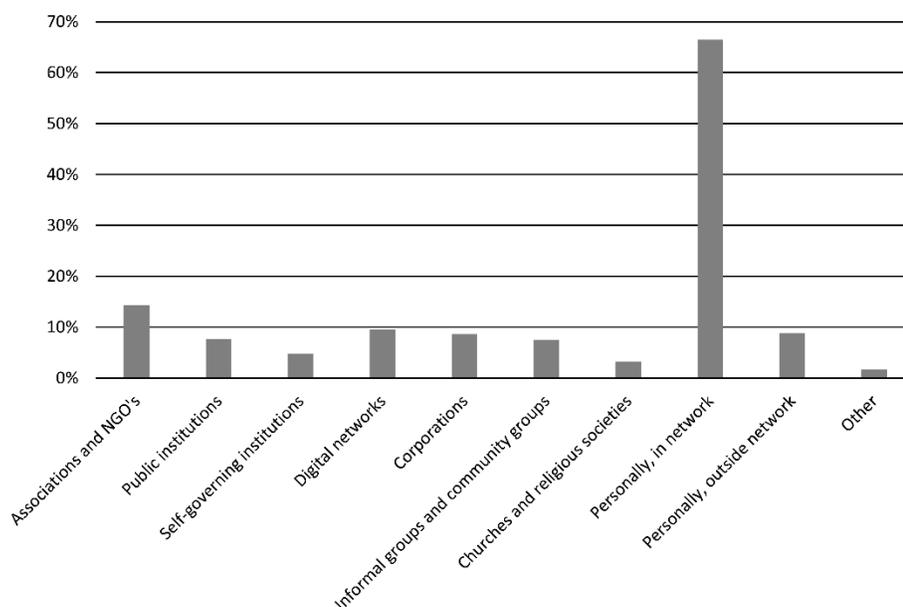
Notes: n=1,753. Population is volunteers in the COVID-19 crisis. The diagram sums to more than 100 per
cent because an individual can provide support in more settings. Means are weighted by gender, age, and
socioeconomic status.

To investigate this question, we estimate the relationships between level of network embed-
dedness, distinguishing between weak and strong ties, and the respondents self-reported level of
need for help while controlling for central sociodemographic factors as explained in the Methods
section (Table A6 in the appendix reports the estimates). Figure 3 shows a local smooth regression
of the estimated focal variable relationships. It suggests two things: First, network matters, but not
all network connections are equally important. The almost flat prediction line of weak ties reflects

that the estimated relationship is insignificant. In other words, the presence or absence of weak ties do not influence the degree to which the respondent reports not receiving sufficient help. Secondly, the index of strong ties is a significant predictor of this, indicating that having strong ties to family and friends is related to whether one receives the help needed in a situation like the Covid-19 lockdown.

Figure 3. *The relation between social network embeddedness and self-reported unsatisfied need of support*
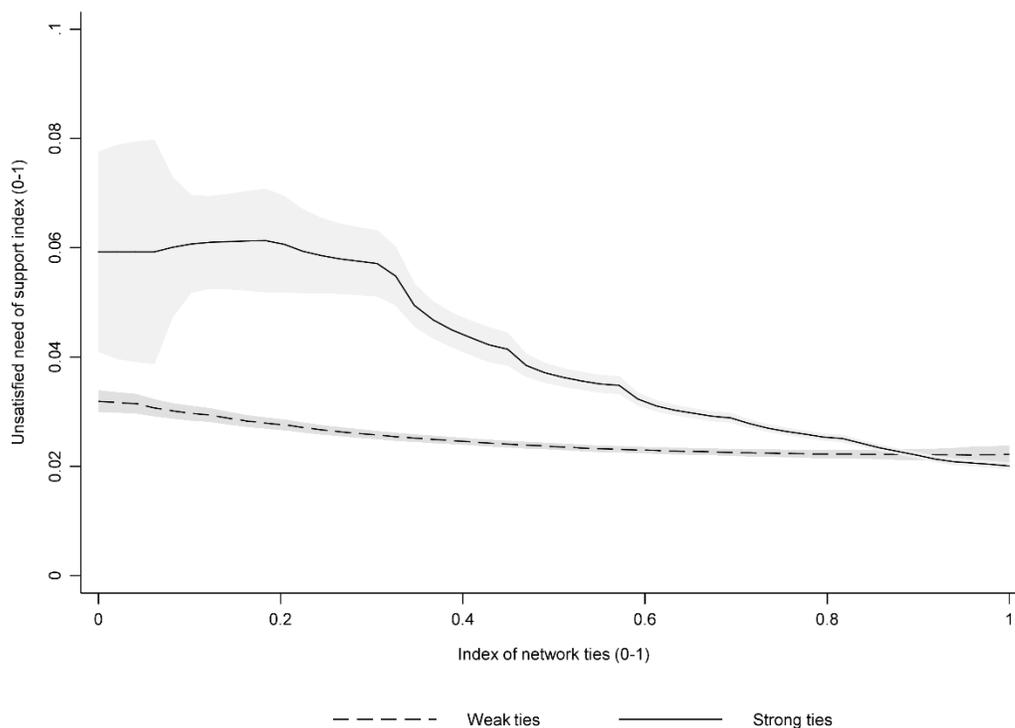
Notes. n=3,297. Population is the Danish population aged 16–99. Local smooth regression of bivariate relationship between social network embeddedness index and self-reported unsatisfied need of support index. Shadow is 95 per cent CI. For details of the model and the distribution of the indices and the included variables, consult the appendix.

In sum, our findings indicate that, during the COVID-19 crisis, a group of citizens did not receive the support that they felt they needed. This is very likely the case because the group depended on the support offered by organisations that went into lockdown during the COVID-19 pandemic. Lacking integration in informal social support networks, this group of individuals had few if any places to turn to for help. In relation to this particular group, our research suggests that the welfare provisions, health services, and social support usually provided by formal state, market, and civil

society actors is not immediately replaceable by informally organised social support networks because not everyone is connected and has access.

## Social media groups amount and type of social support

The COVID-19 crisis revealed an innovation in informal civil society providing an organisational setting where access to support does not depend on a personal network, namely social media support communities. We offer two important insights into the role of social media as an organisational setting for support. First, our findings show that social media such as Facebook played a non-trivial role in the mobilisation of informally organised support during the COVID-19 crisis. Figure 2 revealed that 10 per cent of those who offered support did so via social media, rendering it the third-largest organisational setting. In normal times, we expect 2–5 per cent of volunteers in Scandinavia to use social media (Eimhjellen 2019. From this perspective, 10 per cent is a relatively high share. This underlines the point that social media constitute a useful mobilisation technology in times of emergency and crisis (Carlsen, Toubøl and Ralund, 2020; Carlsen, Ralund and Toubøl, 2020; Birkbak, 2012; Albris, 2018).

Organised social media support gains further significance when considered in relation to our second finding, that is, support offered via social media is similar in commitment and kind to the support offered off-line. The data generated in the survey show that the average volunteer on social media provided 2.1 forms of support. In comparison, the average volunteer who used other organisational settings for volunteering provided 1.9 forms of support. Of course, not all forms of support carry the same costs. For instance, it is relatively less costly to share information online than going shopping for a person in isolation. Figure 4 allows us to compare the profile of support activities organised in social media networks with the weighted average of support activities across other organisational settings. Because the respondents can be active in more than one organisational setting, which reflects the blurred boundaries between the various organisational settings of civil society, our data does not allow us to link the individual activity to a specific organisational setting, and the same respondent may be counted in both data series. This implies that the figure should be interpreted with caution. Still, it indicates that, overall, there are no major discrepancies between the support organised on social media and in the other organisational settings. It is important to point out though that statistical testing reveals that information sharing and material/economic support are significantly more frequently in the social media networks, whereas help to people in isolation is more pronounced in the other organisational settings. This might indicate that social media is well suited for facilitating simple exchanges of help such as information sharing or economic help and less so for help requiring a higher degree of commitment to relationships such as help to isolated persons.

These findings bear some similarities to Ivar Eimhjellen's recent study (2019) that found information sharing to be the most common activity online. However, the fact that in most regards the repertoire of online volunteers does not seem to differ significantly from that of other organisational settings suggests that online volunteering—at least during times of crisis—can facilitate a

much more varied set of activities. This is in line with findings on mobilisation of the Danish refugee solidarity movement in 2015 (Gundelach and Toubøl, 2019; Toubøl 2019).

Figure 4. *Distribution of COVID-19 related support by type reported for social media networks and in total across all other forms of organising among volunteers*
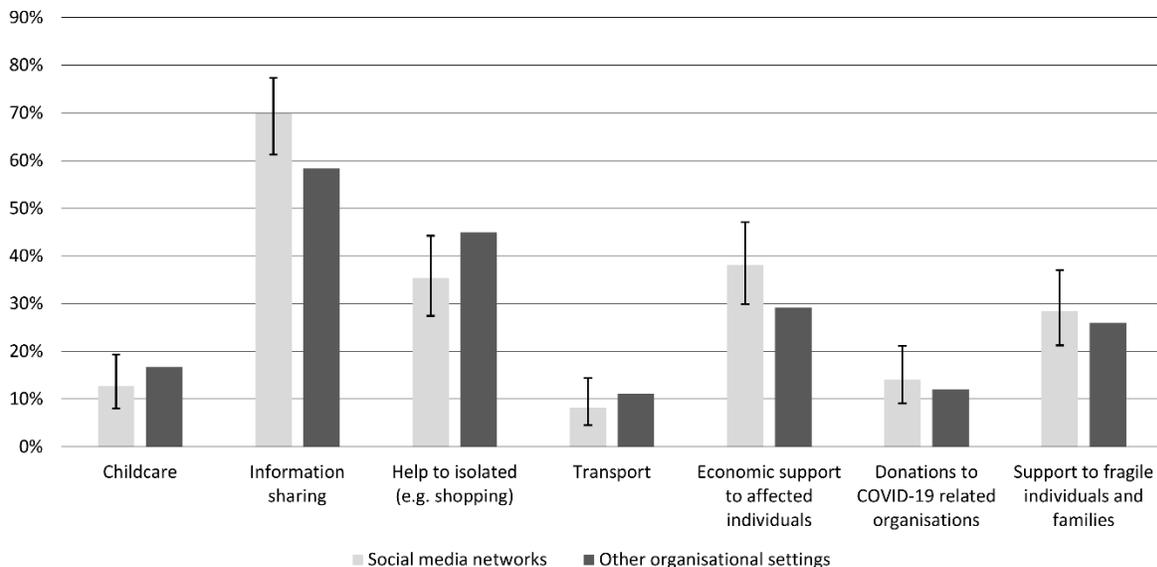
Notes: n=1,753. The population is volunteers. The total sum of each series is higher than 100 per cent because a respondent may have carried out more than one type of help and, therefore, may be observed multiple times.

While these results demonstrate that social support facilitated through digital networks such as social media groups is non-trivial, they do not clearly establish that social-media-organised support works as a bridge facilitating help to those without a network. The affordances of social media, especially Facebook groups, clearly allow citizens to join a group quickly and post a request for help. Furthermore, most of the 247 Facebook help groups that we found had the goal of helping all those in need and not only family and friends. They all had the intention of matching those who wanted to help with those in need of help, thereby overcoming the constraints of prior social networks. This interpretation receives further support across the 12 interviews conducted so far with administrators. For instance, one of the administrators explained the purpose of the group as follows.

> Those people that the group has supported have typically been people with chronic diseases, because often they do not have extensive family and friend networks that they can rely upon. Actually, the group was meant to target all vulnerable persons, no

> matter whether they were socially strong or weak. Really, it does not matter. As long as they are in need of help.

The above quote represents a pattern in the interviews indicating that the support groups that emerged on social media, most notably Facebook, sought to bypass the draw of social networks and offer support to those with only few or no social contacts. Yet, despite these organisational intentions and technological affordances, there can be multiple challenges that make it hard to attract, locate, and help vulnerable and socially isolated people because this part of the population tends to have low generalised trust (Frederiksen and Toubøl 2019). We would expect generalised trust to be important for seeking help in a quasi-public forum such as Facebook group with many thousands of members.

Conclusion

In line with prior research, our results point to the importance of social networks in providing social support (House et al., 1988; Wellman and Wortley, 1990; Smith and Christakis, 2008), especially in crisis situations like the COVID-19 pandemic. Our data indicate that social networks under the pandemic are effective, attentive, and adaptive suppliers of help to the evolving needs of vulnerable citizens. Importantly, we found that not all ties matter equally. Citizens who lack strong ties are most likely to have an unsatisfied need for help.

To investigate alternative ways of facilitating help that are fast and adaptive, like social networks, but differ from these networks by not leaving behind those without strong ties, we turned to social support organised in social media groups. Here we find evidence that goes against the slacktivism theory of digital participation (Morozov, 2011; Laer and Aelst, 2010). Our data indicate that, in total amount as well as kind of social support, social media facilitated support played a non-trivial role in Danish civil society's response to the COVID-19 crisis, and the level of social media facilitated activity was notably higher than what has been observed in non-crisis times (Eimhjellen 2019). One possible explanation for this divergence is that social media groups are used effectively primarily in crises or emergencies where citizens feel an urge to respond quickly and anticipate too many bureaucratic obstacles in joining established NGO's.

Our research shows that it was clearly the intention of most social media groups to facilitate help to those without strong support networks. Despite these organisational intentions and the technological affordance, there can be several psychological, organisational, and social barriers that prevent the vulnerable and isolated persons from seeking help in a social media forum: fear of stigmatisation, lack of trust, excluding codes of conduct, perceived (il)legitimacy of support need. Further research is needed into the barriers and enablers of social media social support.

Our findings give rise to the question of whether the changes that we have witnessed during the COVID-19 crisis are contingent upon and limited to the crisis or if do they extend beyond it. The COVID-19 pandemic has led to an increased awareness of the substantial capacity for support in informal civil society as well as the role of social media therein. This awareness is not confined to civil society actors but also extends to state actors. They are likely to take a pronounced interest

in these informally organised ways of providing support in a period where they are under pressure to respond sensibly to the economic and societal consequences of the COVID-19 crisis. However, it also gives rise to caution. Our research shows clearly that the bulk of informally organised support flows through existing social networks and, therefore, is not available to the unconnected. It is thus likely that this particular group of citizens will continue to depend upon welfare provisions from formal state, market, and civil society organisations in the years to come.

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Appendix

The tables below report background information for the variables and regression model of the relationship between individual level of weak and strong network ties and the level of unsatisfied needs for support during the COVID-19 crisis, depicted in Figure 3. Tables A1-A3 concern the survey question formulation, the distribution of the responses and the distribution of the indices of network ties. Tables A4-A5 concern the survey question formulation, the distribution of the responses, and the index the respondents' perception of whether they received the support they needed. Finally, Table A6 reports the estimates of the OLS regression model of the relationship between the index of unsatisfied support needs as the dependent variable and the indices of weak and strong network ties as the focal independent variables.

Table A1: Survey questions and distribution of valid responses to the survey item measuring strong and weak ties

Question: I am going to ask how often you do certain things. For each activity, would you say you do them every week or nearly every week, once or twice a month, only a few times a year, or not at all?

| | Strong ties | | | | Weak ties | | | | | |
| | Family outside your household | | Friends | | Colleagues from work | | People from the church, mosque, or synagogue | | People in clubs and voluntary associations | |
Response set	n	%	n	%	n	%	n	%	n	%
0. I have none/not a member	17	0	15	0	563	16	732	21	348	10
1. Not at all	50	1	34	1	468	14	1,407	41	472	14
2. A few times a year	379	11	320	9	1,413	41	1,049	30	621	18
3. Once or twice a month	1,253	36	1,306	38	719	21	145	4	741	21
4. Every week	1,764	51	1,787	52	292	8	125	4	1,277	37
Total	3,463	100	3,462	100	3,455	100	3,458	100	3,459	100

Note: This survey item is a slightly modified version of item 6 in the European Value Study 1999 edition questionnaire. The question stem, sub-questions, and response set formulations were translated from Danish.

Table A2. Normalised index of strong ties

Value	n	%	Cum. %
0.000	6	0	0
0.250	26	1	1
0.375	25	1	2
0.500	109	3	5
0.625	303	9	14
0.750	800	23	37
0.875	1,060	31	67
1.000	1,133	33	100
Total	3,462	100	

Table A3. Normalised index of weak ties

Value	n	%	Cum. %
0.000	105	3	3
0.083	44	1	4
0.167	137	4	8
0.250	267	8	16
0.333	403	12	28
0.417	463	13	41
0.500	600	17	59
0.583	577	17	75
0.667	502	15	90
0.750	224	6	96
0.833	94	3	99
0.917	21	1	100
1.000	14	0	100
Total	3,451	100	

Table A4. Survey questions and distribution of valid responses to the survey items measuring unsatisfied need for help and support

Question: Do you receive, or do you need the following forms of help in relation to the outbreak of the new coronavirus (COVID-19)?

Response set	Childcare		Information about the new coronavirus (COVID-19)		Help with shopping and similar tasks		Personal transportation (e.g., passenger car)		Economic support (e.g., money, stuff, donations) due to the coronavirus (COVID-19) outbreak		Support to make my or my family's everyday life function during the corona crisis.		Other help? (Please describe in the text boxes below)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0. Yes, I receive help that covers my needs	182	5	627	17	251	7	163	4	109	3	148	4	27	1
1. Yes, I receive help, but it is not sufficient	23	1	73	2	13	0	15	0	43	1	31	1	14	0
2. No, I do not receive help, but I need it	100	3	72	2	37	1	48	1	163	4	119	3	56	2
0. No, I do not receive help and I do not need it	3,353	92	2,877	79	3,347	92	3,409	94	3,315	91	3,324	92	3,506	97
Total	3,658	100	3,649	100	3,648	100	3,635	100	3,630	100	3,622	100	3,603	100

Note: The question stem, its sub-questions, and response set formulations were translated from Danish.

Table A5. Normalised index of unsatisfied needs for support

Value	n	%	Cum. %
0.000	3,076	87	87
0.071	85	2	89
0.143	233	7	96
0.214	20	1	97
0.286	63	2	98
0.357	8	0	99
0.429	23	1	99
0.500	9	0	99
0.571	9	0	100
0.643	2	0	100
0.714	1	0	100
0.786	1	0	100
0.857	5	0	100
1.000	2	0	100
Total	3,537	100	

Table A6. OLS regression model of index of unsatisfied needs for help (0-1)

Covariate	Coefficient	S.E.	P-value
Index of weak network ties (0-1)	0.005	0.008	0.558
Index of strong network ties (0-1)	-0.043	0.010	0.000
Occupation			
Employed		Reference	
Unemployed	0.031	0.006	0.000
Retired	-0.007	0.006	0.212
Student	-0.013	0.007	0.062
Other	-0.003	0.007	0.715
Personal income (thousands)			
< DKK 100 ($\approx$ € 13)		Reference	
DKK 100-150 ($\approx$ € 13-20)	0.000	0.007	0.981
DKK 150-200 ($\approx$ € 20-27)	0.003	0.007	0.657
DKK 200-300 ($\approx$ € 27-40)	-0.013	0.006	0.042
> DKK 300 ($\approx$ € 40)	-0.015	0.007	0.026
Educational attainment			
Elementary school		Reference	
2 KVU, gymnasial og erhv..	-0.002	0.004	0.641
3 MVU	-0.003	0.005	0.534
4 LVU/Ph.D.	0.004	0.006	0.483
Urbanisation			
City		Reference	
Suburbs	0.003	0.005	0.531
Town	-0.001	0.004	0.828
Village	-0.007	0.005	0.174
Countryside	-0.003	0.006	0.672
Gender			
Male		Reference	
Female	-0.001	0.003	0.835
Age (7 categories)	-0.003	0.001	0.035
Family type			
Singe without children		Reference	
single with children	0.011	0.006	0.084
Couple without children	-0.003	0.005	0.571
Couple with children	0.001	0.004	0.871
Other	0.002	0.007	0.812
Children			
No		Reference	
Yes	-0.001	0.005	0.887
Constant	0.084	0.012	0.000

Note. Coefficients are unstandardised. n=3,217. df=24. R^2= 0.037.