ARTICLE

Who helps and why? A longitudinal exploration of volunteer role identity, between-group closeness, and community identification as predictors of coordinated helping during the COVID-19 pandemic

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Abstract

Mutual aid groups have allowed community members to respond collectively to the COVID-19 pandemic, providing essential support to the vulnerable. While research has begun to explore the benefits of participating in these groups, there is a lack of work investigating who is likely to engage in this form of aid-giving, although early accounts suggest that existing volunteers have played a significant part in the mutual aid phenomena. Taking a social identity approach, the present study sought to identify what social psychological processes predict this continued engagement by exploring predictors of coordinated COVID-19 aid-giving for pre-existing volunteers. A two-wave longitudinal online survey study ($N = 214$) revealed that volunteer role identity among existing volunteers at T1 (pre-pandemic) was positively associated with volunteer-beneficiary between-group closeness at T1, which in turn was positively associated with community identification at T1. This in turn positively predicted coordinated COVID-19 aid-giving at T2 (3 months later). This paper therefore reveals the intra- and intergroup predictors of pandemic-related coordinated

aid-giving in pre-existing volunteers. Implications for voluntary organisations and emergency voluntary aid provision are discussed.

KEYWORDS
community identification, COVID-19 mutual aid, helping, prosocial behaviour, social cure, volunteering

INTRODUCTION

The COVID-19 pandemic has presented huge challenges to communities across the globe. While most people have experienced significant changes to their lives, it has tended to be the most physically and psychologically vulnerable who have been particularly affected. For instance, the elderly and those with chronic or severe illnesses have often been forced to shield themselves within their homes, making it difficult (sometimes impossible) for them to obtain food and medical supplies without help (UK Government, 2021). In addition, those facing economic hardship caused by pandemic-related job loss, furlough, or reduction in working hours have often struggled to meet the basic needs of themselves and their families (Social Metrics Commission, 2020). The psychological impact of the pandemic has also been most sharply felt by vulnerable individuals, such as those with lower incomes, those with pre-existing mental illnesses, and those with limited opportunity for social interaction (Asmundson et al., 2020; Chatterjee et al., 2020; McQuaid et al., 2021).

Thus, as the pandemic took hold in Spring 2020, communities became increasingly aware of the need to support their members, especially those who were deemed to be more vulnerable. One of the main ways in which communities responded to this need was through the creation of COVID-19 mutual aid groups (e.g., Domínguez et al., 2020). These voluntary groups involve members working together based on principles of solidarity for the good of their communities through providing services such as food and medicine delivery, befriending, and information sharing (Covid-19 Mutual Aid UK, 2021). Thousands of these groups were created and mobilised during 2020 in the UK alone, leading to millions of vulnerable individuals receiving much-needed support (Tiratelli & Kaye, 2020). The critical role mutual aid groups have played in reducing the impact of COVID-19 has been recognised by both national and local governments, with 95% of UK council leaders and chief executives describing them as being either 'significant' or 'very significant' to their COVID-19 response (New Local, 2020). These mutual aid phenomena have not gone unnoticed by psychologists, and several studies have begun to explore the experiences and outcomes of participation (e.g., Bowe et al., 2021; Mao et al., 2020). Given their social significance (and the ongoing adverse effects of the pandemic on communities throughout the world), it is vital that the psychological processes guiding these continued voluntary collective behaviours are fully understood, so as to both encourage continuing participation and to appropriately support the sustainability of this vital mutual aid movement (Mao et al., 2020). To help address this, the current study synthesises insights from the study of volunteerism with recent social psychological analyses of community volunteering to identify the psychological processes, which predict the giving of coordinated COVID-19 aid in pre-existing volunteers (a population identified as being one of the greatest contributors to COVID-19 coordinated aid-giving; Tiratelli & Kaye, 2020). In doing so, we draw upon the well-established relationships between volunteering behaviour and the development of a volunteer role identity to explore whether strength of identification as a volunteer before the pandemic positively predicts engagement in pandemic-related aid-giving. More specifically, we expect that this well-established link may occur indirectly via intragroup processes (strength of community identification) and intergroup processes (perceived closeness between volunteers and beneficiaries).

Volunteer role identity

Volunteer role identity is a central construct within volunteerism research and is used to predict both continued commitment to volunteering and the psychological consequences of volunteering, such as increased well-being (van Ingen & Wilson, 2017). The primary premise of this approach is that volunteering commitment and rewards are positively predicted by the strength of the person's volunteer role identity (i.e., the extent to which they consider their role/s as a volunteer to be important and central to who they are, e.g., Thoits, 2012, 2013). Volunteer role identity has been shown to account for relationships between behavioural intentions and maintenance of volunteering behaviour over several years in longitudinal studies (e.g., Marta et al., 2014). Further, strength of volunteer role identity has been shown to be a better predictor of length of voluntary service and time spent volunteering than personality predictors and volunteering motives (Finkelstein et al., 2005). It is therefore unsurprising that not everybody who has participated in coordinated aid-giving during the pandemic is new to volunteering. Indeed, many of these individuals belong to pre-existing volunteering networks and are already involved in voluntary groups and roles and thus may already possess a volunteer role identity (e.g., Tiratelli & Kaye, 2020). For this reason, in the present study, we have chosen to explore predictors of pre-existing volunteers' engagement in coordinated COVID-19 aid-giving, including their pre-pandemic levels of volunteer role identity.

Dominant functional approaches to the study of volunteerism have traditionally sought to identify distinct motives for volunteering, as well as exploring their psychological and behavioural consequences (e.g., Snyder et al., 2000). These approaches have been given greater ability to define and predict volunteering behaviour through the inclusion of identity considerations (e.g., volunteer role identity), but it has recently been suggested that exploring additional collective identities could provide further explanatory power (Thoits, 2021). Within the volunteerism literature, these collective identities have typically referred to the organisational contexts where volunteering takes place. However, recent evidence from the social identity approach to volunteering (Bowe et al., 2020; Gray & Stevenson, 2020) suggests that the communities within which volunteering takes place may also be crucial in defining volunteering behaviours and their associated benefits.

Community identification

COVID-19 mutual aid groups have been most numerous in communities with high levels of social capital (Tiratelli & Kaye, 2020), and it is logical to predict that people who have been motivated to volunteer in their communities before COVID-19 may be particularly likely to engage coordinated COVID-19 aid provision. While traditional social psychological perspectives on volunteering tend to focus somewhat exclusively on how interpersonal and personality-related variables predict volunteering (e.g., Wilson, 2012), more comprehensive models of volunteering, such as the Volunteering Process Model (VPM; e.g., Omoto & Snyder, 1995) appreciate that volunteering is predicted by a complex interaction of personal, social, and contextual factors. Importantly, the VPM posits that volunteering tends to be situated within communities and that possessing a psychological sense of community is an important predictor of volunteering behaviour (Omoto & Snyder, 2010). Thus, since coordinated COVID-19 aid-giving is so rooted within the community context, this suggests that pre-existing volunteers who feel a sense of community belonging may be particularly likely to engage in its provision, and that the relationship between volunteer role identity and coordinated aid-giving may occur through this sense of community belonging. Supporting this prediction in a general Chinese sample, Wang et al. (2021) found that participants who were most connected to their communities displayed the strongest intentions to engage in COVID-19-related community participation (e.g., helping fellow community members).

The idea that feeling a sense of belonging to (or *identification with*) a particular social group, such as one's local community, can unlock important outcomes such as help-giving, is a central tenet of the Social Identity Approach (SIA) within social psychology (e.g., Turner et al., 1987). Indeed, the social

identity approach to volunteering has specifically highlighted the role played by community identification in predicting important volunteering outcomes. For instance, in interviews with community volunteers, Bowe et al. (2020) showed that participants used their sense of connection and commitment to their communities to explain their volunteering motivations and behaviours. Moreover, Bowe et al. (2020) survey of community volunteers revealed that the more time participants committed to their volunteering, the more they identified with their communities, which in turn predicted higher levels of personal wellbeing (Bowe et al., 2020). These results highlighting commitment and connection with the community are important because community solidarity and belonging are known to encourage helping behaviours in the wake of disasters (Drury et al., 2019). Additionally, the VPM posits that the positive experiences and outcomes that volunteers obtain during their voluntary work are important positive predictors of future volunteering intentions (e.g., Omoto & Snyder, 2002), suggesting that the community identification volunteers experienced in Bowe et al.'s (2020) research might promote future acts of volunteering, including the provision of coordinated aid during emergencies and crises such as the COVID-19 pandemic.

Further supporting this proposition, research exploring informal helping during the pandemic has also highlighted the important role of community identification. For instance, Vignoles et al. (2021) showed that community identification was positively related to COVID-19-related helping, and Stevenson et al.'s (2021) longitudinal research showed that community identification was indirectly positively related to participants' giving of pandemic-related emotional support. It is important to note that neither of these studies explicitly recruited pre-existing volunteers and neither asked participants about whether they engaged in pre-pandemic volunteering (aspects which will be remedied in the present study). Nonetheless, there is a range of evidence to support the hypothesis that community identification will positively predict coordinated COVID-19 aid-giving.

Perceived volunteer-beneficiary intergroup closeness

While this evidence supports our belief that community identification will predict the provision of coordinated COVID-19 aid-giving among pre-existing volunteers, we also want to consider what might predict volunteers' sense of community identification in the first place. Bowe et al. (2020) showed that community identification was predicted by the objective amount of time that participants dedicated to volunteering, but research within the volunteering and social identity literatures suggests that there could be additional interpersonal and intergroup variables at play. One such variable may be volunteers' perceived closeness to those who benefit from their voluntary work. From an interpersonal perspective, this idea is supported by the finding that volunteer role identity is related to feelings of empathy towards others (Finkelstein, 2009), which in turn has been argued to lead to a reduction in psychological distance between the empathiser and the target (because it involves the empathiser experiencing the target's internal states as if they were their own; Strayer & Roberts, 1997). Indeed, Strayer and Roberts (1997) showed that this sense of psychological closeness translates into desire for physical closeness, with children reporting willingness to sit closer to story characters with whom they experienced a sense of empathy. These findings suggest volunteer role identity should be a positive predictor of sense of closeness to volunteering beneficiaries in our participants.

From an intergroup perspective, this sense of psychological closeness to the beneficiaries of volunteering is an important issue, because helping transactions tend to involve an explicit status imbalance that can make the boundaries between groups salient: groups who provide help tend to be perceived as possessing high levels of power, skills, resources, and competence, while those requiring help tend to be perceived as lacking these traits (Nadler, 2002). This can lead to those in need being stigmatised for their membership of this low-status group: stigma which is often only exacerbated by them seeking and/or receiving help (Halabi & Nadler, 2017). In turn, this can create a psychological gulf between helpers and recipients who may share an over-arching common ingroup identity as fellow community members, but who nonetheless occupy different intergroup

positions. In these circumstances, helping transactions may throw status differences into sharp relief. For instance, Stevenson et al. (2014) showed that members of a disadvantaged community were aware of how they were stereotyped and stigmatised by local service providers, which ultimately led to problematic and conflict-ridden interactions during helping transactions. Worse still, such perceptions of stigma might prevent people from seeking much-needed aid altogether. For example, Stevenson et al. (2014) noted how the anxiety created by stigma consciousness led to widespread under-utilisation of services. More recently, research exploring the delivery of food aid revealed the lived experiences of people who use foodbanks (Bowe et al., 2019; Caplan, 2016) and showed that fear of being stigmatised within the local community meant that individuals experiencing food insecurity either refused to seek such help or would only seek it once they reached extreme levels of food poverty (e.g., they had not eaten for many days).

These observations indicate that for community-based helping transactions to be perceived by help-recipients as effective and satisfying (or possibly even for those in need to seek and accept help at all), the potential psychological distance between helper and recipient must be narrowed. Moreover (and critically important for the application of this work to the prediction of participation in coordinated aid provision during emergencies and crises such as the COVID-19 pandemic), we know that narrowing this gap also facilitates effective *help-giving* within communities. For example, volunteers who were interviewed about participation in food aid provision described how they are motivated to provide help to vulnerable people in their communities without judgement because they have experienced food poverty themselves, or because they sense a potential common fate by recognising that they (or anyone within their community) could potentially need foodbank support in the future (Bowe et al., 2019). Moreover, Bowe and colleagues recognised that this expressed sense of closeness between volunteer and recipient community members allowed for movement towards intragroup experiences of a shared humanity and a sense of collective responsibility for helping fellow residents. While a community is comprised of a diverse range of individuals (some of whom are likely to be vulnerable or in need, while others are likely to hold more advantaged positions), these findings suggest that volunteers who perceive there to be a relatively small psychological distance (i.e., a sense of psychological closeness) between the volunteers who comprise their voluntary group and the people whom their voluntary group benefits may also experience a stronger sense of connection and belonging to the community in general. In turn, as mentioned earlier, we would expect this sense of community identification to positively predict the provision of coordinated COVID-19 aid (e.g., Bowe et al., 2020; Drury et al., 2019; Omoto & Snyder, 2002).

The present study

Bringing the previously discussed strands of literature together, we can hypothesise about how specific psychological processes will interact to predict pre-existing volunteers' engagement in the provision of coordinated COVID-19 aid during the first wave of the pandemic in Spring 2020. We hypothesise that strength of volunteer role identity in pre-existing volunteers will predict participation in pandemic-related aid giving, but that this relationship may be indirect in nature. Specifically, we expect that the strength of participants' volunteer role identity will positively predict their perceived sense of between-group closeness between the volunteers who comprise their voluntary group and the people whom their voluntary group benefits; in turn, this sense of closeness will positively predict community identification, which in turn will positively predict engagement in the provision of coordinated COVID-19 aid. We test this model via an international two-wave longitudinal survey study with pre-existing volunteers, where the T1 data were gathered immediately before the COVID-19 pandemic (February 2020), and the T2 data were gathered during it (May 2020). This allows us to explore the extent to which our predictors (T1 volunteer role identity, volunteer-beneficiary between-group closeness, and community identification) predict our outcome (T2 provision of coordinated COVID-19 aid) over time.

METHOD

Design, participants, and procedure

The data used in this study are from the second and third waves of a three-wave survey, which was originally designed (pre-COVID-19) to explore social identity processes within volunteering. Each of the Time 1 variables presented in the analyses were part of this existing study questionnaire. Additional variables of interest were also included in this questionnaire but are not relevant to this study. However, a list of these unused variables is available from the corresponding author upon request. At the onset of the pandemic, the pandemic-related aid measure was added to the next wave. The second and third waves from this existing study were then selected for use in this study because they allowed us the unique opportunity to explore volunteering processes immediately pre-pandemic (February 2020) and during its height (May 2020).

Recruitment occurred via the international participant recruitment website Prolific Academic (ProA). ProA has been shown to produce higher-quality data than rival participant recruitment platforms and to attract more diverse audiences with a variety of demographic backgrounds (e.g., education level, SES, marginalisation etc.; Peer et al., 2017). Indeed, ProA has been used for research topics, which rely on recruiting participants from a wide range of backgrounds (e.g., financial distress and mental ill-health; see Stevenson & Wakefield, 2021). Although the only socioeconomic status variables we measured in the present study were education level and employment status, these variables indicated diversity among the participants (for highest education level, 5.5% had school qualifications achieved at 16 years of age, 26.2% had school qualifications achieved at 18 years of age, 39.3% had a degree, and 29% had a postgraduate degree; for employment status, 79.4% were employed, 5.6% were unemployed, 11.7% were students, 1.9% were retired, and 1.4% were homemakers).

To participate in studies, ProA users log into their ProA account and check the list of studies available for them to complete. Participants completed the original survey (in English) in November 2019 and were paid £2 upon study completion. Participants were made aware in the Participant Information Sheet that the survey was for people who volunteer with a charity or organisation and were invited to participate if they met this criterion. Three hundred and twenty participants completed this initial survey.

These participants were invited to complete the survey again three months later, in February 2020 (again receiving £2 for participation): two hundred and fifty-seven did so. Of these, 16 stated that they did not currently volunteer with a voluntary group, so were excluded from the data-file, leading to a total of two-hundred and forty-one (120 *males*, 121 *females*; M_{age} = 34.07 years, SD = 10.93, age range = 18–64 years). Hereafter, these are known as Time 1 (T1) participants. Thirty-eight percent were British/Irish (n = 93), 13% were Polish (n = 33), 12% were American (n = 29), 8% were Portuguese (n = 21), and smaller percentages reported various other nationalities, including Greeks, Spaniards, Mexicans, Hungarians, and Italians.

Of the two-hundred and forty-one T1 participants, two hundred and fourteen (88.80%) completed the same survey (with additional COVID-19-related items) at Time 2 (T2), (110 *males*, 104 *females*, M_{age} = 34.50 years, SD = 11.28, age range = 18–64 years), which took place three months later, during the COVID-19 pandemic (May 2020). Participants were again paid £2 upon survey completion. We retained all participants regardless of whether they were still formally volunteering at T2 (12 stated that they were no longer volunteering, but removing them from the data-file did not change the patterning of results). Conducting between-groups *t*-tests on each of the T1 key variables to compare participants who did (n = 214) and did not (n = 27) respond at T2 revealed no significant differences (all *p*s > .45). However, those who responded at T2 were older (M_{age} = 34.50 years, SD = 11.28) than those who did not respond at T2 (M_{age} = 29.78 years, SD = 7.62, $t(41.96)$ = −2.85, p = .007), but we controlled for age in our analyses.

An a priori power analysis in GPOWER (Erdfelder et al., 1996), which assumed a medium effect size, power of 0.95, and 7 predictors (our mediation model features one predictor, two mediators, and

four control variables) indicated that a minimum sample-size of 153 was required. Since 61 participants were automatically deleted listwise from the mediation analysis because of not having a value for T1 community identification (see details below), the number of participants included in the mediation analysis was 153.

Measures

Unless stated, all items were measured on 1–7 scales ("I strongly disagree"- "I strongly agree"), and the mean of the items was computed so as to obtain the overall value for each scale, with higher values indicating higher levels of the construct in question.

Participants' *volunteer role identity* was measured with the five-item Volunteer Role Identity Scale (Callero et al., 1987, e.g., "Volunteering is an important part of who I am").

Participants' *perception of between-group closeness* between their voluntary group and its beneficiaries was measured using Schubert and Otten's (2002) adaption of the Inclusion of the Ingroup in the Self Measure (Aron et al., 1992). Participants were presented with seven images, each showing two circles. One circle represented the people who volunteer at the participant's voluntary group (participants who volunteer with multiple groups were asked to think of the group that came to mind first), and the other represented the people who benefit from that voluntary work. The pairs of circles ranged from not over-lapping at all (1) to almost fully overlapping (7), with higher scores indicating greater between-group closeness. Participants were asked to select the image that best represented the relationship between the volunteers in their group and the people who benefit from the work of the volunteers in their group.

Participants' *community identification* was measured with the four-item Group Identification Scale (GIS; Sani et al., 2015, e.g., "I feel a sense of belonging to my local community"). Participants were asked to define 'local community' in any way that was meaningful for them (e.g., their neighbourhood, street, village, town, city area, etc.). Participants who indicated that they did not belong to any form of community (61 at T1, 66 at T2) were invited to leave the four items blank.

Participants' *coordinated COVID-19 aid-giving* was measured with a six-item adaptation of Drury et al.'s (2016) Provided Coordinated Social Support Scale (e.g., "I have participated in one or more groups that were created in order to support members of my local community during the pandemic"). This adapted scale has been used in previous COVID-19 research (Bowe et al., 2021). Participants were asked to think about the last three months (i.e., since the start of the COVID-19 pandemic), and to rate the extent to which they had engaged in each helping behaviour on a 1 to 5 scale ("Not at all"- "To a very great extent"). This variable was only measured at T2, as T1 data collection occurred before the COVID-19 pandemic. One participant left one of the six items blank, so the mean of their values for the other five items was used as their value for this item.

Relevant *control variables* were also measured: participants' *age*, *gender* (0 = female, 1 = male), the *length of time since they started volunteering with their voluntary group* (measured on a 1–41 scale which ranged from *less than one month - 30 years or more*), and the *number of times they volunteer with their voluntary group in an average year* (i.e., frequency of volunteering). These variables were selected for inclusion because of the potential impact they might have on helping during the COVID-19 pandemic (e.g., Mak & Fancourt, 2020).

RESULTS

Descriptive statistics and correlations

Table 1 shows the descriptive statistics (including Cronbach's alphas where appropriate) and correlation coefficients for the key variables (controlling for age, gender, time since started volunteering, and frequency of volunteering). As expected, the T1 and T2 versions of each variable correlated strongly (all $ps < .001$). Supporting predictions, T1 volunteer role identity correlated positively with T1 perceived

TABLE 1 Means, standard deviations, alphas (where appropriate), and intercorrelations among the key variables (controlling for age, gender, length of time since started volunteering, and frequency of volunteering)

Variable	1	2	3	4	5	6	7
1. T1 Volunteer Role Identity(1–7, M = 4.93, SD = 1.13, α = 0.81)	–						
2. T1 Between-Group Closeness (1–7, M = 4.94, SD = 1.40)	0.38***	–					
3. T1 Community Identification (1–7, M = 4.97, SD = 1.41, α = 0.94)	0.28**	0.31***	–				
4. T2 Volunteer Role Identity (1–7, M = 4.87, SD = 1.14, α = 0.81)	0.69***	0.34***	0.33***	–			
5. T2 Between-Group Closeness (1–7, M = 4.87, SD = 1.42)	0.34***	0.51***	0.23**	0.43***	–		
6. T2 Community Identification (1–7, M = 4.98, SD = 1.33, α = 0.92)	0.27**	0.35***	0.81***	0.28**	0.22**	–	
7. T2 Coordinated COVID Aid-Giving (1–5, M = 2.16, SD = 0.97, α = 0.89)	0.12	0.11	0.23**	0.16*	0.03	0.36***	–

Note: ***p < .001, **p < .01, *p < .05. This correlation table involves pairwise deletion, so the sample-size for each correlation varies. Degrees of freedom for each correlation range from 115 to 208.
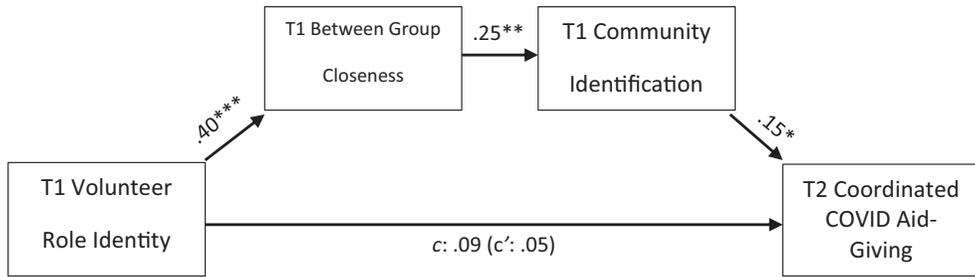
FIGURE 1 Indirect effects model. Values are unstandardized. On the c path, the total effect is outside brackets (c), and the direct effect is inside brackets (c'). Control variables are not pictured. ***$p < .001$, **$p < .01$

beneficiary closeness ($r = 0.38$, $p < .001$), which itself correlated positively with T1 community identification ($r = 0.31$, $p < .001$). T1 community identification correlated positively with the giving of coordinated COVID-19 aid at T2 ($r = 0.23$, $p = .005$).

Indirect effects analysis

We used model six in version 3.0 of Hayes' (2018) PROCESS macro to test our hypothesised longitudinal serial indirect effect model. Specifically, we predicted that T1 volunteer role identity would positively predict T1 perceived beneficiary closeness, which in turn would positively predict T1 community identification, which in turn would positively predict coordinated COVID-19 aid-giving at T2. The analysis involved 5,000 bootstrapping samples with 95% confidence intervals (LLCI/ULCI), using the percentile method. Participants' age, gender, length of time volunteering with the group, and number of times volunteering with the group in a typical year were controlled for.

The indirect effect of T1 volunteer role identity on coordinated COVID-19 aid-giving at T2 via T1 perceived beneficiary closeness and T1 community identification was significant. T1 volunteer role identity was positively associated with T1 perceived beneficiary closeness, which in turn was positively associated with T1 community identification, which in turn was a positive predictor of coordinated COVID-19 aid-giving at T2. The total effect of T1 volunteer role identity on coordinated COVID-19 aid-giving at T2 was non-significant, and this became weaker when the mediators were included (direct effect), indicating indirect-only mediation (Zhao et al., 2010). See Figure 1 for the model, and Table 2 for the statistical values.[1] The R^2 value was 0.07, indicating that the variables in the model explain 7% of variance in T2-coordinated COVID aid-giving.[2]

For completeness, we tested alternative models by altering the positions of the predictor and mediator variables. The only alternative model which produced a significant indirect effect involved swapping T1 volunteer role identity and T1 perceived beneficiary closeness, so that T1 perceived beneficiary closeness was the predictor variable and T1 volunteer role identity was the first mediator variable. In this model, the indirect effect of T1 perceived beneficiary closeness on coordinated COVID-19 aid-giving at T2 via T1 volunteer role identity and T1 community identification was significant. T1 perceived beneficiary closeness was positively associated with T1 volunteer role identity, which in turn was positively associated with T1 community identification, which in turn was a positive predictor of

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[1]We re-ran the model with participants' nationality (UK vs. non-UK) as a binary control variable—this did not change the patterning of results.

[2]Although this R^2 value is relatively small, we do show significant associations between our variables of interest and there are likely to be many other variables we have not explored in our study, which predict COVID-19 coordinated helping (e.g., participants' health/shielding status, levels of COVID-19 anxiety, whether they were still working or on furlough during the pandemic, caring responsibilities and home-schooling, etc.).

TABLE 2 Statistical values for the predicted model (Indirect effect of T1 volunteer role identity on T2 COVID-19 aid-giving via T1 perceived beneficiary closeness and T1 community identification)

Path/Effect	Statistical values
Path from T1 volunteer role identity to T1 perceived beneficiary closeness	Coeff = 0.40, SE = 0.10, t = 4.03, p = .0001, LLCI = 0.20, ULCI = 0.60
Path from T1 perceived beneficiary closeness to T1 community identification	Coeff = 0.25, SE = 0.09, t = 2.89, p = .005, LLCI = 0.08, ULCI = 0.42
Path from T1 community identification to T2 coordinated COVID-19 aid-giving	Coeff = 0.15, SE = 0.06, t = 2.47, p = 0.015, LLCI = 0.03, ULCI = 0.27
Total effect of T1 volunteer role identity on T2 coordinated COVID-19 aid-giving	Effect = 0.09, SE = 0.08, t = 1.22, p = 0.22, LLCI = −0.06, ULCI = 0.24
Direct effect of T1 volunteer role identity on T2 coordinated COVID-19 aid-giving	Effect = 0.05, SE = 0.08, t = 0.62, p = 0.54, LLCI = −0.11, ULCI = 0.21
Indirect effect of T1 volunteer role identity on T2 COVID-19 aid-giving via T1 perceived beneficiary closeness and T1 community identification	Effect = 0.01, Boot SE = 0.01, Boot LLCI = 0.002, Boot ULCI = 0.03

Note: Abbreviations: LLCI, lower level confidence interval; ULCI, upper level confidence interval.

TABLE 3 Statistical values for the alternative model (indirect effect of T1 perceived beneficiary closeness on T2 coordinated COVID-19 aid-giving via T1 volunteer role identity and T1 community identification)

Path/Effect	Statistical values
Path from T1 perceived beneficiary closeness to T1 volunteer role identity	Coeff = 0.25, SE = 0.06, t = 4.03, p = .0001, LLCI = 0.13, ULCI = 0.37
Path from T1 volunteer role identity to T1 community identification	Coeff = 0.27, SE = 0.11, t = 2.46, p = .015, LLCI = 0.05, ULCI = 0.48
Path from T1 community identification to T2 coordinated COVID-19 aid-giving	Coeff = 0.15, SE = 0.06, t = 2.47, p = 0.02, LLCI = 0.03, ULCI = 0.27
Total effect of T1 perceived beneficiary closeness on T2 coordinated COVID-19 aid-giving	Effect = 0.03, SE = 0.06, t = 0.52, p = 0.60, LLCI = −0.09, ULCI = 0.15
Direct effect of T1 perceived beneficiary closeness on T2 coordinated COVID-19 aid-giving	Effect = −0.028, SE = 0.06, t = −0.43, p = .67, LLCI = −0.15, ULCI = 0.10
Indirect effect of T1 perceived beneficiary closeness on T2 coordinated COVID-19 aid-giving via T1 volunteer role identity and T1 community identification	Effect = 0.01, Boot SE = 0.01, Boot LLCI = 0.001, Boot ULCI = 0.03

coordinated COVID-19 aid-giving at T2. The total effect of T1 perceived beneficiary closeness on co-ordinated COVID-19 aid-giving at T2 was non-significant, and this became weaker when the mediators were included (direct effect), again indicating indirect-only mediation (Zhao et al., 2010). See Table 3 for the statistical values. The R^2 value was 0.07, indicating that the variables in the model explain 7% of variance in T2 coordinated COVID aid-giving.[2]

DISCUSSION

The COVID-19 pandemic has placed communities across the globe under unprecedented social, eco-nomic, and psychological strain. These effects have been experienced unequally within communities and supporting vulnerable community members was therefore a priority in the pandemic response (O'Connor-Terry et al., 2020). Mutual aid groups comprised of local community volunteers quickly formed, adapting to and overcoming the challenges of limited resources and physical distancing to sup-port those in need within their communities. This multinational collective phenomenon was therefore

critical in enhancing the health and well-being of community members, as well as supporting existing local and national support services. Identifying the group processes motivating and sustaining this collective voluntary behaviour is thus vital to understand how to harness and facilitate this essential source of community resilience among pre-existing volunteers. Research suggested that pre-existing volunteers would be particularly likely to take on these additional or alternative volunteering responsibilities during the pandemic (e.g., Tiratelli & Kaye, 2020), but the social psychological processes that might predict COVID-19 aid-giving in pre-existing volunteers had not been explored: a gap that the present study was designed to address. Drawing upon the volunteerism literature, this study identified pre-pandemic volunteer role identity as a predictor of coordinated COVID-19 aid-giving. Moreover, as hypothesised, the longitudinal survey results showed that volunteer role identity at T1 (pre-pandemic) positively predicted between-group closeness between volunteers and beneficiaries at T1, which in turn was associated with increased community identification at T1, and that this in turn was associated with increased engagement in the provision of coordinated COVID-19 aid at T2 (3 months later) revealing a mediated indirect effect. Moreover, these findings were obtained even after controlling for participants' age, gender, length of time volunteering with their (pre-pandemic) voluntary group, and number of times volunteering with that pre-pandemic group in a typical year. These findings have implications for several literatures, theory development, and for volunteering policies and practices, particularly in response to emergency situations.

First, our work adds to the volunteer role identity literature. Volunteer role identity (i.e., the extent to which an individual perceives their volunteer role/s as being central to their life) has been shown to positively predict continued commitment to volunteering in various studies (e.g., van Ingen & Wilson, 2017; Marta et al., 2014). Our research provides partial support for this prior work by showing that volunteer role identity was an important indirect predictor of later engagement in coordinated COVID-19 aid-giving during the pandemic (i.e., at time 2). However, we found that pre-pandemic volunteer role identity was not a direct predictor of coordinated COVID-19 aid-giving for existing volunteers. We suggest that this is because the COVID-19 pandemic presented a threat, which was vastly different to the normal (pre-pandemic) contexts in which volunteer role identity data are typically collected (including the collection of our T1 volunteer role identity data). The pandemic presented a collective threat more akin to the community-based emergency situations discussed by social psychologists (e.g., Drury et al., 2016; Ntontis et al., 2018). Hence, it makes sense that collective processes are stronger predictors of aid-giving under these pandemic conditions. More specifically, our data extend previous volunteer role identity work by showing that under these conditions, the relationship between volunteer role identity and aid-giving is not direct: it only occurred indirectly via collective social identity processes (specifically, the strength of volunteers' role identification was associated with a stronger sense of closeness between themselves and their beneficiaries, which in turn predicted stronger community identification, which in turn predicted coordinated COVID-19 aid-giving).

In more general terms, this finding highlights the value of theoretical models of volunteering that account for social and contextual factors as well as interpersonal factors when attempting to predict sustained volunteering, such as the VPM (Omoto & Snyder, 2010). More specifically, it indicates the need to appreciate the important role played by intra- and inter-group processes in predicting which pre-existing volunteers are likely to engage in the giving of coordinated aid in emergencies and crises such as the COVID-19 pandemic and suggests that researchers who are interested in understanding and promoting formal volunteering sustainability should also consider the relevance of these processes. We now consider the two specific social identity processes (intergroup closeness and community identification) in more depth.

Regarding perceived intergroup closeness, our research supports work from Finkelstien (2009), which shows that volunteer role identity is related to feelings of empathy towards others: a process known to reduce psychological distance. However, because we explored perceptions of closeness between *groups* (i.e., volunteers and beneficiaries), our conclusions are also able to move beyond this interpersonal focus. To extend the existing interpersonal understanding of psychological distance as a predictor of prosocial behaviour, our work utilises research within the Social Identity Approach, which has revealed

that intergroup closeness is essential for reducing the psychological distance between members of help-seeking and help-giving groups: a relationship which is often characterised by stigma consciousness and unequal power dynamics (e.g., Halabi & Nadler, 2017; Nadler, 2002). Research in multiple contexts has shown that intergroup psychological distancing between help-seekers and help-providers promotes ineffective and mutually unsatisfying helping transactions, where clients are at risk of disengaging and feeling stigmatised, and helpers are at risk of stigmatising clients and feeling unappreciated (e.g., within foodbanks: Bowe et al., 2019; community support services: Stevenson et al., 2014; and Immigration Removal Centres: Kellezi et al., 2021). Conversely, research has shown that reduced perceptions of intergroup differences promoted by psychological processes such as perceived common fate can facilitate effective and mutually satisfying help-giving within communities (e.g., Bowe et al., 2019). The present study supports these observations of pre-pandemic aid provision by showing that perceived closeness between community volunteers and beneficiaries within the community positively predicts volunteers' self-reported identification with their whole community, which in turn predicts the later giving of co-ordinated COVID-19 aid.

As well as exposing the significance of intergroup psychological processes, this study of voluntary aid provision during crisis has also revealed the role of intragroup phenomena, namely the role of community identification in predicting community-based helping behaviour in pre-existing volunteers. Our findings are in line with previous work underpinned by the VPM (e.g., Omoto & Snyder, 2010), which shows that possessing a psychological sense of community is an important predictor of volunteering behaviour. Our findings are also consistent with the Social Identity Approach (e.g., Turner et al., 1987), which posits that group identification promotes prosocial ingroup behaviour. This prediction has been supported in the context of community-related volunteering by Bowe et al. (2020), whose qualitative work showed that volunteers describe their sense of connection to their communities as an important motivation for engaging in voluntary work. It has also been supported by recent work exploring identity-based predictors of informal COVID-19 helping in communities (e.g., Stevenson et al., 2021; Vignoles et al., 2021), although this work did not involve recruiting pre-existing volunteers. Our research thus extends these findings by showing that community identification is also a key predictor of coordinated COVID-19 aid-giving for pre-existing volunteers. The importance of a sense of connection and common fate with other community members in predicting community-based prosocial responses has already been revealed empirically in various contexts of disaster and emergency (e.g., Drury et al., 2016, 2019). Moreover, theorists have reasoned that shared community solidarity is a key predictor of sustained community resilience and effective coordinated responses to the COVID-19 pandemic (Ntontis & Rocha, 2020). Our findings provide support for these positions by revealing that even for those who already volunteered before the pandemic (and possess an existing volunteer role identity), strength of community identification helps to explain some of the variance in co-ordinated COVID-19 aid provision.

The unique context of the pandemic suggests further implications of our work. Importantly, our study shows how group-based processes predict helping despite the potential cost to self (i.e., risk of infection due to contact with others while helping). Social identity-based research indicates that this selflessness could be due to collective identities being associated with a sense of shared fate (created by the viral threat), which enables a better understanding of fellow group members' suffering (Kellezi et al., 2019). In addition, although it was not measured in the present study, possessing high levels of community identification is likely to encourage people to perceive those needing help within their community as fellow ingroup members, and there is evidence that shared group membership increases COVID-19-related risk-taking in intragroup situations (Cruwys et al., 2020, 2021), which may encourage helping behaviour that would be perceived as being too risky in intergroup contexts. In sum, the present study advances several literatures and theoretical understandings by shedding light on how inter- and intra-group processes interact to predict the provision of coordinated emergency aid in the unique context of the pandemic.

The interaction between inter- and intra-group processes in predicting which pre-existing volunteers will engage most in the provision of COVID-19 aid is also evident in the alternative model we identified

in our data, which involves perceived beneficiary closeness as the predictor, volunteer role identity as the first mediator, and community identification as the second mediator. Although we did not predict this alternative model, it is consistent with previous literature. For example, in terms of the path from perceived beneficiary closeness to volunteer role identity, Pozzi et al. (2020) showed that perceived mentee closeness was a key predictor of volunteer role identity in school-based mentoring programmes, which they argued was due to the volunteers needing to feel a sense of closeness to the mentees whom their work benefits in order to develop the belief that volunteering is an important part of who they are (which is central to possessing a strong volunteer role identity). Moreover, the VPM posits that the experiences volunteers have during their voluntary work are important predictors of their later engagement in volunteering (e.g., Omoto & Snyder, 2002), and that volunteers who can develop close and satisfying relationships with beneficiaries are likely to feel more engaged with their volunteer role. Furthermore, the path from volunteer role identity to community identification is consistent with work by Bowe et al. (2020), who showed that engaging in volunteering predicted higher levels of community identification, which the authors described as being evidence that helping fellow community members by participating in voluntary work allows volunteers to feel more connected to their communities.

Our findings also have practical applications, which may help to increase the sustainability of both formal and informal volunteering. While our work indicates that volunteer role identity is an important predictor of coordinated COVID-19 aid-giving in pre-existing volunteers, it also shows that this relationship occurs indirectly via social identity processes. Our findings thus suggest that to encourage pre-existing volunteers to continue volunteering (and to engage in new voluntary roles), policies and practices should be designed with the aim of increasing the sense of intergroup closeness between volunteers and beneficiaries (with our alternative model defining this variable as a predictor of volunteer role identity itself), and with the aim of increasing volunteers' strength of community identification, belonging, and connection. Such observations can also be applied to help encourage the many people who started volunteering during the COVID-19 pandemic (United Nations, 2020) to continue with their voluntary work.

In terms of intergroup closeness, it may be useful to encourage the salience of superordinate identities, which encapsulate both volunteers and beneficiaries (such as a shared community identity: Bowe et al., 2020, or a shared human identity: Vignoles et al., 2021), as previous work has shown that making a superordinate group membership salient facilitates helping (e.g., Levine et al., 2005). Bowe et al. (2019) showed that foodbank volunteers often talk of sharing an identity with their beneficiaries (e.g., by recognising that they too might need foodbank assistance one day, or by remembering times when they did require such help in the past), so volunteer recruitment, support, and training could promote this ethos.

In terms of community identification, pandemic-appropriate collective events such as the UK's Clap for Carers (where people came to their front doors at 8pm each Thursday for ten weeks to applaud frontline workers and National Health Service (NHS) staff; Wood & Skeggs, 2020) and displaying rainbow artwork (symbolising support for the NHS) in front windows of homes are related to a sense of community solidarity and belonging. Post-pandemic, encouraging people to get involved in local social events which celebrate the community and its inhabitants (e.g., the Eden Project's Big Lunch initiative, or Neighbour Day; Fong et al., 2021) would provide the opportunity for interactions that are likely to facilitate a shared sense of community identity. Moreover, work by Bowe et al. (2020) suggests that time spent volunteering is itself an important predictor of community identification, which highlights the potentially reciprocal relationships between the variables in our model, and the possibility of creating a 'virtuous cycle' (e.g., Miller et al., 2017) of increased volunteering and community connection.

While the pandemic remains, it is also important to address safety issues which may be a side-effect of increased community identification. As mentioned above, there is the possibility that possessing high levels of community identification may encourage people to perceive those needing help within their community as fellow ingroup members, which could encourage risky behaviour that may increase the spread of COVID-19 (Cruwys et al., 2020, 2021). Voluntary groups (both formal and informal) must recognise this and protect their volunteers as much as possible by putting appropriate safety measures in place (e.g., social distancing, safety training, reducing the number of volunteers working in one area

simultaneously, and using personal protective equipment). Such measures will help to ensure the safety of volunteers, beneficiaries, and the wider community.

Finally, it is also important to consider implications and applications of the findings for contexts other than the COVID-19 pandemic. While our work supports pre-pandemic research (e.g., Bowe et al., 2020), which highlights that collective processes are important predictors of volunteering, it also extends this work by exploring the importance of within- and between-group processes for help-giving in the context of a major crisis. These observations can be applied to many other emergency situations and disasters (e.g., Drury et al., 2016; Ntontis et al., 2018) and may be of particular benefit to communities experiencing new and unexpected crises (e.g., because of climate change).

Our research is not without limitations. Perhaps, most notably, our participants were recruited via opportunity sampling from the online platform Prolific Academic, which means that our sample (although international) is unlikely to be representative of the wider communities to which these participants belong. However, due to social distancing, remote data collection methods are becoming more widespread (and even essential). In addition, Prolific Academic is evidenced to produce data of higher quality than those obtained from other online platforms (Peer et al., 2017). Furthermore, although the study involves longitudinal data (which allow conclusions to be drawn regarding the temporal ordering of variables), the survey nature of the research means that causal relationships cannot be established. Future work should therefore involve experimental research in order to address this. Finally, because our first wave of data was gathered pre-pandemic, we were unable to control for levels of COVID-19-related coordinated aid-giving at T1 in our longitudinal mediation model. Nonetheless, we were able to control for other relevant T1 variables, such as pre-pandemic volunteering frequency.

Despite these limitations, our study makes important contributions to the existing literature on prosocial behaviour, volunteering, and disaster responses by highlighting the role played by social identity processes (specifically between-group closeness and ingroup identification) in mediating the relationship between volunteer role identification and COVID-19 coordinated community aid provision in pre-existing volunteers. While the COVID-19 pandemic has been experienced by many as a period of disconnection and has posed challenges to our sense of togetherness, collective processes remain at the heart of efforts to mitigate its effects. Facilitating contexts within which these collective processes are likely to be created and sustained will allow communities to harness their most important resource: people with the desire to help others.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

Blerina Kellezi (Writing – original draft; Writing – review & editing) **Mhairi Bowe** (Conceptualization; Writing – original draft; Writing – review & editing) **Juliet Ruth Helen Wakefield**, PhD. (Conceptualization; Data curation; Formal analysis; Funding acquisition; Project administration; Writing – original draft; Writing – review & editing).

OPEN RESEARCH BADGES

This article has earned an Open Data Badge for making publicly available the digitally-shareable data necessary to reproduce the reported results. The data is available at https://doi.org/10.31234/osf.io/8kcyj.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available via the Supplemental Materials of the manuscript pre-print: https://doi.org/10.31234/osf.io/8kcyj.

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