Empirical Articles

Personality and context-related factors of helping and helping-related affect during early stages of the COVID-19 pandemic

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COVID-19 pandemic led to introduction of lockdown measures in many countries, while in Serbia the Government also introduced the curfew by which vulnerable groups of citizens were prohibited from leaving their homes at any time. In such a situation many citizens organized to voluntarily offer their help to those in isolation, which offered a unique opportunity to examine prosocial behavior in the natural setting of global crisis. This study examined the differences between non-helpers and helpers, as well as groups of helpers who provided their help to close or unknown others, in personality (prosocial tendencies, selfishness and communal narcissism) and context-related factors (situation specific empathy and fear) of prosocial behaviors. Additionally, the study also analyzed the helping-related affect among helpers, depending on the recipient of help and personality characteristics. Results revealed that groups of helpers with different recipients of help (close persons, unknown persons or both) were not different among each other, but they were different from non-helpers. Non-helpers were more selfish and had self-focused prosocial tendencies, and they showed less empathy towards people in isolation, compared to helper groups. However, the helping-related affect depended on the recipient of help and helper's personality traits. This study confirmed some previous findings and offered novel insights into factors related to helping in crises.

Key words: COVID-19, prosocial behavior, selfishness, communal narcissism, empathy, fear.

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INTRODUCTION

The pandemic of COVID-19 was declared by the World Health Organization in March 2020. The first official case of COVID-19 infection in Serbia was registered on March 6, 2020. On March 15, the Government of the Republic of Serbia declared a state of emergency and introduced lockdown measures. Protective measures were rapidly tightened in the following days and a curfew was introduced on March 18. Seniors over 65 were put into forced isolation by being prohibited to leave their homes at any time, while other citizens were forced to stay at home during the evenings and nights on workdays and during the whole weekend. Since these measures were introduced at short notice, people in self-quarantine and forced isolation had trouble obtaining food supplies, medicines, and other necessities. Within a single day of the curfew introduction, citizens started to organize themselves in order to help people in forced isolation and anyone in need. In addition to volunteering groups organized by the local communities, citizens formed informal help groups on social networks to offer their help in many different ways: to buy and deliver groceries and medicines, to take pets for a walk, to give free rides to medical workers, to sew and donate facemasks, etc.

Stressful and threatening situations (Buchanan & Preston, 2014; Vieira, Jangard, Pierzchajlo, Marsh & Olsson, 2020) and crises (Kaniasty & Norris, 1995) are known to induce prosocial behavior among people. The COVID-19 global crisis provided a unique context for exploring the factors of prosocial behavior. In this study, we examine how personality and context-related factors have influenced prosocial behavior in the early stages of COVID-19 pandemic and forced isolation introduced in Serbia, with the special focus on providing help to close persons as opposed to strangers. Additionally, we have

examined how helping-related affect emerges and changes over the time of pandemic depending on these factors.

Prosocial tendencies

The motives for prosocial behavior can be numerous, but they are usually qualified as either egoistic or altruistic (Batson, Lishner & Stocks, 2015). Egoistic helping is usually seen through the lens of Social Exchange Theory (Thibaut & Kelley, 1959), which states that people help in order to increase the benefits and lower the costs of helping. On the other hand, according to Batson's Altruism–Empathy Hypothesis (Batson & Oleson, 1991), altruistic helping is shown to arise when the helper empathizes with the persons in need or when he/she is able to take their perspective. It should be noted that Batson *et al.* (2015) do not claim that people never help out of selfish reasons. His theory supplements the Social Exchange Theory by claiming that when witnesses experience empathy, they will help purely altruistically, but when they do not, they will still gauge the costs and benefits of helping (Batson *et al.*, 2015).

Carlo and Randall (2002) have provided a framework for measuring the prosocial tendencies that could be sorted out as more or less self-focused or other-focused. Besides the purely egoistic and self-focused type of prosocial behavior such as a tendency towards public prosocial behavior, and purely unselfish type of prosocial behavior named altruism, they singled out four additional types of prosocial tendencies: compliant, anonymous, dire, and emotional, which could be sorted out as less of more self- or other-focused. The tendency towards compliant prosocial behavior is defined as helping others in response to a verbal or nonverbal request, as opposite to spontaneous helping. Anonymous prosociality is defined as helping without others being aware of who helped them. Dire refers to helping in emergency situations, while emotional prosociality refers to an orientation towards helping others under emotionally evocative circumstances (Carlo & Randall, 2002).

Personality traits related to (low) prosociality

In the context of (low) prosociality tendencies, two specific personality traits were taken into consideration (for other prosociality-related personality traits see Thielmann, Spadaro & Balliet, 2020). One of them is selfishness, which refers to a singleminded focus on one's own welfare, regardless of the well-being of others (Raine & Uh, 2019). It could vary from "softer" or adaptive selfishness, which reflects caring not only for themselves, but also for their own family and sometimes friends, to "hard" or pathological selfishness in which others are harmed for selfadvancement (Raine & Uh, 2019). Selfishness could be seen as a core trait related to an unwillingness to help others, and previous research has shown that it is negatively related to empathy (e.g., Yilmaz, 2018). Although studies have shown that crisis situations promote solidarity and altruism among people (e.g., Kaniasty & Norris, 1995; Rao, Han, Ren et al., 2011), there is evidence from the experimental studies that people are more selfish when social isolation is stronger (Buso, De Caprariis, Di Cagno et al., 2020).

The other trait relevant in the context of prosociality is communal narcissism, which refers to a grandiose self-view in the communal domain (Gebauer, Sedikides, Verplanken & Maio, 2012). In contrast to the common view of narcissism as a self-perceived superiority in the agency domain (i.e., competencies, intelligence, attractiveness), communal narcissism reflects superior self-view in the domain of morality, kindness, and emotional intimacy. Communal narcissists have the same motives as agentic narcissists in terms of power, esteem, entitlement and grandiosity, but they satisfy those motives in a different way, by presenting themselves as the best friend and/or the parent, the most helpful and caring person, someone who will show the great impact on humanity, etc. Thus, they think they are superior in helping and caring for others. However, the self-view of communal narcissists is not in line with others' views, and therefore communal narcissists are judged as particularly low on communal traits and communal behavior by the observers (Gebauer et al., 2012). Furthermore, Nehrlich, Gebauer, Sedikides and Schoel (2019) have shown that communal narcissism is related to subjective prosociality, but unrelated to objective prosociality. Global crises, such as COVID-19, could give a communal narcissistic a chance to bask in the admiration of others and to stand out. Accordingly, Freis and Brunell (2020) have shown that essential workers in the COVID-19 crisis, such as medical workers or retailers, shared more about their work on social media, in person and elsewhere, the more they were characterized by communal narcissism. At the same time, sharing these contents boosted their narcissistic feelings.

Empathy and fear as context-related factors of prosociality

Empathy, as a critical prerequisite of unselfish helping (Batson et al., 2015), has been examined as both trait and state, evoked

by the specific situation. As a trait, empathy shows relations to various prosocial behaviors (e.g., Carlo & Randall, 2002; Davis, 2015). As a state, it is shown to be related to the nature and severity of the adverse situation, as well as to closeness or similarity with the endangered person (Beeney Franklin, Levy & Adams, 2011; Tarrant, Dazeley & Cottom, 2009).

Cao, Qi, Y Huang et al. (2020) have shown that both trait and state empathy were related to prosocial willingness in the time of COVID-19 pandemic. Interestingly, they found that the closer to the epicenter of the pandemic (the City of Wuhan) the participants were, the less they were willing to help due to increased anxiety. These results indicated that empathy had a motivating effect, while anxiety had an impairing effect on prosocial willingness. A considerable number of studies have shown that fear can discourage helping, since individuals who experience it focus upon their own emotions and personal losses as opposed to others' gains (Paciello, Fida, Cerniglia, Tramontano & Cole, 2013). Lerner and Kertner (2000) claim that fearful individuals judge the situation as pessimistic, out of control, and uncertain, which results in their passivization and unreadiness to act. Their Appraisal Tendency Framework model hypothesizes that individuals faced with fear and anxiety will be reluctant to help others, which is consistent with the notion of perceived losses in the Social Exchange Theory (Thibaut & Kelley, 1959). A study conducted in the context of the COVID-19 pandemic also found that fear was related to lower prosocial tendencies expressed on social networks (Ye, Long, Liu & Xu, 2020).

However, it should be noted that there are studies that show that anxiety, fear or stress can increase prosocial behavior, especially if a threat is imminent. The study of Vieira *et al.* (2020) showed that individuals who experienced more acute anxiety (but not stress) during the pandemic reported higher engagement in altruistic acts. Likewise, Buchanan and Preston (2014) argued that more challenging situations with pronounced stress, especially those when others' needs were salient, could lead to more altruistic helping.

The recipient of prosocial act

There is empirical evidence that the probability of helping increases with increasing relational closeness (Levine, Prosser, Evans & Reicher, 2005). However, different theories and empirical evidence suggest that different motives guide providing help to close persons (relatives or close friends), as opposed to distant ones (strangers or acquaintances). The list of these motives includes promotion of evolutionary success (Buss, 2019), empathic concern (Batson *et al.*, 2015), the sense of "oneness" as either factor of empathic or egoistic helping (see Cialdini, Brown, Lewis, Luce & Neuberg, 1997).

A number of studies have shown that people experience greater empathy towards an ingroup than towards an outgroup (Tarrant *et al.*, 2009). Schlenker and Britt (2001) have found that the level of trait empathy is associated with greater willingness to provide social support to a friend, but not to a stranger. In line with these findings, Hein, Silani, Preuschoff, Batson and Singer (2010) found that different neural mechanisms regulated (non)helping ingroup and outgroup in the situation of costly helping (i.e., enduring physical pain due to helping). Helping an ingroup was related to neural mechanisms related to empathic concern (anterior insula activation), while not helping the outgroup, especially when they were negatively evaluated, was related to activation of centers associated with antagonistic behavior (nucleus accumbens), that is, with deriving pleasure from someone else's misfortune.

Nevertheless, the hypothesis of different motives for helping persons of different closeness is rarely directly tested within one study. In one such study, Maner and Galliot (2007) tested the hypothesis that empathic concern might promote helping more among relatives than among strangers. They found that helping relatives was motivated by empathic concern, above the negative affect and the sense of unity, which were potential factors of egoistic helping, while helping a stranger was only related to the sense of oneness, but not to empathic concern.

Since research suggests that the recipient of help is not only an important factor of readiness to help, but also of the motives that regulate prosocial behavior, in this study we wanted to examine differences in both personality and context-related factors of helping between helpers and non-helpers, as well as between those who have helped known or unknown persons in the situation of the COVID-19 crisis.

Affect related to providing help

Altruism is known to have positive effects on mood, mental health, and well-being of the helper (Musick & Wilson, 2003; Post, 2005). Positive emotions model suggests that altruism enhances mental health by evoking positive emotions and displacing negative emotions (Post, 2005). Additionally, a recent study carried out in the context of the COVID-19 crisis indicates that when altruistic individuals are unable to help due to objective circumstances, such as forced isolation, they can experience negative emotions and, consequently, worse mental health outcomes (Feng, Zong, Yang, Gu, Dong & Zhihong, 2020). To conclude, empirical evidence indicates that the short-term effects of helping are beneficial for the individual.

To the best of our knowledge, there are no studies that examine affective consequences of helping depending on personal traits of the helper. It seems justified to expect that affective consequences of the act of helping might be different depending on personality traits from the domain of prosociality. We expect that self-focused individuals like those who help out of egoistic reasons, communal narcissists and selfish persons, even after they have helped, would experience fewer positive emotions and more negative ones, because they are not initially focused on the welfare of others, and they could still calculate if the act of helping has paid off.

The aim of the study and hypotheses

In order to understand prosocial behavior provoked by the emergence of the COVID-19 pandemic and introduced lockdown and curfew measures, we conducted a study with two aims. First, we wanted to explore differences between non-helpers and helpers in personality traits in the domain of prosociality (prosocial tendencies, selfishness and communal narcissism) and contextrelated factors of helping (empathy towards individuals in forced isolation and fear related to COVID-19 pandemic). In this context, we were interested how these personal and context-related factors differed between those who helped close others and strangers. We hypothesized that non-helpers will be characterized by higher selffocused prosocial tendencies and selfishness, compared to helpers. When it comes to communal narcissism, since we followed selfreports of specific behaviors rather than self-perception of own prosociality (Nehrlich *et al.*, 2019), we proposed that helping was not related to communal narcissism. Regarding context-related factors, we expected that non-helpers experience more fear related to COVID-19 and less empathy, compared to helpers. Furthermore, helping close persons is expected to be related to higher empathy, while helping strangers should be related to other-focused prosocial tendencies.

The second aim was to explore helping-related affect among helpers, as well as to analyze if the affective reactions to the acts of helping depended on the recipient of help and personality traits of the helper. We hypothesized that higher self-focused prosocial tendencies, and personality traits (selfishness and communal narcissism) and lower other-focused prosocial tendencies would be related to less positive and more negative emotions related to helping. These effects should be the most prominent in a situation where there is no personal attachment to the recipient of help, that is, among those who helped a stranger, because their personal gains might seem lessened or unclear.

METHOD

Procedure

The study was approved by the Ethical Committee of the Department of Psychology, Faculty of Philosophy, University of Novi Sad, Serbia, which is the Second Instance Commission of the Ethical Committee of the Serbian Psychological Society (No. 202003221959_nytc).¹

The data were collected online from March 28 to April 6, 2020 (the second and the third week of the emergency state and curfew). The invitation for participation in the study on helping in the times of the COVID-19 pandemic was published on the personal Facebook profiles of researchers, and people were invited to share the invitation. In order to reach the group of helpers, we shared the invitation for study participation in a number of self-organized Facebook groups in which people offered their help to individuals in forced isolation. These groups were created as the curfew started with the aim to seek and offer different kinds of help. A call for participation included information about the main aim of the study.

Participants

In total, a convenience sample of 581 participants took part in the research. Approximately half of the participants provided help to someone in the last two to three weeks. Respondents who reported that they offered their help were asked about the recipient of help, and had a possibility to choose multiple answers. Although we were primarily interested in the difference between those who helped close persons as opposed to strangers, the results showed that a considerable number of participants helped both categories. Therefore, we created three groups of helpers: those who helped only close persons, those who helped both close and unknown persons, and those who helped only strangers, namely, unknown persons. Other information about samples are presented in Table 1.

Measures

The Prosocial Tendencies Measure (PTM; Carlo & Randall, 2002, for Sebian adaptation see Dinić & Bodroža, 2020) is a measure of six prosocial tendencies. The PTM contains 23 items distributed into six Table 1. Sample characteristics (N = 581)

	f	%
Gender		
Male	126	21.7
Female	455	78.3
Age		
Range	19	-72
M(SD)	34	.01
	(10	.27)
Education		
Elementary school	65	11.2
Secondary school	126	21.7
College	35	6.0
Bachelor's degree	295	50.8
MA or PhD degree	60	10.3
Helped someone in the previous 2 to 3 weeks and whom?		
No	287	49.4
Yes, close person(s)	170	29.3
Yes, close person(s) and stranger(s)	74	12.7
Yes, stranger(s)	50	8.6
The kind of help offered (more than one answer was possible):		
Shopping	232	39.9
Delivery of goods	205	35.3
Providing qualified psychosocial support	64	11.0
Providing information on protective measures	28	4.8
Sewing and giving away facemasks	18	3.1
Free ride to medical workers	46	7.9
Other	18	3.1
How often they provided help if they had offered it?		
Never	24	4.1
Only once	16	2.8
Few times in total	164	28.2
Once a week	48	8.3
Almost everyday	72	12.4

scales: public (four items), anonymous (five items), dire (three items), emotional (four items), compliant (two items), and altruism (five items). Public prosociality occurs in the presence of others, and it is motivated by gaining their approval and respect, as well as enhancing personal selfworth. Anonymous prosociality is performed without the other's knowledge of who helped them, and the validation study has shown that it was not a mere negative pole of public prosociality. Dire prosociality happens in emergency situations. Emotional prosociality occurs under emotionally evocative circumstances, and it is usually associated with sympathy for another person. Compliant prosociality is helping at others' requests as opposed to spontaneous provision of help. Altruism refers to helping others when there is little or no perceived potential for a direct reward to oneself. The response scale ranges from 1 = does not describe*me at all* to 5 = describes me greatly.

The Selfishness Questionnaire (SQ; Raine & Uh, 2019, for Serbian adaptation see Dinić & Bodroža, 2020) contains 24 items measuring three selfishness aspects, eight items per each: adaptive (selfishness with benefits for oneself, family, and close friends), egocentric (selfishness with a single-minded attentional focus on oneself), and pathological (selfishness in which others are harmed for self-advancement). The response scale ranges from 1 = strongly disagree to 5 = strongly agree. Since all aspects showed the same effects in the analyses, we used the total score.

The Communal Narcissism Inventory (CNI; Gebauer *et al.*, 2012, for Serbian adaptation see Radević & Dinić, 2020) consists of 16 items measuring communal narcissism, defined as grandiose self-thoughts in the communal domain. Eight items refer to the present, seven to the future, and one is conditional, referring either to the present or the future. The response scale ranges from 1 = strongly disagree to 7 = strongly agree.

The Empathy towards Persons in the Forced Isolation Scale has been created for the purpose of this study to measure empathy evoked by the specific context of the situation. It contains six items (e.g., "I get very sad when I think of people who are forced into complete isolation.") with a frequency scale 1 = never to 5 = always. For details about the factor structure see Dinić & Bodroža (2021).

Fear related to the COVID-19 pandemic was measured by the five-item Fear subscale from the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988, for Serbian adaptation see Mihić, Novović, Čolović & Smederevac, 2014), which was presented with the instruction "How do you feel since the coronavirus appeared in our country?" The response scale ranged from 1 = very slightly or not at all to 5 = very much.

The helping-related affect was measured by three subscales from PANAS (Mihić *et al.*, 2014; Watson *et al.*, 1988): Joviality (three items), Self-Assurance (three items), and Fear (five items). Additionally, three items were created to measure Exhaustion (*tired, exhausted,* and *without energy*). Respondents had the instruction to answer how they felt about helping in the last 2 weeks. The response scale ranged from 1 = very slightly or not at all to 5 = very much. These scales were filled out only by those who answered that they helped someone in the previous two to three weeks. The reliability of all scales is presented in the Table 2.

Data analyses

Relations between variables were analyzed by Pearson correlations. Since there were age differences between some helper groups and non-helper group (see Table 3), age was used as covariate in the analysis of covariance (ANCOVA) for testing the differences in prosocial tendencies, empathy, fear, selfishness and communal narcissism between four groups (non-helpers and the three groups of helpers). The analyses of helpingrelated affect were carried out only on the three helper groups. In these analyses, age was not controlled, because there were no age differences between the three helper groups and, thus, ANOVA was used. To analyze the moderation effect of the recipient of help in relation to personality traits and helping-related affects, a set of moderation analyses were conducted in the PROCESS macro for SPSS v3.4. (Hayes & Little, 2018). We performed separate analyses for six prosocial tendencies, communal narcissism and selfishness. Scores on personality traits were centered before calculation of the interaction effect. The helper group was a moderator, and for the purposes of the analyses, it was transformed into two dummy variables: helping strangers (coded as 1, other groups coded as 0), and helping close persons and strangers (coded as 1, other groups coded as 0). Accordingly, the reference group was the group in which participants helped close persons only.

RESULTS

Descriptives, alpha reliabilities, and correlations

Descriptive statistics and correlations between all variables are presented in Table 2. Correlations between the factors of prosocial tendencies were generally small to moderate. Empathy towards people in forced isolation showed negative correlation with selfishness and public prosociality, while it showed positive correlations with other types of prosocial tendencies. Fear related to the pandemic was positively correlated to empathy, selfishness, public and emotional prosociality, and negatively to altruism. Selfishness, communal narcissism and public prosocial tendencies were mutually positively correlated. Communal narcissism also showed positive correlations with other prosocial tendencies, except for altruism.

Furthermore, empathy and altruism were positively related to all explored affects, both positive and negative. Communal narcissism, dire, anonymous, compliant, and emotional prosocial tendencies were positively related to positive effects, while selfishness and public prosocial tendency were positively related to negative effects.

Table 2. Descriptives, a	alpha reliabilities and	correlations between variables
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	M(SD)	α	1	2	3	4	5	6	7	8	9	10	11	12	13
Contextual factors															
1 Empathy towards persons in forced isolation	3.91 (0.72)	0.78													
2 Fear related to pandemic	2.78 (1.01)	0.90	0.19												
Personality factors															
3 Communal narcissism	3.52 (1.08)	0.92	0.03	0.00											
4 Selfishness	2.04 (0.60)	0.90	-0.38	0.12	0.12										
5 Dire prosociality	3.75 (0.78)	0.54	0.16	-0.01	0.33	-0.10									
6 Public prosociality	1.43 (0.60)	0.78	-0.10	0.14	0.16	0.29	0.05								
7 Anonymous prosociality	3.29 (0.97)	0.81	0.22	0.00	0.15	-0.23	0.21	-0.05							
8 Compliant prosociality	4.11 (0.80)	0.78	0.19	-0.01	0.27	-0.22	0.43	-0.04	0.28						
9 Emotional prosociality	3.72 (0.86)	0.77	0.21	0.13	0.37	0.01	0.58	0.10	0.16	0.39					
10 Altruism	4.29 (0.58)	0.55	0.11	-0.13	-0.29	-0.45	-0.10	-0.47	0.06	0.04	-0.17				
Helping-related affect															
11 Joviality	3.29 (0.97)	0.79	0.21	-0.04	0.29	-0.08	0.23	0.05	0.30	0.18	0.25	-0.19			
12 Self-assurance	3.58 (0.89)	0.73	0.24	-0.06	0.30	-0.06	0.29	0.03	0.22	0.27	0.27	-0.19	0.79		
13 Fear	2.09 (1.00)	0.92	0.20	0.68	0.02	0.12	-0.01	0.16	-0.01	-0.03	0.11	-0.14	-0.15	-0.15	
14 Exhaustion	1.90 (0.99)	0.90	0.02	0.36	0.05	0.18	0.02	0.12	-0.00	0.01	0.04	-0.20	-0.15	-0.11	0.64

Note: Correlations $\geq \pm 0.11$ are significant at p < 0.01.

Table 3. Differences between helpers and non-helpers in context-related and personality factors (N = 581)

	1 Helped only close persons (n = 170)	2 Helped only strangers (n = 50)	3 Helped both close persons and strangers $(n = 74)$	4 Non-helpers $(n = 287)$	F (3,577)	р	Post–hoc Bonferroni tests	
Age	35.55 (10.62)	37.60 (11.27)	34.39 (8.46)	32.37 (10.04)	5.94	0.001	1, 3 > 4	
Empathy towards persons in forced-isolation	4.02 (0.64)	3.92 (0.71)	4.24 (0.58)	3.77 (0.75)	10.18	< 0.001	1, 3 > 4	
Fear related to pandemic	2.73 (1.00)	2.43 (0.94)	2.79 (1.13)	2.87 (0.98)	2.46	0.062	_	
Dire prosociality	3.80 (0.75)	3.91 (0.69)	3.93 (0.77)	3.64 (0.80)	4.84	0.002	3 > 4	
Public prosociality	1.37 (0.53)	1.25 (0.37)	1.45 (0.59)	1.50 (0.66)	3.19	0.023	4 > 2	
Anonymous prosociality	3.41 (0.89)	3.52 (0.86)	3.51 (0.99)	3.13 (1.00)	4.64**	0.003	3 > 4	
Compliant prosociality	4.19 (0.72)	4.19 (0.90)	4.27 (0.68)	4.02 (0.85)	3.06	0.028	-	
Emotional prosociality	3.73 (0.81)	3.83 (0.91)	3.81 (0.93)	3.68 (0.86)	1.04	0.375	-	
Altruism	4.27 (0.57)	4.48 (0.41)	4.33 (0.59)	4.25 (0.60)	2.03	0.109	_	
Communal narcissism	3.52 (1.08)	3.32 (1.06)	3.64 (1.15)	3.52 (1.07)	0.76	0.520	-	
Selfishness	1.95 (0.57)	1.84 (0.58)	1.88 (0.55)	2.17 (0.60)	7.48	< 0.001	4 > 1, 2, 3	

Differences between helpers and non-helpers

There were neither gender differences ($\chi^2[3] = 0.16$, p = 0.984), differences in educational level (*K*-*W*[3] = 3.90, p = 0.272), nor in the household size (*F*[3,577] = 0.78, p = 0.51, $\eta^2 = 0.004$) in membership in the non-helping and helping groups. However, there were age differences between the groups. There were more younger participants among non-helpers, than among those who helped only close persons or only unknown persons (Table 3). Therefore, the age was controlled in the following comparisons of helper and non-helper groups. Results showed that non-helpers were more selfish than all three helper groups. Furthermore, nonhelpers had higher public prosocial tendency compared to those who helped only strangers. In addition, non-helpers had lower dire and anonymous prosociality compared to those who helped both close persons and strangers. Interestingly, non-helpers and those who helped only strangers were not different in empathy, but non-helpers showed lower empathy compared to those who helped only close persons or both close persons and strangers. The three groups of helpers did not differ in any examined characteristics.

Helping-related affect

Differences among three helper groups in helping-related affect depending on the personality traits were examined by the regression analysis with moderation effects. Since no age differences were observed among the helper groups, age was not controlled in these analyses. Groups of helpers were different only in self-assurance, where those who helped close persons and strangers were more self-assured than those who helped only close persons or only strangers (Table 4). When it comes to prosocial tendencies, dire, anonymous, compliant and emotional Table 4. Helping–related affect in different helper groups depending on communal narcissism and selfishness (N = 294)

	Criterion								
Predictors	Joviality B (SE)	Self–Assurance B (SE)	Fear B (SE)	Exhaustion B (SE)					
Communal Narcissism (CNI)	0.31 (0.07)***	0.32 (0.06)***	-0.03 (0.07)	-0.07 (0.07)					
Helping strangers (HS)	0.06 (0.15)	0.10 (0.14)	-0.22 (0.17)	0.02 (0.16)					
Helping close persons and strangers (HCPS)	0.19 (0.13)	0.24 (0.12)*	0.02 (0.14)	-0.08(0.14)					
CNI x HS	-0.17(0.14)	-0.23(0.13)	0.05 (0.15)	0.17 (0.15)					
CNI x HCPS	-0.05(0.12)	-0.11 (0.10)	0.11 (0.13)	0.29 (12)*					
R^2	0.10	0.12	0.01	0.02					
F (5,284)	6.55	9.98	0.59	1.35					
p	< 0.001	< 0.001	0.712	0.243					
ΔR^2 for interaction terms	0.00	0.01	0.00	0.02					
ΔF (2,284) for interaction terms	0.71	1.80	0.39	3.01					
$p(\Delta F)$	0.490	0.172	0.681	0.050					
Selfishness (SQ)	-0.14 (0.13)	-0.02(0.12)	0.05 (0.14)	0.20 (0.13)					
Helping strangers (HS)	-0.01 (0.16)	0.03 (0.14)	-0.20(0.16)	0.03 (0.16)					
Helping close persons and strangers (HCPS)	0.21 (0.14)	0.27 (0.12)*	0.05 (0.14)	-0.13 (0.14)					
SQ x HS	-0.32(0.27)	-0.54 (0.25)*	0.16 (0.28)	0.09 (0.27)					
SQ x HCPS	0.33 (0.24)	0.21 (0.22)	0.55 (0.25)*	0.34 (0.24)					
R^2	0.03	0.04	0.04	0.04					
F (5,284)	1.67	2.47	2.22	2.18					
p	0.143	0.032	0.052	0.061					
ΔR^2 for interaction terms	0.01	0.02	0.02	0.01					
ΔF (2,284) for interaction terms	2.17	3.63	2.37	1.00					
$p(\Delta F)$	0.121	0.031	0.102	0.371					

^{***}p < 0.001,

prosociality were related to both helping-related joviality and selfassurance, while altruism was related only to self-assurance (see Table S1 in Supplementary material; Bodroža & Dinić, 2021). However, none of the interaction effects of prosocial tendencies and helper groups on helping-related affect were statistically significant.

In the case when communal narcissism was a predictor, results showed that it was related to more joviality and self-assurance related to the act of helping. Finally, interaction terms of helper groups and communal narcissism showed that among those who helped both close and unknown persons, higher communal narcissism was related to more exhaustion (Fig. 1).

In the case when selfishness was a predictor, results showed that it was not related to helping-related affect, and that there was a statistically significant interaction of selfishness and the helper group, which indicated that among those who helped strangers, higher selfishness was related to less self-assurance (Fig. 2). Although the interaction term of selfishness and the group which

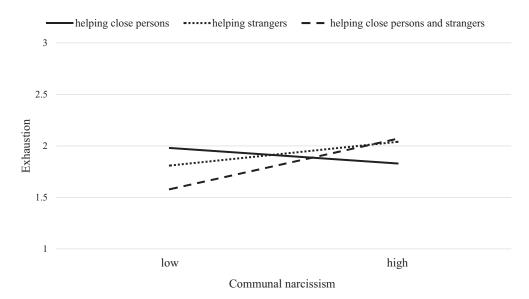


Fig. 1. The level of exhaustion in different helper groups depending on communal narcissism.

^{*}*p* < 0.05.

-helping close persons ------helping strangers - helping close persons and strangers

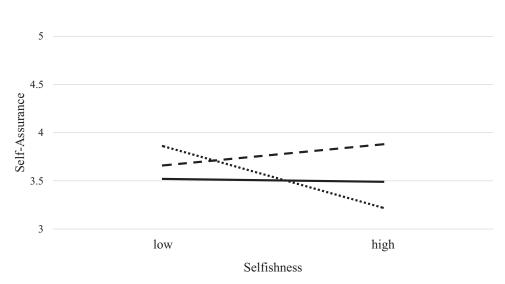


Fig. 2. The level of self-assurance in different helper groups depending on selfishness.

helped close and strange persons (dummy coded) was statistically significant, results showed that this interaction effect did not explain a significant percent of criterion variance and, thus, we did not analyze it further.

DISCUSSION

This study was carried out in the context of the global crisis of COVID-19 pandemic, which offered a unique opportunity to examine prosocial behavior in the natural setting. We explored voluntary helping during the emergency state and curfew in Serbia which is the only country where curfew was introduced at the beginning of the pandemic. In such a context, we carried out the study which was primarily focused on the differences between helpers and non-helpers, as well as on the groups of helpers who provided their help to close or unknown others.

Analyses showed that groups of helpers with different recipients of help were not substantially different from each other, but they were substantially different from non-helpers. In general, as compared to helpers, non-helpers were more self-oriented when it came to their prosocial tendencies and other personality traits. They were shown to be less empathetic, more selfish and generally more motivated to help in public situations as opposed to helping anonymously or in dire situations. All these findings confirmed that selfish individuals and individuals who were self-focused when deciding on prosocial behavior would judge their own costs and benefits, and, as a result, they would be less likely to make the decision to help, as Social Exchange Theory states (Thibaut & Kelley, 1959).

Our expectation that non-helpers and helpers would not differ in communal narcissism was supported, which was in line with the finding of Nehrlich *et al.* (2019) that communal narcissism was unrelated to objective helping behavior. This result might indicate that, although the crisis situation could provide opportunities to gain admiration through heroic acts (Freis & Brunell, 2020), potential threats of risk of infection could

correlation between communal narcissism and fear related to the pandemic, on the one hand, and empathy towards individuals in forced isolation, on the other hand, might reflect this conflicting position. Also, it should be noted that relations of communal narcissism with prosocial tendencies directly showed that these individuals saw themselves as prosocial, but they were also aware that their helping did not come "for free," and that they clearly saw their personal interest in behaving in this manner, which was obvious from its positive relation to public helping and negative relation to altruism. Results regarding context-related factors require further elaboration. Regarding empathy towards people in forced isolation, results showed that non-helpers experienced less empathy, compared to those who helped close persons. These findings give support to Batson's Altruism-Empathy Hypothesis (Batson et al., 2015). However, it should be emphasized that the measures of altruism and empathy used in this study were conceptually different in at least two aspects. First, the measure of altruistic prosocial tendency captured trait altruism, while empathy, which was a prerequisite of altruistic helping in the Altruism-Empathy Hypothesis, was conceptualized as contextspecific and, as such, referred to sympathy for individuals in forced isolation. Second, altruism referred to helping despite potential losses or without potential or direct gains. Although Batson's theory implied that empathy was a mediator between the situation and altruism, the PTM measure of altruism did not explicitly contain any indicator of sympathy or emphatic concert for others, and their conceptual difference was reflected in low, but statistically significant positive correlation between PTM altruism and context-related empathy.

demotivate these individuals to really step out. A positive low

Regarding the fear related to pandemic, our analyses revealed no differences between helpers and non-helpers. This result is contrary to the findings of previous studies which showed that fear and anxiety were usually related to less prosocial behavior (Cao *et al.*, 2020; Ye *et al.*, 2020) and it is more in line with meta-analytic findings that showed that negative affect and anxiety are not the determinants of prosocial behavior (Thielmann *et al.*, 2020).

It should be emphasized that some differences between helpers and non-helpers did not appear, contrary to our expectations. First, we found no differences in compliant prosocial tendencies, which meant that non-helpers were not necessarily the ones who waited for someone to ask for their help. When it came to emotional prosociality, where the differences were also not found, the concept itself implied helping by offering comfort and emotional support. Thus, the lack of differences between helpers and non-helpers might reflect the mere fact that self-organized groups of helpers were primarily focused on helping in the practical aspects of forced isolation (e.g., buying groceries), while emotional support was provided to a lesser extent (only 11% of helpers said that they provided professional psychosocial support). Furthermore, emotional prosociality was related to higher empathy towards individuals in forced isolation, but also to higher fear related to the pandemic, which might indirectly suggest that overly emotional and sympathetic individuals might have experienced the empathic over-arousal (Hoffman, 2000), which "blocked" their capacities for providing help. Finally, non-helpers did not perceive themselves as less altruistic than helpers. It seems that, although non-helpers were aware that they are motivated to help in public and non-anonymous situations more than certain groups of helpers, they did not perceive that their helping tendencies are usually based on direct rewards more than helpers. This may be due to the different understanding of what rewards might be.

Contrary to our expectation, there were no differences between the three groups of helpers neither in personality traits or contextrelated empathy and fear. It could be assumed that strong situational pressures annul the individual differences among helpers, making them a homogenous group of people who help regardless of their reasons for providing help and the recipient of help.

Groups of helpers did not differ in their joviality, fear and exhaustion related to helping, but they differed in self-assurance. Group comparisons showed that self-assurance was the highest among those who helped both close persons and strangers. This finding might suggest that more extensive experience with helping brought confidence to the helper. However, this explanation should be taken with caution, because we neither measured the intensity or the frequency of helping, nor the number of persons whom one provided help.

Trait altruism was not associated with joviality related to the act of helping, but only to self-assurance, while dire, compliant, emotional and anonymous prosociality were related to both of these positive emotions related to the act of helping. It seems that those who tend to help anonymously, on demand, in emergent or emotional situations experience short-term benefits of these prosocial acts (Post, 2005) in both positive feelings and enhancement of self-image, which is in line with Social Exchange Theory (Thibaut & Kelley, 1959). Altruistic helping, however, implies a non-calculative readiness to help, which confirms the Altruism-Empathy Hypothesis (Batson et al., 2015). Finally, those who tend to help in order to gain public praise do not benefit from the helping in the emotional sense or self-image enhancement. Therefore, it seems that the positive effects of helping behavior are not granted to everyone, but they depend on the basic motivation that lies behind such acts.

Furthermore, our results showed that among helpers selfishness was not related to lower positive emotions and higher negative emotions related to helping, as we hypothesized. Nevertheless, the results confirmed our expectation that if more selfish persons provided help to strangers, they would not benefit from helping in terms of positive emotions that such an act could bring. More selfish persons who helped strangers were less self-assured regarding their helping. However, it seemed that they expected more direct than symbolic benefits, which made them insecure regarding their behaviors. Therefore, it could be expected that they might easily give up on helping others.

Moreover, among helpers, those with higher communal narcissism reported more joy and self-assurance related to helping, which was consistent with communal narcissists' selfimage of superiority in helping and caring for others (Gebauer et al., 2012). However, if they provided help to both close and unknown persons, those with higher communal narcissism experienced more exhaustion than those with lower levels of this trait. This finding, along with findings regarding the relationship of communal narcissism with prosocial tendencies, indirectly showed that helping, the communal narcissist was not genuinely altruistically motivated. Therefore, when helpers with higher communal narcissism pushed their limits to help both close and unknown persons, they started to experience exhaustion. Our findings provided additional insight into the dynamics of communal narcissism, adding up to previous studies which showed that such individuals were not genuinely other-focused as they want to present themselves (Freis & Brunell, 2020; Gebauer et al., 2012; Nehrlich et al., 2019).

Limitations and conclusions

Because of the nature and the main topic of the study, it was carried out on a convenient sample of helpers and non-helpers. For these reasons, the results of the study could not be generalized to a wider population. Also, our results are related to the specific context of an early phase of the COVID-19 pandemic, so future studies are needed to confirm to what extent they could be generalized to the post-pandemic period or other situations of prosociality under crises. It should be mentioned that the helper group in this study consisted only of those who reacted promptly and helped at the beginning of the crisis. The helpers could be different from those who might have hesitated and helped later during the curfew. Helpers from our sample provided different kinds of help, some of which assume direct contact with others and enhanced risks of infection, while others did not. However, due to uneven and sometimes small groups of helpers who provided specific kinds of help, we could not consider this factor in the analyses. Our hypotheses regarding the recipient of help involved comparison between those who helped close others and those who helped strangers, but for practical reasons we were forced to create an additional group of helpers who helped both groups of persons in need. This group might have blurred some differences between the groups we were primarily interested in. Additionally, since the study was advertised in social media groups where help was offered, the non-helper group could have included a considerable number of people who were in need of help. These individuals may have been specific compared to the general population (e.g.,

health status, specific needs, age, etc.). This could also limit the generalizability of the comparisons of helpers and non-helpers.

Despite these limitations, the results of this study provide a further understanding of both personality and contextual factors of helping in crisis situations. It seems that crisis situation mobilises resources of all people who are willing to provide help intrinsically and immediately and diminishes the differences between them in terms of to whom they provide help. Furthermore, both personality and contextual factors contribute to the differences between helpers and non-helpers showing that helpers are characterized by altruistic and other-focused tendencies, higher empathy and less fear related to pandemic.

The datasets generated during and/or analysed during the current study are available in the Open Science Framework repository (Bodroža & Dinić, 2021).

The procedures used in this study adhere to the tenets of the Declaration of Helsinki. The study was approved by the Ethical Committee of the Department of Psychology, Faculty of Philosophy, University of Novi Sad, Serbia, which is the Second Instance Commission of the Ethical Committee of the Serbian Psychological Society (No. 202003221959_nytc).

Bojana Bodroža and Bojana M. Dinić contributed to the conception and design of the study, collected the data, and performed the analyses. Bojana Bodroža wrote the first draft of the manuscript. Bojana M. Dinić provided substantial feedback on the manuscript. All authors contributed to the article and approved the submitted version.

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ENDNOTE

¹ This study is a part of a larger research project. Other results from this project are presented elsewhere (Dinić & Bodroža, 2020; Dinić & Bodroža, 2021).

REFERENCES

Batson, C.D. & Oleson, K.C. (1991). Current status of the empathyaltruism hypothesis. In M.S. Clark (Ed.), *Review of personality and* social psychology, Vol. 12. Prosocial behavior (pp. 62-85). Thousand Oaks, CA: Sage.

- Batson, C.D., Lishner, D.A. & Stocks, E.L. (2015). The empathy–altruism hypothesis. In D.A. Schroeder & W.G. Graziano (Eds.), *The Oxford handbook of prosocial behavior* (pp. 259–281). New York, NY: Oxford University Press.
- Beeney, J.E., Franklin, R.G., Levy, K.N. & Adams, R.B. (2011). I feel your pain: Emotional closeness modulates neural responses to empathically experienced rejection. *Social Neuroscience*, 6, 369–376.
- Bodroža, B. & Dinić, B. (2021). Prosocial behaviors in times of COVID-19 pandemic. Open Science Framework. https://doi.org/10.17605/OSF. IO/GDZ42.
- Buchanan, T. & Preston, S. (2014). Stress leads to prosocial action in immediate need situations. *Frontiers in Behavioral Neuroscience*, 8, 5. https://doi.org/10.3389/fnbeh.2014.00005.
- Buso, I. M., De Caprariis, S., Di Cagno, D., Ferrari, L., Larocca, V., Marazzi, F. *et al.* (2020). The effects of COVID-19 lockdown on fairness and cooperation: Evidence from a lablike experiment. *Economics Letters*, 196, 109577.
- Buss, D.M. (2019). Evolutionary psychology: The new science of the mind, 6th edition. New York: Routledge.
- Cao, S., Qi, Y., Huang, Q., Wang, Y., Han, X., Liu, X. et al. (2020). Emerging infectious outbreak inhibits pain empathy mediated prosocial behaviour. PsyAchXiv. https://doi.org/10.31234/osf.io/5p8kd.
- Carlo, G. & Randall, B.A. (2002). The development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence*, 31, 31–44.
- Cialdini, R.B., Brown, S.L., Lewis, B.P., Luce, C. & Neuberg, S.L. (1997). Reinterpreting the empathy–altruism relationship: When one into one equals oneness. *Journal of Personality and Social Psychology*, 73, 481–494.
- Davis, M.H. (2015). Empathy and prosocial behavior. In D.A. Schroeder & W.G. Graziano (Eds.), *The Oxford handbook of prosocial behavior* (pp. 282–306). New York: Oxford University Press.
- Dinić, B. & Bodroža, B. (2020). "My precious... toilet paper": Stockpiling during the COVID–19 pandemic is related to selfishness, but not to fear. *Primenjena Psihologija*, 13, 489–504. https://doi.org/ 10.19090/pp.20.4.489-504.
- Dinić, B. & Bodroža, B. (2021). COVID-19 protective behaviors are forms of prosocial and unselfish behaviors [brief research report]. *Frontiers in Psychology*, 12(1128). https://doi.org/10.3389/fpsyg.2021.647710.
- Feng, Y., Zong, M., Yang, Z., Gu, W., Dong, D. & Zhihong, Q. (2020). When altruists cannot help: The influence of altruism on the mental health of university students during the COVID–19 pandemic. *Globalization and Health*, 16, 61.
- Freis, S.D. & Brunell, A.B. (2020). Effects of narcissism in essential workers during COVID–19. *Personality and Individual Differences*, 171, 110533. https://doi.org/10.1016/j.paid.2020.110533.
- Gebauer, J.E., Sedikides, C., Verplanken, B. & Maio, G.R. (2012). Communal narcissism. *Journal of Personality and Social Psychology*, 103, 854–878.
- Hayes, A.F. & Little, T.D. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach, 2nd edition. New York: The Guilford Press.
- Hein, G., Silani, G., Preuschoff, K., Batson, C.D. & Singer, T. (2010). Neural responses to ingroup and outgroup members' suffering predict individual differences in costly helping. *Neuron*, 68, 149–160.
- Hoffman, M.L. (2000). Empathy and moral development: Implications for caring and justice. New York: Cambridge University Press.
- Kaniasty, K. & Norris, F.H. (1995). Mobilization and deterioration of social support following natural disasters. *Current Directions in Psychological Science*, 4, 94–98.
- Levine, M., Prosser, A., Evans, D. & Reicher, S. (2005). Identity and emergency intervention: How social group membership and inclusiveness of group boundaries shape helping behavior. *Personality* and Social Psychology Bulletin, 31, 443–453.
- Maner, J.K. & Gailliot, M.T. (2007). Altruism and egoism: Prosocial motivations for helping depend on relationship context. *European Journal of Social Psychology*, 37, 347–358.

- Mihić, L., Novović, Z., Čolović, P. & Smederevac, S. (2014). Serbian adaptation of the positive and negative affect schedule (PANAS): Its facets and second–order structure. *Psihologija*, 47, 393–414.
- Musick, M.A. & Wilson, J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. *Social Science & Medicine*, 56, 259–269.
- Nehrlich, A.D., Gebauer, J.E., Sedikides, C. & Schoel, C. (2019). Agentic narcissism, communal narcissism, and prosociality. *Journal of Personality and Social Psychology*, 117, 142–165.
- Paciello, M., Fida, R., Cerniglia, L., Tramontano, C. & Cole, E. (2013). High cost helping scenario: The role of empathy, prosocial reasoning and moral disengagement on helping behavior. *Personality and Individual Differences*, 55, 3–7.
- Post, S.G. (2005). Altruism, happiness, and health: It's good to be good. International Journal of Behavioral Medicine, 12, 66–77.
- Radević, L. & Dinić, B. (2020). Relationships of agentic and communal narcissism with self-efficacy in various life domains. *Primenjena Psihologija*, 13, 91–117.
- Raine, A. & Uh, S. (2019). The selfishness questionnaire: Egocentric, adaptive, and pathological forms of selfishness. *Journal of Personality* Assessment, 101, 503–514.
- Rao, L. –L., Han, R., Ren, X.–P., Bai, X. –W., Zheng, R., Liu, H. et al. (2011). Disadvantage and prosocial behavior: The effects of the Wenchuan earthquake. Evolution and Human Behavior, 32, 63–69.
- Schlenker, B.R. & Britt, T.W. (2001). Strategically controlling information to help friends: Effects of empathy and friendship strength on beneficial impression management. *Journal of Experimental Social Psychology*, 37, 357–372.
- Tarrant, M., Dazeley, S. & Cottom, T. (2009). Social categorization and empathy for outgroup members. *British Journal of Social Psychology*, 48, 427–446.

- Thibaut, J.W. & Kelley, H.H. (1959). *The social psychology of groups*. New York: Wiley.
- Thielmann, I., Spadaro, G. & Balliet, D. (2020). Personality and prosocial behavior: A theoretical framework and meta-analysis. *Psychological Bulletin*, 146, 30–90.
- Vieira, J., Pierzchajlo, S., Jangard, S., Marsh, A. & Olsson, A. (2020). Perceived threat and acute anxiety predict increased everyday altruism during the COVID–19 pandemic. *PsyAchXiv*. https://doi.org/10.31234/ osf.io/n3t5c.
- Watson, D., Clark, L.A. & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Ye, Y., Long, T., Liu, C. & Xu, D. (2020). The effect of emotion on prosocial tendency: The moderating effect of epidemic severity under the outbreak of COVID–19. *Frontiers in Psychology*, 11, 3550.
- Yilmaz, H. (2018). Measuring egocentric, adaptive and pathological forms of selfishness: Scale adaptation study. *The Journal of Academic Social Science*, 6, 45–57. https://doi.org/10.16992/ASOS.13889.

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article:

Table S1. Helping-related affect in different helper groupsdepending on prosocial tendencies

***p < 0.001, **p < 0.01, *p < 0.05.

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