# Belief in the importance of socially responsible behaviors – the significance of trust and personal experiences with Covid-19

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#### Abstract



A vast number of studies have shown that trust is related to socially desirable traits and behaviors. In the present research we have investigated the relationship between generalized trust and beliefs about the importance of socially responsible behaviors (SRB) during the pandemic – namely, following the sanitary regime and getting vaccinated. Basing on the previous findings we assumed that trustful people would be more convinced of the benefits of complying with the pandemic restrictions and getting vaccinated. The hypothesis stated that people with high levels of trust who had COVID-19 or whose close persons had been infected would be the most likely to believe in socially responsible behaviors. We recruited 405 people from the general population (age range 18–65) to participate in an online study conducted via a research platform. The analysis using linear regression has shown that people, whose close persons had suffered from COVID-19 were more inclined to believe in the importance of SRB. The level of trust also predicted the beliefs about the importance of socially responsible behaviors in mitigating the pandemic. Trust was positively related to SRB, except for people whose close persons had been infected with COVID-19. Regardless of the level of trust, people with such experience tended to assess SRB as important to combat the pandemic. These results have shed light on the importance of trust in developing the strategy of fighting the COVID-19 pandemic.

Keywords COVID-19 · Pandemic restrictions · Social relationships · Trust · Vaccination

## Introduction

The prolonging COVID-19 pandemic is considered the biggest global health crisis in the last century (Godara et al., 2021). As numerous studies have shown, it is greatly related to the deterioration of well-being (Rahman et al., 2020). This is true both among people infected with COVID-19 and those who did not get the disease, but were subjected to pandemic restrictions such as the lockdown, which limited social contacts. As a result, people may have suffered from loneliness (Nowakowska, 2020; Okruszek et al., 2020), increased stress (Bodecka et al., 2021), anxiety (Gambin et al., 2021) and depressive symptoms (Ma et al., 2020). The pandemic has been a situation when social responsibility was particularly important, because commitment of the individuals within the society has been required to stop the spread of the virus and mitigate the dramatic costs to health, economy and well-being of entire nations (Hosseini Bamakan & Haddadpoor Jahromi, 2021). Previous studies have shown that trust can be a vital factor helping societies to recover from crises (Helliwell et al., 2015; Yamamura et al., 2015). Therefore, investigating to what extent trust explains attitude towards social responsibility in the times of a pandemic seems to be a particularly relevant issue.

Trust is a key element of social life. It is essential for successful business transactions, establishing friendships and long-term relationships (Solomon & Flores, 2003). Trust is based on expectation of positive outcomes of other people's behavior (Ashraf et al. 2006, Bohnet & Piankov, 2006; Johnson & Mislin, 2011; Yamagishi & Yamagishi, 1994). It can refer to specific institutions (such as government or public organizations) or reflect a generalized attitude towards society and other people. Trustful societies have better opinion about public institutions and are more satisfied with their service (Helliwell et al., 2021). Trust arises from beliefs about the world and others, which are developed through

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everyday interactions or reflects global vision of the world (Putnam, 2000).

A considerable number of studies indicate the relationship between trust and a variety of socially desired qualities and behaviors, such as optimism, tolerance, cooperation, social solidarity, and charitable behaviors (Ashraf et al. 2006; Rothstein & Uslaner 2005). Trust is linked to happiness measured both at individual and national level (Jasielska et al., 2019; Helliwell et al., 2021). It is also one of the key factors explaining the remarkably high level of happiness in Nordic countries (Martela et al., 2020). Benefits of trust reach far beyond personal well-being and general benevolence. There is ample evidence that trust is linked to society resilience in response to economic and social crises. For example, trust was proven to mitigate the negative effects of the Great Earthquake on psychological well-being in Japan (Yamamura et al., 2015) and was linked to happiness maintenance in Ireland and Iceland after the financial crisis in 2007 (Helliwell et al., 2015).

### **Current Study**

As social psychologists argue, pandemic is a powerful situation which affects social processes (Meier et al., 2021). It can lead to increase in acts of solidarity (Nowakowska, 2021), as well as to a deterioration of perceived social support (Kaniasty, 2020). Therefore, understanding factors that determine engagement in socially responsible behaviors is important (see Albarracin & Jung, 2021). By gathering such information scientists can offer valuable recommendations for creating an environment that facilitates cooperation and social responsibility. The main objective of the current study is to identify the psychological variables that can aid improving pandemic-related preventive behavior, as well as the interactive effects of such variables in predicting socially responsible behaviors.

As trust is related to doing good deeds for others (Jasielska, 2020), it seems likely that trustful individuals will be also more inclined to socially responsible behaviors during the pandemic. Such behaviors might comprise following the sanitary restrictions (such as e.g., wearing masks, keeping distance, and other recommendations that aim to stop the spread of the virus; Campos-Mercade et al., 2021), and being vaccinated against COVID-19 (Graffigna et al., 2020). Countries which have higher indices of trust in institutions are more successful in fighting COVID-19 and have lower rates of mortality as a result of COVID-19 (Helliwell et al., 2021). Some studies have shown, that social trust is positively related to perceived benefits from vaccination (Latkin et al., 2021; Liu & Yang, 2021). However, data on how the generalized trust is linked to the beliefs about the significance of socially responsible behaviors in limiting the spread of the virus is scarce. Investigating this relationship is an important issue to be undertaken, given that the majority of countries in the world still have not achieved satisfactory vaccination/immunity rates. Thus, all knowledge about factors that are linked to the successful fight against the pandemic is highly relevant. Therefore, in the present study we want to test the connection between the generalized trust and belief in the importance of pandemic-related, socially responsible behaviors, namely, following the sanitary regime and getting vaccinated against COVID-19. We assume that people characterized by a high level of trust will be more convinced of the benefits of complying with the pandemic restrictions and getting vaccinated. What is more, the attitude to behaving in a socially responsible way will also be determined by whether a person (or others that are in close relationship with the person) has been infected with COVID-19. Such experience can be linked to a higher proneness to various types of socially responsible behaviors, because of the increased awareness of dire consequences of ignoring the pandemic. Therefore, we hypothesize that people with high levels of trust who have had COVID-19 or whose close persons have been infected will be the most likely to believe in socially responsible behaviors.

## Method

#### **Participants and Procedure**

According to an a-priori power analysis conducted in G\*Power (Faul et al., 2009), 386 participants were needed to detect a small effect size ( $\alpha = .05$ ) with a power of .80. We decided to enroll more participants to maximize the chance of including people who had been infected with COVID-19. The study was conducted in June 2021, after the end of third wave of COVID-19. Participants were recruited online via one of the biggest research platforms in Poland. The final sample consisted of 405 people (180 women, 44%), aged 18–60 (M = 38.91; SD = 11.02). After providing informed consent, they completed Generalized Trust Scale, responded to questions about COVID-19 experiences and answered about their beliefs regarding Socially Responsible Behaviors. They also completed several other questionnaires, which are not relevant to the present research, for which analyses will be presented elsewhere. The study was performed in accordance with the ethical standards of the Institutional Review Board of the authors and with the Declaration of Helsinki.

#### Measures

**Trust** To measure Trust, we used the Generalized Trust Scale (GTS; Yamagishi & Yamagishi, 1994). GTS is a self-report tool constructed to assess trust defined as an expectation of trustworthiness of others (or high expectations of human benevolence - Yamagishi, 2001). The scale has been used successfully to study and predict trusting behavior (Carter & Mark Weber, 2010; Jasielska et al., 2019; Yamagishi 2001). It consists of six statements, such as *Most people are trustworthy*. Participants responded using a 5-point scale (with answers ranging from 1– strongly agree to 5 – strongly disagree). Prior to its use, the scale was translated and back translated by a bilingual person. The GTS had a very good reliability in the present study,  $\alpha = .92$ .

**COVID-19 Experiences and Beliefs about Socially Responsible Behaviors** Several questions were asked about the participants' experiences with the coronavirus pandemic. First, they declared whether they themselves or their close persons had been infected with COVID-19 or not. Those who had been through COVID-19 also assessed the severity of their symptoms on a scale from 1 (very light) to 10 (very severe). Then, participants answered (on a scale from 1 - I*strongly disagree* to 4 - I *completely agree*) to what extent they believed that following behaviors could help fighting the pandemic: 1) adhering to the sanitary regime; and 2) getting vaccinated. Those two questions constituted a scale called Socially Responsible Behaviors, SRB, which showed a good reliability estimate,  $\alpha = .86$ .

## Results

There were 169 (41.7%) individuals, who declared that they had been infected with COVID-19 themselves (Own Infection), and 232 (57.3%) individuals, who declared that their close persons had been infected (CP Infection). Means and standard deviations for Trust and SRB are presented in Table 1 separately for participants with CP Infection and Own Infection.

Results of the zero-order Pearson correlation indicated that Own Infection was associated with the CP Infection and the CP Infection was related to higher SRB (close person infected: M = 3.44, SD = 1.12; close person not infected: M = 3.21. SD = 1.10). SRB was positively related to Trust and CP Infection, but not significantly associated with Own Infection or symptoms severity. Trust was associated with neither CP nor Own Infection, nor the severity of symptoms. Correlation coefficients are presented in Table 2. 
 Table 2
 Correlations and means for continuous study variables

Variable	Own Infection	CP Infection	Severity	Trust	SRB
Own Infection	_	.51*	_	03	.02
CP Infection		-	.07	.01	.10*
Severity			-	04	.03
Trust				_	.19*
SRB					_
Μ	_	_	4.51	3.14	3.34
SD	-	-	2.38	0.77	1.12

p < .05; CP/Own Infection, coded 0 – not infected, 1 – infected. The severity of infection refers to Own Infection

Next, hypotheses were tested using linear regression. Trust (centered around the mean) was the predictor of SRB and infection (own or of close persons) was the moderator of this relationship. Severity of Own Infection was not related to Trust and SRB so was not included in the model where Own Infection was the moderator. Unstandardized coefficients for two models with Own and CP Infection as moderators are presented in Table 3.

Results indicated that Trust was positively associated with SRB, but only the CP Infection (and not Own Infection) was important in shaping this relationship. The effect of Trust on SRB was positive and significant only in those whose close persons had not been infected, B=0.43, SE=0.10, t=4.14, p < .001, 95% CI [0.22; 0.63], but insignificant in participants whose close persons had been infected, B=0.13, SE=0.09, 1.36, p=.173, 95% CI [-0.05; 0.32]. Figure 1 presents Trust-SRB relationship depending on CP Infection.

## Discussion

In the current study we found out that people whose close persons had suffered from COVID-19 were more inclined to believe in the importance of SRB (operationalized as following the sanitary regime and getting vaccinated against COVID-19), but in the case of own illness such phenomenon did not occur. Witnessing a close person having COVID-19 could have been a great stressor (Lahav, 2020). SRB are linked to orientation on others, which may be more highlighted while seeing someone being "vulnerable" and empathizing with them (as in the "empathy-altruism hypothesis",

Table 1Means and standarddeviations for Trust and SRBdepending on the CP Infectionand Own Infection. Number ofparticipants in each group ispresented in brackets

	CP Infection				Own Infection				
	Negative (173)		Positive (232)		Negative (236)		Positive (169)		
	М	SD	М	SD	М	SD	М	SD	
Trust	3.12	0.80	3.14	0.75	3.16	0.81	3.10	0.70	
SRB	3.21	1.10	3.44	1.12	3.32	1.09	3.36	1.15	

Table 3Unstandardizedcoefficient in the modelspredicting SRB based on Ownor CP Infection, Trust andinteraction of these variables

	Own				Close Persons'				
	В	SE	t	р	B	SE	t	р	
Infection	0.05	0.11	0.49	.624	0.23	0.11	2.09	.038	
Trust	0.30	0.09	3.44	.001	0.43	0.10	4.14	< .001	
Trust x Infection	-0.09	0.15	-0.62	535	-0.30	0.14	-2.13	.033	
$R^2$ change	0.001				0.011				
$R^{2}(p)$	0.036 (.0	0.036 (.002)				0.056 (< .001)			

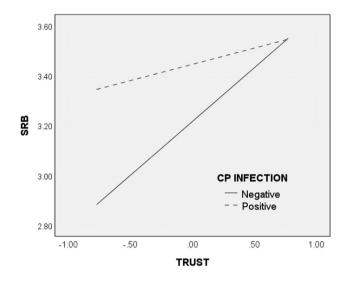


Fig.1 Trust and SRB in the CP Infection groups (positive or negative)

Batson et al., 2015). Taking care of an ill person might have activated thinking about others more globally and resulted in believing in the pandemic-related SRB. Interestingly, such effect was not observed for own illness. On the one hand, own illness may be related to concentrating on the self (caring for oneself to combat the disease), thus, not promote social responsibility. On the other hand, it might result in belittling the experiences of others, interpreting them in the light of the course of one's own illness (which is especially true in people who had only slight symptoms). In people who behaved in a socially responsible manner before, the experience of illness might have resulted in fatalistic, hopeless thinking that, despite efforts, SRB cannot prevent them from getting infected with COVID-19.

Our results indicated that, generally, the higher the generalized trust, the higher the belief in the importance of SRB, except for people whose close persons had COVID-19. This result is in line with the previous literature regarding the role of trust in socially desirable outcomes (e.g., Ashraf et al. 2006; Rothstein & Uslaner 2005). Which is noteworthy, the level of trust was on a similar level in both people whose close persons had and did not have COVID-19, however, as mentioned above, the belief in the importance of SRB was higher in those whose close persons had the disease, and in this group such belief did not correlate with trust. A mechanism that may underlie this phenomenon might be that witnessing a close person's illness was a strong social situation (Mischel, 1977), which makes individual differences (such as generalized trust) not necessary to believe in the importance of SRB. Regardless of the level of trust, people with such experience tended to assess SRB as important to combat the pandemic. However, as described above, own infection did not appear to be such a strong social situation, which might be linked to the fact of receiving care during illness (instead of caring for others), which did not provide an opportunity to activate the other-oriented thinking, or a feeling of hopelessness (catching the disease despite behaving responsibly).

#### **Limitations and Future Research Directions**

Our study has several limitations which ought to be taken into account. First, the study was cross-sectional (limiting causal interpretations and capturing one specific pandemic period of the third wave), conducted in only one country, and through a research panel (restricting the potential participants to the registered panel members). Future studies are needed to find out other potential correlates and/or antecedents of SRB during the pandemic to limit the spread of the virus. It would be also beneficial to combine quantitative and qualitative methods to obtain a more nuanced picture of the studied variables. For example, usage of daily diary studies (Nezlek, 2020) could help us find the dynamics of the interaction between momentary feelings of trust and daily socially responsible behavior. Moreover, one of the promising new approaches in Online Photovoice (OPV - Tanhan & Strack, 2020). This qualitative method provides participants an opportunity to express their own experience by using photographs and writing stories. Applying OPV to describe trust and SRB in the context of pandemic can enrich the current findings and indicate other factors worth investigating in future.

#### **Practical Implications**

Our study has several implications in different areas. In the times of health crisis, such as the pandemic, trust is related to a higher readiness to act socially responsible. Trustful citizens are more inclined to get vaccinated and to follow sanitary regime, which is fundamental in preventing spreading the virus (WHO, 2021). Therefore it seems worthy for the governments to support development of trustful attitudes in the society. One of the foundations of trust is open and sincere communication (Thomas et al., 2009), which can be enhanced through access to reliable information and by establishing a social dialogue between the authorities and society (Serohin et al., 2020). Shaping trustfulness is a process that requires time and engagement of different institutions, starting from the earliest levels of schooling. Developing educational programs that foster a trust should be an important goal for education professionals.

Future pandemics are highly likely to occur. Therefore, the knowledge about factors affecting social behavior and attitudes during major health crises is essential for supporting societies and individuals in successful fighting other virus outbreaks.

Author Contributions Dorota Jasielska: Conceptualization, Methodology, Investigation, Resources,

Writing - original draft, Writing - review & editing, Project administration, Funding acquisition.

**Joanna Rajchert:** Formal analysis, Data curation, Writing - original draft, Writing - review & editing.

**Iwona Nowakowska:** Methodology, Writing - original draft, Writing - review & editing.

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**Data Availability** Data are available from the authors upon reasonable request.

#### Declarations

Ethical Approval The study was carried out in accordance with the recommendations of the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Approval was granted by the Ethics Committee of the first author's university. All subjects gave written informed consent in accordance with the Declaration of Helsinki.

**Conflict of Interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

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