

# Social Psychological Bulletin

Psychologia Społeczna

## Under or Out of Government Control? The Effects of Individual Mental Health and Political Views on the Attribution of Responsibility for COVID-19 Incidence Rates

Krystyna Skarżyńska<sup>a</sup>, Beata Urbańska<sup>b</sup>, Piotr Radkiewicz<sup>b</sup>

[a] *Department of Psychology, SWPS University of Social Sciences and Humanities, Warsaw, Poland.* [b] *Institute of Psychology, Polish Academy of Sciences, Warsaw, Poland.*

Social Psychological Bulletin, 2021, Vol. 16(1), Article e4395, <https://doi.org/10.32872/spb.4395>

Received: 2020-09-15 • Accepted: 2020-11-11 • Published (VoR): 2021-03-30



**Handling Editor:** Wijnand A. P. Van Tilburg, Department of Psychology, University of Essex, Colchester, United Kingdom

**Corresponding Author:** Krystyna Skarżyńska, SWPS University of Social Sciences and Humanities, ul. Chodakowska 19/31, 03-815 Warsaw, Poland. E-mail: [kskarzyn@swps.edu.pl](mailto:kskarzyn@swps.edu.pl)

**Supplementary Materials:** Data [see [Index of Supplementary Materials](#)]



### Abstract

The paper shows the role of mental health and political views in attributing responsibility for COVID-19 incidence rates to the government and factors beyond government control. Authors' hypotheses draw on the classic and new versions of attribution theories, on literature from political psychology about the process of blaming the government for natural catastrophes, and also on local socio-political specifics (political polarization). The empirical data used in the article come from the survey carried out on-line via a professional research panel at the turn of May and June 2020, after about three months of lockdown, and during the presidential election campaign. The research sample included 850 Polish adults (aged 18 to 84) fully diversified in terms of gender, age, and education (the sample was representative for the Polish population in terms of respondents' place of residence and the country's region). To measure attribution of responsibility, the authors developed an 8-item instrument. Half of the instrument's items indicate government and state institutions' responsibility and half describe circumstances not related to the government. The results showed that the respondents tended to attribute more responsibility for COVID-19 effects to the government than other ("non-government") factors. In explaining the government's



This is an open access article distributed under the terms of the [Creative Commons Attribution 4.0 International License](#), CC BY 4.0, which permits unrestricted use, distribution, and reproduction, provided the original work is properly cited.

responsibility, political views and party preferences play an incomparably more significant role than mental health symptoms. The authors interpret these results as the effect of attitudinal and affective political polarization of Polish society.

## Keywords

responsibility attribution, government responsibility, mental health symptoms, political views, political polarization

## Highlights

- The authors argue that responsibility for COVID-19 incidence rates can be attributed to government activity and factors beyond government control.
- Two categories have been identified among the potential reasons for attributing responsibility: mental health and political views/party preferences.
- The results showed that respondents tend to attribute more responsibility for COVID-19 effects to the government than other ("non-government") factors.
- In explaining the government's responsibility, political views and party preferences play an incomparably more significant role than mental health symptoms.

The COVID-19 pandemic is a difficult time for citizens due to the threat to physical health and because government restrictions related to physical distancing and lockdown can lead to deep frustration of some basic human needs (autonomy, relatedness, security). In the beginning, societies experience an "epidemic of fear"; the next step is an "epidemic of explanations": social (naive, lay) interpretations of responsibility for the disease's spread (Strong, 1990). After the initial common fear associated with high acceptance of governmental restrictions by about 80% of Poland's citizens, an evident decline appeared in fear and governmental regulations. At the end of May, the level of approval for restrictions was strongly correlated with citizens' political preferences (Markowski, 2020).

Our study addressed the issue of "naive explanations" of the responsibility for COVID-19 incidence rates in Polish society. It is essential to note that our society is strongly politically divided, and the study was conducted during the presidential electoral campaign. In today's Poland, the division into liberals and communitarians seems to be the most salient dimension of the political polarization (Radkiewicz, 2019). This could have an impact on the perception of responsibility of particular agents. Additionally, the existential threat evoked by the COVID-19 pandemic and electoral campaign could increase political polarization and motivate people to form more robust social identifications (Castano, 2004; Greenberg et al., 1999).

This paper aims to look at factors explaining responsibility for the COVID-19 incidence rates due to two categories of responsibility: 1) as attributed to government/au-

thorities, and 2) as attributed to 'non-governmental' factors, i.e., beyond the control of authorities (e.g., characteristics of the virus, citizens' behavior). The process of attribution of responsibility to the government allows individuals to make sense of the world. It is necessary to form causal beliefs and some normative judgments about politics, politicians, and the political system (Malhotra & Kuo, 2007; Shaver, 1985).

Based on the classic attribution theories (e.g., Jones & Davis, 1965), their modifications (e.g., Shaver, 1985; Weiner, 1995), the theses of terror management theory (Greenberg et al., 1999), the theory of social roles (Hamilton, 1978), and political polarization effects (Malhotra & Kuo, 2007; Van Bavel et al., 2020), we considered two sets of variables that could have an important impact on the level of responsibility attributed to the government and non-governmental actors: 1) individual differences in mental health during the epidemic period, and 2) political attitudes and preferences.

Social perceptions of the government's responsibility for such collective experiences as the COVID-19 spread express citizens' deeper attitudes and expectations towards the government and social trust (Arceneaux & Stein, 2006; Sibley et al., 2020; Van Bavel et al., 2020). It can also be associated with citizens' well-being, particularly with anxiety and stress or individual emotional conditions. As people tend to look for external explanations for their harmful condition, more stressed individuals attribute more responsibility for pandemic effects to the government than less stressed ones (Doliński, 1992; Forsterling, 2005).

Blaming the government and the system is also one of the responses to the perception of individual failure (Kay, Jost, & Young, 2005). Liberals are oriented towards personal freedom, whereas communitarians or conservatives are oriented towards the security of society as a whole. The first group should be more frustrated by a lockdown, physical distancing, or the obligation to wear a mask than communitarians oriented towards the community's well-being. Furthermore, existential threat leads to clinging to the in-group and strengthening own essential values and political orientations (Castano, 2004; Greenberg et al., 1999). As a result, we can expect that, apart from deteriorated mental health and well-being, political views and preferences should be another important factor predicting the level of responsibility attributed to the government.

## How Do People Attribute Responsibility? Inspirations From Classical and New Approaches in Social Psychology

Responsibility is one of the central moral concepts in social relationships. The attribution of blame and responsibility to public officials and to government is a cornerstone of democratic politics (Malhotra & Kuo, 2007). Beginning with Heider (1958), social psychologists have studied how and to whom responsibility is attributed. Heider suggested that people are held responsible only for the effects of behavior that they intend to create, and for effects that they can create. Explorations of these proposals by Shaw and Sulzer (1964) and Walster (1966) showed that people tend to attribute more responsibility

to an actor whose behavior resulted in rather negative outcomes than positive ones, especially when the results were severe or when it involved other people. These findings can be interpreted by Jones and Davis's (1965) hypothesis, stating that hedonic relevance increases correspondence. "Hedonic relevance" refers to the extent to which an actor's behavior proves rewarding or costly to the observer. The observer has an increasing need to attribute responsibility to someone as the outcomes become more severe (Doliński, 1992; Hamilton, 1978; Hewstone & Fincham, 1996; Jones & McGillis, 1976; Weiner, 1995).

The "outcomes" of the COVID-19 pandemic, and restrictions associated with it, are severe and varied. The psychological costs that citizens pay during an epidemic or other natural catastrophe tend to be perceived as more dependent on governmental policies than on ordinary people's behavior and accidental impersonal factors (Shaver, 1985; Strong, 1990). During the pandemic period, people may experience not only physical health symptoms, but also - because of government restrictions - some basic psychological needs may be frustrated. Other studies on the consequences of COVID-19 also show that the pandemic implies a decrease in well-being and mental health (Bojanowska et al., 2020; Hamer et al., 2020; Kachanoff et al., 2020; Lades et al., 2020; Xiang et al., 2020). Because the outcomes of governmental restrictions have various negative psychological consequences, people may blame the government for the effects of COVID-19 when looking for the causes of worse well-being.

Classic research on responsibility attribution did not take into account an actor's role in the power hierarchy. Nevertheless, those studies seem to show some important bases for prediction concerning an actor's position in the power hierarchy as a predictor of responsibility attribution. Researchers from the field of attribution theory pointed out that behavior is seen as internally caused when external forces are not very powerful, and when the ability to withstand external forces is high (Jones & McGillis, 1976; Shaver, 1985). However, when observers are at the same time victims of the actions of a high-ranking politician, even when they see strong external pressures on their decisions, they tend to overestimate their personal intentions and assign high responsibility (Doliński, 1992). Other studies showed that more salient causes (people and their activities) are more likely to be seen as responsible for the event (Robinson & McArthur, 1982; Taylor & Fiske, 1975). Government attitudes, decisions, and activities concerning the COVID-19 epidemic are presented by the media every day and are widely commented on by citizens. So, we can assume that actors with higher and more salient positions of power (authorities, government), and who have more ability to successfully resist external forces (such as the widespread occurrence of epidemics), are perceived as more responsible than actors with a low power position (other citizens).

But this is not all that is proposed by social psychology, and a sociological approach to responsibility attribution. The general statement based on empirical evidence goes as follows: roles may be a necessary component of responsibility judgments. In modern societies, role-attributed responsibility is related to the opinion that higher prestige jobs,

or social roles in bureaucratic authority, demand more accountability. High-prestige roles - those with major responsibility - entail expectations that the occupant will fulfill, diffuse and internalize obligations to act or oversee others' actions. Hamilton (1978) argues that in the most common usage, responsibility refers to a decision about the liability for sanctions based on a rule. They propose inputs to the decision on the rule itself, the actor's deeds, and others' expectations regarding what the actor should do. So, an actor is judged based on causality (what was or was not done) and expectations (what should have been done). Voters may be motivated to look for explanations when natural catastrophes or epidemics happen, and may assume that the government plays a major role in preparing for and responding to such disasters. Because the government plays this primary role, citizens may choose to blame the government for not doing enough when COVID-19 strikes their country.

As stated earlier, people who experience a deterioration of their well-being (experiencing symptoms of stress, anxiety, depression) during an epidemic period, can feel especially helpless and look for greater support from the government and health care institutions (Abramson et al., 1978; Forsterling, 2005; Weiner, 1995). If they evaluate this support as insufficient or inadequate, their tendency to attribute responsibility for COVID-19 incidence rates will increase. Blaming the government for the consequences of an epidemic may help some individuals believe that the consequences of future disasters can be prevented, if the government acts more professionally and the political system is effective enough in crisis situations (Arceneaux & Stein, 2006; Lerner, 2003; Shaver, 1985). The above-described premises lead to the following hypotheses:

H1. Citizens tend to attribute greater responsibility for COVID-19 incidence rates to the government than to non-governmental factors.

H2. Mental health symptoms (general well-being, anxiety, depression, and stress) during the epidemic period are related to the level of responsibility attributed to the government: the lower the mental health and personal well-being self-descriptions, the higher the responsibility attributed to the government for COVID-19 incidence rates.

## How Do People Attribute Responsibility? Inspirations From Political Psychology and Local Socio-Political Specifics

We assumed that blaming government for the COVID-19 effects could be caused by the country's political situation. When society is strongly politically divided, and political polarization among citizens is salient, we can expect that political party preferences may be strongly associated with the level of responsibility for pandemic effects attributed to the government. Polish society is politically polarized: the last election (July 2020)

showed that 51% of Poles supported the incumbent president (who represented the ruling party), and 49% voted for the candidate who represented the opposition. In strongly politically divided society, citizens may blame some political leaders, or the government as a whole, not only on account of its real effectiveness or strategy of coping with COVID-19. They can also rely on existing political attachments and blame politicians of the opposite party. For example, [Malhotra and Kuo \(2007\)](#) showed that, after Hurricane Katrina, New Orleans citizens attributed responsibility for death cases and property damage to particular officials based on party cues. The authors considered using the party cues in this context as a “biased heuristic”.

According to the Terror Management Theory (TMT), reminding people of their mortality induces an existential threat that also leads to an increased need for protection provided by worldview-based beliefs. People want others to comply with their cultural worldview. Existential threat can increase some political polarization processes during the COVID-19 pandemic, and it may lead to treating own political orientation and party preferences as essential cues in the attribution of responsibility for effects of COVID-19 to the government or non-government factors (c.f. [Greenberg et al., 1999](#)).

As [Van Bavel et al. \(2020\)](#) note, political polarization manifests in two forms: 1) attitudinal polarization, which concerns taking extreme opposing positions, and 2) affective polarization, referring to distrusting and disliking followers of the opposite party. Both forms of polarization could be associated with the level of responsibility for COVID-19's effects attributed to the government. The results of several studies carried out on the representative sample of adult Poles showed that there are two main dimensions of polarization in Polish society, expressing two different visions of the political community: liberal and communitarian ([Radkiewicz, 2017, 2019](#)). These are two worldview orientations with different concepts of the state, civil freedom, individual identity, etc. Supporters of the liberal orientation believe that: (a) human freedom is the most important goal of civil society, and any normative ideals of a “good life” can be more important than freedom; (b) people are who they feel at the moment, and attachment to tradition and history is often an unnecessary burden; (c) citizens are a group of private individuals united only by a deliberate agreement to form a common government, and (d) the state should not get involved in ideological issues, and has no right to interfere in the sphere of private morality. On the other hand, supporters of the communitarian orientation claim that: (a) the condition of individual freedom is the freedom of the whole of society; (b) knowing the traditions and history of the community in which someone lives is a very important element of being aware of who we are; (c) without the norms, values, history and culture that come from society, we would just be a biological organism and nothing else; and (d) the state should promote certain ideological values, if they are consistent with the beliefs of the majority of citizens.

The division into communitarians and liberals reflects two dominant forms of political beliefs: 1) cultural rightism with economic leftism; and 2) cultural leftism with eco-

conomic rightism (Radkiewicz, 2017). This is very far from the classic distinction between left and right. Several studies show that political preferences are strongly anchored in sets of interrelated beliefs referring to basic human values (Caprara & Vecchione, 2018; Caprara & Zimbardo, 2004). At the level of political ideology, the dimension 'Openness to change vs. Conservation' describes the fundamental difference between cultural liberalism and conservatism, while 'Self-enhancement vs. Self-transcendence' refers to the fundamental differences between economic liberalism and egalitarianism. This equivalence between political ideology and human values makes it possible to explain the mental 'inconsistency' of the largest groups of the electorate (harmonious combining left-wing and right-wing beliefs). The psychological correlation of 'Conservation' and 'Self-transcendence' values (communal characteristics typical of the ruling party voters) determines a compatible combination of cultural rightism and economic leftism, while the psychological correlation of 'Openness to change' and 'Self-enhancement' values (individualistic characteristics typical of the largest opposition party voters) means a compatible combination of cultural leftism and economic rightism.

On one side of the Polish socio-political polarization, we can observe very consolidated supporters of the current ruling party (PiS), characterized by relatively high communitarianism and anti-liberalism. On the other side, opposition supporters are much more dispersed, manifesting moderate or relatively high liberalism and rather low communitarianism (Radkiewicz, 2019). Such political polarization based on liberal vs. communitarian orientations leads to affective polarization, which results in trusting or distrusting the government's health and information policy. Political opponents doubt government health policy and see the government's information as politically motivated. Government supporters tend to think exactly the opposite. In general, political polarization can manifest in the stronger tendency of liberals than communitarians to attribute responsibility for COVID-19's consequences to the government.

Further, one of the essential products of differences between liberal and communitarian orientations seems to be the difference in perceptions of the rule of law. This principle should be the foundation of a liberal political community. In contrast, the fundamental principle of a communitarian political community is the priority of collective goals and interests over individual ones. Therefore, people of a liberal orientation seem more sensitive to potential violations of the rule of law than people of a communitarian orientation. Consequently, compared to communitarians, for liberals, the rule of law should be a much more important criterion in assessing politicians and political authorities' actions.

In sum, our hypotheses focus on three very closely related aspects of the political attitudes that create the main lines of polarization: 1) individual orientations towards the political community (liberal vs. communitarian worldview), 2) perception of the rule of law, and 3) electoral political preferences. Based on three points, we can hypothesize that:

H3. Individual orientation towards the political community is related to the responsibility attributed to the government for COVID-19 incidence rates. The stronger the liberal orientation, the greater the responsibility of the government, and the lower the importance of non-governmental factors; whereas the stronger the communitarian orientation, the lower the responsibility of government, and the higher the importance of non-governmental factors;

H4. Individual perception of the government's attitude towards the rule of law is related to the level of responsibility attributed to the government for COVID-19 incidence rates. The stronger the individual perception of the government as breaking down the rule of law (in the state), the greater the responsibility attributed to the government for the effects of COVID-19;

H5. Individual political preferences are related to the level of responsibility attributed to the government for the effects of COVID-19. People who declare voting for the ruling party attribute a lower level of responsibility to the government than other party electorates.

## Method

### Participants and Procedure

The sample consisted of  $N = 1072$  Polish adults recruited online via the professional consumer research panel Ariadna. Participants who sign up with the panel get points, which they can later exchange for small 'gifts'. We estimated the shortest time to accurately and reliably complete the questionnaire at about 18.5 minutes. People with extremely short response times ( $N = 222$ ) were excluded from the analyses. We performed a series of  $\chi^2$  tests in order to assess the sample's representativeness. They showed that the sample was representative in terms of gender, size of the place of residence and the region of the country. However, the  $\chi^2$  tests also showed a statistically significant overrepresentation of better educated people and overrepresentation of people aged 45-60 at the expense of people over 60 years.

The final sample consisted of  $N = 850$  participants: 55.1% women and 44.9% men. They were between 18 and 84 years old ( $M = 46.4$ ,  $SD = 15.7$ ). Primary education or junior high school had been completed by 13%, vocational – 34.1%, secondary and post-secondary – 11.5%, and 41.4% of the respondents completed higher education. Place of residence: 28.5% of respondents lived in the countryside, 13.1% in small towns up to 20

thousand inhabitants, 21.6% in towns above 20 to 100 thousand, 22.4% in towns above 100 to 500 thousand, and 14.5% in cities above 500 thousand inhabitants.

The research was carried out at the turn of May and June, during the third month of lockdown. It was also a month before the presidential election, which took place on June 28th, after the change of the original date from May 10th.

## Measures

### Mental Health

We used the short form of the Mental Health Continuum questionnaire (MHC-SF) and Depression Anxiety Stress Scales (DASS-21) to assess mental health. MHC-SF, a tool developed by Keyes (2002) and adapted to Polish by Karaś, Ciecuch, and Keyes (2014), was used to assess subjective well-being. It consists of 14 items representing three aspects of well-being (emotional, psychological, and social). Participants were asked about the frequency of experiencing various symptoms of well-being during the last month (e.g., 'How often did you feel happy?', 'How often did you feel good at managing the responsibilities of your daily life?'). The scale ranges from never (1) to everyday (6). The Cronbach's alpha coefficient amounted to .95.

The Depression Anxiety Stress Scales (DASS-21) (Henry & Crawford, 2005) translated to Polish by Makara-Studzińska (Lewicka et al., 2015) was used to measure symptoms of depression, anxiety, and stress over the past two weeks. The sample questions were: stress – 'I found it hard to wind down', anxiety – 'I was aware of dryness of my mouth', depression – 'I couldn't seem to experience any positive feeling at all' (responses from 0 – *did not apply to me at all* to 3–*applied to me very much or most of the time*). The internal reliability of the DASS-21 subscales amounted to: alpha = .92 for depression, .87 for anxiety and .90 for stress.

### Political Worldview

**Liberal and communitarian orientation** – A 32-item scale to measure the preference for the liberal or communitarian political community was developed by Radkiewicz (2019). It is based on the assumption that there are two relatively separate ways of understanding the democratic community order – a liberal and communitarian orientation. Each of the subscales representing both orientations contained 16 items. Internal reliability was  $\alpha = .89$  for liberal orientation, and  $\alpha = .92$  for communitarian orientation. Exemplary items for liberal orientation: 'Human freedom is the most important goal of the civil society, no top-down ideas of good life can be more important than freedom', 'Who we are does not depend on our family ties, circle of friends or belonging to different social groups. If they were not, we would still be who we are'; 'The state has no right to enter into worldviews and moral views of citizens, or to judge whether what people do privately is good or bad'. Exemplary items for communitarian orientation: 'Freedom and sovereignty of the whole society are the condition for the freedom of

individual citizens', 'It is hard to imagine a good life without feeling that you are a resident of a specific place, region or country, and that you have a nationality', 'The state is a historically formed national community that gives citizens moral support and a sense of security'.

**Broken rule of law** — The instrument aimed to assess the level of satisfaction with the rule of law in Poland was developed by Skarżyńska. It consisted of 5 questions concerning such aspects of the rule of law as: 1) whether the mandates issued by the police correspond to the seriousness of the offense; 2) impartiality of the courts; 3) careful lawmaking; 4) legality of the decisions made by the government; and 5) protection of medical confidentiality (responses from 1 – *I completely agree* to 6 – *I completely disagree*, e.g. 'The judge during a trial does not favor or discriminate against either party', 'The law is created with care. All circumstances for and against are considered and taken into account'. The higher the score on the scale, the higher the perceived break down of the rule of law in the country. Internal reliability of the scale amounted to  $\alpha = .79$ .

**Political preferences** — Respondents were asked about their voting preferences ('Which political party would you vote for, if the parliamentary elections were held this Sunday?'). Participants could choose from: 1) Prawo i Sprawiedliwość (Law and Justice), 2) Koalicja Obywatelska (Civic Coalition), 3) Lewica Razem (Left Together), 4) Polskie Stronnictwo Ludowe (Polish Peasant Party), 5) Konfederacja (Confederation), and 6) other parties.

Dependent variable: Responsibility for COVID-19 incidence rate. The instrument examining attribution of responsibility for COVID-19 incidence rate in Poland, developed by Skarżyńska, contained 8 questions. Four of them referred to the responsibility of government and state institutions: 1) poor organization of health care; 2) lack of adequate financial resources; 3) bad government policy; and 4) willingness to keep the government in power rather than to address the health of citizens. Another four items concerned circumstances not related to the government, such as: 1) the presence of foreigners from countries with high incidence rates; 2) properties of the virus; 3) disregard for restrictions imposed by the government; or 4) fate. Respondents were asked to assess on a 10-degree scale the extent to which the given circumstances or institutions contributed to the incident rate (from 1-minimum to 10-maximum). Internal reliability of the 4-item subscale regarding government responsibility was  $\alpha = .84$ , while 4 items concerning responsibility attributed to non-government factors were less coherent. We decided to treat it as a separate dimension, despite the fact that the subscale's internal reliability was only approximately  $\alpha = .60$ . Explanatory and confirmatory factor analysis was performed to confirm the empirical separateness of both factors. In an explanatory factor analysis, the first factor 'governmental responsibility' explained 35.7% of the total variance, whereas the second factor 'non-governmental responsibility' explained about 21%. In a

confirmatory factor analysis, the two-dimensional model with 19 degrees of freedom showed acceptable goodness of fit (GFI = .940; SRMR = .041; RMSEA = .076).

## Results

### Descriptive Statistics

Descriptive statistics and correlations are presented in Table 1. As expected, symptoms of stress, depression, and anxiety were strongly correlated (Pearson's  $r$  between .72 and .82,  $p < .001$ ), and all of them were negatively related to well-being ( $r$  between -.32 and -.62,  $p < .001$ ). Government responsibility revealed weak, positive correlations with stress, depression, and anxiety symptoms, while the correlation with well-being was negative ( $r = -.17$ ,  $p < .001$ ). Non-government responsibility turned out to be marginally, positively correlated with stress and anxiety.

**Table 1**

*Descriptive Statistics and Intercorrelations*

Variable	1	2	3	4	5	6	7	8	9
1. Stress									
2. Anxiety	.76**								
3. Depression	.82**	.72**							
4. Well-being	-.48**	-.32**	-.62**						
5. Liberalism	.01	-.03	.02	-.02					
6. Communitarianism	-.11**	-.11**	-.18**	.28**	.25**				
7. Broken rule of law	.05	-.04	.07*	-.21**	.21**	-.20**			
8. Government responsibility	.09*	.07*	.12**	-.17**	.29**	-.18**	.49**		
9. Non-government responsibility	.08*	.11**	.04	.02	-.07*	.13*	-.15**	.17**	
<i>M</i>	7.13	4.22	6.15	34.66	4.14	4.26	4.04	6.92	6.24
<i>SD</i>	4.78	4.26	5.22	15.15	0.68	0.70	0.99	2.23	1.61
<i>Min.-max.</i>	0-21	0-21	0-21	0-70	1-6	1-6	1-6	1-10	1-10

\* $p < .05$ . \*\* $p < .01$ .  $N = 850$ .

Government responsibility shows a positive correlation with liberal orientation and a negative correlation with communitarian orientation. On the other hand, non-government responsibility shows opposite correlations with both orientations (negative with liberalism and positive with communitarianism). The perception of breaking down the rule of law is strongly correlated with the level of government responsibility, and more weakly with the level of non-government responsibility.

## Differences in the Level of Government and Non-Government Responsibility Attribution

Consistent with Hypothesis 1, the level of responsibility attributed to the government ( $M = 6.92$ ,  $SD = 2.23$ ) is higher than the level of responsibility attributed to the circumstances not related to the government ( $M = 6.24$ ,  $SD = 1.61$ ). The  $t$ -test for dependent samples was statistically significant,  $t = 7.89$ ,  $p < .001$ ,  $\eta^2 = .07$ .

We found no significant differences between men and women in the level of government responsibility,  $F(1, 848) = 0.79$ ,  $p = .37$ , but for non-government factors, women ( $M = 6.37$ ,  $SD = 1.59$ ) tend to attribute more responsibility than men ( $M = 6.08$ ,  $SD = 1.61$ ),  $F(1, 848) = 6.61$ ,  $p = .01$ . Further, we found a significant relationship between the level of education and government responsibility attributions,  $F(5, 844) = 2.50$ ,  $p = .03$ , showing that, compared to less educated people (primary and vocational), better educated people were more inclined to emphasize governmental responsibility. On the other hand, there was no significant relationship between the level of education and non-government responsibility attributions,  $F(5, 844) = 2.08$ ,  $p = .07$ . Finally, we observed no significant correlation between respondents' age and attributing governmental responsibility,  $r = .01$ ,  $p = .777$ , but in the case of non-governmental responsibility, the correlation was significant. The coefficient  $r = .17$ ,  $p < .001$  suggests that the level of non-governmental attributions increased with the age of respondents.

## Individual and Political Worldviews as Predictors of Government and Non-Government Responsibility Attribution: Hierarchical Regression Analysis

A hierarchical regression analysis was performed to verify whether individual differences in mental health and in political views predict the level of government and non-government responsibility attribution. The results are shown in Table 2.

In the first block, symptoms of stress, anxiety, depression and well-being were entered. The model with government responsibility as a dependent variable turned out to be statistically significant,  $F(4, 845) = 6.66$ ,  $p < .001$ ,  $R^2 = .03$ , with well-being as the only significant predictor. Thus, decreasing well-being turned out to be related to an increasing tendency to attribute governmental responsibility. The model with non-government responsibility was also statistically significant,  $F(4, 845) = 3.62$ ,  $p = .006$ ,  $R^2 = .02$ , with anxiety as the only significant predictor. The higher the anxiety, the higher the level of non-government responsibility attribution.

In the next step, the second block of variables was entered into the regression equation. It included: liberal and communitarian orientations, evaluations of the rule of law, and electoral preferences. Two instrumental variables were created to test the hypothesis on whether electoral preferences predict attributions of responsibility. The hierarchical model with government responsibility attribution as the dependent variable

was statistically significant,  $F(9, 840) = 56.38, p < .001, R^2 = .38$ . Adding variables related to political worldview explained an additional 35% of variance,  $\Delta R^2 = .35$  and the change in  $R^2$  was highly significant,  $F(5, 840) = 93.24, p < .001$ . Among the mental health variables, after entering the second block, only the marginal positive predictive effect of anxiety turned out to be significant. On the other hand, all the variables related to political worldview appeared to be significant, and their coefficients were stronger than the anxiety effect. Attribution of government responsibility was positively predicted by liberalism and dissatisfaction with obeying the rule of law, and negatively predicted by communitarianism. However, the most influential predictors were political preferences. Being a non-voter, and especially being a voter for the opposition turned out to be the key predictors of governmental responsibility for COVID-19 incidence rate.

**Table 2**

*Mental Health Indicators and Political View Components as Two Categories of Predictors of Governmental and Non-Governmental Responsibility for COVID-19 – Hierarchical Regression Analyses*

Predictor	Dependent variable							
	Government responsibility				Non-government responsibility			
	Block 1		Block 1+2		Block 1		Block 1+2	
	$\beta$	<i>B</i> (SE)	$\beta$	<i>B</i> (SE)	$\beta$	<i>B</i> (SE)	$\beta$	<i>B</i> (SE)
Constant		7.17 (0.32)**		1.89 (0.60)**		5.83 (0.24)**		6.04 (0.53)**
Stress	-0.04	-0.02 (0.03)	-0.06	-0.03 (0.02)	0.07	0.02 (0.02)	0.06	0.02 (0.02)
Anxiety	0.02	0.01 (0.03)	0.09	0.05 (0.02)*	0.13	0.05 (0.02)*	0.11	0.04 (0.02)*
Depression	0.04	0.02 (0.03)	0.05	0.02 (0.02)	-0.07	-0.02 (0.02)	-0.07	-0.02 (0.02)
Well-being	-0.16	-0.02 (0.01)**	0.01	0.00 (0.05)	0.05	0.01 (0.01)	-0.01	0.00 (0.01)
Liberalism			0.17	0.56 (0.10)**			-0.07	-0.17 (0.09)*
Communitarianism			-0.10	-0.31 (0.10)**			0.14	0.33 (0.09)**
Broken rule of law			0.28	0.64 (0.07)**			-0.08	-0.13 (0.06)*
Non-voters <sup>a</sup>			0.30	1.47 (0.18)**			0.02	0.07 (0.16)
Opposition voters <sup>b</sup>			0.40	1.79 (0.18)**			-0.07	-0.21 (0.16)
$\Delta R^2$				.35**				.04**
$F(9, 840)$				56.4**				6.0**
$R^2$ total				.38				.06

*Note.* Contrasts: a = ruling party voters vs. non-voters; b = ruling party voters vs. opposition voters. Dummy coding: (1) ruling party voters (0,0); (2) non-voters (1,0); (3) opposition voters (0,1).

\* $p < .05$ . \*\* $p < .01$ .

The model with non-government responsibility as the dependent variable was also statistically significant, but it explained only 6% of the variance,  $F(9, 840) = 6.02, p < .001, R^2 = .05$ . Adding variables related to political worldview explained an additional 4% and this change in  $R^2$  was significant,  $F(5, 840) = 7.83, p < .001$ . The strongest positive predictor of non-governmental responsibility was communitarianism (but  $\beta = 0.14$  cannot be

considered strong). Increasing liberalism and dissatisfaction with the rule of law were marginal negative predictors of non-governmental responsibility. The predictive effects of electoral preferences appeared to be non-significant in this case.

Based on the above results, we may conclude that Hypothesis 2 was only partly supported - the level of well-being is rather weakly but significantly related to the attribution of government responsibility, when individual differences are entered into the regression equation, but not in the final model including political worldview. Only the level of anxiety was significant in the second model. The predictive power of political worldview variables is stronger than individual differences in mental health. As predicted in Hypothesis 3, individual orientation towards political community is related to responsibility attributed to the government for COVID-19 incidence rate. Liberal orientation is positively related to the responsibility of the government and negatively related to the importance of the factors beyond the government's control, whereas in the case of communitarian orientation the pattern of results turned out to be exactly the opposite. Also, Hypothesis 4 and 5 found full support in the results of the study. The stronger the individual perception of the government as breaking down the rule of law, the greater the responsibility attributed for the effects of COVID-19 to the government. Furthermore, compared to the ruling party's followers, people not supporting the ruling party showed a substantial tendency to attribute a higher level of responsibility to the government.

## Discussion

In this article we have shown empirical evidence that people looking for some interpretations and explanations of the observed spread of COVID-19 effects tend to attribute a higher level of responsibility for epidemic effects to the government than to other situational factors (not related to governmental activities). It was also found that political views and preferences are incomparably better predictors of the level of responsibility attributed to the government than variables regarding mental health and well-being.

The first finding supports our Hypothesis 1, and is consistent with attribution theory (e.g., Hewstone & Fincham, 1996; Jones & Davis, 1965; Shaver, 1985) and the theory of social roles (Hamilton, 1978). An "adequate protection against epidemic" is part of the government's duty. Citizens observe governmental activities during the epidemic period and evaluate government responsibility. In the light of the results of previous studies on the social perception of natural disasters, we think that this is a rather general phenomenon (e.g., Malhotra & Kuo, 2007; Robinson & McArthur, 1982; Taylor & Fiske, 1975). Looking for an explanation of the epidemic effects, people tend to blame salient external causes. The government plays a major role in preparing and responding to pandemics or natural disasters. Many Polish citizens are willing to impute the government's responsibility for failing to adequately protect against the epidemic (Skarżyńska & Maj,

2020). At the beginning of July 2020, as much as 53% of adult Poles declared a lack of governmental support and care in the pandemic crisis (Pawłowska, 2020).

Our second major finding concerned empirical importance of some potential determinants of attributing responsibility to the government for spreading COVID-19. It shows an incomparably, more predictive role of political orientations and party preferences in comparison to the role of mental health and well-being. These results were generally consistent with research hypotheses, though they exceeded our expectations in terms of explanatory power. As we expected, individual liberal or communitarian orientation, perception of the breakdown of the rule of law, and party preferences were significantly related to the level of responsibility attributed to the government. Interpretation of the above results was based on the specificity of the analyzed political views (liberal and communitarian orientation), and the consequences of political polarization that are more salient during a pandemic (Castano, 2004; Greenberg et al., 1999). In a pandemic, people are confronted with severe diseases and even with the death of many people around them. Mortality seems to be more salient. According to Terror Management Theory (TMT), the activation of thoughts of mortality increases the tendency to identify with and reinforce some collective entities and world views. This phenomenon applies to people with both liberal and conservative orientations. So, we suppose that during the pandemic period, personal world views are more salient. People are ready to express and defend them, even by protecting the government (if it represents the same value orientation).

Our results have shown that citizens' liberal political orientation is positively related to responsibility attribution to the government, but communitarian orientation is negatively related to blaming the government. It reflects not only polarization processes and a heuristic approach to attribution of responsibility but also some differences in values that are important for liberals and communitarians. A liberal political orientation means that citizens identify themselves as a group of private individuals united by an agreement to form a joint government. For liberals, individual freedom is the most important value, and they believe the state has no right to interfere in the sphere of citizens' everyday life. They did not support the ruling party in the last election, and nowadays, they do not accept government restrictions concerning the COVID-19 epidemic (Skarżyńska & Maj, 2020). Supporters of a communitarian orientation believe that the condition of individual well-being is the freedom and security of society. The state should promote some values consistent with the beliefs and needs of the majority of citizens. Today they usually support the ruling party and tend to accept all the restrictions imposed by the government.

It is not easy to separate the two above described ways of attributing responsibility. They both can result from attitudinal and affective components of polarization (Van Bavel et al., 2020). Holders of a liberal orientation have different expectations than holders of a communitarian orientation towards government health policy during the

pandemic. They prefer other values and have different attitudes and expectations toward an optimal political system and good politics. For example, liberals see freedom and the rule of law as more essential attributes of democracy than communitarians (Radkiewicz, 2017, 2019). At the end of May 2020, liberal oriented citizens did not agree with lockdown policies and freedom restrictions, while communitarians treated the same government restrictions as the correct solution for society (Skarżyńska & Maj, 2020). On the other hand, an affective polarization reflects attachment and sentiment to the party (ruling or oppositional). It can lead to using only party cues (“my party – the opposite one”) in the attribution of responsibility for COVID-19 effects. In this case, citizens use party identification as a heuristic to blame or justify anti-crisis efforts (Malhotra & Kuo, 2007). Because mortality salience increases the sense of social and political identifications and essential values, it seems possible that the pandemic period increases heuristic thinking in the attribution of responsibility process. Liberal citizens are in opposition to the ruling party; they do not like the ruling party’s politicians, and they do not trust the government. Communitarians identify themselves as government supporters and trust the ruling party and government health policies. They tend to attribute pandemic health effects to rather non-government factors (e.g., characteristics of the virus), while liberally oriented citizens tend to reject such attributions. Looking for an explanation of the epidemic effects, people tend to blame salient external causes. If communitarians do not attribute responsibility to the government (because they accept its policies), they blame some external factors that seem salient enough.

We have supposed that the social perception of the government as responsible for COVID-19 incidence rates might be biased by individual differences in mental health characteristics like stress, anxiety, depression, and well-being. People who experience higher frustration of their essential needs feel more anxiety and a decrease in well-being. They may want more external help, and their expectations towards the government can even be excessive. Based on the classic theory of attribution (e.g., Jones & Davis, 1965; Walster, 1966), we predicted that adverse mental health symptoms would be related to the higher level of responsibility attributed to the government. Nevertheless, the empirical results were only partially consistent with the hypothesis. Among the mental health symptoms, only the elevated anxiety level positively predicted responsibility to the government and non-governmental factors. We can interpret it as an example of a hedonic relevance phenomenon (e.g., Jones & Davis, 1965). The citizens who pay severe psychological costs of the epidemic (in terms of higher anxiety level) tend to exaggerate external responsibility. It allows them to keep an individual sense of cognitive control (Abramson et al., 1978; Doliński, 1993; Forsterling, 2005; Lerner, 2003; Weiner, 1995).

However, our results show that individual differences in mental health during the COVID-19 epidemic are incomparably much less significant in explaining the government responsibility attributions than some socio-political variables. This pattern could appear for two reasons. First, the level of anxiety related to the COVID-19 epidemic at

the time of the study has decreased, and the level of well-being has increased compared to March this year (Bojanowska et al., 2020; Osiecki & Klinger, 2020). With the first information about slowly removing the restrictions, Poles' moods jumped up considerably, particularly among more liberal-oriented citizens (Markowski, 2020). At the beginning of July, more than 50% of respondents in all age groups declared that their mental health level was without change (Pawłowska, 2020).

The second reason could be the specific Polish political situation, i.e., intense attitudinal and affective polarization. Even the level of changes in anxiety during the lockdown was contingent on political preferences. For example, the ruling party's supporters were less afraid of the financial crisis than the opposition's supporters (Hamer & Baran, 2020). Forty percent of Polish citizens think that the COVID-19 pandemic caused an increase in society's polarization (Pawłowska, 2020).

The great importance of political polarization is visible at the level of general political orientations and declarations of voting in parliamentary elections. Though being the opposition voter is the most powerful predictor of attributing responsibility to the government. On the one side, party identification is the effect of liberal political orientation and implies voting preferences (liberals vote for liberal parties). On the other side, party preference may be the critical signal that citizens tend to use when they attribute COVID-19 to the government or non-government factors.

Another important issue taking into account responsibility attribution to the government and no-government factors is the rule of law. According to political scientists, modern liberal democracy is based on the assumption that all citizens are equal before the law and freedom is their inherent right (Schmitter & Karl, 1991). It gives hope to people that their lives can be free from the curse of violence and lawlessness. Since the ruling party is communitarian and anti-liberal, its partisans also tend to be communitarians rather than liberals. They are less interested in the rule of law (fundamental principle of the liberal democracy political doctrine) than liberals (Radkiewicz, 2019). As the social perception of breaking down the rule of law was the salient dimension of political polarization, it must have influenced attributions of responsibility for COVID-19 incidence rates.

In our study, we asked questions concerning five concrete (specific) situations where the rule of law could be broken down (such as, for example, a judge's impartiality or protection of medical confidentiality). The results we obtained highly supported our expectations: the stronger the individual perception of the government as breaking down the rule of law, the greater the government's attributed responsibility for the effects of COVID-19. On the other hand, the government's weaker perception of breaking down the rule of law was related to a greater responsibility attributed to some non-governmental factors beyond the government's control.

These results are conclusive. Political polarization has a decisive impact on the perception of the government's responsibility for epidemic consequences. During the pan-

dem, the impact of polarization might have been further amplified by the mortality salience. This is also in line with other studies, which show that voters consider politicians responsible even for events beyond their actual control (e.g., Malhotra & Kuo, 2007). People are willing to punish the incumbent mayor for a flood, earthquake, or epidemic if they believed that municipal authorities were responsible for failing to provide adequate protection (e.g., Arceneaux & Stein, 2006). Blaming the government can express not only citizens' reliable knowledge about government activities but party identification cues, as well. An empirical distinction of these two mechanisms of responsibility attribution ought to be an important step to better understanding this phenomenon.

Citizens seem to believe that "disasters are an excellent test of governmental performance" (Schneider, 1990, p. 172). And not every government passes such a test with success. The effects of blaming the government for its mistakes and "bad intentions" during the pandemic period may be transferred and delayed. Therefore, large manifestations against the government in October 2020 (triggered by the announcement of anti-abortion law) might also express blaming the government for its pandemic prevention strategy. The COVID-19 pandemic is not over yet. Future studies are likely to reveal many surprising findings of on whom and why blame is placed for COVID-19.

---

**Funding:** The empirical part of this work was financed by the OPUS grant of the National Science Centre (Poland) UMO-2016/21/B/HS6/03213

---

**Acknowledgments:** The authors have no support to report.

---

**Competing Interests:** The authors have declared that no competing interests exist.

---

**Data Availability:** For this article, a dataset is freely available (Skarżyńska, Urbańska, & Radkiewicz, 2021).

---

## Supplementary Materials

The following Supplementary Materials are available (for access see [Index of Supplementary Materials](#) below):

- Dataset
- Codebook

### Index of Supplementary Materials

Skarżyńska, K., Urbańska, B., & Radkiewicz, P. (2021). *Supplementary materials to "Under or out of government control? The effects of individual mental health and political views on the attribution of responsibility for COVID-19 incidence rates"* [Dataset and codebook]. PsychOpen GOLD. <https://doi.org/10.23668/psycharchives.4705>

## References

- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans. *Journal of Abnormal Psychology, 87*, 49-74. <https://doi.org/10.1037/0021-843X.87.1.49>
- Arceneaux, K., & Stein, R. M. (2006). Who is held responsible when disaster strikes? The attribution of responsibility for a natural disaster in an urban election. *Journal of Urban Affairs, 28*(1), 43-53. <https://doi.org/10.1111/j.0735-2166.2006.00258.x>
- Bojanowska, A., Kaczmarek, L. D., Kościelniak, M., & Urbańska, B. (2020). *Values and well-being change amidst the COVID-19 pandemic in Poland*. PsyArXiv. <https://doi.org/10.31234/osf.io/xr87s>
- Caprara, G. V., & Vecchione, M. (2018). On the left and right ideological divide: Historical accounts and contemporary perspectives. *Advances in Political Psychology, 39*(S1), 49-84. <https://doi.org/10.1111/pops.12476>
- Caprara, G. V., & Zimbardo, P. G. (2004). Personalizing politics: A congruency model of political preference. *American Psychologist, 59*, 581-594. <https://doi.org/10.1037/0003-066X.59.7.581>
- Castano, E. (2004). In case of death, cling to the in-group. *European Journal of Social Psychology, 34*(4), 375-384. <https://doi.org/10.1002/ejsp.211>
- Doliński, D. (1992). *Przypisywanie moralnej odpowiedzialności* [Ascribing moral responsibility]. Warszawa: Wydawnictwo Instytutu Psychologii PAN.
- Doliński, D. (1993). *Orientacja defensywna* [Defensive orientation]. Warszawa: Instytut Psychologii PAN.
- Forsterling, F. (2005). *Atrybucje. Podstawowe teorie, badania i zastosowanie* [Attribution: Basic theories, research and application]. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkand, S., & Lyon, D. (1999). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology, 58*, 308-318. <https://doi.org/10.1037/0022-3514.58.2.308>
- Hamer, K., & Baran, M. (2020). *Wybory prezydenckie, sympatie polityczne Polaków a obawy związane z koronawirusem. Raport z badań* [Presidential elections, political sympathies of Poles and fears related to the coronavirus: Research report]. Warszawa: Instytut Psychologii PAN.
- Hamer, K., Baran, M., & Marchlewska, M. (2020). *Czego boją się Polacy w związku z koronawirusem? Raport z badań* [What are Poles afraid of due to the coronavirus? Research report]. Warszawa: Instytut Psychologii PAN.
- Hamilton, V. L. (1978). Who is responsible? Toward a social psychology of responsibility attribution. *Social Psychology Quarterly, 41*(4), 316-328. <https://doi.org/10.2307/3033584>
- Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY, USA: Wiley.
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 44*, 227-239. <https://doi.org/10.1348/014466505X29657>
- Hewstone, M., & Fincham, F. (1996). Attribution theory and research: Basic issues and applications. In M. Hewstone, W. Stroebe, & G. Steveson (Eds.), *Introduction to social psychology* (pp. 167-204). Oxford, United Kingdom: Basil Blackwell.

- Jones, E., & Davis, K. (1965). From acts to dispositions: The attribution process in person perception. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 2, pp. 219-266). New York, NY, USA: Academic Press.
- Jones, E., & McGillis, D. (1976). Correspondent interferences and attribution cube: A comparative appraisal. In J. H. Harvey, W. J. Ickes, & R. Kidd (Eds.), *New Directions in Attribution Research* (Vol. 1, pp. 389-420). Hillsdale, NJ, USA: Erlbaum.
- Kachanoff, F., Bigman, Y., Kapsaskis, K., & Gray, K. (2020). *Measuring two distinct psychological threats of COVID-19 and their unique impacts on wellbeing and adherence to public health behaviors*. PsyArXiv. <https://doi.org/10.31234/osf.io/5zr3w>
- Karaś, D., Ciecuch, J., & Keyes, C. L. M. (2014). The Polish adaptation of the Mental Health Continuum-Short Form (MHC-SF). *Personality and Individual Differences*, 69, 104-109. <https://doi.org/10.1016/j.paid.2014.05.011>
- Kay, A. C., Jost, J. T., & Young, S. (2005). Victim derogation and victim enhancement as alternate routes to system justification. *Psychological Science*, 16, 240-246. <https://doi.org/10.1111/j.0956-7976.2005.00810.x>
- Keyes, C. L. M. (2002). The Mental Health Continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207-222. <https://doi.org/10.2307/3090197>
- Lades, L., Laffan, K., Daly, M., & Delaney, L. (2020). *Daily emotional well-being during the COVID-19 pandemic*. PsyArXiv. <https://doi.org/10.31234/osf.io/pg6bw>
- Lerner, M. J. (2003). The justice motive: Where social psychologists found it, how they lost it, and why they may not find it again. *Personality and Social Psychology Review*, 7, 388-399. [https://doi.org/10.1207/S15327957PSPR0704\\_10](https://doi.org/10.1207/S15327957PSPR0704_10)
- Lewicka, M., Wójcik, M., Sulima, M., & Makara-Studzińska, M. (2015). Nasilenie negatywnych emocji u kobiet ciężarnych w okresie hospitalizacji [The intensification of negative emotions in pregnant women during hospitalization]. *Annales Academiae Medicae Silesiensis*, 69, 177-183. <https://doi.org/10.18794/aams/36771>
- Malhotra, N., & Kuo, A. G. (2007). Attributing blame: The public's response to hurricane Katrina. *The Journal of Politics*, 70(1), 120-135. <https://doi.org/10.1017/s0022381607080097>
- Markowski, R. (2020). Koronawirus już Polakom niestraszny? [Are Poles no longer afraid of coronavirus?] *Gazeta Wyborcza*, 30 maj, 14.
- Osiecki, G., & Klinger, K. (2020). Lęk przed koronawirusem słabnie [The fear of the coronavirus is waning]. *Dziennik Gazeta Prawna*, 29th April.
- Pawłowska, D. (2020). Pandemia wyzwala w nas strach [The pandemic releases an anxiety]. *Gazeta Wyborcza*, September 18, p. 13.
- Radkiewicz, P. (2017). The axiological clash as a key determinant of expanded and destructive political conflict in Poland. *Eastern European Politics and Societies*, 31, 382-401. <https://doi.org/10.1177/0888325416679695>
- Radkiewicz, P. (2019). *Patriotyzm, etnocentryzm, nacjonalizm. Perspektywa makropsychologiczna* [Patriotism, ethnocentris, nationalism]. Warszawa: Wydawnictwo Naukowe PWN.

- Robinson, J., & McArthur, L. Z. (1982). Impact of salient vocal qualities on causal attribution for a speaker's behavior. *Journal of Personality and Social Psychology*, 43, 236-247.  
<https://doi.org/10.1037/0022-3514.43.2.236>
- Schmitter, P. C., & Karl, T. L. (1991). What democracy is. . . and is not. *Journal of Democracy*, 2(3), 75-88. <https://doi.org/10.1353/jod.1991.0033>
- Schneider, S. (1990). [Review of the book *Disaster relief: The politics of intergovernmental relations*, by R. M. Stratton] *Publius: The Journal of Federalism*, 20(4), 170-172.  
<https://doi.org/10.2307/3330302>
- Shaver, K. (1985). *Attribution of blame: Causality, responsibility and blameworthiness*. New York, NY, USA: Springer.
- Shaw, M. E., & Sulzer, J. (1964). An empirical test of Heider's levels in attribution of responsibility. *Journal of Abnormal and Social Psychology*, 69, 39-46. <https://doi.org/10.1037/h0040051>
- Sibley, C. G., Greaves, L. M., Satherley, N., Wilson, M. S., Overall, N. C., Lee, C. H. J., . . . Duck, I. M. (2020). Effects of the COVID-19 pandemic and nationwide lockdown on trust, attributes toward government, and well-being. *American Psychologist*, 75(5), 618-630.  
<https://doi.org/10.1037/amp0000662>
- Skarżyńska, K., & Maj, K. (2020). *Spółeczeństwo wobec epidemii - czerwiec 2020. Raport z badań* [Society and the epidemic – June 2020. Research report]. Warszawa: University of Social Sciences and Humanities.
- Strong, P. (1990). Epidemic psychology: A model. *Sociology of Health & Illness*, 12(3), 249-259.  
<https://doi.org/10.1111/1467-9566.ep11347150>
- Taylor, S. E., & Fiske, S. T. (1975). Point of view and perceptions of causality. *Journal of Personality and Social Psychology*, 32, 439-445. <https://doi.org/10.1037/h0077095>
- Van Bavel, J. J., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., ... Willer, R. (2020). Using social and behavioral science to support COVID-19 pandemic response. *Nature Human Behaviour*, 4, 460-471. <https://doi.org/10.1038/s41562-020-0884-z>
- Walster, E. (1966). Assignment of responsibility for an accident. *Journal of Personality and Social Psychology*, 3, 73-79. <https://doi.org/10.1037/h0022733>
- Weiner, B. (1995). *Judgment of responsibility*. New York, NY, USA: Guilford.
- Xiang, Y.-T., Yang, Y., Li, W., Zhang, L., Zhang, Q., Cheung, T., & Ng, C. H. (2020). Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry*, 7, 228-229. [https://doi.org/10.1016/S2215-0366\(20\)30046-8](https://doi.org/10.1016/S2215-0366(20)30046-8)

**PSPS**  
Polish  
 Social  
 Psychological  
 Society

*Social Psychological Bulletin* (SPB)  
 is an official journal of the Polish  
 Social Psychological Society  
 (PSPS).



leibniz-psychology.org

PsychOpen GOLD is a publishing  
 service by Leibniz Institute for  
 Psychology (ZPID), Germany.