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"In conspiracies we trust": interpersonal/institutional trust and beliefs in conspiracy theories during the COVID-19 pandemic

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Abstract

Academic research has shown that believing in conspiracy theories is common in contemporary democracies and that believing in such theories is particularly common in moments of crisis (such as wars, terrorist attacks, or pandemics). Scholars have attempted to understand the psychological and attitudinal elements that trigger conspiracism among the citizenry, finding that both interpersonal and institutional trust negatively correlate with conspiracism. If, however, it is straightforward to expect that people who present low levels of institutional trust might present high levels of conspiracism (due to the consistency of the narratives that drive the two attitudes), no research has so far investigated the mechanism behind the relationship between interpersonal trust and beliefs in conspiracy theories. Using survey data collected in Italy at the beginning of June 2020, after the first pandemic wave in the country, the present contribution aims to identify a plausible socio-psychological mechanism that triggers this latter association. Using fixed-effect regression models, we show negative associations between institutional/interpersonal trust and conspiracism – with the former coefficient being bigger than the latter. We also show that pandemic stress, measured as one's perceived likelihood of being infected by the new Coronavirus, moderates both associations. In particular, at higher levels of pandemic stress, the correlation between interpersonal trust and conspiracy is larger, while the opposite is true for the relationship with institutional trust. This is consistent with theories that see conspiracism as a simple explanation of a complex world, namely, a tool that people (especially low-interpersonal-trust individuals) employ to reduce stress and anxiety produced by an uncertain situation.

1. Introduction

In recent years, scholarly and public opinion interest in conspiracy theory beliefs has grown. Conspiracy theories, in their most basic definition, are explanations of social facts by means of "secret arrangement[s] between a small group of actors to usurp political or economic power, violate established rights, hide vital secrets or illicitly cause

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widespread harm" (Uscinski et al. 2016, p. 58). The growing interest in the determinants of conspiracism might be explained in two ways. First, the diffusion of conspiracist beliefs seems in contrast to the spread of higher education, scientific knowledge, and the relative ease with which rigorous and reliable information can be accessed by the general public. Rather than explanations of social facts put forward by experts, people seem to be more fascinated by alternative epistemologies, which are usually consistent with their previous beliefs (Plencner, 2014). Partially related to this first argument, the increased diffusion of conspiracy theories also seems to be associated with the support of populist parties (Mancosu et al., 2017; Castanho Silva et al., 2017), which have recently made heavy use of conspiratorial language.

The academic literature has shown that conspiracy theories emerge during crises, such as wars (Olmsted, 2019; Byford and Billig, 2001) or terrorist attacks (Kreis, 2020); i.e., moments in which the feelings of threat and panic are at their peak in the citizenry (Oleksy et al., 2021). Unsurprisingly, thus, the COVID-19 pandemic crisis has crucially contributed to the emergence of a large number of theories related to the origins of the virus and the possible benefits that evil and powerful conspirators might obtain by lockdown measures, the circulation of the virus, or vaccination campaigns (Miller, 2020; Oleksy et al., 2021, Vezzoni et al., 2021). These positions can lead to negative consequences, such as vaccine hesitancy (Hornsey et al., 2020) or scarce compliance with public health measures (Constantinou et al., 2021).

Scholars have made relevant efforts to understand the psychological and attitudinal elements that trigger conspiracism among the citizenry, focusing, among other elements, on the relevance that trust in institutions might have on the likelihood of accepting conspiracy theories. It should not surprise, indeed, that people holding scarce trust in political institutions are more fascinated by theories that place in an extremely negative light these same institutions, deemed as plotting conspiracies to the detriment of regular citizens. Much less investigated is the connection between interpersonal trust and conspiracism. Although some research has been dedicated to this latter relationship, showing a negative correlation between the two concepts (Goertzel, 1994; Abalakina-Paap et al., 1999), the mechanism that should drive this empirical evidence is far from being assessed.

The aim of this contribution is twofold. First, we aim to systematically compare the strength of the relationship between interpersonal/institutional trust and conspiracism. Second, we aim to identify a socio-psychological mechanism that is able to explain the under-theorized correlation between interpersonal trust and conspiracism. We will argue that the relationship between conspiracism and horizontal trust might be due to the cognitive and social tools that interpersonal trust guarantees. We rely on socio-psychological theories that see interpersonal trust as an indicator of the extent to which people can deal with complexity and can solve cognitive and social problems through a trustworthy network. When an individual lacks social/interpersonal trust, it means that they are alone in solving those problems and dealing with complex, stressful situations. Believing in conspiracy theories is, after all, very similar to producing simple answers to complex problems. This leads us to hypothesize that, at lower levels of social trust, we will witness a higher likelihood of relying on coping mechanisms that produce higher levels of conspiracist ideation. This mechanism can be further refined by exploiting the COVID-19 pandemic, which has unevenly increased levels of stress and uncertainty in the population. On the one hand, if the

mechanism we are hypothesizing is correct, at heightened levels of stress and uncertainty (produced by the COVID-19 crisis) we will see stronger associations between conspiracism and interpersonal trust. On the other hand, we will not see the same picture with regard to the association between institutional trust and conspiracism, which is mainly due to a narrative consistency between the two concepts.

We test our hypotheses by means of survey data collected in Italy at the beginning of June 2020, after the first pandemic wave in the country. Using fixed-effects regression models, we show the negative associations between institutional/interpersonal trust and conspiracism – with the former being about 4.5 times bigger than the latter. In addition, we show that pandemic stress, measured as one's perceived likelihood of being infected by the new Coronavirus, moderates both associations. In particular, at higher levels of pandemic stress, the correlation between interpersonal trust and conspiracy is greater, while the opposite is true for the relationship with institutional trust.

The paper is designed as follows. Section 2 aims to outline the argument, define the basic concepts that we will take into account, and clarify the hypotheses. Section 3 presents the data and methods employed to test our expectations. Section 4 will present the results of the regression analyses, and Section 5 will draw some conclusions on the results and present the limitations of the research.

2. Background

2.1 Conspiracies theories and people who believe them

Academic research has shown that believing in conspiracy theories is common in contemporary democracies. According to Oliver and Wood (2014), about 50% of Americans believe in at least one conspiracy theory among those most widespread in the US. The percentage of believers is similar in other samples collected in other countries (see, as regards Italy, Mancosu et al., 2017). As a matter of fact, conspiracism seems not to be a marginal phenomenon.

The academic literature has tried to identify the factors that explain the individual likelihood of endorsing these theories. In particular, it is possible to identify two research lines. The first relies on psychological and psychopathological studies, which argue that believing in conspiracies is a more or less severe form of mental disease (Darwin et al., 2011; Barron et al., 2014). Conspiracism seems to be related to a paranoid style of thinking, a psychological condition in which an individual "sees the hostile and conspiratorial world in which he feels himself to be living as directed [...] against a nation, a culture, a way of life whose fate does not affect himself alone but millions of others." (Hofstadter, 1956, p. 4). In addition, people believing in conspiracy theories are more likely to show Manichean attitudes of the social and political environment in which they live, depicting a society in which a few conspirators are identified with Evil and millions of individuals with Good. Moreover, social psychology literature finds that conspiracism is correlated with lower levels of self-esteem, agreeableness, high levels of powerlessness, and authoritarianism (Abalakina et al., 1999; Swami et al., 2011).

A second line of research, on the other hand, investigates conspiracy beliefs by employing a socio-political perspective, aimed at finding associations between conspiracism and other attitudinal or socio-demographic variables (Oliver and Wood, 2014; van Proojien,

2017; Mancosu and Vegetti, 2020). For instance, it is shown that education is negatively related to conspiracism, with more educated people being more likely to engage in rational thinking, to avoid an obscure interpretation of facts, and to be less likely to present the need for closure attitudes (Oliver and Wood, 2014, Van Proojien, 2017, Mancosu et al., 2017). The literature also shows positive correlations between conspiracism and religiosity (see Oliver and Wood, 2014; Mancosu et al., 2017; Ladini, 2021), and political engagement (Jolley and Douglas, 2014). As regards the relationship between electoral attitudes and conspiracism, the literature shows different patterns, diversified by the national contexts in which the empirical evidence is collected. In the US, generic conspiracy theories (i.e., theories that do not see a major role in the conspiracy of a Democrat/Republican) seem not to asymmetrically affect liberal/conservative citizens (Oliver and Woods, 2014). On the other hand, right- and left-wing extremists seem to believe more in conspiracy theories in the Netherlands (see van Prooijen et al., 2015). Italy is characterized by a strong left-right cleavage, with extreme right-wing people believing significantly more even in generic theories (Mancosu et al., 2021). Previous research has also dealt with the relationship between different forms of trust and conspiracy theory beliefs.

2.2 Interpersonal, institutional trust, and conspiracism

Overall, the investigation of interpersonal and institutional trust, as well as their consequences, is extremely prolific in sociology and political science. Trust in institutions (also known as "vertical trust" or "trust in authorities") is generally labeled as the level of confidence that one has in political institutions (such as the government, the police, the parliament of one's country, etc., see Yang, 2006; Twenge et al., 2014). Similarly, interpersonal trust is the level of trust that people have in others during their everyday activities. On the other hand, the horizontal trust concept is usually connected to the concept of social capital (Hooghe & Stolle, 2003; Prakash & Selle, 2004; Putnam, 2002), which conceptualizes the levels to which one is embedded in interpersonal networking activities, knows other people in one's community and is willing to trust them.

Although apparently similar (after all, both deal with the act of trusting), in the literature the two concepts present enormous differences, both in terms of the mechanism explaining the determinants of different levels of interpersonal/institutional trust, and in terms of their theorized consequences. When dealing with institutional trust, for instance, scholars tend to explain different degrees of it by means of one's position in society (Campbell, 2004), or the characteristics of the political/institutional system to which individuals are exposed. For instance, political contexts in which people witness low levels of accountability of the political systems are those in which a lack of trust in those suboptimal institutions is more likely (e.g. Edlund and Lindh, 2013, Hakhverdian and Mayne, 2012, Welch et al., 2005).

On the other hand, asymmetries in the levels of horizontal trust are more likely to be explained by micro-sociological or psychological elements, such as the intensity of relationships in formal/informal groups (Li et al., 2005), or the degree of structuredness and clarity of the social norms in one's environment (Welch et al., 2005). Especially regarding this latter construct, it is easy to imagine that in a social environment in which the individual can efficiently predict the actions of other individuals surrounding them, the level of social trust will be higher. As far as the consequences of different social and

institutional levels are concerned, it is possible to say that, if institutional trust is more a matter of the *opinions* of people about the political and social system in which they live, interpersonal trust tackles one's everyday *social life*.

The literature stresses that interpersonal and institutional trust presents strong (and negative) associations with conspiracism. For instance, Einstein and Glick (2015) show that high levels of conspiracism are correlated with low levels of trust in institutions. The same relationship is shown by Mari and colleagues (2021). The social-psychological literature presents similar results concerning the relationship between interpersonal trust and believing in conspiracy theories. Evidence of this association can be found in Goertzel (1994), as well as in Abalakina-Paap and colleagues (1999). However, in this latter case, the relationship is always presented as plain empirical evidence, rarely associated with an explanatory mechanism.

2.3 Trust and conspiracism: what about the mechanisms?

The explanation of the relationship between different types of trust and conspiracism is the main aim of the paper. As regards institutional trust, the mechanism that drives the relationship is pretty straightforward. If people, for a variety of reasons, tend to trust less in institutions, it means that they believe that these are at best inefficient, and at worst flawed (Hakhverdian and Mayne, 2012; Mari et al., 2021). If political and economic institutions are perceived in this way, it becomes easier to believe that a corrupt elite, not attentive to the public interest, might plot in secret to the detriment of the large majority of the unaware population (for a more in-depth analysis of the consistency of distrust and conspiracist narratives, see Jamison et al., 2020). As shown above, previous literature has shown a negative relationship between conspiracism and institutional trust, and we have no elements to believe that the pandemic would undermine this association. Our first hypothesis will thus read as follows:

H_1. *At lower levels of institutional trust, the level of conspiracism increases*

Much less clear is the mechanism that drives the relationship between social trust and conspiracism – as stressed above, previous literature, mainly based on correlational analyses in social psychology, did not provide a social mechanism that can provide a compelling theoretical explanation of the association between the two concepts.

In order to provide an attempt to solve this puzzle, we must start with defining conspiracism in a slightly different way. For citizens who believe in these theories, conspiracism has been defined as a simple explanation to a complex problem (see Marchlewska et al., 2018). Believing in conspiracy theories shifts the responsibility of dramatic events or unequal distributions of resources to a super-powerful, unrecognizable, and unbeatable group of people – the conspirators (Marchlewska et al., 2018; Uscinski, 2018). We also stressed in the previous paragraph that low levels of interpersonal trust are related to anomy – i.e., social structures in which social norms are undermined or almost absent (see Welch, 2005; Falcone and Castelfranchi, 2001). As stressed in previous studies, people with low interpersonal trust are alone in coping with complexity – namely, they have to cognitively deal with complex issues in (almost) complete solitude. This interpretation is compatible with the evidence brought by Grace and Schill (1984), who show that people presenting high levels of social trust are more likely

to cope with situations of stress better than people with low levels (see also Wang et al., 2020). It is thus easier for those people to rely on simple explanations of social and political facts to cope with complexity. Hypothesis 2 will thus read as follows.

H_2. *At lower levels of interpersonal trust the level of conspiracism increases*

2.4 The role of uncertainty and the COVID-19 crisis in Italy

The COVID-19 crisis in Italy, especially during and after the so-called first wave (between March and July 2020), provides a unique occasion to test this mechanism. The Coronavirus pandemic hit Italy before other countries and, especially during the first wave of the pandemic, in a particularly strong way (with an excess death rate – as of 15 June 2020 – of more than 34,345 units, see Blangiardo et al., 2020). The first wave, with the strong lockdown measures taken to prevent the spread of the virus, produced dramatic changes in Italians' everyday lives. For our interests, this wave of the pandemic presents two relevant characteristics. First of all, it enhanced stress and uncertainty in the population from the economic, social, and existential points of view. The pandemic, in addition to producing a disastrous economic crisis, reduced the network of social relationships of a large quota of the population, forced to stay at home because of the lockdown measures. The second element of interest is the variance of those stress levels in the population. Since the beginning of the pandemic, it was clear that some subjects (the elderly, people with pre-existing pathologies) were more likely to be seriously endangered by the virus. Also, Italy has seen a very uneven distribution of the prevalence of infected people (and consequently, different death tolls), with outbreaks in some provinces of Northern Italy. For these reasons, the measured levels of stress and the perceptions of existential threat during and after the pandemic were largely different among Italians.

In this contribution, we will employ the perception of the threat of the Covid-19 pandemic (the so-called pandemic stress, see Kujawa et al., 2020) as a moderator to better understand the relationships between interpersonal/institutional trust and conspiracism.

Perceiving high levels of pandemic stress brings, inevitably, a burden of anxiety and uncertainty that people must cope with. If what we argued in H2 is true, i.e., that the relationship between interpersonal trust and conspiracism is driven by a form of anxiety reduction, in which people cope with uncertainty by relying on simple, Manichean theories that explain almost everything with simple arguments, it is plausible to infer that this same relationship should be stronger in subjects that experience more of this type of anxiety. In other words, we expect that, if the mechanism we are theorizing is correct, COVID-related stress will moderate the relationship between interpersonal trust and conspiracism. Hypothesis 3 thus reads as follows:

H_3. *The negative relationship between interpersonal trust and conspiracism will be stronger among people experiencing more pandemic stress.*

On the other hand, we have stressed that trust in institutions is only marginally associated with the levels of anxiety that one experiences, and it is mainly a matter of opinion, which deals more with the consistency of conspiracist narratives with respect to anxiety management. Institutional trust is mainly based on perceived perceptions of

institutional performance, or political partisanship, but the literature so far has not provided any possible theoretical link between institutional trust, conspiracism, *and* uncertainty/pandemic stress. In this case, we might expect that the moderation effect would be absent, because of the very fact that the two mechanisms that drive people's reactions are different. We do not see any reason why pandemic stress is expected to moderate the relationship between institutional trust and conspiracism. Our H4 will thus read as follows:

> **H_4.** *The negative relationship between institutional trust and conspiracism will not be moderated by pandemic stress.*

3. Data and methods

Our hypotheses are tested through an online survey of the over-18 Italian population (n=2,267). Data collection is managed by the Italian polling company SWG. The sample is drawn from a pool of 60,000 panelists. Respondents are randomly drawn from this pool, with the sampling procedure stratified by a set of socio-demographic indicators (gender, age, and area of residence). The questionnaire was administered after the first pandemic wave (more specifically, between June 26 and July 3, 2020).

Our dependent variable is the result of a scale asking our respondents to evaluate the likelihood of four conspiracy theories about the nature and diffusion of COVID-19 that were particularly widespread in July 2020. More specifically, we asked them to evaluate – from 0 (meaning "not plausible at all") to 10 (meaning "completely plausible") – the following statements:

- The new Coronavirus has been created to breed fear and impose mass vaccinations
- COVID-19 was created in a Chinese lab and escaped, causing the pandemic[1]
- New 5G antennas harm the immune system and makes the diffusion of Covid-19 easier
- The COVID-19 emergency and lockdown measures have been a rehearsal for a dictatorship

The four items, although covering largely different aspects of the conspiracy theories about the pandemic, present an extremely satisfactory internal consistency (Cronbach's Alpha = 0.92). We can thus argue that they tackle a concept that might be very similar to that of conspiracist ideation (Bruder et al., 2013). After summing the four items, we rescaled them to obtain a 0-10 scale, in which 0 is equal to 0 "Evaluating every conspiracy theory as not plausible at all" and 10 means "Evaluating every conspiracy theory as totally plausible".

The main independent variables are represented by two scales tackling interpersonal and institutional trust. The first scale, which covers interpersonal trust, is composed of two items, asking people to evaluate, on a 1-4 scale from 1 ("No trust at all") to 4 ("A lot of trust") how much they trust 1) their colleagues/coworkers and 2) friends and acquaintances. The second scale measures trust in political and public institutions, asking them to evaluate, on the same 4-point scale outlined above, their trust in the

[1] We are aware of the fact that the "leak" hypothesis is now more plausible, being evaluated as a possible origin of the new Coronavirus also by official sources. Still, in July 2020 this was definitely a conspiracy theory.

following institutions: the President of the Republic, the Italian Parliament, Italian law enforcement, the President of the respondent's region, the mayor of respondent's city, the government, and the National Healthcare System. Both the scales provide a more than sufficient internal consistency (respectively, the Cronbach alphas of the two scales are equal to .83 and .86). To make them comparable in the models that test our hypotheses, and to provide positive coefficients in the models, after summing the items, we rescaled them to a 0-1 scale, inverted the polarity of the scale, and produced two *distrust* scales, in which 0 means "no distrust at all in any item" and 1 means "complete distrust in all items". This will help the readability of predictions/average marginal effects in the following paragraph. It must be noted that the first-order correlation between the two types of trust is not particularly high (r=.40). We can thus conclude that the two concepts, as stressed repeatedly in the literature (see Spadaro et al., 2020, Kim et al., 2020), tackle two different concepts.

We stressed above the importance of the moderator of the effect, the individual level of pandemic stress. Since we do not have a measure in our questionnaire that tackles this concept exactly, we rely on a proxy of the concept, namely, the perceived likelihood of getting infected in the future by the new Coronavirus (a 0-10 scale going from 0 "Impossible" to 10 "Sure"). The question was asked of those who did not get infected with COVID-19 (in our sample, we had 29 people who declared they had been infected and we thus expunged them from the analysis). In this case, at higher levels of perceived likelihood of being infected, we are assuming that feelings of anxiety and pandemic stress will increase.[2]

To control for possible composition effects, we added to our models several confounders, namely gender, age (continuous), educational level (subdivided in "Primary", "Secondary" and "Tertiary"), and vote intentions (subdivided in "Majority", "Right-wing opposition", "Other parties/Abstention").[3]

3.1 Models

We stressed above that the pandemic hit the country in very different ways. It is thus important to take into account that different subnational pandemic situations might alter the correlation of our attitudes. The hypotheses will thus be tested using two fixed-effect linear regression models, with the level-2 variable being the region of residence of the respondents.

The first model, aimed at testing H_1 and H_2, in addition to the control variables, fits the coefficients for the two types of trust. The second fits two two-way interactions between the two types of trust separately and the perceived likelihood of getting infected by COVID-19. This latter model will test H_3 and H_4.

4. Results

Table 1 reports the coefficients for the two models presented above.

[2] Of course, this choice, similarly to the working employed for the trust scale, is a suboptimal solution. This drawback of the empirical design will be dealt with in the last section of the paper.
[3] See Appendix 1 for descriptive statistics of the variables employed in the models.

Table 1. Two fixed-effect models to study conspiracism

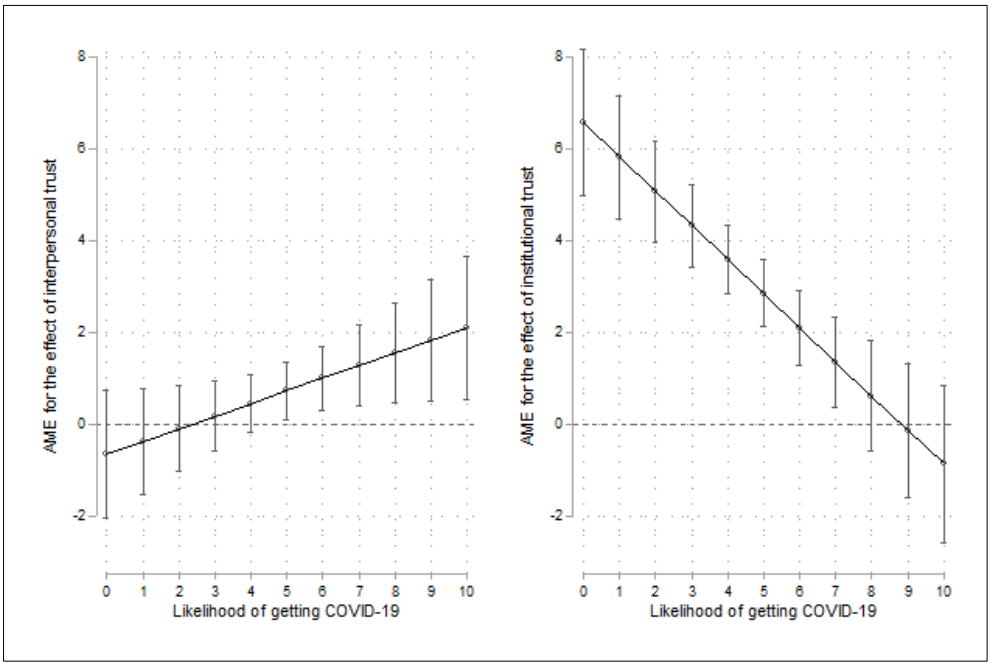
	Model 1		Model 2	
Independent variables	**Coef.**	**S.E.**	**Coef.**	**S.E.**
Institutional distrust	3.018***	(0.371)	6.558***	(0.814)
Interpersonal distrust	0.670**	(0.310)	-0.640	(0.711)
Likelihood of getting COVID-19	0.0452	(0.0305)	0.338***	(0.0795)
Instit. distrust * Getting COVID-19			-0.742***	(0.152)
Interp. distrust * Getting COVID-19			0.274**	(0.138)
Gender: Female (ref. Male)	0.613***	(0.124)	0.596***	(0.124)
Age	-0.004	(0.004)	-0.004	(0.004)
Vote: Government (ref. Others)	0.152	(0.152)	0.166	(0.151)
Vote: Right-wing opposition	1.303***	(0.166)	1.260***	(0.165)
Education lvl: Secondary (ref. Primary)	-0.858***	(0.226)	-0.806***	(0.225)
Education lvl: Tertiary	-1.360***	(0.232)	-1.336***	(0.230)
Constant	1.099***	(0.415)	-0.396	(0.554)
Observations	1,668		1,668	
Number of lvl-2 units	20		20	
Lvl-2 variance	2.489		2.474	

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

As it is possible to see in model 1, both vertical and horizontal distrust variables correlate positively with conspiracism, as correctly predicted in H_1 and H_2. Since the two variables are rescaled in the same way, it is also possible to investigate the magnitude of these two effects. As we can note, the difference between the coefficients of vertical and horizontal distrust is important, with the institutional distrust coefficient being about 4.5 times greater than that of interpersonal distrust (a three-point coefficient for the institutional trust variable and a 0.7 coefficient for the interpersonal trust variable).

Although few studies in the literature have investigated the relevance of the differences between interpersonal and institutional trust in explaining conspiracism, the corroboration of H_1 and H_2 does not come as a surprise. The interaction terms, presented in Model 2, show a more interesting pattern. We argued in H_3 that, if the relationship between different types of trust and conspiracism is actually driven by different mechanisms (fear and anxiety on one hand, narrative consistency on the other), the moderation effect of perceived stress caused by the COVID-19 crisis should impact interpersonal trust in a very precise way, namely, increasing the effect of distrust at increasing levels of pandemic stress. On the other hand, in H_4 the sign of the moderating effect of stress was expected *not* to be significant. As is possible to see from Table 1 (Model 2), the interaction terms between pandemic stress and the two variables present opposite signs. In other words, the more a person is persuaded that he/she will get COVID-19, the greater the correlation between interpersonal distrust and conspiracism. Similarly, at increasing levels of our pandemic stress variable, we see a decreasing correlation between institutional distrust and conspiracism. Figure 1 shows these two relationships graphically.

Figure 1. Average Marginal Effects of the coefficient of institutional and interpersonal distrust on conspiracism, by perceived likelihood of getting COVID-19



Source: own elaboration.

As is possible to see from the left panel of Figure 1, the Average Marginal Effects show also the magnitude of the two opposed moderation effects. We can see that the AME of interpersonal distrust is non-significant at low levels of perceived likelihood of getting infected (and it becomes significant when the perceived likelihood is higher than 5). On the other hand, we can see the opposite figure for institutional distrust (right panel of Figure 1). Here, at high levels of pandemic stress, we have non-significant marginal effects of interpersonal distrust. Summarizing, we can say that H_3 is corroborated, while the empirical test of H_4 reveals unexpected evidence that must be carefully taken into account. Although we expected that the moderation of pandemic stress would not have been significant, we realize that the effect is significant, and goes in the opposite direction with respect to the effect that moderates the correlation between interpersonal trust and conspiracism. This moderation effect is particularly large, with people with low levels of pandemic stress presenting a strong and positive association between institutional trust and conspiracism, and citizens presenting high levels of pandemic stress presenting a non-significant correlation between institutional trust and conspiracism. This result challenges our H_4 and calls for possible alternative explanations of the relationship between trust (and, in particular, institutional trust) and conspiracism during the pandemic.

5. Discussion

Believing in conspiracy theories is usually seen as being related to one's levels of trust. Lower levels of institutional trust might make people more likely to believe in plots orchestrated by powerful and evil elites. At the same time, even if the mechanism is not

explicitly posited, the literature found a negative association between interpersonal trust and believing in conspiracy theories (Goertzel, 1994; Abalakina-Paap et al., 1999).

The present contribution aimed to systematically compare the effects that different types of trust might have on conspiracism. In addition, the paper aimed to understand the mechanisms underlying the relationship between conspiracism and interpersonal/institutional trust, by exploiting, as a moderator variable, the role of pandemic stress after the first COVID-19 wave. We argued that people with low levels of interpersonal trust are more likely to employ conspiracy theories as coping mechanisms to deal with complexity, especially when presenting high levels of pandemic stress. Believing in such theories, thus, might be a way of reducing the stress related to uncertain situations (Grace and Schill, 1984; Wang et al., 2020). On the other hand, people with high levels of interpersonal trust are more equipped to deal with uncertainty and thus are less likely to be forced to rely on these simple explanations of reality.

At the same time, we expected that the moderating effect of pandemic stress would not be significant as regards the correlation between institutional trust and our dependent variable. Surprisingly, we found that the moderation effect in this latter case is opposite with respect to the former type of trust. This is particularly interesting since it might suggest that a situation of pandemic distress leads to a reduction in the correlation between believing in conspiracies and trust in institutions. The relationship between institutional trust and conspiracism seems to be affordable only if one feels relatively safe with respect to the pandemic. Being afraid of the possible consequences of the pandemic, on the other hand, reduces the correlation between trust and conspiracism. This latter result might be explainable as some form of side effect of high levels of fear of the pandemic, which, as we know from previous literature, increases the average level of institutional trust (Kritzinger et al., 2021). As a result, if institutional trust increases also for generally conspiracist people, this might lead to the weaker correlations that we see in the results.

The study presents several limitations, both as concerns the data employed and the design. Concerning the former, we have seen that the variables employed to measure both interpersonal trust and pandemic stress are non-standard variables that are usually employed in the literature. In particular, interpersonal trust and pandemic stress are generally measured in different ways. Also, because of data limitations, several socioeconomic variables (such as economic vulnerability and income losses, which might represent relevant indicators fostering respondents' feeling of anxiety) were kept out of our analyses. Future research will aim to test whether those relationships hold with standard variables, as well as with more confounders. The second limitation relates to the non-causal design employed. The results present correlational evidence, and the causal mechanisms argued are corroborated only in an indirect way. In other words, we do not have the "smoking gun" that our argument is correct.

Notwithstanding these issues, we think that these results shed light on the connections between two fundamental concepts employed in social science and a new, interesting element of public opinion that is becoming extremely relevant in contemporary societies.

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References

Abalakina-Paap, M., Stephan, W. G., Craig, T., & Gregory, W. L. (1999). Beliefs in conspiracies. Political Psychology, 20(3), 637-647.

Barron, D., Morgan, K., Towell, T., Altemeyer, B., & Swami, V. (2014). Associations between schizotypy and belief in conspiracist ideation. Personality and Individual Differences, 70, 156-159.

Blangiardo, M., Cameletti, M., Pirani, M., Corsetti, G., Battaglini, M., & Baio, G. (2020). Estimating weekly excess mortality at sub-national level in Italy during the COVID-19 pandemic. PloS one, 15(10), e0240286.

Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. Frontiers in psychology, 4, 225.

Campbell, W. R. (2004). The sources of institutional trust in East and West Germany: civic culture or economic performance?. German politics, 13(3), 401-418.

Castanho Silva, B., Vegetti, F., & Littvay, L. (2017). The elite is up to something: Exploring the relation between populism and belief in conspiracy theories. Swiss political science review, 23(4), 423-443.

Constantinou, M., Gloster, A. T., & Karekla, M. (2021). I won't comply because it is a hoax: Conspiracy beliefs, lockdown compliance, and the importance of psychological flexibility. Journal of Contextual Behavioral Science, 20, 46-51.

Byford, J., & Billig, M. (2001). The emergence of anti-Semitic conspiracy theories in Yugoslavia during the war with NATO. Patterns of Prejudice, 35(4), 50-63.

Darwin, H., Neave, N., & Holmes, J. (2011). Belief in conspiracy theories. The role of paranormal belief, paranoid ideation and schizotypy. Personality and Individual Differences, 50(8), 1289-1293.

Edlund, J., & Lindh, A. (2013). Institutional trust and welfare state support: on the role of trust in market institutions. Journal of Public Policy, 295-317.

Einstein, K. L., & Glick, D. M. (2015). Do I think BLS data are BS? The consequences of conspiracy theories. Political Behavior, 37(3), 679-701.

Falcone, R., & Castelfranchi, C. (2001). Social trust: A cognitive approach. In Trust and deception in virtual societies (pp. 55-90). Springer, Dordrecht.

Goertzel, T. (1994). Belief in conspiracy theories. Political Psychology, 15(3),731-742.

Grace, G. D., & Schill, T. (1986). Social support and coping style differences in subjects high and low in interpersonal trust. Psychological Reports, 59(2), 584-586.

Hakhverdian, A., & Mayne, Q. (2012). Institutional trust, education, and corruption: A micro-macro interactive approach. The Journal of Politics, 74(3), 739-750.

Hofstadter, R. (1965). The paranoid style in American politics and other essays. New York: Knopf.

Hooghe, M., & Stolle, D. (Eds.). (2003). Generating social capital: Civil society and institutions in comparative perspective. Springer.

Hornsey, M. J., Finlayson, M., Chatwood, G., & Begeny, C. T. (2020). Donald Trump and vaccination: The effect of political identity, conspiracist ideation and presidential tweets on vaccine hesitancy. Journal of Experimental Social Psychology, 88, EarlyView.

Jamison, A. M., Quinn, S. C., & Freimuth, V. S. (2019). "You don't trust a government vaccine": Narratives of institutional trust and influenza vaccination among African American and white adults. Social Science & Medicine, 221, 87-94.

Jolley, D., & Douglas, K. M. (2014). The effects of anti-vaccine conspiracy theories on vaccination intentions. PloS one, 9(2), e89177.

Kim, Y., Sommet, N., Na, J., & Spini, D. (2021). Social Class—Not Income Inequality—Predicts Social and Institutional Trust. Social Psychological and Personality Science, EarlyView.

Kreis E. (2020) Tackling "conspiracy" theories after the January 2015 terrorist attacks in Paris. Diogenes EarlyView.

Kritzinger, S., Foucault, M., Lachat, R., Partheymüller, J., Plescia, C., & Brouard, S. (2021). 'Rally round the flag': the COVID-19 crisis and trust in the national government. West European Politics, 1-27.

Kujawa, A., Green, H., Compas, B. E., Dickey, L., & Pegg, S. (2020). Exposure to COVID-19 pandemic stress: Associations with depression and anxiety in emerging adults in the United States. Depression and anxiety, 37(12), 1280-1288.

Ladini, R. (2021). Religious and conspiracist? An analysis of the relationship between the dimensions of individual religiosity and belief in a big pharma conspiracy theory. Italian Political Science Review/Rivista Italiana di Scienza Politica, 1-18.

Li, Y., Pickles, A., & Savage, M. (2005). Social capital and social trust in Britain. European sociological review, 21(2), 109-123.

Mancosu, M., Ladini, R., & Vassallo, S. (2021). Political consequences of conspiratorial thinking: evidence from 2016 Italian constitutional referendum. Acta Politica, 56(1), 69-88.

Mancosu, M., Vassallo, S., & Vezzoni, C. (2017). Believing in conspiracy theories: Evidence from an exploratory analysis of Italian survey data. South European Society and Politics, 22(3), 327-344.

Mancosu, M., & Vegetti, F. (2021). "Is it the message or the messenger?": Conspiracy endorsement and media sources. Social Science Computer Review, 39(6), 1203-1217.

Marchlewska, M., Cichocka, A., & Kossowska, M. (2018). Addicted to answers: Need for cognitive closure and the endorsement of conspiracy beliefs. European Journal of Social Psychology, 48(2), 109-117.

Mari, S., Gil de Zúñiga, H., Suerdem, A., Hanke, K., Brown, G., Vilar, R., ... & Bilewicz, M. (2021). Conspiracy Theories and Institutional Trust: Examining the Role of Uncertainty Avoidance and Active Social Media Use. Political Psychology. EarlyView.

Miller, J. M. (2020). Psychological, political, and situational factors combine to boost COVID-19 conspiracy theory beliefs. Canadian Journal of Political Science/Revue canadienne de science politique, 53(2), 327-334.

Oleksy, T., Wnuk, A., Maison, D., & Łyś, A. (2021). Content matters. Different predictors and social consequences of general and government-related conspiracy theories on COVID-19. Personality and individual differences, 168, 110289.

Oliver, J. E., & Wood, T. J. (2014). Conspiracy theories and the paranoid style (s) of mass opinion. American Journal of Political Science, 58(4), 952-966.

Olmsted, K. S. (2019). Real enemies: Conspiracy theories and American democracy, World War I to 9/11. Oxford University Press.

Plencner, A. (2014). Critical thinking and the challenges of internet. Communication Today 5 (2): 4–19.

Prakash, S., & Selle, P. (Eds.). (2004). Investigating social capital: Comparative perspectives on civil society, participation and governance. Sage.

Putnam, R. D. (2000). Bowling alone: The collapse and revival of American community. Simon and Schuster.

Swami, V., Coles, R., Stieger, S., Pietschnig, J., Furnham, A., Rehim, S., & Voracek, M. (2011). Conspiracist ideation in Britain and Austria: Evidence of a monological belief system and associations between individual psychological differences and real-world and fictitious conspiracy theories. British Journal of Psychology, 102(3), 443-463.

Spadaro, G., Gangl, K., Van Prooijen, J. W., Van Lange, P. A., & Mosso, C. O. (2020). Enhancing feelings of security: How institutional trust promotes interpersonal trust. PloS one, 15(9).

Twenge, J. M., Campbell, W. K., & Carter, N. T. (2014). Declines in trust in others and confidence in institutions among American adults and late adolescents, 1972–2012. Psychological science, 25(10), 1914-1923.

Uscinski, J. E., Klofstad, C., & Atkinson, M. D. (2016). What drives conspiratorial beliefs? The role of informational cues and predispositions. Political Research Quarterly, 69(1), 57-71.

Uscinski, J. E. (2018). Conspiracy theories and the people who believe them. Oxford University Press.

Van Prooijen, J. W. (2017). Why education predicts decreased belief in conspiracy theories. Applied cognitive psychology, 31(1), 50-58.

Van Prooijen, J. W., Krouwel, A. P., & Pollet, T. V. (2015). Political extremism predicts belief in conspiracy theories. Social Psychological and Personality Science, 6(5), 570-578.

Vezzoni, C., Sani, G. M. D., Chiesi, A. M., Ladini, R., Biolcati, F., Guglielmi, S., ... & Segatti, P. (2021). Where does the Coronavirus come from? On the mechanisms underlying the endorsement of conspiracy theories on the origin of SARS-CoV-2. Italian Political Science Review/Rivista Italiana Di Scienza Politica, 1-15.

Wang, H., Xia, Q., Xiong, Z., Li, Z., Xiang, W., Yuan, Y., ... & Li, Z. (2020). The psychological distress and coping styles in the early stages of the 2019 coronavirus disease (COVID-19) epidemic in the general mainland Chinese population: A web-based survey. PLoS One, 15(5).

Welch, M. R., Rivera, R. E., Conway, B. P., Yonkoski, J., Lupton, P. M., & Giancola, R. (2005). Determinants and consequences of social trust. Sociological Inquiry, 75(4), 453-473.

Yang, K. (2006). Trust and citizen involvement decisions: Trust in citizens, trust in institutions, and propensity to trust. Administration & Society, 38(5), 573-595.

Appendix

Descriptive statistics:

Variable	Min	Max	S.D.	Mean
Conspiracism scale	0	10	2.72	2.55
Institutional distrust	0	1	.20	.52
Interpersonal distrust	0	1	.22	.39
Likelihood of getting COVID-19	0	10	2.06	4.64
Gender: Female (ref. Male)	1	2	.50	1.47
Age	18	90	15.73	48.80
Vote: Others	0	1	.48	.37
Vote: Government	0	1	.48	.38
Vote: Right-wing opposition	0	1	.43	.25
Education lvl: Primary	0	1	.30	.10
Education lvl: Secondary	0	1	.50	.52
Education lvl: Tertiary	0	1	.49	.38