

The life cycle of conspiracy theories: evidence from a long-term panel survey on conspiracy beliefs in Italy – a replication study

Original study: Mancosu M, Vassallo S (2022). The life cycle of conspiracy theories: evidence from a long-term panel survey on conspiracy beliefs in Italy. *Italian Political Science Review/Rivista Italiana di Scienza Politica* 52, 1–17. <https://doi.org/10.1017/ipo.2021.57>

Abstract

In recent years, conspiracy theories have gained significant visibility across both traditional and social media platforms, becoming a subject of growing interest among social and political scientists. While much of the existing literature has focused on the psychological and behavioural implications of conspiratorial thinking, relatively little attention has been paid to the temporal dynamics of such beliefs. Mancosu and Vassallo (2022) address this gap by examining the life cycle of conspiracy theories through a longitudinal panel survey conducted in Italy. This replication study confirms their findings, showing a general decline in belief in conspiracy theories between 2016 and 2020. While the original authors argue that socio-demographic characteristics play a limited role in explaining this trend, the present analysis further explores these dimensions to provide a more comprehensive understanding of the original results. Finally, the hypothesis that changes in media framing - particularly the use of derogatory language - may have contributed to the observed decline remains a plausible explanation.

Introduction

In recent years, an increasing number of political leaders have strategically employed conspiracy theories for propagandistic purposes. This was notably the case during the 2016 Brexit referendum and the 2020 United States presidential election (Uscinski, DeWitt, & Atkinson). The COVID-19 pandemic has further contributed to the proliferation of such narratives, particularly those concerning the virus's origins and the alleged dangers of vaccination.

However, conspiracy theories are far from a recent phenomenon. As Naphy (Naphy, 2002) illustrates, harmful religious narratives were already circulating in pre-Enlightenment Europe. Since then, these narratives have been transmitted across generations, often gaining traction during periods of societal instability - conditions that provide fertile ground for conspiratorial thinking (Van Prooijen & Douglas, 2017). During the Cold War, for instance, numerous events were interpreted as part of broader plots against the public good. One of the most prominent examples remains the assassination of John F. Kennedy in 1963, which many believe was orchestrated from within the US government.

Moving closer to the present, the 2001 attacks on the World Trade Center have generated a wide array of conspiracy theories that continue to circulate and attract scholarly attention (Vermeule & Sunstein, 2009) (Uscinski, 2018) (Douglas, et al., 2019). Academic interest in conspiracy

theories has spanned multiple disciplines, including psychology, communication studies, and political science. These fields have explored how such beliefs influence individual reasoning and behaviour, often with significant social and political consequences (Jolley & Douglas, 2014) (Lewandowsky, Gignac, & Oberauer, 2013).

Despite this growing body of research, one dimension has remained relatively underexplored: the life cycle of conspiracy theories. Specifically, little is known about whether belief in such theories tends to increase, stabilise, or decline over time. Addressing this gap, Mancosu and Vassallo conducted a longitudinal analysis using panel data from the Italian National Election Study (ITANES), comparing belief levels in four “classic” conspiracy theories between 2016 and 2020. Their findings indicate a general decline in conspiratorial beliefs, a trend only marginally explained by socio-demographic or political variables.

This replication study seeks to validate and extend those findings. In addition to confirming the observed decline, it offers a more detailed examination of the role of socio-demographic and political stances indicating that often, those who experienced the steepest decline are still, nonetheless, the most likely to believe in these theories. Furthermore, it checks the hypothesis proposed by the original authors: that the increasingly critical tone adopted by mainstream media when reporting on conspiracy theories may have contributed to this decline, either by genuinely altering public opinion or by encouraging respondents to conceal their beliefs due to social desirability pressures.

The appendix tables are replicated in the associated script but are not presented in this paper.

Concept definition

Before proceeding with the analysis, it is essential to clarify the definition of a conspiracy theory. Uscinski and colleagues (Uscinski, Klostad, & Atkinson, 2016) define it as “attempts to explain significant social and political events and circumstances by implausibly claiming that they are the ultimate and consciously pursued effect of a secret conspiracy led by a group of powerful and malevolent actors.” In essence, what remains is a theory, as there is no verifiable evidence of an actual conspiracy. This distinction is crucial, as it allows us to differentiate between conspiracies - which are considered plausible by relevant epistemic authorities - and conspiracy theories, which are typically implausible and widely rejected.

Conspiracy theories often appeal to individuals seeking straightforward explanations for complex events. This tendency is rooted in natural attributional processes, through which people infer causes and consequences (Hilton, McClure, & Slugoski, 2005). These theories typically involve a small, powerful group pursuing a hidden agenda to the detriment of the wider public, often through covert coordination and manipulation of information. Believers - commonly referred to as conspiracists - are usually highly active in identifying and connecting fragments of information that appear to support their narrative, reinforcing what they perceive as a coherent and logical explanation.

However, not all conspiracy theories are logically consistent or simpler than official accounts. For instance, the theory that the collapse of the World Trade Center towers was an “inside job”

orchestrated by the US government is far more convoluted than the mainstream explanation, yet it is sustained by an internally consistent, albeit ad hoc, logic.

Mancosu and Vassallo also caution against the conceptual stretching of the term “conspiracy theory”. Some narratives, while often labelled as such, may in fact lack any conspiratorial structure and instead reflect forms of defamation, prejudice, or misinformation. To maintain analytical clarity, this study focuses exclusively on conspiracy theories that meet the following criteria:

1. They have been decisively refuted by the relevant epistemic communities;
2. They attribute agency to a small group of powerful conspirators;
3. They involve a deliberate plan to influence large-scale social or political phenomena;
4. They require the coordination of a broader network of agents;
5. They depend on the maintenance of secrecy regarding the true objectives and identities of those involved.

Underlying individual factors, the media context, social outcomes

In the past two decades, research has identified several individual-level traits associated with belief in conspiracy theories. People with lower self-esteem (Abalakina-Paap, Stephan, Y. Craig, & Larry Gregory, 1999) (Furnham, 2021), reduced analytical thinking skills (Swami, Voracek, & Stiege, 2014), and higher levels of innumeracy (Martini, et al., 2022) are generally more likely to endorse conspiratorial narratives.

Religiosity has also been linked to conspiracist beliefs, particularly when it involves alternative spiritual views such as belief in reincarnation (Oliver & Wood, 2014) (Mancosu, Vassallo, & Vezzoni, 2017). Political orientation plays a role as well: individuals with more conservative or right-leaning views tend to show a greater tendency towards conspiratorial thinking (van der Linden, Panagopoulos, Azevedo, & Jost, 2021).

These predispositions can be amplified by political actors who use conspiracy narratives to gain or maintain support. At the same time, people who believe in conspiracy theories often distrust mainstream media, which they perceive as aligned with the very institutions they suspect. As a result, they turn to alternative sources of information that they consider more authentic or independent (Stempel, Hargrove, & Stempel, 2007) (Oliver & Wood, 2014).

Social media platforms have further reinforced this dynamic. Online spaces such as Facebook and Twitter allow users to engage with like-minded individuals, forming communities where conspiracy theories are shared, discussed, and reinterpreted. In these environments, users often become “prosumers”—both consumers and producers of conspiratorial content (Bessi, Zollo, Del Vicar, & Quattrocioni, 2015) (Zollo, et al., 2015) (Zollo, et al., 2017).

These factors contribute to the persistence and spread of conspiracy theories. People who are more inclined to see hidden patterns or intentionality behind events may be more vulnerable to misinformation, which can in turn foster distrust in science, institutions, and democratic processes.

Data, variables, method and extension

The available data suggest that the motivations behind belief in conspiracy theories have weakened over time. While the decline in belief is clearly observable, no single explanatory factor appears sufficient to account for this change. Mancosu and Vassallo (2022) therefore propose two plausible interpretations: the first is the media persuasive effect, which suggests that increasingly critical or dismissive media coverage may have influenced public attitudes; the second is the social desirability effect, which posits that individuals may still hold conspiratorial beliefs but are less willing to express them openly due to changing social norms.

This study draws on panel data from the Italian National Election Study (ITANES), conducted in collaboration with the University of Milan. Two waves were selected for analysis: the first collected shortly after the 2016 Constitutional Referendum (7-13 December 2016), and the second following the 2020 Constitutional Referendum (22-30 September 2020). A total of 1,442 respondents participated in both waves and provided valid responses. While the sample is statistically robust and broadly representative of the Italian population, it does not constitute a fully probabilistic sample, as noted by the original authors.

In both waves, respondents were asked to evaluate the plausibility of four well-known conspiracy theories that have circulated in Italy in recent decades. Each item was rated on a scale from 0 (“not plausible at all”) to 10 (“completely plausible”). The four statements were:

1. “Moon landings never happened and the proofs have been fabricated by NASA and the US government” (Moon);
2. “Vapor trails left by aircraft are actually chemical agents deliberately sprayed in a clandestine program directed by government officials” (Chemtrails);
3. “Vaccines harm the immune system and expose it to diseases” (Vaccines);
4. “The Stamina method invented by Davide Vannoni for curing neurodegenerative diseases has been obstructed by big pharmaceutical groups” (Stamina).

The structure of this replication study closely follows that of the original. The first part presents a descriptive analysis of belief levels in each theory across the two waves, followed by a comparison of average scores. The second part employs a series of regression models to examine the influence of socio-political variables - such as age, gender, education, political trust, and ideological self-placement - on changes in belief.

The extension introduced in this paper follows the reflection on the limited explanatory power of socio-political variables. While the original study innovatively focused on temporal dynamics, it remains relevant to explore which factors are most strongly associated with belief in conspiracy theories at a given point in time. Although this approach is less novel, it contributes to a broader understanding of the framework within which these beliefs persist. By dividing respondents into two groups - Sceptics and Believers - a logistic regression was conducted to identify the most influential variables. Results were calculated for both the 2016 and 2020 waves and are presented in *Tables 3 and 4*.

Following this initial comparison, a further and more distinctive analysis is proposed. *Table 5* juxtaposes the original OLS results - which identify the variables most associated with the

decline in belief - with the 2020 logistic regression results, which highlight the factors that continue to drive belief in conspiracy theories. This dual perspective allows for a more nuanced understanding of both the dynamics of change and the enduring predictors of conspiratorial thinking.

The original hypothesis concerning the role of media coverage remains central to the analysis.

The main methodological difference between this replication and the original study lies in the software used for statistical analysis. While Mancosu and Vassallo provided their dataset and scripts in STATA format, the present study re-implements the analysis using R, with the aim of enhancing accessibility and promoting open-source reproducibility.

Replication results

To address the central question of this study - how has conspiracism changed between 2016 and 2020? - we begin by examining *Figure 1*, which illustrates the difference in conditional means for each conspiracy theory. While there is little variation among respondents who were already highly sceptical in 2016, those who strongly believed in the proposed theories at that time appear significantly more uncertain in 2020. In some cases, the average plausibility score dropped by as much as five points. The graph plots the change in average scores (y-axis) against the original 2016 plausibility ratings (x-axis), showing that the decline is consistent across the entire scale and for all four theories.

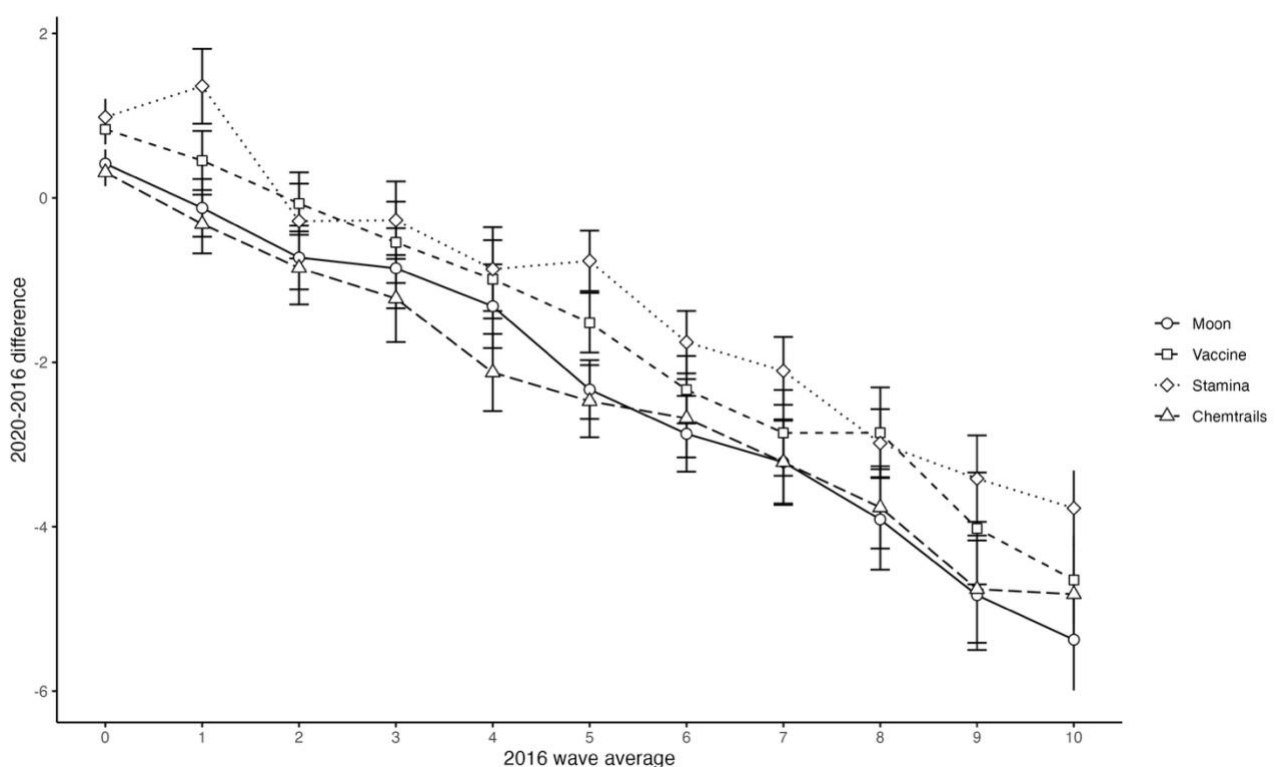


FIGURE 1: Difference of the four conspiracies between 2016 and 2020.

However, this descriptive evidence does not clarify which factors may have contributed to the observed decline. To explore this further, four linear regression models were estimated - one for each conspiracy theory - using the difference in plausibility scores between 2016 and 2020 as the dependent variable. The models control for a set of socio-political variables, including age, gender, education, political trust, and ideological self-placement.

Table 1 presents the results of these regressions and reveals several noteworthy patterns. Women appear to have reduced their belief in conspiracy theories more than men, particularly in relation to the “Stamina” and “Chemtrails” narratives. Respondents identifying with right-wing political positions also show a greater decline in belief, especially regarding the “Moon landing” and “Chemtrails” theories. Although age does have some effect, its impact appears to be relatively minor compared to other variables.

Despite these findings, the models exhibit very low R-squared values (0.02), indicating that the included variables explain only a small portion of the variance in belief change. This leads Mancosu and Vassallo to conclude that the decline in conspiracism is best described as a generalised trend, rather than one driven by specific demographic or political factors.

TABLE 1: 4 OLS regression models to study opinion change in conspiracism

	<i>Dependent variable:</i>			
	diff_moon	diff_vacc	diff_stam	diff_chem
	(1)	(2)	(3)	(4)
gender2	-0.277* (0.149)	-0.194 (0.162)	-0.503*** (0.173)	-0.389*** (0.145)
age	0.008* (0.005)	0.015*** (0.005)	0.009* (0.006)	0.007 (0.005)
titstuMedia	-0.345 (0.238)	-0.091 (0.258)	0.100 (0.276)	-0.033 (0.231)
titstuAlta	-0.319 (0.251)	-0.268 (0.272)	-0.155 (0.291)	-0.211 (0.244)
stealth	-0.038 (0.033)	-0.102*** (0.036)	-0.057 (0.038)	-0.050 (0.032)
sindesCsx	0.148 (0.259)	0.136 (0.281)	-0.114 (0.301)	0.016 (0.252)
sindesC	-0.051 (0.319)	0.270 (0.346)	0.379 (0.370)	-0.506 (0.310)
sindesCdx	-0.356 (0.269)	0.275 (0.292)	0.352 (0.312)	-0.555** (0.262)
sindesDx	-0.883*** (0.327)	-0.549 (0.355)	-0.123 (0.379)	-0.787** (0.318)

sindesNC	-0.003 (0.341)	0.282 (0.370)	-0.199 (0.396)	-0.526 (0.332)
Constant	-0.546 (0.476)	-0.560 (0.516)	-0.721 (0.552)	-0.425 (0.463)
Observations	1,323	1,323	1,323	1,323
R²	0.020	0.022	0.019	0.021
Adjusted R²	0.012	0.015	0.011	0.013
Residual Std. Error (df = 1312)	2.677	2.902	3.104	2.602
F Statistic (df = 10; 1312)	2.618***	2.955***	2.497***	2.801***

Note:

*p<0.1; **p<0.05; ***p<0.01

Following *Table 1*, *Table 2* presents the linear predictions for the significant coefficients identified in the four models. For continuous variables, predictions are calculated at the extremes of the variable's range; for categorical variables, predictions are based on the reference category used in *Table 1*. All predicted values fall within the negative range, indicating that a decline in belief is expected across all categories and for each of the four theories.

TABLE 2: Linear predictions of significant variables in the four models (Table 1 coefficients)

Predictions of the dependent variable								
	Model 1		Model 2		Model 3		Model 4	
Category	Male	Female	Male	Female	Male	Female	Male	Female
Gender	-0.79	-1.06	-0.46	-0.66	-0.53	-1.04	-0.80	-1.18
Category	25	65	25	65	25	65	25	65
Age	-1.13	-0.80	-0.95	-0.37	-1.02	-0.64	-1.16	-0.89
Category	2	8	2	8	2	8	2	8
Stealth dem.	-0.78	-1.01	-0.22	-0.83	-0.58	-0.92	-0.82	-1.12
Category	Left	Right	Left	Right	Left	Right	Left	Right
Left-right SP	-0.77	-1.65	-0.67	-1.27	-0.83	-0.95	-0.66	-1.44

This paper builds on that conclusion by offering a broader perspective. Without a clearer understanding of which variables most strongly contribute to belief in conspiracy theories - albeit within the limits of the low explanatory power noted in the original study - it becomes more difficult to interpret the observed decline.

To address this, eight logistic regression models were estimated to assess the impact of socio-demographic and political variables on belief in each theory in both 2016 and 2020. *Tables 3 and 4* present the results for the respective years. Results are expressed in log-odds: a positive coefficient indicates an increased likelihood of believing in the theory, while a negative coefficient indicates a decreased likelihood.

In the 2016 wave, gender, age, political orientation, and educational attainment significantly influenced the probability of endorsing conspiracy theories. Specifically, women and right-wing respondents were more likely to believe in such theories, while younger individuals were marginally more susceptible. Conversely, higher levels of education and left-wing political orientation were associated with a lower likelihood of belief. Trust in institutions, as measured by the stealth democracy scale, explained only marginal differences and was not consistently significant.

The 2020 wave reveals a similar pattern for gender, political orientation, and education - the first two increasing the likelihood of belief, and the latter reducing it. Age appears less relevant and loses significance for the “Vaccines” and “Stamina” theories. Higher scores on the stealth democracy scale are now more strongly associated with disbelief, although the overall effect remains modest.

Overall, the variables that most consistently influence belief in conspiracy theories are gender (female), political orientation (right-wing), and educational attainment (higher education), the latter acting as a mitigating factor.

TABLE 3: 2016 Separate logit models for each conspiracy belief

	<i>Dependent variable:</i>			
	moon1_b	chem1_b	vacc1_b	stam1_b
	(1)	(2)	(3)	(4)
gender2	0.449*** (0.131)	0.564*** (0.128)	0.589*** (0.124)	0.514*** (0.110)
age	-0.018*** (0.004)	-0.016*** (0.004)	-0.017*** (0.004)	-0.012*** (0.004)
titstuMedia	-0.302 (0.193)	-0.497*** (0.184)	-0.072 (0.186)	-0.322* (0.167)
titstuAlta	-0.642*** (0.214)	-0.910*** (0.206)	-0.563*** (0.207)	-0.709*** (0.182)
stealth	0.071** (0.029)	0.032 (0.028)	-0.002 (0.027)	-0.032 (0.024)
sindesCsx	-0.091 (0.263)	0.046 (0.271)	0.230 (0.262)	0.021 (0.207)
sindesC	-0.034	0.281	0.411	0.223

	(0.322)	(0.321)	(0.305)	(0.248)
sindesCdx	0.761***	0.882***	0.889***	0.550***
	(0.257)	(0.265)	(0.259)	(0.209)
sindesDx	1.271***	1.339***	1.472***	1.134***
	(0.283)	(0.291)	(0.285)	(0.243)
sindesNC	0.419	0.966***	0.879***	0.766***
	(0.302)	(0.297)	(0.293)	(0.245)
Constant	-1.131***	-0.930**	-1.000**	0.091
	(0.433)	(0.429)	(0.419)	(0.359)
Observations	1,587	1,577	1,584	1,546
Log Likelihood	-746.294	-764.893	-807.217	-964.452
Akaike Inf. Crit.	1,514.587	1,551.786	1,636.434	1,950.905
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01				

TABLE 4: 2020 Separate logit models for each conspiracy belief

	<i>Dependent variable:</i>			
	moon2_b	chem2_b	vacc2_b	stam2_b
	(1)	(2)	(3)	(4)
gender2	0.353**	0.365**	0.632***	0.584***
	(0.166)	(0.164)	(0.144)	(0.127)
age	-0.019***	-0.016***	-0.006	-0.007*
	(0.006)	(0.006)	(0.005)	(0.004)
titstuMedia	-0.936***	-0.570**	0.018	0.025
	(0.216)	(0.223)	(0.202)	(0.184)
titstuAlta	-1.425***	-1.142***	-0.845***	-1.030***
	(0.253)	(0.260)	(0.237)	(0.210)
stealth	0.055	0.054	-0.079**	-0.093***
	(0.036)	(0.036)	(0.031)	(0.028)
sindesCsx	-0.099	0.315	0.364	0.132
	(0.366)	(0.385)	(0.368)	(0.270)
sindesC	0.383	0.496	1.152***	0.682**
	(0.410)	(0.442)	(0.388)	(0.301)
sindesCdx	0.816**	1.069***	1.559***	1.173***
	(0.348)	(0.375)	(0.351)	(0.262)

sindesDx	1.246*** (0.374)	1.450*** (0.401)	1.645*** (0.378)	1.608*** (0.291)
sindesNC	0.464 (0.404)	0.801* (0.424)	1.227*** (0.387)	0.862*** (0.302)
Constant	-1.155** (0.548)	-1.787*** (0.569)	-1.952*** (0.516)	-0.730* (0.425)
Observations	1,583	1,563	1,564	1,460
Log Likelihood	-511.699	-521.452	-638.401	-760.477
Akaike Inf. Crit.	1,045.399	1,064.904	1,298.802	1,542.954
Note: *p<0.1; **p<0.05; ***p<0.01				

Once this general pattern is established, a comparison between the OLS regression results and the 2020 logistic regression findings offers valuable insights. The comparison shows that, while Mancosu and Vassallo correctly highlight gender (female) and political orientation (centre-right) as key drivers of the observed decline, these same variables remain among the strongest predictors of belief. In other words, although women and right-wing voters exhibited a greater decline in belief, they still demonstrate higher levels of conspiracism compared to other groups (see *Table 5*). Right-wing respondents, in particular, have significantly reduced their belief in conspiracy theories, yet remain the most susceptible group.

The data also suggest that centrist respondents played a more prominent role in 2020, as indicated by the fact that the difference analysis does not show a consistent decline across all theories for this group. Regarding age, while younger individuals remain more conspiratorial than older ones, the difference analysis suggests that older respondents have increased their propensity to believe in conspiracy theories - particularly those related to vaccines. This may be linked to the confusion and uncertainty surrounding both the virus and vaccine risks during the COVID-19 pandemic.

Finally, the stealth democracy scale continues to show a negative association with belief in conspiracy theories, aligning with the original difference analysis, which found that higher stealth scores were associated with a greater decline in belief.

On a closing note, left-wing respondents appear to have maintained relatively stable attitudes over time. However, in 2020, the “Moon”, “Chemtrails”, and “Vaccines” theories were perceived as slightly more plausible by left-wing voters than in 2016, as confirmed by the difference analysis.

TABLE 5: Comparison between lm and logit models (2020)

	diff_moon n	moon2_b	diff_vacc	vacc2_b	diff_chem	chem2_b	diff_stam	stam2_b
	OLS	logistic	OLS	logistic	OLS	logistic	OLS	logistic
gender2	-0.277* (0.149)	0.353** (0.166)	-0.194 (0.162)	0.632*** (0.144)	- 0.389***	0.365*** (0.164)	-0.503** *	0.584*** (0.127)

					(0.145)		(0.173)	
age	0.008* (0.005)	-0.019** * (0.006)	0.015*** (0.005)	-0.006 (0.005)	0.007 (0.005)	-0.016** * (0.006)	0.009* (0.006)	-0.007* (0.004)
titsuMedia	-0.345 (0.238)	- 0.936*** (0.216)	-0.091 (0.258)	0.018 (0.202)	-0.033 (0.231)	-0.570** (0.223)	0.100 (0.276)	0.025 (0.184)
titsuAlta	-0.319 (0.251)	- 1.425*** (0.253)	-0.268 (0.272)	-0.845** * (0.237)	-0.211 (0.244)	-1.142** * (0.260)	-0.155 (0.291)	-1.030* ** (0.210)
stealth	-0.038 (0.033)	0.055 (0.036)	-0.102* ** (0.036)	-0.079** (0.031)	-0.050 (0.032)	0.054 (0.036)	-0.057 (0.038)	-0.093* ** (0.028)
sindesCsx	0.148 (0.259)	-0.099 (0.366)	0.136 (0.281)	0.364 (0.368)	0.016 (0.252)	0.315 (0.385)	-0.114 (0.301)	0.132 (0.270)
sindesC	-0.051 (0.319)	0.383 (0.410)	0.270 (0.346)	1.152*** (0.388)	-0.506 (0.310)	0.496 (0.442)	0.379 (0.370)	0.682** (0.301)
sindesCdx	-0.356 (0.269)	0.816** (0.348)	0.275 (0.292)	1.559*** (0.351)	-0.555** (0.262)	1.069*** (0.375)	0.352 (0.312)	1.173*** (0.262)
sindesDx	-0.883*** (0.327)	1.246*** (0.374)	-0.549 (0.355)	1.645*** (0.378)	-0.787** (0.318)	1.450*** (0.401)	-0.123 (0.379)	1.608*** (0.291)
sindesNC	-0.003 (0.341)	0.464 (0.404)	0.282 (0.370)	1.227*** (0.387)	-0.526 (0.332)	0.801* (0.424)	-0.199 (0.396)	0.862*** (0.302)
Constant	-0.546 (0.476)	-1.155** (0.548)	-0.560 (0.516)	-1.952** * (0.516)	-0.425 (0.463)	-1.787** * (0.569)	-0.721 (0.552)	-0.730* (0.425)
Observations	1,323	1,583	1,323	1,563	1,323	1,564	1,323	1,460
R2	0.020		0.022		0.021		0.019	
Log Likelihood		-511.699		-638.401		-521.452		-760.477
Akakike Inf. Crit.		1,045.399		1,298.802		1,064.904		1,542.954

Note: *p<0.1; **p<0.05; ***p<0.01

Possible explanations of the drop in conspiracism: the role of the media

The two tables presented above confirm a generalised decline in conspiratorial beliefs. However, they also show that this decline can only be partially explained by socio-demographic or political variables. It is worth noting that respondents who were already sceptical in 2016 had limited room to express further disbelief due to the constraints of the 0-10 scale. As a result, the most significant changes are observed among those who initially expressed stronger belief in conspiracy theories, who appear to have become more uncertain by 2020.

What is particularly interesting is that the public discourse surrounding conspiracy theories evolved in at least two key ways between 2016 and 2020. First, the overall visibility of the topic increased, especially during the COVID-19 pandemic. Second, the tone adopted by

mainstream media in covering conspiracy theories shifted, becoming more critical and, at times, overtly dismissive.

Mancosu and Vassallo hypothesise that this change in media framing may have influenced public attitudes. To support this idea, they draw attention to a linguistic distinction in the Italian context. While the term *cospirazione* is typically used in academic discourse, the term *complotto* is more common in media coverage and often carries a derogatory connotation.

Using the MediaCloud platform - which collects and analyses global news content in real time (Roberts, et al., 2021) - the authors examined the frequency of the terms *cospirazione* and *complotto* (and their derivatives) in Italian media articles published between 2016 and 2020. The resulting time series was smoothed using a LOWESS procedure (bandwidth = 0.6) to highlight broader trends. Proportions of the two terms (and their derivative terms) on the total of articles published by Italian outlets are shown in Figure 2.

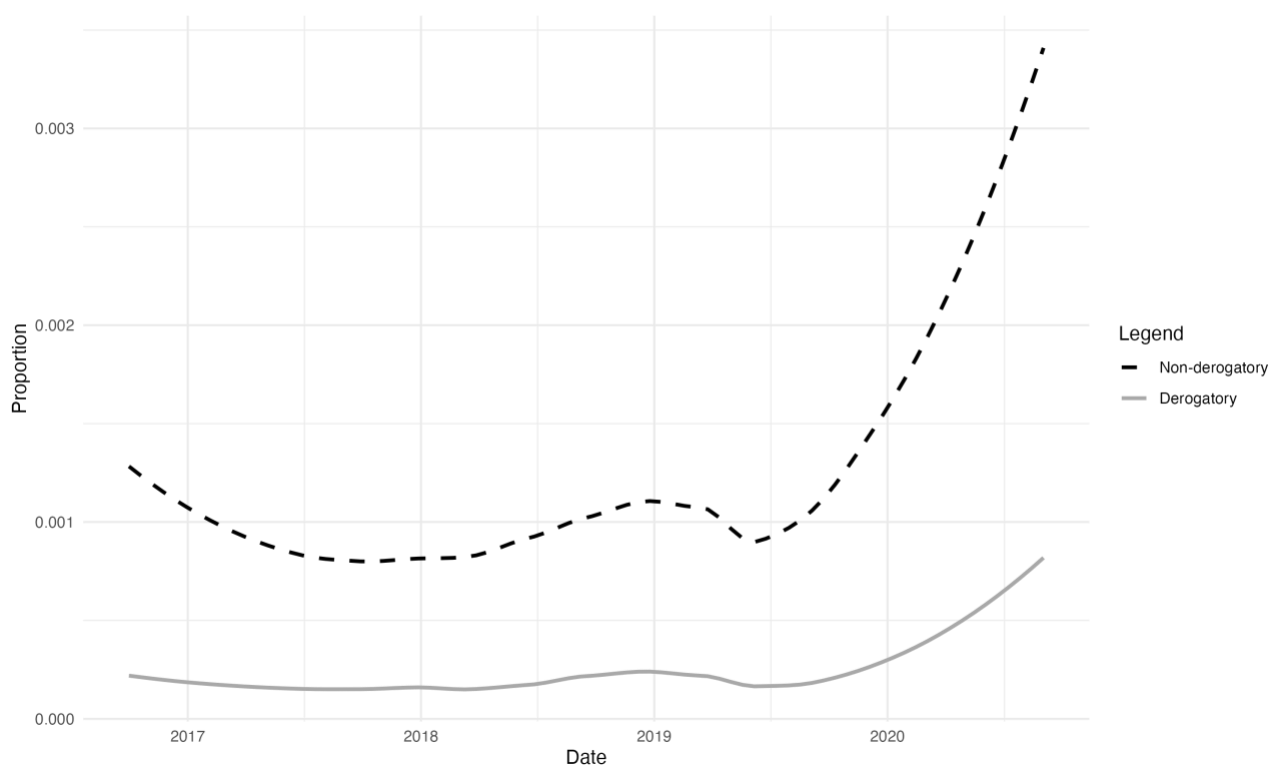


FIGURE 2: Trends of the non-derogatory/derogatory terms in mainstream media defining conspiracies over 4 years.

The data show that media interest in conspiracy-related topics began to rise in mid-2019 and had tripled by August 2020. More notably, the use of the derogatory term *complotto* increased from 0.1% to 0.3% of all published articles, while the use of the more neutral term *cospirazione* remained stable at 0.1%. Although these percentages may seem small, they are significant given that MediaCloud processes approximately 3,000 articles per day. A 0.2 percentage point increase translates to roughly 180 additional articles per month.

This shift in tone coincides with broader efforts by journalists and institutions to combat misinformation during the pandemic (European Commission, 2021) (Lewandowsky, et al.). As Mancosu and Vassallo argue, if complottismo is indeed perceived as a derogatory label, then the increased use of this term may have contributed to a delegitimisation of conspiratorial thinking in the public sphere. In other words, conspiracy theories may have received more media attention, but with a distinctly negative framing that emphasised their logical inconsistencies and potential social risks.

This interpretation is supported by existing literature in political communication, which has shown that media effects can be substantial (Iyengar & Simon, 2000). According to the authors, the increased media coverage of conspiracy theories may have influenced public opinion in two ways:

1. It may have genuinely changed people's minds through a process of learning and critical reflection;
2. Alternatively, it may have led individuals to conceal their true beliefs due to social desirability pressures, particularly if they perceived their views as marginal or stigmatised (Einstein & Glick, 2015) (Radnitz & Underwood, 2017).

Discussion and Conclusion

The aim of this paper was to replicate the original study by Mancosu and Vassallo in order to strengthen the robustness of findings on a topic that remains relatively underexplored in the academic literature. All analytical steps were faithfully reproduced, and an extension was subsequently introduced. Following the structure of the original work, the reader is cautioned against the risks of conceptual stretching and is guided through the authors' categorisation of conspiracy theories, distinguishing them from other forms of misinformation or slander. For this study, four well-known conspiracy theories within the Italian context were selected, and data were drawn from the ITANES panel survey, specifically from the 2016 and 2020 waves. Data on media coverage of conspiracy theories were obtained from the MediaCloud platform.

The replication confirms the original findings regarding the life cycle of conspiracy theories: counterintuitively, while the number of media articles addressing conspiracy-related content increased over time, the likelihood of individuals believing in such theories declined. The original study argued that this trend could not be adequately explained by socio-demographic or political variables. This replication supports that conclusion, as the R^2 values for the original models remain very low. However, this study extends the analysis by examining the 2016 and 2020 contexts more closely, demonstrating that certain variables exert a stronger influence than others on the likelihood of believing in conspiracy theories. The results suggest that women and right-wing individuals are the most susceptible groups, while higher levels of education serve as a protective factor against conspiratorial thinking. At the same time, the study proposes that the very groups which experienced the most significant decline in belief - namely, women and right-wing voters - continue to be those most inclined to endorse such theories. These findings may offer valuable insights, particularly for future research in the fields of psychology and behavioural science.

The two original hypotheses proposed to explain the decline in belief - (1) the increasingly negative portrayal of conspiracy theories in the Italian media landscape, and (2) the growing tendency to conceal one's true opinions due to social desirability pressures - were not rejected and remain plausible within the framework of this replication. However, further data are required to empirically test these mechanisms.

The appendix section is available only in the original paper. While the results have been successfully replicated, they are not reproduced in full within this study.

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