Suspicious Minds: Exploring the Commonalities and Differences among Conspiracy Beliefs, Paranoid Beliefs, and Conspiracy Mentality in a Nationally Representative Sample.

Unraveling suspicious beliefs

Trucharte, Almudena^{1,2}., Peinado, Vanesa¹., Valiente, Carmen¹., Contreras, Alba⁵., Espinosa, Regina^{3,4}., Shevlin, Mark⁶., Vazquez, Carmelo¹.

Corresponding Author: Vanesa Peinado

Phone: (+0034) 91 394 3135 Fax: (+0034) 91 394 3189

Contact email: juliavpe@ucm.es

¹ Department of Personality, Assessment and Clinical Psychology, University Complutense of Madrid, Madrid, Spain

² Clinical Psychology Unit, Department of Psychology, University of Sheffield, Sheffield, UK

³ Facultad HM de Ciencias de la Salud de la Universidad Camilo José Cela.

⁴ Instituto de Investigación Sanitaria HM Hospitales, Madrid, Spain.

⁵ Department of Psychobiology and Methodology of Behavioral Sciences, University of Málaga

⁶ School of Psychology, Ulster University, Coleraine, United Kingdom

Abstract

Despite the theoretical overlap between conspiracy beliefs, paranoid beliefs, and conspiracy mentality, their distinctions remain insufficiently understood. This study explored these constructs and their clinical significance within a nationally representative sample (N = 1497). We measured sociodemographic and psychological variables early in the COVID-19 pandemic (T1) and assessed conspiracy beliefs, paranoid beliefs, and conspiracy mentality one year later (T2), during a period of heightened visibility of these beliefs. This longitudinal design allowed us to conduct an in-depth analysis of how early factors shaped these belief systems. We conducted factor analyses and regression models to disentangle their relationships and identify distinct predictors. The results confirmed that conspiracy beliefs, paranoid beliefs, and conspiracy mentality are distinct constructs. We found that paranoid beliefs were more strongly associated with psychological factors (e.g., anxiety, intolerance of uncertainty), whereas conspiracy beliefs were driven by sociopolitical variables (e.g., income, political ideology). We identified external locus of control as the sole predictor of conspiracy mentality. Few participants showed strong endorsement of coronavirus conspiracy beliefs, which followed a skewed distribution similar to paranoid beliefs in the general population. These findings highlight the importance of tailored interventions targeting specific predictors, with critical implications for mental health and public health strategies.

Keywords: Conspiracy beliefs, Paranoid beliefs; Conspiracy mentality, Factor analysis, predictors.

Introduction

Claims such as "Climate change is a hoax perpetrated by corrupt scientists and politicians" (Enders et al., 2021) or "People have been hostile towards me on purpose" (Green et al., 2008) are examples of conspiracy and paranoid beliefs, which many people in the general population could endorse. While both types of beliefs share the perception of harm caused by others and show overlapping antecedents and correlates, they are nonetheless distinguishable constructs (Greenburgh & Raihani, 2022).

In this context, unlike conspiracy beliefs, delusions are generally considered pathological and are often associated with significant distress and impairment (Veling et al., 2022). However, recent studies suggest that conspiracy beliefs, although widespread, may arise from similar cognitive biases that contribute to delusional beliefs, such as jumping to conclusions, emotional reasoning, and anomalous perception (Frost et al., 2025; Acar et al., 2022). These cognitive biases contribute to the formation of both delusions and conspiracy beliefs, suggesting that the line between them is not always clear, particularly in individuals with high delusion proneness (Ichino, 2024). Additionally, both types of beliefs share features commonly associated with delusional pathology, such as resistance to counterevidence and a fixed belief in the harmful intentions of others (Bortolotti et al., 2021), which may explain why conspiracy beliefs are often compared to paranoid beliefs.

While conspiracy beliefs generally involve perceived collective harm and arise from weak evidence supporting interpretations of major sociopolitical events as covert plans orchestrated by powerful groups (Douglas et al., 2017), paranoid beliefs focus on perceived personal harm, characterized by concerns about intentional threats targeting the individual (Freeman, 2016). These beliefs lie on a continuum, from everyday suspicions to severe persecutory delusions, affecting approximately 10–15% of the population (Freeman &

Garety, 2014). Both phenomena may contribute to significant societal challenges, particularly in contexts like the COVID-19 pandemic. For example, conspiracy beliefs have been associated with lower vaccination rates, increased social rejection, and poorer psychological well-being, which can exacerbate vulnerabilities during public health crises (van Proojen et al., 2021).

Conspiracy theories have existed for centuries across cultures, but their reach has intensified with the rise of the internet and social media, facilitating rapid dissemination (Ahmed et al., 2020). Uncertain circumstances, such as the COVID-19 pandemic, create ideal conditions for their spread. During the pandemic, studies reported that 25-31% of the population endorsed some coronavirus-related conspiracy beliefs (Allington et al., 2020). These beliefs often co-occur: individuals endorsing one conspiracy theory are more likely to accept others, possibly due to self-reinforcing mechanisms that increase perceived plausibility (Swami et al., 2010). It is important to distinguish between conspiracy mentality (i.e., a general tendency to prefer conspiratorial explanations; Imhoff & Bruder, 2014) and specific conspiracy theories (Sutton & Douglas, 2020). To date, both terms are often used interchangeably (Sutton & Douglas, 2020), but conspiracy mentality seems to be a relatively stable disposition and a latent factor underlying specific conspiracy beliefs (Imhoff et al., 2022).

Several sociodemographic and psychological factors are associated with greater susceptibility to conspiracy beliefs. Lower education and income, perceptions of societal change as threatening, and feelings of powerlessness are consistent predictors (Nera et al., 2023). Belonging to marginalized groups, higher religiosity, extreme political ideologies, heightened anxiety, mistrust in authorities, and reduced analytical thinking have also been linked to conspiracy beliefs (Alper et al., 2020; Freeman & Bentall, 2017).

Understanding the interplay between conspiracy beliefs, conspiracy mentality, and paranoia is crucial for addressing their negative impacts. Therefore, this study aimed to: (1) estimate the prevalence of coronavirus-specific conspiracy beliefs in the general population; (2) determine whether these beliefs are distinct from conspiracy mentality and paranoia through factor analysis; (3) examine sociodemographic differences in their endorsement; and (4) identify the predictive role of both sociodemographic and psychological variables in shaping these beliefs.

Method

We conducted the present study as part of an international consortium's protocol (McBride et al., 2020; see project registration for a detailed description [anonymized for review]), using an online-based panel launched at two distinct assessment points. At T1 (26 days after the state of emergency declaration), we assessed sociodemographic and psychological predictors (e.g., anxiety, locus of control). At T2 (April 15–21, 2021), we measured conspiracy beliefs, paranoid beliefs, and conspiracy mentality, coinciding with a period of increased prevalence of these beliefs. The study adhered to the principles of the Declaration of Helsinki and received ethical approval from the University Ethics Committee.

Participants

Participants between 18 and 75 years who completed both surveys at T1 and T2 were included in the sample (N = 1497, 76.72% of compliance). The panel employed a stratified quota sampling technique, which ensured that the demographic features such as gender, age, household income, and regional population were aligned with those of the overall Spanish population. The sample consisted of 789 males (52.7%) and 708 females (47.3%), with an average age of 46.39 (SD = 12.68) years. Most of the participants had university studies

(49.3%) and were employed (66.9%) (see Table 5 for further details of sample characteristics).

Measures

Three groups of items measured conspiracy beliefs, conspiracy mentality, and paranoid beliefs (see examples of the items in Tables 1 and 4):

Conspiracy Beliefs. We included 14 items from the consortium's protocol (McBride et al., 2020) to assess conspiracy beliefs related to COVID-19, vaccines, healthcare professionals, and scientists. Participants rated their belief in each statement on a scale from 0 (I do not believe it at all) to 100 (I completely believe it). We calculated a total score by averaging the 14 items, with higher scores indicating stronger conspiracy beliefs.

Conspiracy Mentality. We included the 5-item Short-Form Conspiracy Mentality Questionnaire (SF-CMQ; Imhoff & Bruder, 2014) to assess conspiracy mentality. Participants rated items on a scale from 0% (Certainly not) to 100% (Certainly). We calculated a total score by averaging the five items, with higher scores indicating greater conspiracy mentality. Internal consistency was good ($\alpha = .84$).

Paranoid Beliefs. We included the 5-item Short-Form Persecution and Deservedness Scale (SF-PaDS; Valiente et al., 2021) to assess paranoid beliefs. Participants rated items on a 5-point Likert scale from 1 (Strongly disagree) to 5 (Strongly agree). We calculated a total score by averaging the five items, with higher scores indicating stronger paranoid beliefs. Internal consistency was good ($\alpha = .85$).

Predictor variables (T1):

Sociodemographic characteristics. We included participants' information on age, gender, highest educational attainment, religious belief, urbanicity of residence, political ideology (measured on a visual scale from 0 = left to 10 = right), and gross annual household income in euros.

Perception of Belonging. We included the 3-item Perception of Belonging Scale, adapted from the UK Community Life Survey (Cabinet Office, 2015), to assess belongingness and connectedness. Participants rated their agreement on a 4-point Likert scale ranging from 1 (Very uncomfortable) to 4 (Very comfortable). We calculated a total score by averaging the three items, with higher scores indicating greater belongingness. Internal consistency was good ($\alpha = .82$).

Intolerance of Uncertainty. We included the 12-item Intolerance of Uncertainty Scale—Short Form (IUS-12; Carleton et al., 2007) to assess intolerance of uncertainty. Participants rated items on a 5-point Likert scale ranging from 1 (Not at all characteristic of me) to 5 (Entirely characteristic of me). We calculated a total score by summing the items, with higher scores indicating greater intolerance of uncertainty. Internal consistency was excellent ($\alpha = .91$).

Loneliness. We used the 3-item Loneliness Scale (TLS; Hughes, Waite, Hawkley, & Cacioppo, 2004) to asses loneliness. Participants responded to three questions assessing how often they felt lacking companionship, left out, or isolated from others, on a 3-point Likert scale coded from 1 (Hardly ever) to 3 (Often). We calculated a total score by summing the three items, with higher scores indicating greater loneliness. Internal consistency was acceptable ($\alpha = .72$).

Analytical Reasoning. We included the 3-item Cognitive Reflection Test (CRT; Frederick, 2005) to assess analytical reasoning. Participants were asked to solve three problems with an intuitive but incorrect answer that requires reflection to solve correctly (e.g., "A bat and a ball cost 1.10ϵ in total. The bat costs 1.00ϵ more than the ball. How much does the ball cost?"). We calculated a total score by summing the number of correct answers (range 0–3), with higher scores indicating greater analytical reasoning. Internal consistency was acceptable ($\alpha = .71$).

Locus of Control. We included the 9-item Locus of Control Scale (Sapp & Harrod, 1993) to assess locus of control. The internal, external, and powerful others subscales were each measured by three items using a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). We calculated a total score for each subscale by summing the three items, with higher scores indicating stronger endorsement of that locus. Internal consistency for the subscales was acceptable ($\alpha = .61$ for external; $\alpha = .76$ for powerful others).

Anxiety. We measured anxiety symptoms using the 7-item Generalized Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006). Participants indicated how often they had been bothered by anxiety symptoms in the past seven days, on a 4-point Likert scale from 1 (Not at all) to 4 (Nearly every day). We calculated a total score by summing the seven items, with higher scores indicating greater anxiety. Internal consistency was excellent ($\alpha = .93$).

Depression. We measured depressive symptoms using the 9-item Patient Health Questionnaire (PHQ-9; Kroenke & Spitzer, 2002). Participants reported how often they had been bothered by depressive symptoms in the past two weeks, on a 4-point Likert scale ranging from 0 (Not at all) to 3 (Nearly every day). We calculated a total score by summing

the nine items, with higher scores indicating greater depressive symptoms. Internal consistency was good ($\alpha = .89$).

Analytic procedure

Firstly, we conducted a descriptive analysis, employing 95% confidence intervals (CI) for percentage prevalence estimates to gauge the acceptance of specific coronavirus conspiracy beliefs.

Secondly, we examined the factor structure of specific conspiracy beliefs related to COVID-19 through an exploratory confirmatory analysis by randomly splitting the database into two datasets. We performed the exploratory factor analysis (EFA) on the items about the COVID-19 virus, vaccines, science, conspiracy, and paranoid beliefs using data from T2. The EFA allowed us to compare the fit of models with one through to five factors. We used the following criteria to decide on the appropriate number of factors. Horn's parallel analysis (PA) allowed us to estimate the accurate number of factors. PA generated the eigenvalues for 500 random data sets, maintaining the size of the sample and the number of variables of the actual data set. We compared the original data eigenvalues with the mean and 95th percentile eigenvalues from the PA. We retained a factor when the factor's eigenvalue in the original data exceeded both the 95th percentile and the mean eigenvalue of the parallel factor.

We examined the following indexes: a) the Comparative Fit Index (CFI) and Tucker Lewis Index (TLI), which indicate an excellent fit with values > .95 and an acceptable fit with values > .90; b) Root-Mean-Square Error of Approximation with 90% CI (RMSEA); c) the Standardised Root-Mean-Square Residual (SRMR), which, like the RMSEA, indicates an excellent fit with values of .06 or below, while values below .08 indicate an acceptable fit; d) the Bayesian Information Criterion (BIC), which we used to compare the models,

indicating the best fit with its lowest value. A difference between models of 6 to 10 points indicates strong evidence of model superiority, and a difference greater than 10 points provides robust support for model superiority.

In the second stage, we performed the confirmatory factor analysis (CFA) on the best EFA solution, including only the items with the highest loadings on each factor (>.30). Next, we examined the specific coronavirus conspiracy belief scores across sociodemographic data by performing a multivariate analysis of variance (MANOVA). Finally, to explore the potential predictive role of sociodemographic and psychological variables regarding the differences in conspiracy and paranoid beliefs, as well as conspiracy mentality, we added the predictor variables from T1 data to the final factorial model. We simultaneously regressed all factors on all the sociodemographic and clinical predictor variables. We conducted all steps of the analytical procedure in Mplus 8.3 with robust maximum likelihood estimation.

Results

Endorsement of specific coronavirus conspiracy beliefs

We assessed endorsement of a set of items measuring coronavirus-related conspiracy beliefs, which were grouped into three content domains consistent with the questionnaire: conspiracy theories about the COVID-19 virus, conspiracy beliefs about COVID-19 vaccines, and conspiracy beliefs about healthcare professionals and scientists (see Table 1 for item wording). We found that the mean score for "conspiracy beliefs about vaccines" was 18.24 (SD = 21.67), which was lower than the mean for "conspiracy theories about the COVID-19 virus" (M = 29.20, SD = 16.42) and "conspiracy beliefs about healthcare professionals and scientists" (M = 33.34, SD = 28.29). Table 1 shows that most participants did not endorse these beliefs or did so only at low levels, and only a minority expressed strong

endorsement (e.g., 1.1–7.5% reported 91–100% agreement with the item "5G mobile networks are responsible for the current global pandemic").

-Insert Table 1-

Factor Analysis of Conspiracy beliefs, Conspiracy mentality and Paranoid beliefs.

We show and simulated eigenvalues from the parallel analysis in Table 2. The eigenvalues for the sample correlation matrix exceeded both the mean and the 95th percentile simulated eigenvalues for models with one through four factors, suggesting that a four-factor solution was optimal. The fit statistics for the exploratory factor analyses appear in Table 3. Both the four- and five-factor models showed acceptable fit but we retained the 4-factor solution over the 5-factor model for theoretical and empirical reasons. First, parallel analysis (Table 2) indicated that only four factors exceeded the 95th percentile of simulated eigenvalues, while the fifth fell below this threshold, suggesting it reflected random variance. Second, although the 5-factor model showed marginally better fit, it split the CMQ into two factors, one with two items and another with three, that lacked clear discriminant validity and contradicted the CMQ's established unidimensional structure (Imhoff & Bruder, 2014). Moreover, factors with fewer than three items are known to show poor reliability and limited replicability (Kline, 2016; Brown, 2015). In contrast, the 4-factor solution preserved theoretical coherence and interpretability. Finally, for reasons of parsimony and empirical adequacy, the 4-factor model provided good fit (CFI = 0.941, RMSEA = 0.065) without compromising conceptual clarity. Following best practices (Watkins, 2018), we prioritized parallel analysis and theoretical consistency over incremental fit improvements. Across all tested factor solutions (1- to 5-factor models), three items consistently demonstrated loadings below .30 on every factor ("COVID-19 was developed in a laboratory in Wuhan, China";

"COVID-19 originated in a meat market in Wuhan, China", and "The vaccines will give you COVID-19"). Following standard psychometric thresholds (Costello & Osborne, 2005), these items were excluded from final analyses as they failed to meaningfully associate with any latent construct.

-Insert Table 2 & 3-

According to the PA, we retained the four-factor model (Table 2). Table 4 reports the factor loadings for each item in this model. All factors were significantly and positively correlated. The strongest correlation emerged between "Coronavirus beliefs" and "Science-related beliefs" (r = .645), which were also moderately correlated with "Conspiracy mentality" (r = .349 and r = .370, respectively). The weakest correlations involved paranoid beliefs, which were only modestly associated with science-related conspiracy beliefs (r = .224) and with coronavirus conspiracy beliefs (r = .263). Using the confirmatory sample, we tested the four-factor model in a CFA, which showed good model fit: χ^2 (183) = 754.784, p = .001; CFI = .907; TLI = .894; RMSEA (95% CI) = .066 (.061, .071); SRMR = .062.

-Insert Table 4-

Endorsement of Coronavirus and Science conspiracy beliefs according to the sociodemographic characteristics of the sample.

Both EFA and CFA indicated two correlated factors for the coronavirus conspiracy items. We calculated differences in sociodemographic characteristics for each factor using a MANOVA (see Table 5).

The results showed significant gender differences, with females endorsing both coronavirus and science-related conspiracy beliefs more than males (η^2 = .01 for both). Regarding education, Bonferroni's post-hoc analysis indicated that participants with

university education had lower scores on both types of conspiracy beliefs compared to those with primary or technical qualifications ($\eta^2 = .02$ for coronavirus; $\eta^2 = .01$ for science-related beliefs).

We also observed significant economic status differences only for science conspiracy beliefs ($\eta^2 = .01$), with students scoring lower than unemployed, retired, or employed participants. Household income significantly influenced both coronavirus ($\eta^2 = .03$) and science conspiracy beliefs ($\eta^2 = .01$); individuals with lower incomes endorsed conspiracy beliefs more than those with medium or high incomes. For coronavirus-related beliefs, individuals with high incomes scored lower than those with medium incomes, following a similar pattern for science-related beliefs.

Additionally, religious participants, rural residents, and those with right-wing political orientations showed greater endorsement of coronavirus conspiracy beliefs ($\eta^2 = .02$, $\eta^2 = .01$, $\eta^2 = .01$, respectively). We observed the same trend for science conspiracy beliefs, with higher endorsement among religious participants and those with right-wing orientations ($\eta^2 = .01$ for both).

-Insert Table 5-

Predictors of Coronavirus and Science Conspiracy beliefs, Conspiracy mentality, and Paranoia.

We present the predictors and regression coefficients for each factor in Table 6. Coronavirus conspiracy beliefs were significantly predicted by stronger religious beliefs, more right-wing political ideology, greater external locus of control, lower income, and lower analytical reasoning. Science-related conspiracy beliefs were predicted by being female,

more right-wing political ideology, greater external locus of control, lower income, and lower analytical reasoning.

We found that conspiracy mentality was predicted solely by external locus of control. In contrast, paranoid beliefs were predicted by younger age, higher anxiety, higher loneliness, greater intolerance of uncertainty, greater external and chance locus of control, and lower analytical reasoning. Paranoid beliefs accounted for the highest percentage of explained variance (35%).

-Insert Table 6-

Discussion

The present study investigated the prevalence and characteristics of conspiracy beliefs on coronavirus and scientists, examining their differences and similarities with conspiracy mentality and paranoia. While conspiracy theories are often linked to crises like the COVID-19 pandemic (Roozenbeek et al., 2020), only a minority of our participants strongly endorsed them. A systematic review reported that conspiracy belief prevalence in the general population ranges widely, from 0.4% to 82.7%, with beliefs implying intentional harm, such as the deliberate spread of the virus, being the most widespread (Freeman et al., 2020). In our sample, conspiracy beliefs involving intentional harm (e.g., "Scientists or health professionals often cover up their mistakes") were also the most prevalent, with rates between 10% and 14%. These findings highlight how conspiracy beliefs tied to intentional harm resonated more widely in the general population (Tsamakis et al., 2022).

Interestingly, we excluded some widely disseminated narratives in the media—such as "COVID-19 was created in a laboratory in Wuhan"—from the factor analysis because they did not fully meet the criteria for conspiracy beliefs. This distinction highlights the need to

differentiate between societal misinformation and actual conspiratorial thinking (Douglas & Sutton, 2023). While misinformation is pervasive, conspiracy beliefs represent a more structured and personal worldview, with significant implications for mental health interventions. The distribution of conspiracy beliefs in our sample resembled that of paranoid beliefs (Freeman & Garety, 2014). While many participants indicated disbelief or uncertainty toward coronavirus-related conspiracy theories, only a minority expressed strong belief in them.

Factor analysis confirmed that coronavirus and science conspiracy beliefs, conspiracy mentality, and paranoia are distinct constructs, in line with previous findings (Imhoff et al., 2022). Furthermore, we identified two interrelated factors within conspiracy beliefs: coronavirus-related beliefs (e.g., beliefs about the origins or impacts of COVID-19 and vaccines) and science-related beliefs (e.g., mistrust in scientists and healthcare professionals). These factors were positively correlated and appeared to reinforce one another. Individuals who believed in conspiracy theories were also more likely to distrust science and medicine, and vice versa (e.g., Simione et al., 2021).

Sociodemographic analyses revealed meaningful patterns. Women, individuals with lower education and income, stronger religiosity, and right-wing political orientations were more likely to endorse both types of coronavirus conspiracy beliefs. Rural residents more often supported coronavirus-related conspiracy theories, while students were less likely to endorse science-related conspiracies. These findings align with research suggesting that individuals with fewer socioeconomic resources or stronger perceptions of social threat are more prone to conspiracy beliefs (Tsamakis et al., 2022). Additionally, the ideological and socio-political context plays a role. For example, conspiracy beliefs often correlate with opposition to the ruling political party, which may explain the higher prevalence of such

beliefs among right-wing participants in this study, given the left-leaning government in Spain at the time (Imhoff et al., 2022). Predictive analyses further distinguished the constructs. Paranoia was more common in younger individuals and was closely associated with self-relevant psychological factors, such as interpersonal control and perceived selfthreat. In contrast, conspiracy beliefs were mainly linked to socio-political variables, including income, political ideology, and external locus of control (Freeman & Bentall, 2017). External locus of control was a significant predictor of all four factors but emerged as the sole predictor of conspiracy mentality, reinforcing the idea that this construct represents a stable personality disposition rather than a flexible belief system (Imhoff et al., 2022). These findings suggest that conspiracy and paranoid beliefs may serve as coping mechanisms to explain perceived lack of control or to attribute harm to external forces, whether aimed at the individual (paranoia) or at society (conspiracy beliefs) (Douglas et al., 2017; Freeman, 2016). From a clinical perspective, this divergence also has practical implications. Although delusions and conspiracy beliefs may share cognitive biases, such as jumping to conclusions or resistance to counterevidence (Acar et al., 2022), which complicates their differentiation, clinicians often rely on three criteria to distinguish them: the rigidity of the belief, the level of distress, and whether it is culturally shared or idiosyncratic (Aminot et al., 2024). This aligns with our findings, as conspiracy beliefs are socially embedded in broader cultural or political contexts, whereas paranoia is typically self-referential and linked to individual vulnerabilities. Moreover, some cognitive vulnerabilities, such as intolerance of uncertainty, appear more strongly related to paranoia than to conspiratorial thinking, further highlighting why the latter is best understood in its socio-political context (Larsen et al., 2021). Taken together, these considerations may help clinicians interpret such beliefs more accurately,

avoiding the over-pathologization of common conspiracy beliefs while identifying clinically relevant delusional processes.

Several limitations should be noted. First, all measures were based on self-reports, which may introduce social desirability biases. Second, our estimates of conspiracy belief prevalence may be incomplete, as we did not include all existing coronavirus-related conspiracy theories (e.g., those involving government institutions). Third, the study's focus on COVID-19-specific beliefs may limit the generalizability of findings to other types of conspiracy beliefs or contexts. Although we collected information on nationality, the sample was predominantly Spanish (>90%), with only a very small minority reporting other nationalities, mainly Latin American. While this variable could in principle have been included as a control in the analyses, we acknowledge this as a limitation, since ethnicity is an important social factor that may influence these belief systems and should be examined in more diverse samples in future research. Finally, the small effect sizes observed might reflect the skewed distribution of conspiracy beliefs in the sample. Despite these limitations, this study has several strengths. The large, representative sample enhances the generalizability of our results. The use of validated psychological instruments improves the robustness to our findings, and the two time points of data collection allowed us to identify longitudinal predictors. Importantly, we applied robust statistical methods, including factor analyses and regression models, controlling for the influence of predictors across constructs. The high response rate at both assessment points further supports the validity of our findings.

In conclusion, the COVID-19 pandemic intensified the interest in conspiracy theories and their psychological and social determinants. This study offers robust evidence that conspiracy beliefs, conspiracy mentality, and paranoid beliefs are interconnected yet distinct constructs, each with specific psychological and socio-political predictors. Paranoid beliefs

were primarily linked to internal psychological factors, while conspiracy beliefs were rooted in socio-political variables. These findings underscore the need for tailored interventions targeting each belief type to reduce their negative impact on mental health and societal cohesion. Given their personal and societal consequences, such as political polarization and misinformation, further research is essential to inform effective public health strategies to counteract the effects of these harmful beliefs.

During the preparation of this work the author(s) used ChatGPT in order to proofreading the manuscript. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

Data Availability Statement: The data and materials for this study were registered in the Open Science Framework (OSF). A more detailed description of the project is available at [link hidden for review]. Data will be made available upon reasonable request to ensure compliance with the review process and ethical considerations.

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Compliance with Ethical Standards: All procedures performed in studies involving human participants followed the ethical standards of the institutional research committee at [anonymized for review] and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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