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Navigating Uncertainty: How War and COVID-19 threats shape populist sentiment through need for cognitive closure

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Abstract

Social crises and threatening situations can undermine the sense of certainty leading individuals to seek self-affirming means such as subscribing to belief systems and ideologies that are unambiguous, all-encompassing, and explanatory such as populism. In two cross-sectional datasets collected in Italy one year apart, we tested the indirect effect of different kinds of threats (i.e., threats related to COVID-19 and the Russia-Ukraine Conflict) on populist attitudes through Need for Cognitive Closure (Webster & Kruglanski, 1994, NFCC). In 2022 (N = 1668), we found that both the perceived threat posed by COVID-19 and the threat posed by the Russia-Ukraine Conflict were positively related to NFCC, which in turn was positively related to high levels of populist attitudes. When controlling for the indirect effect of NFCC, COVID-19 threat still held a significant direct effect on populist attitudes, suggesting a partial mediation. The effect of the threat related to the ongoing war on populist attitudes was fully mediated by NFCC. In 2023 (N = 1152), similarly to what we found in the data collected in 2022, the effect of the COVID-19 threat on populist attitudes was partially mediated by NFCC. Whereas the effect of the threat posed by the war was not mediated by NFCC, but directly and positively linked to populist attitudes. Our findings highlighted how populism serves an explanatory function and sense-making when uncertainty arouses from threatening circumstances. Moreover, they underscore the importance of considering contextual variations and distinct threat types when exploring the dynamics of threat perception, and cognitive processes such as perception of uncertainty, and populist attitudes. The results are discussed in light of the relevant literature on threats and the circumstances at the time of the data collection.

Key words: populism; need for cognitive closure; COVID-19 threat; War threat

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Introduction

Global indexes and reports assessing the state of democracies have consistently indicated a "recession" in recent years, reflecting their increased fragility and susceptibility to instability. As a result, more countries are gravitating towards authoritarianism and populism (Rodríguez-Pose et al., 2023; Rodrik, 2020; Sensales et al., 2024). For instance, data from the Populism Tracker database (2018) indicates that by the end of that year, approximately 30.3% of likely voters in Europe expressed willingness to support a populist party, signifying a substantial portion of the electorate. This trend has translated recently into electoral support, victories, or significant backing for populist entities in various countries, including France, Hungary, Italy, Latvia, and Sweden (see Statista, 2024 for more details; Ivaldi, & Zankina, 2023).

The rise in support of extreme ideologies, such as populism, might have been accelerated by the increase in feelings of insecurity (Bar-Tal & Magal, 2021) and the erosion of trust in existing systems and institutions (Forgas, & Crano, 2021) surrounding the recent COVID-19 pandemic and the Russian invasion of Ukraine, thus creating conditions for extreme ideologies such as populism to thrive.

Previous research has shown that economic crises (Rico, et al., 2017; Rhodes-Purdy et al., 2021), terror attacks (Vasilopoulos, et al., 2019), or immigration (Erisen & Vasilopoulou, 2022) promote different forms of populist support. Similarly, people facing threats demand that those in authority exhibit strength and a forceful commitment to protecting the public (McCann, 1997; Doty, et al., 1991; Feldman, & Stenner, 1997; Feldman et al., 2021). One main argument explaining the allure of strong leaders and populist ideologies during times of peril revolves largely around portraying populism as a response to the ambiguity and uncertainty surrounding social crises and more general threatening circumstances (e.g., Obaidi, et al., 2023). Thus, in this paper, we present populism as a compensatory set of beliefs stemming from motivational processes rooted in the need to overcome the ambiguity and uncertainty triggered by looming threats.

Populism as a response in times of uncertainty

Populism is a thin ideology (Mudde, 2004) that implies a Manichean vision of political relationships in which there is a confrontation between an ingroup, 'good- people', and an outgroup, the 'evil- elite' (Wirth, et al., 2016; Greven, 2016). This dichotomy serves as a powerful tool for populist leaders in mobilizing support, shaping a simplified and emotional narrative that resonates strongly with their followers (Di Cicco, et al., 2024; Blassnig, et al., 2020) who perceive themselves as an honest and virtuous entity (Pellegrini, et al., 2023). Such rhetoric also serves to promote hatred and anger versus the "others", deemed responsible for the uncertain situation (Mudde, 2004; Greven, 2016; Mudde & Rovira Kaltwasseer, 2017; Prislei, et al., 2022).

Scholars widely acknowledge that populism tends to surge during times of threatening social crises. Indeed, these crises often coincide with shifts toward ideological inclinations such as traditionalism, political conservatism, and authoritarianism (Fincher, et al., 2008; Thornhill, & Fincher, 2007; Tybur, et al., 2016). Specifically, research indicates that safety threats, such as terrorism or crime, can elicit authoritarian and extreme responses (Forgas, & Crano 2021; Marcus, 2021; Kruglanski, et al., 2021). For instance, Fischer and colleagues (2007) demonstrated that reminders of terrorism, such as photographs or the temporal proximity of attacks, led to increased support for broad authoritarian measures, even when unrelated to the specific threat. Moreover, recent research has illustrated that during periods of ecological threats, there is a tendency for societies to perceive their country as being too 'loose,' leading to a desire for leaders who can instill greater societal tightness (Jackson, et al., 2019; Sprong, et al., 2019). Populist leaders are particularly appealing in these situations because they offer simplistic solutions and portray themselves as strong figures (e.g., McFarland, et al., 1995; see Duckitt, 2013; Jost, et al., 2003).

In this vein, Jackson and colleagues (2019) showed that concerns about immigration influenced intentions to vote for populist candidate Donald Trump. This pattern has also been replicated in a French sample regarding intentions to vote for Marine Le Pen. In a similar manner, following terror incidents in France, anger heightened the likelihood of voting for parties like the Front National (FN) (Vasilopoulos, et al., 2019) and noted a significant positive support for populism (Marcus, et al., 2019). Turning to recent events such as the Russian-Ukrainian conflict, scholars argue that the threat posed by the conflict has been exploited by populist radical right parties for electoral gain (Ivaldi, & Zankina, 2023). In this regard, research indicates that as of September 2023, nearly one-third of European voters were casting their ballots for parties on the extreme ends of the political spectrum, be it far-right, far-left, or populist (Henley, 2023).

Threats posed by diseases and pathogens are also associated with populism. In the context of the COVID-19 pandemic, Boberg and colleagues (2020) coined the term "*infodemic*" to characterize a distinctive information pandemic associated with populism. Moreover, the pandemic provided populist leaders with an opportunity to advance their agendas by promoting anti-establishment feelings and minimizing the crisis's seriousness (Lasco, 2020), resulting in increased support for right-wing populist parties among voters (Wondreys, & Mudde, 2020). Leaders like Viktor Orban in Hungary and Jair Bolsonaro in Brazil capitalized on the situation by employing anti-immigrant and nationalist rhetoric. Orban, for instance, justified strict immigration policies, while Bolsonaro faced criticism for prioritizing economic growth over public health. In countries like Hungary, Poland, and the Czech Republic, where populist leaders maintained firm control and the impact of COVID-19 was relatively low, these leaders presented themselves as exceptional guides employing a combination of threat and reassurance tactics (Wondreys, & Mudde, 2020). Populist parties in coalition governments, such as PODEMOS in Spain and the Five Star Movement in Italy, used the crisis to enhance their political centrality and legitimacy (Bobba, & Hubé, 2021).

Analyzing data from periods of low and high perceived threat during the COVID-19 pandemic in the US, Pazhoohi and Kingstone (2021) observed an escalation in Right-Wing Authoritarian traits corresponding to an increase in the

number of national pathogenic cases. In a similar vein, de Mesquita Silveira (2023) demonstrated that post-quarantine fear-driven behaviors provided an opportune environment for the proliferation of populist discourse among citizens.

Scholars have offered various explanations for the appeal of populism in times of threats. One perspective looks at populism as a compensatory mechanism that addresses basic psychological needs that threats elicit (e.g., Obaidi, et al., 2023). In this vein, Molinario et al. (2024) shows that populist responses to the COVID-19 threat are not direct outcomes but rather manifestations of psychological needs (i.e., need for cognitive closure, Webster, & Kruglanski, 1994; need for significance, Kruglanski, et al., 2022) triggered by threats. Building on this perspective, the appeal of populism as a response to threats stems from its capacity to provide clarity amid threatening and uncertain circumstances, thereby addressing the need for cognitive closure (Webster, & Kruglanski, 1994).

Need for cognitive closure

The need for cognitive closure (NFCC, Kruglanski, 2004) is the epistemic motivation to prefer firm answers to a question, pushing toward uncertainty reduction. Individuals high in NFCC experience a compelling urge to promptly reach conclusions and maintain them permanently (Kruglanski, & Webster, 1996). Such individuals firmly commit to their judgments and exhibit resilience in their perspectives. In this regard, the motivational emphasis of NFCC shares similarities with the inflexibility attributed to the authoritarian personality (Mannetti, et al., 2002). Conversely, individuals with a strong need to avoid closure are cautious about making definitive commitments. They find comfort in keeping their options open, preferring to abstain from binding views or firm opinions (Mannetti, et al., 2007).

Although previous research has shown that NFCC can represent a dispositional variable (Webster, & Kruglanski, 1994), it can be also a situationally psychological state induced by environmental factors, such as time pressure experiences (Chirumbolo, et al., 2004), environmental noise (Kruglanski, & Webster, 1991), or stressors experiences (Kruglanski, et al., 1993). In times of crisis, NFCC can become especially salient, as individuals seek ways to interpret and establish order in unfamiliar circumstances. In this context, populist narratives centered around the "us vs. them" rhetoric become particularly appealing as they offer a robust sense of identity, clearly pinpoint who is responsible for the uncertain situation, and present straightforward solutions.

Research has shown that people who avoid uncertain situations find conservative ideologies appealing because they preserve the status quo (Jost, et al., 2003, 2007). Moreover, people high in NFCC are more likely to prefer authoritarian leaders who offer simple solutions to complex problems (Kruglanski, et al., 2003). Psychological predispositions associated with NFCC, such as intolerance of uncertainty and a desire for order, further predispose individuals towards supporting populist ideologies (Gründl, & Aichholzer, 2020). Populist ideologies, across various cultures and historical periods, consistently follow a universal structure. They tend to prioritize simplicity, clarity, and a binary framework that fosters a sense of certainty. Typically, they adopt a Manichean perspective, portraying ordinary people as virtuous and oppressed by a corrupt politics and elite. Their simplistic description of reality is especially appealing to those who are adverse to ambiguity and uncertainty. Accordingly, research has found that individuals with elevated NFCC levels exhibit a stronger inclination towards endorsing populist ideologies, even after accounting for various influential factors such as cultural threat and political orientation (Kruglanski, et al., 2021). Moreover, NFCC seems to mediate the relationship between socio-political factors (e.g., cultural threats, economic needs) and populist attitudes (Kruglanski, et al., 2021).

In this work, we investigated the relationship between threats, NFCC, and populism. We argue that given its close connection with uncertain situations (such as those caused by contingent threats), NFFC should mediate the effect of threats on populist attitudes. In the present research, we consider threats (e.g., COVID-19 and the war in Europe initiated by Russia) as a particular type of environmental factor able to induce NFCC.

The current research

The last few years following the outbreak of the pandemic and the Russian invasion of Ukraine - among the most threatening events faced by Europeans in the last decade (Eurosurveillance, 2020; Opioła, et al., 2022; Silva, 2022) - registered a prevalence of populist sentiments in Europe. This resulted in the elections of populist candidates in several European Countries (Statista, 2024).

The effect of these two events on the growing support for populism might have been due to the uncertainty brought about by these two novel circumstances. At its outbreak and the subsequent months, the pandemic led to widespread confusion among media, politicians, and experts, inundating individuals with conflicting and constantly evolving information (Nagler, et al., 2020). This fluid information landscape was further muddled by the presence of misinformation, often propagated through social media, resulting in diminished trust in mainstream media and government authorities (Filkuková, et al., 2021). Most importantly, this barrage of conflicting information left individuals deeply confused and uncertain about their present and immediate future (Molinario et al., 2025). In this vein, during the pandemic even international business managers encountered challenges in understanding and addressing the uncertainty linked to the broader repercussions of the financial crisis on the future of the economy as a whole (Sharma, et al., 2020). In Italy, emotional responses triggered by the pandemic, such as anger, exhibited a positive correlation with populist inclinations, whereas fear had a negative impact on such tendencies (Filsinger, et al., 2023). Ultimately, the pandemic facilitated the decline of democratic sentiments, fostering the emergence of populist factions like Fratelli d'Italia (Pietrucci, 2023; Bavili, 2023).

To complicate the situation even further, just over two years after the pandemic outbreak, the Russian invasion of Ukraine introduced a new dimension of destabilization. For the first time

in decades, a conflict unfolded on European soil, and especially in the initial phases, people harbored fears regarding the potential impact on the ordinary population (Kurapov, et al., 2022). Some European countries found the event particularly concerning due to security implications stemming from the conflict's proximity to the EU border, as well as the accompanying increase in energy prices (Kalogiannidis, et al., 2022).

These two unprecedented events have likely influenced individuals' sense of self – their trust in their ability to safeguard themselves and their loved ones, as well as their assurance in confronting a world undergoing transformation and posing threats. According to the uncertainty-identity theory, the experience of uncertainty motivates individuals to align themselves with groups that tell them what to feel, think, and do, offering a robust and positive sense of self (Hogg, 2007). In this vein, scholars agree that the rise of populist leaders stems from the perception that they possess the capability to address societal challenges and respond to ecological threats (Gelfand, et al., 2011; Harrington, & Gelfand, 2014) that induce vulnerability and uncertainty within societies (Gelfand, et al., 2011; Jackson, et al., 2019). Hence, existing literature suggests that when individuals perceive threats, they are more inclined to support authoritarian leaders (Merolla, et al., 2011; Nettle, & Saxe, 2021; Torres-Vega, et al., 2021) and support clear-cut ideologies, including populism (Mutz, 2018; Béland, 2021; Manunta, et al., 2022), that can provide responses and guidance in the uncharted situation.

For example, Obaidi et al. (2018) found that individuals from various regions (Europe, the US, Afghanistan, and Turkey) express greater hostility toward their respective out-groups (such as Muslims or the West) when they feel that their cultural values and practices are under threat. This is in line with Terror Management Theory (Greenberg, et al., 1986), according to which individuals facing existential threats such as mortality tend to strengthen group affiliations. This often involves adopting rigid friend-enemy distinctions which aligns with the Manichean view of political relationships commonly employed by populists (Mudde, 2004). Accordingly, research provides evidence that the perception of economic threats (such as unfair economic treatment and relative disadvantage) strongly correlates with the endorsement of extreme ideas and participation in radical political actions (Kamans, et al., 2009; Kteily, & Bruneau, 2017). In this vein, the belief in the collective economic disadvantage of one's group compared to others (referred to as collective narcissism, Golec de Zavala et al., 2009), has been identified as a significant predictor of populist views (Marchlewska, et al., 2017).

Hence, we hypothesized that high perceptions of COVID-19 threat (H1) and War Threat (H2) will correspond to increased endorsement of populist attitudes. Moreover, since threatening situations prompt a desire for certainty (e.g., Obaidi, et al., 2023; Webber, et al., 2018), which in turn leads individuals to seek for clear-cut ideologies such as populism (Molinario, et al., 2020; Kruglanski et al., 2021), we hypothesize that the impact of COVID-19 threat (H3a) and war threat (H3b) on populism will be mediated by the need for cognitive closure. Although specific Hs were not generated in this regard, we tested these Hs taking into account two distinct types of threats, one stemming from the spread of infectious diseases (i.e., COVID-19 pandemic) and the other originating from bellicose actions (i.e., Russian - Ukrainian conflict) to explore differences in the effects of these two distinct threats on the paths hypothesized.

The hypotheses were tested in two independent correlation samples collected one year apart (i.e., in 2022 and 2023) in Italy. Participants were recruited through a snowball sampling method. Sample 1 was collected between April and May 2022, shortly after the Russian invasion of Ukraine in February, while Sample 2 was collected between April and May 2023. Although our study did not employ a longitudinal design, conducting it at two distinct time points enabled us to look at the effects of the evolving political landscape and pandemic on our Hs. Specifically, we were interested in exploring whether the changing circumstances would lead to different effects on uncertainty and in turn on populist attitudes. To illustrate, the prevalence of COVID-19 deaths and cases in Italy differed significantly between the two instances of data collection. In May 2022, the daily count of new COVID-19 cases in Italy hovered around 35,000 (source: worldometers.info/coronavirus/country/italy/), contrasting sharply with May 2023 when it dropped significantly to approximately 2,100 cases per day. Likewise, the daily death toll attributed to COVID-19 in May 2022 stood at about 110, whereas by Spring 2023, this figure plummeted to approximately 22 per day, marking a staggering 500% decrease compared to the initial data collection period. Similarly, the perceived threat posed by the war in Ukraine underwent shifts over time. Immediately following the invasion, the menacing specter of war commanded significant attention in the Italian media landscape. However, as time elapsed, this salience gradually diminished (Lauriola, et al., 2024). Thus, although we did not have specific hypotheses in this regard, we expected the evolving circumstances would affect the paths tested.

Methods

Samples

Sample 1 included sixteen-hundred and sixty-eight Italian adults recruited via snowball sampling method between April and May 2022 (n_1 = 1668, Women_1 = 53%, M_{age1} = 32.9, SD_{age1} = 14.1) whereas Sample 2 included 1152 Italian adults recruited via snowball sampling method between April and May 2023 (n_2 = 1152, Women_2 = 54%, M_{age2} = 33.6, SD_{age2} = 14.7).

The snowball sampling started with the involvement of Psychology students from Sapienza University of Rome, who after completing the survey were asked to recruit twenty participants in exchange for course credits. Participation in the study was voluntary, students were reassured that their decision to participate or abstain would not impact any aspect of their academic assessment or standing. The survey was administered online through Qualtrics. Thus, every participant expressed their consent online. Most of the participants were high school educated (Sample 1 = 42%, Sample 2 = 41%), while a relative portion held a Bachelor's (Sample 1 = 30%, Sample 2 = 27%)

Master's (Sample 1 = 21%, Sample 2 = 27%) or a Doctorate degree (Sample 1 = 1%, Sample 2 = 1%). In terms of socio-economic status, most of the participants rated themselves as "Middle" (Sample 1 = 54%, Sample 2 = 53%), on a scale spanning from 1 = "Low" to 5 = "High." Both samples were balanced in terms of political orientation (measured with a 7-point Likert scale ranging from 1 = "strongly left" to 7 = "strongly right"), with (Sample 1, *M* = 3.4, *SD* = 1.3; Sample 2, *M* = 3.5, *SD* = 1.4). Data are available on the Open Science Framework repository (https://osf.io/bq4ad/). The study was approved by the Ethics Review Board of Sapienza University of Rome.

Measures

All measures were administered using a 7-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Means, standard deviation, Cronbach alpha information related to each measure and correlations among the variables are reported in Table 1.

Populist attitudes. Nine items adapted from Akkerman and colleagues (2014) were used to measure populist attitudes, e.g., "Inside the Italian parliament, politicians should follow the will of the people." High scores on this scale indicated a high level of populist attitudes.

COVID-19 threat. Three items created ad hoc were used to measure the degree to which participants were feeling "Personally threatened", "Physically threatened", "Economically threatened" by the pandemic. High scores indicate a high perceived COVID-19 threat.

War threat. Three items created ad hoc were used to measure the degree to which participants were feeling "Personally threatened", "Physically threatened", "Economically threatened" by the war in Ukraine. High scores indicate a high perceived War threat.

Need for Cognitive Closure. Fifteen items from Roets and Van Hiel (2011), e.g., "I don't like uncertain situations." High scores indicate a high level of need for cognitive closure.

Analyses

To test our hypotheses, we ran a multigroup path analysis using lavaan package in R (Rosseel, 2012), wherein Sample 1 was coded as "0" and Sample 2 was coded as "1". War threat and COVID -19 threat were included were included in the model as predictors, NFCC was included as mediator, and populist attitudes as a dependent variable. Before performing the statistical analyses, we checked for possible outliers with scores above or below three standard deviations from the mean in the independent variables included in the model. According to this criterion, no outliers were detected and excluded from the analysis.

Results

In Sample 1, COVID-19 threat was positively related to populist attitudes (confirming H1), whereas against H2, War threat (H2) was not significantly related to populist attitudes. Moreover, both War threat and COVID-19 were positively associated to NFCC. Additionally, NFCC was positively associated with populism. Most importantly to our hypotheses, the indirect effects of COVID-19 threat (H3a) and War threat (H3b) on populism were significant. Specifically, War threat was found to indirectly increase populism through NFCC. This indicates that individuals experiencing increased war threat tend to report higher NFCC, which in turn is associated with greater populism. Similarly, COVID-19 was found to indirectly increase populism through NFCC, suggesting individuals experiencing increased COVID-19 threat tend to report higher NFCC, which in turn is associated with greater populism. When controlling for the indirect effect of NFCC, the effect of War threat on populism was not significant whereas the effect of COVID- 19 threat on populism remains significant. Indicating that COVID-19 threat independently contributes to higher populism, regardless of their indirect association through the NFCC. See Figure 1 for a graphical representation of the results.

Specifically, as in Sample 1, in Sample 2, COVID-19 threat and War threat were positively related to populist attitudes (confirming both H1 and H2). Moreover, contrary to what was found in Sample 1, War threat was not associated with NFCC, whereas similarly to what was found in Sample 1, COVID-19 was positively associated with NFCC. Moreover, NFCC was positively associated with populism. Most importantly to our hypotheses, the indirect effects of COVID-19 threat (H3a) on populism was significant, whereas contrary to our hypothesis the effect of War threat on populism (H3b) was not significant. Moreover, contrary to what was found in Sample 1, when controlling for the indirect effect of NFCC, the direct effect of War threat on populism was significant. When controlling for the indirect effect of NFCC, the effect of COVID - 19 threat on populism remains significant (significant direct effect on populism).

Tab. 1. Descriptive statistics and Pearson Correlations. Values related to Sample 1 are reported above and Sample 2 below.

		Sample	*α*	*M*	*SD*	1	2	3
1	Populism	Sample 1	.80	4.60	0.97	—		
		Sample 2	.82	4.64	1.01	—		
2	COVID-19 threat	Sample 1	.75	3.85	1.48	.25***	—	
		Sample 2	.70	4.45	1.49	.21***	—	
3	War threat	Sample 1	.84	3.61	1.62	.14***	.44***	—
		Sample 2	.78	3.72	1.36	.30***	.38***	—
4	Need for cognitive closure	Sample 1	.83	4.50	0.87	.33***	.23***	.16***
		Sample 2	.85	4.55	0.87	.32***	.17***	.11***

Thus, in Sample 2, COVID-19 threat independently contributes to higher populism, regardless of their indirect association through the NFCC, whereas war threat contributes to populist attitudes only directly and regardless of NFCC. See Table 2 and Table 3 for details on statistics related to the mediation analysis.

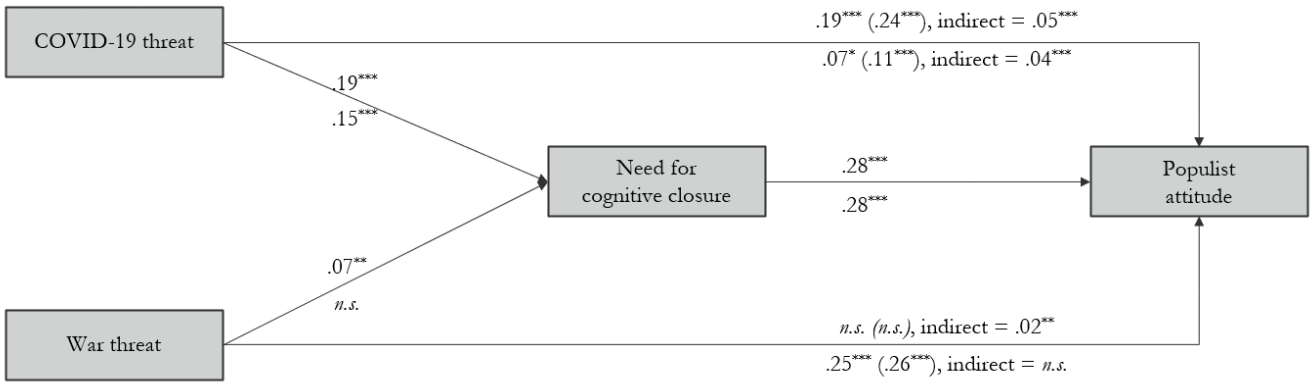
The multigroup analysis showed a significant difference in the model tested in the two samples ($\chi 2$ = 30.34, *df* = 5, *p* < .001), specifically it detected significantly different effects of War threat on NFCC (*b* = -.04, *SE* = .02, *p* = .028), COVID - 19 threat on populism when controlling for the indirect effect through NFCC (*b* = -.06, *SE* = .02, *p* = .001), and of War threat on populism when controlling for the indirect effect through NFCC (*b* = .14, *SE* = .02, *p* < .001).

When controlling for socioeconomic status, gender, education, and political orientation the results did not change significantly.

General Discussions

In this study, we identified the epistemic motivation of the need for cognitive closure (Webster, & Kruglanski, 1994) as a response to macro-level trends and developments that affect populist sentiments. The need for certainty and closure can be aroused by significant and threatening changes that leave individuals confused. For example, the economic crises promoted by the 2008 recession, the globalization trends, the "refugee crisis", the COVID-19 pandemic, and the recent conflicts in Eastern Europe are all circumstances that elicit chaos and confusion thus they activate the need for a clear response. Building on the existing literature and the results obtained in two studies one conducted two years into the pandemic and few months after the Russian invasion of Ukraine (Spring 2022), and one year later (Spring 2023) in Italy, we proposed and provide evidence that

Fig. 1. Sample 1 (N = 1668) above, Sample 2 (N = 1152) below. Mediation analysis. Direct effects are presented first, total effects are in parentheses.



Note: * = p < .05,** = p < .01, *** = p < .001

Tab. 2. Mediated regression analysis. Values related to Sample 1 are reported above and Sample 2 below

Dependent variable	Predictor	Sample	β	*SE*	95% CI		*p*
					LL	UL	
NFCC							
	War threat	Sample 1	.07	.01	.01	.07	.005
		Sample 2	.05	.02	-.01	.07	.115
	COVID-19 threat	Sample 1	.19	.02	.08	.14	<.001
		Sample 2	.15	.02	.05	.12	<.001
Populism							
	NFC	Sample 1	.28	.03	.27	.37	<.001
		Sample 2	.28	.03	.27	.39	<.001
	War threat	Sample 1	.01	.02	-.03	.03	.779
		Sample 2	.25	.02	.14	.22	<.001
	COVID-19 threat	Sample 1	.19	.02	.09	.16	<.001
		Sample 2	.07	.02	.01	.08	.025

Tab. 3. Indirect and Total effects. Values related to Sample 1 are reported above and Sample 2 below

Type	Effect	Sample	*β*	*SE*	95% CI		*p*
					LL	UL	
Indirect	War threat ⇒ NFCC ⇒ Populism	Sample 1	.02	.00	.00	.02	.006
		Sample 2	.01	.01	.00	.02	.119
	COVID-19 threat ⇒ NFCC ⇒ Populism	Sample 1	.05	.01	.02	.05	<.001
		Sample 2	.04	.01	.02	.04	<.001
Total	War threat ⇒ Populism	Sample 1	.03	.02	-.01	.05	.286
		Sample 2	.26	.02	.15	.24	<.001
	COVID-19 threat ⇒ Populism	Sample 1	.24	.02	.12	.19	<.001
		Sample 2	.11	.02	.03	.11	<.001

the crisis induced by the COVID-19 pandemic and the Russian - Ukrainian conflict, and specifically the perception of these events as threatening have the potential of activating the NFCC (Webster, & Kruglanski, 1994) and in turn have important consequences of political attitudes. Specifically, we submitted that, given their nature, populist ideologies are suitable to satisfy the need for certainty when activated in threatening situations, and when these needs are activated, people tend to express more populist attitudes. Overall, we found support for our hypotheses, although with some interesting differences worth discussing across the two samples considered.

In Sample 1, data collection occurred immediately following the Russian-Ukrainian conflict, this temporal proximity to the Russian invasion could have had an effect on people's level of uncertainty elicited by the novel event. This is shown by the positive association of war threat with NFCC. In other words, the observed effect of the perceived threat posed by the war on the individual's NFCC reflects the increased desire for certainty, stability and clear-cut outcomes in response to a perceived external threat. This is also supported by the general public opinion in Europe, who expressed uncertainty, anxiety, safety and economic concerns as a result of the Russian- Ukrainian conflict (Eurobarometer, 2022). Italians echoed these concerns in a poll where over three-quarters of respondents indicated that they were impacted by the ongoing increases in energy costs and prices (Eurobarometer, 2022). Indeed, the war in Ukraine has fueled inflation and uncertainty in Europe, affecting sovereign borrowing costs between countries like Germany and Italy (Jones, 2022).

As time went by, although the threat posed Russian - Ukrainian conflict did not change significantly in our samples (Study 1, M = 3.61; Study 2, M = 3.72), the uncertainty surrounding the Russian - Ukrainian conflict vaned out, indeed a year later, in Study 2, we found no significant association between the threat posed by the war and NFCC, suggesting that Italians were more certain about what to expect from that particular situation. Quite different findings were found with regards to the threat posed by COVID-19 pandemic. Although Sample 1 was collected 2 years-in and 3 years-in the pandemic, the threat posed by it was consistently and positively associated with NFCC in our two samples, indicating that the situation surrounding the pandemic elicited still strong uncertainty.

These differences in the effects of the threats considered on NFCC can be due to the nature of the threats themselves. Although Italians have experienced a long time of peace, the effects of a conflict can be better imagined and therefore elicit less uncertainty. Whereas, when it comes to a pandemic, the event has been strongly evolving and it has been difficult to predict, thus the level of uncertainty associated with it was still strong even after 3 years from the pandemic outbreak. Moreover, it is interesting to notice how the perceived threat posed by the pandemic significantly increased from 2022 to 2023 in our samples (Study 1, M = 3.85; Study 2, M = 4.45), indicating how its effect was still evolving, whereas the perceived threat of the war remained constant across our two samples.

With regards to the indirect effects of war threat and COVID-19 threat on populism through NFCC, we also found interesting differences across our samples. In Sample 1, the results suggest that individuals perceiving higher levels of threat are more likely to experience an increased need for closure, which in turn contributes to the adoption of populistic attitudes. Namely, the effect of cognitive closure on populist attitudes suggests that individuals, whether avoiding ambiguity, may be more drawn to manichean, emotion-driven and simplistic political ideologies such as the ones offered by populist leaders and parties. However, we also found that COVID-19 threat influenced populism also directly, suggesting that the call for populist narrative is not only a response to the need to overcome uncertainty and ambiguity, but also as a direct effect of the threat posed by the pandemic. This is in line with research suggesting that in threatening situations individuals prefer authoritarian and populist representatives (Forgas, & Crano, 2021; Pellegrini, et al., 2022; Contu, et al., 2023). However, this is surprising when it comes to COVID-19, as research shows the inability of populist leaders to deal efficiently with the pandemic. For example, examining a dataset of 42 developed and developing countries, including 13 under populist governance, Bayerlein and colleagues (2021) investigated systematic differences in policy responses and citizen behavior during the COVID-19 pandemic. This analysis linked these disparities to a higher excess mortality rate (i.e., the additional number of deaths occurring beyond what would be expected under normal conditions) in countries led by populist governments. The findings revealed that populist governments were less inclined to implement targeted policy measures aimed at curbing the spread of the virus. Consequently, excess mortality rates were approximately 10 percentage points higher in countries led by populists during the COVID-19 pandemic compared to their conventional counterparts. However, at the same time, in Italy the direct effect of COVID-19 threat on populism can be explained by the perceived inefficiency of the Italian government in dealing with the situation which could have increased the general populist sentiment among Italians. Indeed, during the COVID-19 pandemic, Italy faced government crises due to oversized coalitions, leading to intra-party conflicts (Capati, et al., 2023). Moreover, the pandemic eroded democratic sentiments, fueling the rise of populist parties like Fratelli d'Italia (Pietrucci, 2023; Bavili, 2023).

In Sample 2, the findings partially confirm those obtained in Sample 1, albeit with a notable distinction: the absence of an indirect impact via NFCC of the war threat on populism. Instead, we observed only a significant direct effect. These findings imply that one year following the Russian invasion of Ukraine, heightened levels of conflict threat were not linked to uncertainty but rather directly correlated with populist tendencies. As elaborated earlier, this could stem from individuals not associating uncertainty with the conflict. Following a year in the conflict, Italians might have had stable expectations regarding the event. However, the persisting threat posed by it remained a significant concern, contributing to heightened populist sentiments.

This suggests that the explanatory mechanisms underlying the relationship between threats and populism may differ depending on the nature of the threat and the circumstances surrounding them. Nonetheless, future studies employing experimental designs are necessary to disentangle the interplay between the nature of the threats and their causes and temporal distance from their onset.

While the correlational nature of the studies imposes limitations on drawing causal inferences and the robustness of the conclusions we can derive, the identified relationships among the variables lend support to a novel perspective on comprehending the motivational allure of populist narratives during periods of crisis. Specifically, our results provide an understanding of the direct and indirect pathways through which war threat and COVID-19 threat influence populism, emphasizing the role of psychological processes such as the need for closure in shaping political attitudes. In other words, when uncertainty becomes prominent in threatening situations, individuals tend to adhere to cultural worldviews that offer a sense of order and permanence. Populist rhetoric often emerges in such circumstances as a compensatory belief system in response to the need for order and certainty that arises during times of uncertainty. Thus, NFCC, characterized by a preference for straightforward solutions and aversion to ambiguity, aligns closely with the messaging of populist movements, offering clear-cut answers to complex societal issues (Molinario, et al., 2020; Miglietta, et al., 2023).

Focusing solely on Italian samples may limit the generalizability of these results to other countries with different landscapes and responses to crises, Thus, testing the proposed model in various contexts would enhance the robustness of this research. Despite this limitation, our findings align with existing literature indicating how various threats—cultural, personal, pathogen-related, or ecological—can fuel extremism, be it ideological, intentional, or behavioral, as a consequence of uncertainty induced by perceived threats (Obaidi et al., 2023; Molinario et al., 2024; Webber et al., 2018). Additionally, they highlight the importance of scrutinizing the nature of threats and the need to look more closely at the nature of the threats and the needs activated by them.

Ethical approval

The study was approved by the Ethics Review Board of Sapienza University of Rome (Prot. 2022/481).

Data availability statement

Data are available on the Open Science Framework repository at this link (https://osf.io/bq4ad/)

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Authors' contribution

E.M.: original idea and theorizing, data analysis, writing, drafting, revising, supervisory role; G.D.: data acquisition, data analysis, drafting, revising G.D.; L.P.: data analysis, writing, drafting, and revising, G.S.: data acquisition, writing, and revising.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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