The generic conspiracist beliefs scale – 5: A short-form measure of conspiracist ideation

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ABSTRACT

The Generic Conspiracist Beliefs Scale (GCB-15) is a reliable and valid measure of conspiracist ideation, but it is also inefficient. At 15 items, the GCB-15 can take upwards of four minutes to complete. Here we introduce the GCB-5—a 5-item, short form of the GCB-15. Across five studies, we use self- and informant-report methods to demonstrate that the GCB-5 is a reliable, criterion-valid, and construct-valid measure of conspiracist ideation. In the final study, we further provide evidence that the GCB-5 has promise for addressing novel research questions. Specifically, we show that people high in conspiracist ideation—as assessed by the GCB-5—are more accepting of the use of nuclear weapons and other forms of so-called "virtuous violence" (e.g., anti-abortion legislation).

1. Introduction

At 10:56 PM on July 20th, 1969—some 109 hours after Apollo 11 lifted off from Kennedy Space Center and some 380,000 kilometers away from the Earth—Neil Armstrong did what is widely hailed to be one of humankind's greatest achievements: He stepped on the moon.

To some, however, this is not one of humankind's greatest achievements. Not because they believe there is some other feat that rivals the moon landing, but because they believe the moon landing never happened in the first place. To these people, the moon landing is a *conspiracy:* a secretive plot orchestrated by a powerful group of people for some unknown but inarguably nefarious purpose (Hofstadter, 1996; see also Brotherton, 2015; Uscinski, 2020).

Over the past decade, researchers have devoted considerable effort to developing various tools and methods for assessing the tendency to believe in such conspiracies—or what has also been termed *conspiracist ideation* (Uscinski, 2020; see also Imhoff et al., 2022). It is not hard to see why. Few events of any importance occur nowadays that are not accompanied by at least one conspiracy theory (and usually many more). There are, for example, conspiracy theories about the 2020 US Presidential Election (e.g., that it was stolen from Donald Trump; Rutenberg et al., 2021); the assassination of Shinzo Abe (e.g., that it was the result of Shinzo Abe threatening to reveal compromising information about Hillary Clinton; Spencer, 2022); the COVID-19 pandemic (e.g., that it was caused by the installation of 5G towers; Satariano & Alba,

2020); and the Russo-Ukrainian War (e.g., that it is little more than an elaborate hoax; Sardarizadeh & Robinson, 2022). In order to study and, eventually, develop interventions to combat conspiracy beliefs, it is crucial for researchers to be able to measure conspiracist ideation with consistency, accuracy, and, in many cases, efficiency.

In the present study, we propose one such measure—a short form of the *Generic Conspiracist Beliefs Scale – 15* (GCB-15; Brotherton et al., 2013). Before we discuss this scale further, however, it is important to discuss what exactly the GCB-15 is and why it makes for a good measure of conspiracist ideation.

1.1. A long-form measure of generic conspiracist beliefs

Prior to 2013, conspiracist ideation was generally assessed by asking participants to rate the veracity of a small set of conspiracy theories (e. g., Douglas & Sutton, 2011; Swami et al., 2011). For instance, participants might be asked whether they believe the earth is hollow, Tupac Shakur faked his own death, or that the shooting at Sandy Hook Elementary School was a false flag operation. These measures, of course, had considerable face validity. If a researcher wanted to assess a person's tendency to believe in conspiracy theories, they couldn't do much better than asking the person whether they believe in conspiracy theories. The measures did, however, also have a critical limitation: by only assessing a person's tendency to believe in a small, rather arbitrary pool of conspiracy theories, the measures were only capable of assessing a

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small, rather arbitrary pool of conspiracist thought.

In response to this apparent limitation, Brotherton and colleagues (2013) set out to develop a measure that would be better able to assess the full breadth of conspiracist ideation. They started by factor analyzing 75 different conspiracist beliefs. The results revealed that most conspiracist beliefs are of one of five types: (1) beliefs that global events are controlled by a small group of people, (2) beliefs in plots that threaten one's personal wellbeing, (3) beliefs that the government regularly engages in corrupt and criminal acts, (4) beliefs that the public is being deceived about the existence of aliens, and (5) beliefs that information is routinely modified or suppressed for the benefit of the government and other large organizations (see also Drinkwater et al., 2020, but also Swami et al., 2017). Using these five types (or "themes") as a basis, Brotherton and colleagues developed a 15-item, 5-factor measure of generic conspiracist beliefs: the *Generic Conspiracist Beliefs Scale − 15* (GCB-15; Brotherton et al., 2013).

Over the past nine years, the GCB-15 has become the go-to measure of conspiracist ideation among conspiracy theory researchers.[1] For the most part, this popularity is well-deserved. Not only does the GCB-15 appear to capture the full breadth of conspiracist ideation, but it has proven, time and time again, to be a *reliable, criterion-valid*, and *construct-valid* measure of conspiracist ideation.

The reliability of a scale refers to whether it produces consistent measurements (Cronbach, 1947; John & Soto, 2007). Studies using the GCB-15 regularly find that over 90 % of the variance in its scores can be attributed to *true* variation in conspiracist ideation (e.g., Bensley et al, 2020; Denovan et al., 2020; March & Springer, 2019; Swami et al., 2014), indicating that most of its items are tapping similar content.

Criterion validity refers to the extent to which a measure is associated with a theoretically relevant outcome or "criterion" (Allen & Yen, 1979). The GCB-15 has been shown to be able to predict the tendency to believe in a wide swathe of specific conspiracy theories (Dieguez et al., 2015; Green & Douglas, 2018), including those about terrorist acts (e.g., 7/7; Brotherton et al., 2013); historical and political events (e.g., the JFK assassination; Dagnall et al., 2015); and the outbreak of various diseases (e.g., COVID-19; Alper et al., 2020; Juanchich et al., 2021). It has also been shown to be associated with several other previously validated measures of conspiracist ideation (Atari et al., 2019; Kay, 2021b; Lantian et al., 2016; Swami et al., 2017), including the *Conspiracy Mentality Questionnaire* (CMQ; Bruder et al., 2013) and the *COVID-19 Conspiracist Ideation Scale* (Kay, 2020).

Construct validity refers to the extent to which a measure behaves in a way that is theoretically consistent with the underlying construct (Cronbach & Meehl, 1955). The GCB-15 is associated with a great many constructs that it should, theoretically, be associated with. As a case in point, people who score high on the GCB-15 are more likely to be uncomfortable with uncertainty (Alper et al., 2020); believe the world is dangerous (Moulding et al., 2016); suffer from paranoia, delusions, and hallucinations (Brotherton et al., 2013; Dagnall et al., 2015); believe in ghosts and other phantasms (Lantian et al., 2016; Majima & Nakamura, 2020); and fall for pseudo-profound bullshit (Hart & Graether, 2018; Pennycook et al., 2015). The GCB-15 is also *not* associated with a great many constructs that it should, theoretically, *not* be associated with. People scoring high on the GCB-15 are, for example, no more likely to be extraverted (Majima & Nakamura, 2020; Siwiak et al., 2019); self-confident (Cichocka et al., 2016); optimistic (Dieguez et al., 2015); religious (Atari et al., 2019); fiscally conservative (Marchlewska et al., 2022); or knowledgeable about European politics (Swami et al., 2018) than their non-conspiratorial counterparts.

Taken together, the above research indicates that the GCB-15 has a number of desirable psychometric properties. It is, however, limited in

one crucial way: its length. When it comes to scale construction, the length (or "efficiency") of a scale is often less talked about than its reliability or validity, but it is an important property to consider for at least two reasons.

First, the length of a scale and, by extension, the length of a study can affect the amount of time and money required to run the study. In paid online studies, for example, longer scales mean participants must be paid more for their participation, increasing research costs. In studies run through university human subjects pools, longer scales mean participants must be awarded more research credit for their participation, increasing the overall time it takes to collect data. Even in the case of volunteer studies, where participants receive neither money nor research credit for their participation, longer scales mean fewer participants will be willing to complete the study (Galesic & Bosnjak, 2009), again increasing the overall time it takes to collect data.

The second reason that the efficiency of a scale is an important property to consider is that the longer a participant spends responding to a study, the more likely they are to start responding inattentively. As but one example, Bowling and colleagues (2021) found that for every 100 additional items a participant completed, the odds of them responding carelessly increased by 1.26 times. Depending on the design of one's study, this careless responding can artificially increase or artificially decrease observed effect sizes (Credé, 2010) and create phantom factors in otherwise unidimensional data (Woods, 2006). If a researcher is interested in minimizing their research costs while also maximizing the quality of the data they collect, they should, therefore, consider the efficiency of the scales that they are using.

At 15 items, the GCB-15 can take upwards of four minutes to complete. This is not exceptionally long, especially when compared to some other measures commonly used in psychology (e.g., the 240-item NEOPI-R; Costa & McCrae, 1992), but it does make the GCB-15 less useful in certain situations. For example, if funds are limited, such as is often the case for studies run by early career researchers and those from countries without established funding institutions, the GCB-15 may prove financially prohibitive. Likewise, if participant attention is limited, such as is often the case at the end of long surveys and among particularly unmotivated samples, the GCB-15 may push some participants over the edge into careless responding. In these situations, it would be valuable to have a measure of conspiracist ideation that has similar levels of reliability, criterion validity, and construct validity to the GCB-15, while also being more efficient to administer.

1.2. A short-form measure of generic conspiracist beliefs

When it comes to creating short-form measures, researchers often make two assumptions (Smith et al., 2000). First, they assume that the reliability and validity evidence of the long-form measure automatically applies to the short-form measure and, second, they assume that, because it is shorter, the short-form measure does not require as much evidence for its reliability and validity. Both of these assumptions are wrong. The goal of the present study was, therefore, to create a short form of the GCB-15 that is reliable, criterion valid, and construct valid in its own right.

To that end, we conducted five studies to evaluate the psychometric properties of a 5-item, short-form measure of the Generic Conspiracist Beliefs Scale: the GCB-5. In Study 1, we tested the reliability of the GCB-5 by first exploring its factor structure and then by estimating a common index of reliability. We also assessed its criterion validity by examining its associations with a tendency to believe in a broad collection of specific conspiracy theories, as well as with a second, previously validated measure of conspiracist ideation. In Study 2, we tested the reliability and criterion validity of the GCB-5 in a similar fashion to Study 1. We further evaluated the GCB-5′s construct validity by examining its associations with various constructs that it should (e.g., delusional ideation) and should not (e.g., trustworthiness) be associated with. In Study 3 and Study 4, we examined the reliability, criterion validity, and construct

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[1] As a case in point, a full 27% of the studies examining the association between personality and conspiracist ideation have used the GCB-15 (see Goreis & Voracek, 2019), more than any other measure of conspiracist ideation.

validity of the GCB-5 in a similar manner to Study 2, but further extended our validation efforts by including additional measures (e.g., the Uniqueness Scale; Snyder & Fromkin, 1977) and an additional source of data (i.e., informant-report ratings). In Study 5, we, again, examined the reliability and the construct validity of the GCB-5. The reliability of the GCB-5 was assessed in much the same way as in the previous four studies, but the construct validity of the GCB-5 was assessed by examining its associations with a number of theoretically relevant social and political issues (e.g., support for stricter voting laws; opposition to COVID-19 vaccine mandates). The primary purpose of Study 5 was, however, to demonstrate the GCB-5′s usefulness for providing novel insights into the nature of conspiracist ideation. To that end, we examined whether people high in conspiracist ideation, as assessed by the GCB-5, are more accepting of the use of nuclear weapons and other acts of so-called *virtuous violence* (i.e., acts of violence that are perceived as being morally right; Fiske & Rai, 2014; see also Slovic et al., 2020).

2. Study 1

The purpose of Study 1 was to assess both the reliability and criterion validity of the GCB-5. The reliability of the GCB-5 was assessed by first examining the dimensionality of the scale—a necessary precondition for calculating many popular reliability indices (Cortina, 1993; John & Soto, 2007; Schmitt, 1996)—and then by estimating a popular index of reliability (i.e., Cronbach's alpha; Cronbach, 1951). The criterion validity of the GCB-5 was assessed by examining its associations with the tendency to believe in a broad collection of specific conspiracy theories, as well as with a popular 5-item measure of conspiracist ideation (i.e., the CMQ; Bruder et al., 2013). We further examined whether these associations were similar in magnitude to those seen for the GCB-15, which would indicate that the GCB-5 has comparable levels of criterion validity to the GCB-15. In the case of the specific conspiracy theories, we also examined whether the associations were similar in magnitude to those seen for CMQ, which would indicate that the GCB-5 has sufficient levels of criterion validity for a measure of its length.

2.1. Method

2.1.1. Participants and procedures

Three hundred undergraduate students were recruited from the human subjects pool at a large university in the Pacific Northwest. After excluding participants who sped through the survey (i.e., those who completed the survey faster than one-third of the median response time; Bedford-Petersen & Saucier, 2020), the sample comprised 283 participants (Table 1).

2.1.2. Materials

2.1.2.1. Conspiracist ideation. The participants completed two measures of conspiracist ideation. First, they completed the GCB-15 (Brotherton et al., 2013) (e.g., "A lot of important information is deliberately concealed from the public out of self-interest"; $\bar{r}_{ij} = 0.42$; $\alpha = 0.92$). From the 15 items that make up the GCB-15, we selected five items to form the GCB-5 (Appendix A; $\bar{r}_{ij} = 0.37$; $\alpha = 0.75$). The five items selected for the GCB-5 were those that showed the greatest factor loading on each of the five factors of conspiracy beliefs identified by Brotherton and colleagues (but see Drinkwater et al., 2020). We chose a single item from each factor so that the GCB-5 would achieve similar content coverage to the GCB-15. Participants responded to the GCB-15 (and the GCB-5) on a 5-point Likert scale (1 = "Strongly disagree"; 5 = "Strongly agree").

Second, the participants completed the 5-item CMQ (Bruder et al., 2013) (e.g., "Many very important things happen in the world, which the public is never informed about"; $\bar{r}_{ij} = 0.33$; $\alpha = 0.71$). Participants responded to the items on a 100-point scale (0 = "Certainly not"; 100 =

Table 1
Demographic information for the participants in Study 1 through Study 5.

	Human Subjects Pool Sample				Prolific Sample
	Study 1	Study 2	Study 3	Study 4	Study 5
Sample Size					
Total	300	300	500	500	559
Excluded	17	12	25	28	6
Remaining	283	288	475	472	553
Power	92.48 %	92.89 %	99.28 %	99.26 %	99.74 %
Age Mean (SD)	19.48 (2.40)	19.68 (2.32)	19.68 (2.33)	19.54 (2.47)	34.20 (13.25)
Gender Count (%)					
Women	211 (74.56 %)	195 (67.71 %)	320 (67.37 %)	334 (70.76 %)	277 (50.09 %)
Men	68 (24.03 %)	91 (31.60 %)	151 (31.79 %)	128 (27.12 %)	275 (49.73 %)
Genderfluid	2 (0.71 %)	1 (0.35 %)	1 (0.21 %)	1 (0.21 %)	1 (0.18 %)
Non-binary	0 (0.00 %)	1 (0.35 %)	2 (0.42 %)	1 (0.21 %)	0 (0.00 %)
Other gender	1 (0.35 %)	0 (0.00 %)	1 (0.21 %)	3 (0.64 %)	0 (0.00 %)
Unsure	0 (0.00 %)	0 (0.00 %)	0 (0.00 %)	3 (0.64 %)	0 (0.00 %)
Preferred not to answer	1 (0.35 %)	0 (0.00 %)	0 (0.00 %)	2 (0.50 %)	0 (0.00 %)
Cultural/Ethnic Identity Count (%)					
White or Caucasian	173 (61.13 %)	189 (65.62 %)	279 (59.74 %)	300 (63.56 %)	415 (75.05 %)
Asian or Asian-American	37 (13.07 %)	30 (10.42 %)	55 (11.58 %)	36 (7.63 %)	17 (3.07 %)
Hispanic/Latinx	30 (10.60 %)	31 (10.76 %)	39 (8.21 %)	40 (8.47 %)	26 (4.70 %)
Black or African-American	6 (2.12 %)	6 (2.08 %)	8 (1.68 %)	9 (1.91 %)	32 (5.79 %)
South Asian	1 (0.35 %)	0 (0.00 %)	5 (1.05 %)	3 (0.64 %)	4 (0.72 %)
Native American	1 (0.35 %)	1 (0.35 %)	7 (1.47 %)	1 (0.21 %)	2 (0.36 %)
Middle Eastern	0 (0.00 %)	3 (1.04 %)	4 (0.84 %)	3 (0.64 %)	1 (0.18 %)
Native Hawaiian or Other Pacific Islander	2 (0.71 %)	2 (0.69 %)	5 (1.05 %)	4 (0.85 %)	1 (0.18 %)
North African	0 (0.00 %)	0 (0.00 %)	2 (0.42 %)	0 (0.00 %)	2 (0.36 %)
Multiple cultures/ ethnicities	28 (9.89 %)	23 (7.99 %)	63 (13.26 %)	65 (13.77 %)	52 (9.40 %)
Other cultural/ ethnic identity	1 (0.35 %)	0 (0.00 %)	2 (0.42 %)	3 (0.64 %)	0 (0.00 %)
Preferred not to answer	4 (1.41 %)	3 (1.04 %)	6 (1.26 %)	8 (1.69 %)	1 (0.18 %)
Political Affiliation Count (%)					
Democratic	139 (49.12 %)	127 (44.10 %)	225 (47.37 %)	–	260 (47.02 %)
Republican	22 (7.77 %)	40 (13.89 %)	35 (7.37 %)	–	247 (44.67 %)
Libertarian	19 (6.71 %)	19 (6.60 %)	25 (5.26 %)	–	0 (0.00 %)
Independent	0 (0.00 %)	2 (0.69 %)	5 (1.05 %)	–	31 (5.61 %)
Green Party	5 (1.77 %)	0 (0.00 %)	7 (1.47 %)	–	0 (0.00 %)
Other political affiliation	2 (0.71 %)	9 (3.13 %)	10 (2.11 %)	–	10 (1.81 %)

Table 1 (*continued*)

	Human Subjects Pool Sample				Prolific Sample
	Study 1	Study 2	Study 3	Study 4	Study 5
None	77 (27.21 %)	73 (25.35 %)	129 (27.16 %)	–	5 (0.90 %)
Preferred not to answer	18 (6.36 %)	18 (6.25 %)	39 (8.21 %)	–	0 (0.00 %)

Note. Power is based on a post-hoc power analysis with a moderate effect size ($r = 0.20$; Funder & Ozer, 2019; Gignac & Szodorai, 2016) and an alpha-level of 0.05 (two-tailed). Political affiliation information was not collected for Study 4.

"Certain").

2.1.2.2. Belief in specific conspiracy theories. To assess their tendency to believe in specific conspiracy theories, the participants completed the 15-item Belief in Conspiracy Theories Inventory (BCTI-15; Swami et al., 2011) (e.g., "The Apollo moon landings never happened and were staged in a Hollywood film studio"; $\bar{r}_{ij} = 0.45$; $\alpha = 0.92$). In order to better capture the full breadth of conspiracist ideation, we also added six additional conspiracy theories to the BCTI-15 to form a 21-item version of the scale (BCTI-21) (e.g., "Since 1998, scientists have been trying to cover up the fact that certain vaccines cause autism"; $\bar{r}_{ij} = 0.39$; $\alpha = 0.93$). The full list of BCTI-21 items can be found in the Supplemental Material. Participants responded to the conspiracy theories on a 9-point scale (1 = "Completely false"; 9 = "Completely true").

2.2. Results and discussion

To investigate the reliability of the GCB-5, it was first necessary to determine whether the GCB-5 was a unidimensional measure of conspiracist ideation. We fit a confirmatory factor analysis model with all five of the GCB-5 items loading on a single conspiracist ideation latent factor (Table 2). We used dynamic fit index cut-off levels to evaluate the fit of the model (Table 3), which are generally more appropriate than fixed fit index cut-off levels for assessing the fit of single-factor models (McNeish & Wolf, 2021). We found that the model fit better than the strictest dynamic fit index cut-off levels. Specifically, fewer than one-third of the items in the model had residual correlations with another item in the model. Taken together, the results indicate that a single latent factor underlies the GCB-5.

Table 2

Standardized loadings of the GCB-5 items on a single Generic Conspiracist Beliefs latent factor.

Item	Study 1	Study 2	Study 3	Study 4	Study 5
The government permits or perpetrates acts of terrorism on its own soil, disguising its involvement.	0.72*	0.70*	0.60*	0.67*	0.71*
Evidence of alien contact is being concealed from the public.	0.59*	0.58*	0.67*	0.69*	0.57*
New and advanced technology which would harm current industry is being suppressed.	0.43*	0.51*	0.41*	0.55*	0.56*
Certain significant events have been the result of the activity of a small group who secretly manipulate world events.	0.72*	0.69*	0.59*	0.74*	0.74*
Experiments involving new drugs or technologies are routinely carried out on the public without their knowledge or consent.	0.61*	0.72*	0.61*	0.69*	0.71*

* $p < .001$.

Having confirmed that the GCB-5 is a unidimensional measure of conspiracist ideation, we calculated our primary index of reliability: Cronbach's alpha (α; Cronbach, 1951). A full 74.97 % of the variance in the GCB-5 scores could be attributed to true variation in conspiracist ideation ($\alpha = 0.75$). This was smaller than that seen for the GCB-15 ($\alpha = 0.92$) but was to be expected given that the GCB-5 was designed to assess the full range of conspiracist beliefs captured by the GCB-15 with only one-third the items. The Cronbach's alpha for the GCB-5 was also larger than the conventionally accepted threshold of 0.70 for reliability (Nunnally, 1978; but see also Lance et al., 2006), indicating that the GCB-5 is, in fact, a reliable measure of conspiracist ideation.

To test the criterion validity of the GCB-5, we examined its zero-order correlations with the CMQ, BCTI-21, and BCTI-15. To examine whether its associations with the CMQ, BCTI-21, and BCTI-15 were comparable to those seen for the GCB-15, as well as to examine whether its associations with the BCTI-21 and BCTI-15 were comparable to those seen for the CMQ, we further conducted Hittner and colleagues' (2003) procedure for comparing dependent zero-order correlations. Because of the number of associations tested here, we use the conservative alpha level of 0.001 for all significance tests.

The results indicated that the GCB-5 had a strong positive association with the CMQ, BCTI-21, and BCTI-15 (Table 4; see also Fig. 1). Moreover, the associations of the GCB-5 with the CMQ, BCTI-21 and BCTI-15 were not significantly different from the associations of the GCB-15 with the CMQ, BCTI-21, and BCTI-15. The associations of the GCB-5 with the BCTI-21 and BCTI-15 were, however, significantly greater than the associations of the CMQ with the BCTI-21 and BCTI-15. Taken together, these results indicate that the GCB-5 has similar levels of criterion validity to the GCB-15 while also having greater levels of criterion validity than the CMQ.

3. Study 2

The results of Study 1 indicated that the GCB-5 is both a reliable and criterion-valid measure of conspiracist ideation. Study 2 was intended, in part, to replicate these findings. Specifically, we again assessed the reliability of the GCB-5 by first examining its dimensionality and then by estimating a popular index of reliability. We also assessed the criterion validity of the GCB-5 by first examining its associations with the BCTI-21, BCTI-15, and CMQ and then by comparing these associations to those seen for the GCB-15 and CMQ. However, beyond further establishing its reliability and criterion validity, Study 2 was intended to assess the construct validity of the GCB-5. To do so, we examined its associations with three variables that it should, theoretically, be associated with—delusional ideation (Barron et al., 2018; Darwin et al., 2011; Dagnall et al., 2015; Furnham & Grover, 2021; Swami et al., 2011, 2016; van der Tempel & Alcock, 2015); interpersonal trust (Lantian et al., 2016; Wagner-Egger & Bangerter, 2007); and anomie (Abalakina-Paap et al., 1999; Goertzel, 1994)—and with one variable that it should, theoretically, not be associated with—trustworthiness (but see Douglas & Sutton, 2011; Kay, 2021a).

3.1. Method

3.1.1. Participants and procedures

Three hundred undergraduate students were recruited from the same human subjects pool as in Study 1. After excluding participants who sped through the survey, the sample comprised 288 participants (Table 1).

3.1.2. Materials

3.1.2.1. Conspiracist ideation. As in Study 1, the participants completed the GCB-15 ($\bar{r}_{ij} = 0.41$; $\alpha = 0.91$), which included the items for the GCB-5 ($\bar{r}_{ij} = 0.41$; $\alpha = 0.78$), and the CMQ ($\bar{r}_{ij} = 0.31$; $\alpha = 0.70$).

Table 3

Model fit indices for the one-factor GCB-5 scale with accompanying level-1 dynamic fit index cut-offs for all studies.

	Model Fit Indices						Dynamic Fit Index Cut-Offs		
	χ^2	df	p	CFI	SRMR	RMSEA [90 % CI]	CFI	SRMR	RMSEA
Study 1	9.78	5	0.082	0.984	0.031	0.058 [0.000, 0.112]	0.980	0.033	0.068
Study 2	9.93	5	0.077	0.986	0.029	0.059 [0.000, 0.112]	0.982	0.033	0.070
Study 3	9.35	5	0.096	0.988	0.024	0.043 [0.000, 0.085]	0.971	0.032	0.073
Study 4	13.40	5	0.020	0.987	0.025	0.060 [0.022, 0.099]	0.984	0.026	0.071
Study 5	6.04	5	0.303	0.999	0.016	0.019 [0.000, 0.065]	0.976	0.032	0.087

Note. All dynamic fit index cut-offs were estimated using the *dynamic* package (Wolf & McNeish, 2022) in *R* (R Core Team, 2022).

Table 4

Zero-order correlations of the GCB-15, GCB-5, and CMQ with belief in specific conspiracy theories, delusional ideation, paranoia, interpersonal trust, anomie, a need for uniqueness, a desire for control, and the Big Five personality traits.

	Study 1			Study 2			Study 3			Study 4		
	GCB-15	GCB-5	CMQ	GCB-15	GCB-5	CMQ	GCB-15	GCB-5	CMQ	GCB-15	GCB-5	CMQ
Conspiracist Ideation (Self-Report)												
CMQ	.64*a	.59*a	–	.57*a	.54*a	–	.59*a	.54*b	–	.80*a	.77*a	–
BCTI-21	.72*a	.68*a	.44*b	.70*a	.67*a	.44*b	.63*a	.59*a	.35*b	.69*a	.64*b	.55*c
BCTI-15	.74*a	.71*a	.47*b	.72*a	.70*a	.49*b	.63*a	.61*a	.40*b	.69*a	.66*a	.58*b
CCIS	–	–	–	–	–	–	–	–	–	.77*a	.68*b	.59*c
Conspiracist Ideation (Informant)												
Conspiracy Theorist	–	–	–	–	–	–	.24*a	.23*a	.07b	–	–	–
CMQ	–	–	–	–	–	–	–	–	–	.32*a	.27*a	.24*a
Delusional Ideation and Paranoia												
PDI	–	–	–	.56*a	.52*ab	.41*b	–	–	–	.52*a	.48*ab	.41*b
SPQ – Odd Beliefs	–	–	–	–	–	–	.50*a	.46*a	.24*b	–	–	–
Paranoia Scale	–	–	–	–	–	–	–	–	–	.41*a	.38*a	.39*a
Interpersonal Trust												
PTS – Trusting	–	–	–	-.20*a	-.15a	-.20*a	-.27*a	-.23*a	-.19*a	–	–	–
PTS – Trustworthy	–	–	–	-0.11 a	-.07ab	.07b	–	–	–	–	–	–
Anomie												
Agnew's Anomie Scale	–	–	–	.36*a	.32*a	.26*a	.38*a	.32*a	.27*a	–	–	–
PAS	–	–	–	.37*a	.37*a	.42*a	–	–	–	–	–	–
PAS – Social Fabric	–	–	–	.31*a	.30*a	.33*a	.43*a	.39*ab	.25*b	–	–	–
PAS – Leadership	–	–	–	.30*a	.30*a	.36*a	–	–	–	–	–	–
Need for Uniqueness												
SANU	–	–	–	–	–	–	.15*a	.13a	.24*a	–	–	–
Uniqueness Scale	–	–	–	–	–	–	–	–	–	.17*a	.19*a	.11a
Control												
TPI – Present Fatalism	–	–	–	–	–	–	.35*a	.31*ab	.19*b	–	–	–
DCS	–	–	–	–	–	–	.04a	.05ab	.17*b	.12a	.13a	.12a
Big Five Traits (Self-Report)												
Extraversion	–	–	–	–	–	–	-0.02 a	-.02a	-.01a	–	–	–
Agreeableness	–	–	–	–	–	–	-.04a	-.01a	-.08a	–	–	–
Conscientiousness	–	–	–	–	–	–	-.06a	-.08a	-.08a	–	–	–
Neuroticism	–	–	–	–	–	–	.15*a	.16*a	.16*a	–	–	–
Openness	–	–	–	–	–	–	-.06a	-.05a	.04a	–	–	–
Big Five Traits (Informant)												
Extraversion	–	–	–	–	–	–	.06a	.05ab	-.08b	–	–	–
Agreeableness	–	–	–	–	–	–	-.04a	-.03a	-.04a	–	–	–
Conscientiousness	–	–	–	–	–	–	-.01a	-.01a	-.02a	–	–	–
Neuroticism	–	–	–	–	–	–	.04a	.04a	.09a	–	–	–
Openness	–	–	–	–	–	–	-.03a	-.04a	.08a	–	–	–

Note. Different subscripts denote significant differences among the correlations for the GCB-15, GCB-5, and CMQ at $p < .001$ (Hittner et al., 2003). GCB-15 = Generic Conspiracist Beliefs Scale – 15; GCB-5 = Generic Conspiracist Beliefs Scale – 5; CMQ = Conspiracy Mentality Questionnaire; BCTI = Belief in Conspiracy Theories Inventory; PDI = Peters Delusions Inventory; SPQ = Schizotypal Personality Questionnaire; PTS = Propensity to Trust Survey; PAS = Perception of Anomie Scale; SANU = Self-Attributed Need for Uniqueness Scale; TPI = Time Perspective Inventory; DCS = Desirability of Control Scale.

* $p < .001$.

3.1.2.2. Belief in specific conspiracy theories. Also as in Study 1, the participants completed both the BCTI-15 ($\bar{r}_{ij} = 0.45$; α = 0.92) and the extended BCTI-21 ($\bar{r}_{ij} = 0.38$; α = 0.93).

3.1.2.3. Delusional ideation. Delusional ideation was assessed using the 21-item *Peters Delusions Inventory* (Peters et al., 2004) (e.g., "I sometimes feel as if things in magazines or on TV were written especially for me"; $\bar{r}_{ij} = 0.23$; α = 0.86). Participants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

3.1.2.4. Interpersonal trust and trustworthiness. Interpersonal trust (e.g.,

"I believe that people seldom tell you the whole story (*Reversed*)"; $\bar{r}_{ij} = 0.14$; α = 0.65) and trustworthiness (e.g., "I listen to my conscience"; $\bar{r}_{ij} = 0.19$; α = 0.70) were assessed using the *Propensity to Trust Survey* (Evans & Revelle, 2008). Participants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

3.1.2.5. Anomie. Anomie was assessed using two measures. The first measure was *Agnew's Anomie Scale* (Agnew, 1980) (e.g., "I have had more than my fair share of worries"; $\bar{r}_{ij} = 0.18$; α = 0.63). The second measure was the *Perception of Anomie Scale* (Teymoori et al., 2016) ($\bar{r}_{ij} = 0.22$; α = 0.78). The items from the Perception of Anomie Scale can be
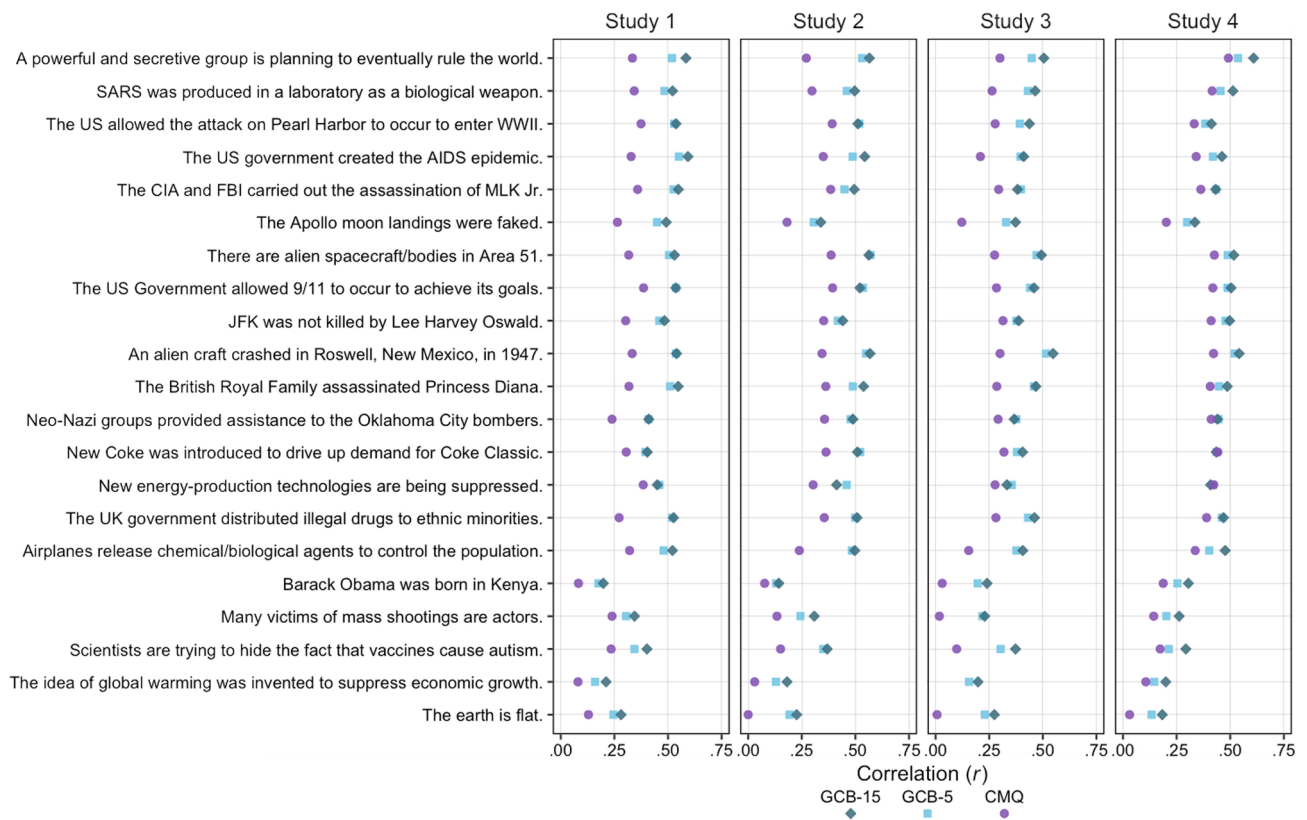
Fig. 1. Correlations of the GCB-15, GCB-5, and CMQ with the individual items from the BCTI-21.

separated into two subscales: the perception that there is a breakdown in the social fabric of society (e.g., "In America today, people think that there are no clear moral standards to follow"; $\bar{r}_{ij} = 0.24$; $\alpha = 0.66$) and the perception that there is a breakdown in societal leadership (e.g., "In America today, politicians don't care about the problems of the average person"; $\bar{r}_{ij} = 0.42$; $\alpha = 0.81$). Participants responded to both scales using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

3.2. Results and discussion

As was the case in Study 1, a confirmatory factor analysis model with all of the GCB-5 items loading on a single latent factor demonstrated excellent fit (Table 2; Table 3). Moreover, 77.72 % of the variance in the GCB-5 scores ($\alpha = 0.78$) could be attributed to true variation in conspiracist ideation. As such, the present findings, again, indicate that the GCB-5 is both a unidimensional and reliable measure of conspiracist ideation.

Turning to its criterion validity, the GCB-5 was highly associated with the CMQ, BCTI-21, and BCTI-15 (Table 4; see also Fig. 1). These associations were comparable to those seen for the GCB-15 and, in the case of the BCTI-21 and BCTI-15, larger than those seen for the CMQ. As in Study 1, the GCB-5 appears to have similar levels of criterion validity to the GCB-15 and higher levels of criterion validity than the CMQ.

With respect to its construct validity, the GCB-5 showed the expected positive associations with the measures of delusional ideation and anomie, as well as the expected lack of an association with trustworthiness (Table 4). Unexpectedly, the GCB-5 was not associated with interpersonal trust, while the GCB-15 and the CMQ were. We would, however, note that the association was in the expected direction and not significantly different from the associations seen for the GCB-15 and CMQ. Therefore, we cannot conclude that the GCB-5 is any less associated with interpersonal trust than is the GCB-15 and CMQ. The GCB-5, therefore,

appears to have comparable construct validity to both the GCB-15 and the CMQ.

4. Study 3

The results of Study 1 and Study 2 indicated that the GCB-5 is a reliable and criterion-valid measure of conspiracist ideation, and the results of Study 2 further indicated that the GCB-5 is a construct-valid measure of conspiracist ideation. Study 3 was intended to replicate these findings. For the most part, we assessed the reliability, criterion validity, and construct validity of the GCB-5 in the same way as we did in Study 2. We did, however, make two notable changes.

First, we changed several of the measures used to assess the GCB-5′s construct validity. We again examined the association of the GCB-5 with delusional ideation, interpersonal trust, and anomie, but we also examined its association with a perceived lack of control, a desire for control, a desire for uniqueness, and the Big Five personality traits (see Goldberg, 1990). Given the results of prior empirical and theoretical work, we expected the GCB-5 would be associated with both a perceived lack of control and a desire for control (Douglas et al., 2017; Kay et al., 2009; Whitson & Galinsky, 2008; but see Stojanov & Halberstadt, 2020), as well as with a desire for uniqueness (Imhoff & Lamberty, 2017; Lantian et al., 2017). We further expected the GCB-5 would *not* be associated with the Big Five personality traits, given that prior research has generally found small to non-existent associations between the tendency to believe in conspiracy theories and "normal" personality traits (Goreis & Voracek, 2019).

Second, in addition to collecting measures completed by the participants, we also collected measures completed by people who knew the participants well (i.e., informants). One of the measures had the informants rate whether a given participant could be described as "the type of person who would believe in conspiracy theories." We expected that people high on the GCB-5 would be rated as being more likely to believe in conspiracy theories, thus providing additional evidence for

the criterion validity of the GCB-5. A second measure had the informants rate the participants' levels of the Big Five personality traits. As with the self-report Big Five ratings, we expected there would be minimal associations between the GCB-5 and the informant-report Big Five ratings, thus providing further evidence for the GCB-5's construct validity.

4.1. Method

4.1.1. Participants and procedures

Five hundred undergraduate students were recruited from the same human subjects pool as in Study 1 and Study 2.[2] After excluding participants who sped through the survey,[3] the sample comprised 475 participants (Table 1).

At the end of the survey, the participants were asked to nominate three informants who they believed knew them well enough to accurately rate their personalities. We excluded 37 informants for speeding through the survey, leaving 505 informant responses across 274 participants (Table 5). In cases where more than one informant provided ratings for a single participant, we averaged the ratings together.

4.1.2. Materials

4.1.2.1. Conspiracist ideation.
As in the previous two studies, the participants completed the GCB-15 ($\bar{r}_{ij} = 0.36$; α = 0.89), which included the items from the GCB-5 ($\bar{r}_{ij} = 0.33$; α = 0.71), and the CMQ ($\bar{r}_{ij} = 0.27$; α = 0.65). To streamline the survey, the participants responded to the CMQ on the same 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree") used for the GCB-15.

In terms of the informants' ratings of the participants' levels of conspiracist ideation, we had the informants respond to the following statement: "They are the type of person who would believe in conspiracy theories". They were asked to respond to the statement using a 5-point Likert scale (1 = "Strongly disagree"; 5 = "Strongly agree").

4.1.2.2. Belief in specific conspiracy theories.
As in Study 1 and Study 2, the participants completed the BCTI-15 ($\bar{r}_{ij} = 0.43$; α = 0.92) and the extended BCTI-21 ($\bar{r}_{ij} = 0.37$; α = 0.92).

Table 5
Demographic information for the informants in Study 3 and Study 4.

	Study 3	Study 4
Sample Size		
Total	542	475
Excluded	37	5
Remaining	505	470
Relationship Length Mean (SD)	10.42 (8.54)	8.25 (8.38)
Relationship Type Count (%)		
Friend	247 (49.01 %)	202 (42.98 %)
Family Member	201 (39.88 %)	225 (47.87 %)
Romantic Partner	45 (8.93 %)	35 (7.45 %)
Peer	7 (1.39 %)	4 (0.85 %)
Other	4 (0.79 %)	4 (0.85 %)

Note. Relationship length was measured in years.

4.1.2.3. Delusional ideation.
For the sake of brevity, the 5-item *Odd Beliefs* subscale from the *Schizotypal Personality Questionnaire* (Raine, 1991) (e.g., "I've had experiences with the supernatural"; $\bar{r}_{ij} = 0.39$; α = 0.82) was used to assess delusional ideation instead of the Peters Delusion Inventory (used in Study 2). The items were converted from their original question format to a statement format so that they could be used with a 5-point Likert scale (1 = "Strongly disagree"; 5 = "Strongly agree").

4.1.2.4. Interpersonal trust.
As in Study 2, the participants completed the interpersonal trust subscale of the Propensity to Trust Survey ($\bar{r}_{ij} = 0.14$; α = 0.65).

4.1.2.5. Anomie.
Anomie was, again, assessed using Agnew's Anomie Scale ($\bar{r}_{ij} = 0.14$; α = 0.57). Participants also completed the breakdown of social fabric items from the Perception of Anomie Scale ($\bar{r}_{ij} = 0.18$; α = 0.58).

4.1.2.6. Need for uniqueness.
The need to feel unique was assessed using Lantian and colleague's (2017) 4-item version of the *Self-Attributed Need for Uniqueness Scale* (Lynn & Harris, 1997) (e.g., "Being distinctive is important to me"; $\bar{r}_{ij} = 0.46$; α = 0.77). Participants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

4.1.2.7. Control.
A perceived lack of control was assessed using the *Present-Fatalistic* subscale of the *Time Perspective Inventory* (Zimbardo & Boyd, 1999) (e.g., "My life path is controlled by forces I cannot influence"; $\bar{r}_{ij} = 0.24$; α = 0.73). A desire for control was assessed using the *Desirability of Control* scale (Burger & Cooper, 1979) (e.g., "I enjoy making my own decisions"; $\bar{r}_{ij} = 0.12$; α = 0.72). Participants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

4.1.2.8. Big five personality traits.
The *Big Five Inventory-2 Extra-Short Form* (Soto & John, 2017) was used to assess the participants' levels of extraversion (e.g., "I am dominant, act as a leader"; $\bar{r}_{ij} = 0.35$; α = 0.62), agreeableness (e.g., "I am compassionate, have a soft heart"; $\bar{r}_{ij} = 0.22$; α = 0.45), conscientiousness (e.g., "I am reliable, can always be counted on"; $\bar{r}_{ij} = 0.29$; α = 0.56), neuroticism (e.g., "I worry a lot"; $\bar{r}_{ij} = 0.45$; α = 0.71), and openness to experience (e.g., "I am original, come up with new ideas"; $\bar{r}_{ij} = 0.26$; α = 0.51). Participants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

The informants filled out the same scale adapted to the third person to provide informant-based ratings of the participants' levels of extraversion (e.g., "They are dominant, act as a leader"; $\bar{r}_{ij} = 0.41$; α = 0.67), agreeableness (e.g., "They are compassionate, have a soft heart"; $\bar{r}_{ij} = 0.44$; α = 0.69), conscientiousness (e.g., "They are reliable, can always be counted on"; $\bar{r}_{ij} = 0.43$; α = 0.69), neuroticism (e.g., "They worry a lot"; $\bar{r}_{ij} = 0.47$; α = 0.73), and openness (e.g., "They are original, come up with new ideas"; $\bar{r}_{ij} = 0.37$; α = 0.63). Informants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

4.2. Results and discussion

As was the case in the previous two studies, a confirmatory factor analysis model with all of the GCB-5 items loading on a single latent factor demonstrated excellent fit (Table 2; Table 3). Moreover, 71.14 % of the variation in the GCB-5 scores could be attributed to true variation in conspiracist ideation (α = 0.71). As such, the present results again indicate that the GCB-5 is both a unidimensional and reliable measure of conspiracist ideation.

Concerning its criterion validity, the GCB-5 was highly correlated with the CMQ, BCTI-21, and BCTI-15 and moderately associated with the informant-report measure of conspiracist ideation (Table 4; see also

Fig. 1). With one exception, these associations were comparable to those seen for the GCB-15. The one exception was that the GCB-5 evinced a slightly smaller association with the CMQ than did the GCB-15 ($r = 0.54$ versus $r = 0.59$). That said, the associations seen for the GCB-5 were larger than all of the associations seen for the CMQ, including the CMQ's association with the informant-report measure of conspiracist ideation. As found in the previous two studies, the GCB-5 appears to have, in most cases, no worse criterion validity than the GCB-15 and better criterion validity than the CMQ.

With respect to its construct validity, the GCB-5 demonstrated moderate-to-large associations with delusional ideation, interpersonal trust,[4] anomie, and a perceived lack of control (Table 4). In all four cases, the GCB-5 demonstrated comparable associations to the GCB-15 and, in the case of delusional ideation, a larger association than the CMQ. The GCB-5 was not, however, associated with either a need for uniqueness or a desire for control, but the effects were in the correct direction and comparable in size to that seen for the GCB-15 and the CMQ. The size of the GCB-5's associations with a need for uniqueness and a desire for control were also not far off from that seen in prior studies (Lantian et al., 2017; Stojanov & Halberstadt, 2020). It is, therefore, unclear whether this is an issue with the GCB-5 not accurately capturing the relationship between conspiracist ideation and a need for uniqueness and a desire for control or a true reflection of the absence of a meaningful relationship between conspiracist ideation and a need for uniqueness and a desire for control. For the most part (and as expected), the GCB-5, GCB-15, and CMQ all demonstrated minimal associations with the self- and informant-report measures of the Big Five personality traits. The one exception to this finding was that the GCB-5, GCB-15, and CMQ were all slightly-to-moderately positively associated with self-reported neuroticism. This finding is rather unique in the literature, with the average association between conspiracist ideation and neuroticism being estimated at around 0.03 (Goreis & Voracek, 2019). It could be the case that the measure of the Big Five used here emphasizes some aspect of neuroticism that is particularly relevant to conspiracist ideation, such as the tendency to worry, but this is purely speculative. Regardless, the present findings indicate that, as in Study 1 and Study 2, the GCB-5 has similar levels of construct validity to the GCB-15 and the CMQ.

5. Study 4

The results of Study 3 largely replicated the findings from Study 1 and Study 2, providing further support for the reliability, criterion validity, and construct validity of the GCB-5. The aim of Study 4 was to further replicate these findings using a similar method to that used in Study 3. However, we did make three changes.

First, in addition to having participants complete a general measure of conspiracist ideation (i.e., the CMQ; Bruder et al., 2013), we also had participants complete a COVID-19-specific measure of conspiracist ideation. We expected that the GCB-5, like the GCB-15 (Alper et al., 2020; Juanchich et al., 2021), would be associated with the tendency to hold conspiracist beliefs about COVID-19, providing further support for the GCB-5's criterion validity.

Second, we had the informants rate the participants' levels of conspiracist ideation using a third-person adaptation of the CMQ instead of the single item measure used in Study 3. As in Study 3, we expected that people scoring high on the GCB-5 would be perceived by people who knew them well as being more likely to believe in conspiracy theories, which would, again, provide support for the GCB-5's criterion validity.

Finally, we no longer examined the associations of the GCB-5 with

interpersonal trust, anomie, and the Big Five personality traits, but we did examine its association with paranoia. Given the abundant past literature linking these two concepts (Imhoff & Lamberty, 2018), we expected people scoring high on the GCB-5 would express more paranoia, thus providing further support for the construct validity of the GCB-5.

5.1. Method

5.1.1. Participants and procedures

Five hundred undergraduate students were recruited from the same human subjects pool as in Study 1, Study 2, and Study 3.[5] After excluding participants who sped through the survey,[6] the sample comprised 472 participants (Table 1).

As in Study 3, participants were asked to nominate three informants who they believed knew them well enough to accurately rate their personalities. Five informants were excluded for speeding through the survey, leaving a total of 470 informant responses across 240 participants (Table 5). In cases where more than one informant provided ratings for a single participant, we averaged their ratings together.

5.1.2. Materials

5.1.2.1. Conspiracist ideation. As in the previous three studies, the participants completed the GCB-15 ($\bar{r}_{ij} = 0.47$; $\alpha = 0.93$), which included the items from the GCB-5 ($\bar{r}_{ij} = 0.45$; $\alpha = 0.80$), and the CMQ ($\bar{r}_{ij} = 0.40$; $\alpha = 0.77$). In the present study, participants also completed the 5-item COVID-19 Conspiracist Ideation Scale (Kay, 2020) (e.g., "Prominent scientists are suppressing the truth about COVID-19"; $\bar{r}_{ij} = 0.45$; $\alpha = 0.80$). Participants responded using a 5-point Likert scale (1 = "Strongly disagree"; 5 = "Strongly agree").

To capture a third-person accounting of the participants' levels of conspiracist ideation, informants also evaluated the participants using a third-person adaptation of the CMQ (e.g., "They think that government agencies closely monitor all citizens"; $\bar{r}_{ij} = 0.40$; $\alpha = 0.77$). Informants responded using a 5-point Likert scale (1 = "Strongly disagree"; 5 = "Strongly agree").

5.1.2.2. Belief in specific conspiracy theories. As in the previous studies, the participants completed the BCTI-15 ($\bar{r}_{ij} = 0.43$; $\alpha = 0.92$) and the extended BCTI-21 ($\bar{r}_{ij} = 0.35$; $\alpha = 0.92$).

5.1.2.3. Delusional ideation and paranoia. As in Study 2, the Peters Delusion Inventory was used to assess delusional ideation ($\bar{r}_{ij} = 0.19$; $\alpha = 0.83$). We also assessed the participants levels of paranoia using the 20-item *Paranoia Scale* (Fenigstein & Vanable, 1992) (e.g., "Someone has it in for me"; $\bar{r}_{ij} = 0.22$; $\alpha = 0.85$). Participants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

5.1.2.4. Need for uniqueness. The need to feel unique was assessed using the 32-item *Uniqueness Scale* (Snyder & Fromkin, 1977) (e.g., "I do not always need to live by the rules and standards of society"; $\bar{r}_{ij} = 0.11$; $\alpha = 0.80$). Participants responded using a 5-point Likert Scale (1 = "Strongly disagree"; 5 = "Strongly agree").

5.1.2.5. The desire for control. As in Study 3, the desire for control was assessed using the Desirability of Control Scale ($\bar{r}_{ij} = 0.10$; $\alpha = 0.67$).

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[4] It is unclear why the GCB-5 was not associated with interpersonal trust in Study 2 but was associated with interpersonal trust in Study 3. Given that Study 3 has a larger sample, we believe it is a better estimate of the true association between the GCB-5 and interpersonal trust.

[5] This dataset was previously reported in Kay (2021b). Data concerning the BCTI-21 was not reported in the previous study.

[6] As with the Study 3 data, we used a different exclusionary criteria here than was used in the original study. Nevertheless, the conclusions that can be drawn from the results are identical regardless of which exclusionary criteria are used.

5.2. Results and discussion

As in the previous studies, a confirmatory factor analysis model with all of the GCB-5 items loading on a single factor demonstrated excellent fit[7] (Table 2; Table 3). Moreover, 80.25 % of the variation in the GCB-5 scores could be explained by true variation in conspiracist ideation (α = 0.80). As such, the present results, again, indicate that the GCB-5 is both a unidimensional and reliable measure of conspiracist ideation.

Turning to the GCB-5′s criterion validity, we found a strong positive relationship between the GCB-5 and the CMQ, BCTI-21, BCTI-15, and COVID-19 Conspiracist Ideation Scale, as well as between the GCB-5 and the informant-report CMQ (Table 4; see also Figure 1[8]). The GCB-5′s associations with the CMQ, BCTI-15, and informant-report CMQ were similar in size to those seen for the GCB-15. The GCB-5′s associations with the BCTI-21 ($r = 0.64$ versus $r = 0.69$) and COVID-19 Conspiracist Ideation Scale ($r = 0.68$ versus $r = 0.77$) were, in contrast, smaller than those seen for the GCB-15. The differences were small, but we would still suggest researchers consider whether such differences would present an issue for their individual studies and, if so, recommend using a longer measure of conspiracist ideation. Despite being smaller than those seen for the GCB-15 in certain cases, the associations of the GCB-5 with the BCTI-21, BCTI-15, and COVID-19 Conspiracist Ideation Scale were all larger than the associations seen for the CMQ. The association between the GCB-5 and the informant-report CMQ was also comparable to the association between the self-report CMQ and the informant-report CMQ. On the whole (and as in the previous studies), the results indicate that the GCB-5 has similar levels of criterion validity to the GCB-15 and greater levels of criterion validity than the CMQ.

With respect to its construct validity, the GCB-5 demonstrated moderate-to-large positive associations with delusional ideation, paranoia, and the need for uniqueness (Table 4). These associations were comparable to those seen for the GCB-15 and CMQ. The GCB-5, GCB-15, and CMQ also all showed null associations with a desire for control. Again, this fits with the prior meta-analytic work suggesting that conspiracist ideation is not, in fact, associated with a desire for control ($r = -0.03$; Stojanov & Halberstadt, 2020). As in the prior studies, the present results indicate that the GCB-5 has comparable levels of construct validity to both the GCB-15 and the CMQ.

6. Study 5

The first four studies found consistent support for the reliability, criterion validity, and construct validity of the GCB-5. Study 5 was intended, in part, to further examine the reliability and construct validity of the GCB-5. Its reliability was tested in a similar fashion to that seen in Study 1, Study 2, Study 3, and Study 4. Its construct validity, on the other hand, was evaluated by examining its associations with the endorsement of a number of social and political issues that it should, theoretically, be associated with, including support for stricter voting laws (Butler et al., 1995; Jolley & Douglas, 2014b; Uscinski & Parent, 2014), opposition to vaccine mandates (Craciun & Baban, 2012; Jolley & Douglas, 2014a; Lewandowsky et al., 2013a; Shapiro et al., 2016), and opposition to new environmental regulations (Jolley & Douglas, 2014b; Lewandowsky et al., 2013b).

The primary purpose of Study 5 was, however, to demonstrate the

utility of the GCB-5 for investigating novel research questions. Specifically, in Study 5, we used the GCB-5 to investigate whether people high in conspiracist ideation have more favorable views towards the use of nuclear weapons. On the one hand, it is easy to imagine that people high in conspiracist ideation would be fundamentally opposed to the use of nuclear weapons. One of the most consistent findings in the conspiracy theory literature is that people high in conspiracist ideation possess a marked distrust of the government (Jolley & Douglas, 2014b; Imhoff & Lamberty, 2018; van Prooijen & Acker, 2015). If a person believes that the government cannot be trusted, they presumably would not support that government's decision to use a nuclear weapon against an enemy. On the other hand, most conspiracy theories are, at their core, stories about supposedly evil outgroups that are intent on the downfall and destruction of one's in-group (van Prooijen & van Lange, 2014). It is possible that people high in conspiracist ideation would see nuclear weapons, not as a tool in the hands of evildoers, but as a tool for *punishing* evildoers. From this perspective, a nuclear strike would be seen as an act of virtuous violence (Fiske & Rai, 2014; see also Slovic et al., 2020)—an act that may be cruel and inhumane but that is also seen as being morally right. If this is the case, we might also expect that people high in conspiracist ideation would have more favorable views towards social and political policies that directly or indirectly support acts of virtuous violence, including death-penalty laws, stand-your-ground laws, the second amendment, anti-abortion legislation, and anti-immigration policies.[9] Study 5 tested these possibilities.

6.1. Method

6.1.1. Participants and procedures

Five hundred fifty-nine participants were recruited through the online polling site Prolific. Given the recent influx of women on Prolific (see Charalambides, 2021), we used demographic prescreening to recruit approximately equal numbers of participants identifying as women and men. We also used demographic prescreening to recruit approximately equal numbers of participants identifying as Democratic and Republican. All participants were paid $15.00 per hour for their participation. We excluded participants who responded incorrectly to two or more of six attention checks embedded in the survey ($n = 6$; see the Supplemental Material). We had also planned to exclude any participant who responded faster than one-third of the median response duration, but no participants met this criterion. In the end, the sample included 553 participants (Table 1).

6.1.2. Materials

6.1.2.1. Conspiracist ideation. As in the first four studies, participants completed the GCB-5 ($\bar{r}_{ij} = 0.43$; α = 0.79), but, unlike in the first four studies, participants responded to the GCB-5 on a 7-point Likert scale (1 = "Strongly disagree"; 7 = "Strongly agree"). This change was made to align with Krosnick and colleagues' (2014) recommendation for maximizing scale reliability and validity.

6.1.2.2. Perspectives on nuclear weapon use. Participants read one of three news articles about a fictional war between the US and Iran (see the Supplemental Material). In each article, the war is described as starting because the US economically sanctioned Iran for violating a nuclear treaty. The Iranian Air Force then attacked a US naval ship, resulting in the death of 2,403 American sailors and the injury of 1,178

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[7] The chi-square test was significant, indicating that the model was significantly different from a saturated, theoretically perfect model. That said, with samples as large as the one used here, chi-square tests are rarely non-significant (see Kline, 2016).

[8] Interestingly, the correlations between the CMQ and the tendency to believe in specific conspiracy theories in Study 4 were consistently larger than those seen in Study 1, Study 2, and Study 3. We are not exactly sure why this was the case, but it may owe to undergraduate students becoming quicker to recognize what is and is not a conspiracy theory during the COVID-19 pandemic.

[9] Although some people may argue that anti-abortion legislation is not an act of violence, we assert that it is. Beyond robbing women of bodily autonomy, anti-abortion laws force women to either carry unwanted, unviable, and life-threatening pregnancies to term or risk the financial, legal, and health consequences of receiving an illegal abortion (Miller et al., 2020; see also Dias, 2022).

others. The US then declared war on Iran, and a difficult ground war ensued. The articles then state that 20,000 more American troops may die if Iran doesn't surrender, but that the US has been considering using a nuclear weapon to bring the war to a close. The first article states that an estimated 100,000 Iranian civilians would die if the US used the nuclear weapon; the second article states that an estimated 2,000,000 Iranian civilians would die if the US used the nuclear weapon; and the third article states that, depending on the target, either 100,000 or 2,000,000 Iranian civilians would die if the US used the nuclear weapon. Participants who read the first or second article were then asked whether they would launch the nuclear strike or continue the ground war. Participants who read the third article were asked whether they would launch the nuclear strike on the location with the potential death toll of 100,000, launch the nuclear strike on the location with the potential death toll of 2,000,000, or continue the ground war. Given that the differences between these three conditions were not relevant to the present study, we collapsed across the conditions for all of the analyses reported here to maximize power. The results broken down by each article can, however, be found in the Supplemental Material.

After reading the articles and choosing to either launch a nuclear strike or continue the ground war, participants responded to five statements assessing (a) their personal level of preference for launching the nuclear strike versus continuing the ground war, (b) how much they would approve of the decision to launch a nuclear strike if that is what the US decided to do, (c) whether they would think the decision to launch the nuclear strike was ethical, (d) whether they believe Iran's leaders are morally culpable for any civilian deaths resulting from the nuclear strike because Iran's leaders started the war, and (e) whether they would approve of a nuclear strike if Iran had first used a small tactical nuclear weapon against US forces.

6.1.2.3. Social and political issues. The participants responded to 16 items similar to those used by Slovic and colleagues (2020) to assess their opinions on various social and political issues (e.g., "The death penalty should be available as a punishment for persons convicted of murder"). For the most part, participants responded using a 7-point Likert Scale (1 = "Strongly disagree"; 7 = "Strongly agree"). A full list of these items, as well as their response scales, are provided in the Supplemental Material.

6.2. Results and discussion

As in the four previous studies, a confirmatory factor analysis model with all of the GCB-5 items loading on a single factor demonstrated excellent fit (Table 2; Table 3). Furthermore, 79.26 % of the variation in the GCB-5 scores could be explained by true variation in conspiracist ideation ($\alpha = 0.79$). This, again, indicates that the GCB-5 is both a unidimensional and reliable measure of conspiracist ideation.

Turning to its construct validity, the GCB-5 demonstrated several theoretically aligned associations with the social and political issues. By way of example, the GCB-5 demonstrated a large positive association with the belief that there should be stricter voting laws, a moderate negative association with the belief that there should be COVID-19 vaccine mandates, and a moderate positive association with the belief that environmental regulations are more harmful than helpful (Table 6). This is consistent with prior research indicating that people high in conspiracist ideation (as well as those who are merely exposed to conspiracy theories) have less faith in the democratic process (Butler et al., 1995; Jolley & Douglas, 2014b; Uscinski & Parent, 2014), are mistrustful of vaccines (Craciun & Baban, 2012; Jolley & Douglas, 2014a; Lewandowsky et al., 2013a; Shapiro et al., 2016), and believe climate change is a hoax (Jolley & Douglas, 2014b; Lewandowsky et al., 2013b). In sum, the present findings again find support for the construct validity of the GCB-5.

Finally, with respect to whether the GCB-5 is able to provide novel

Table 6
Zero-order correlations of the GCB-5 with the nuclear strike statements and the various social and political issues in Study 5.

	GCB-5
Nuclear Strike Statements	
Preference for Nuclear Strike Over Ground War	0.13
Approve of Nuclear Strike	0.21*
Nuclear Strike is Ethical	0.15*
Iran Morally at Fault for Nuclear Strike	0.16*
Preference for Nuclear Strike if Iran Used a Nuke	0.16*
Social/Political Issues	
Black Lives Matter	-0.17*
Death Penalty	0.15*
Second Amendment	0.23*
Stand Your Ground Laws	0.16*
Removing Confederate Monuments	-0.15*
Anti-Environmental Regulations	0.21*
Anti-Abortion Laws	0.20*
Stricter Voting Laws	0.36*
Closing the Southern Border	0.19*
Raids on Immigrants	0.21*
Kids Back in School (COVID-19)	0.00
Company Vaccine Mandates (COVID-19)	-0.25*
Refuse Medical Treatment (COVID-19)	-0.04
Pro-Interventionism	-0.15*
Anti-Interventionism	0.16*
Congressional Approval for Nuclear Strikes	-0.02

* $p < .001$.

insights into the nature of conspiracist ideation, the answer appears to be "yes". There was clear evidence that people high in conspiracist ideation had a somewhat favorable view towards the use of nuclear weapons and other forms of virtuous violence, $\chi^2(1, N = 553) = 13.21, p < .001$. Specifically, for each one-unit increase on the GCB-5, the odds of a participant choosing to launch a nuclear strike rather than continue a ground war increased by 1.28 times, $b = 0.25$, 95 % CI [0.11, 0.39], $SE = 0.07$, Wald $= 3.58, p < .001$. Likewise, people scoring high on the GCB-5 were (a) more likely to report that they had a strong preference for launching a nuclear strike,[10] (b) more likely to approve of the US government launching a nuclear strike against Iran, (c) more likely to believe that such a strike would be ethical, (d) more likely to regard Iran's leaders as being morally at fault for any deaths resulting from the nuclear strike, and (e) more likely to consider the nuclear strike as being appropriate if the Iranian government used a nuclear weapon first (Table 6). Furthermore, the results indicated that survey respondents who were high in conspiracist ideation were also more likely to express support for the death penalty, second-amendment rights, stand-your-ground laws, anti-abortion legislation,[11] raids on immigrants, and closing the US-Mexico border. They were also less likely to express support for the Black Lives Matter movement,[12] the removal of Confederate monuments,[13] and the US intervening to stop genocide and ethnic cleansing in other countries. Taken together, the present findings indicate that people high in conspiracist ideation may harbor an us-versus-them mentality (van Prooijen & van Lange, 2014) and, consequently, commit acts of virtuous violence (Fiske & Rai, 2014; see also Slovic et al., 2020).

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[10] It should be noted that this effect was only significant at 0.002 rather than the more conservative p-value of 0.001 reported throughout the rest of the present manuscript.

[11] This effect was larger among men ($r = 0.36$) than among women ($r = 0.04$).

[12] This effect was larger among people identifying as white ($r = -0.20$) than those identifying as Black ($r = 0.25$), at least after removing three outliers (Mahalanobis $D_1^2 = 12.23$; Mahalanobis $D_2^2 = 8.10$; Mahalanobis $D_3^2 = 6.54$).

[13] This effect was larger among people identifying as white ($r = -0.19$) than those identifying as Black ($r = 0.04$).

7. General discussion

The purpose of the present project was to evaluate the psychometric properties of a short-form version of the Generic Conspiracist Beliefs Scale (Brotherton et al., 2013): the GCB-5. To that end, we conducted five studies (N_{TOTAL} = 2,071). In all five studies, we examined the GCB-5′s reliability by first examining whether it was unidimensional—a prerequisite for calculating many common estimates of reliability (Cortina, 1993; John & Soto, 2007; Schmitt, 1996)—and then by calculating a popular index of reliability (i.e., Cronbach's alpha; Cronbach, 1951). In the first four studies, we also evaluated the GCB-5′s criterion validity by examining its association with the tendency to believe in specific conspiracy theories, as well as with other previously validated measures of conspiracist ideation. In the last four studies, we evaluated the GCB-5′s construct validity by examining its associations with a number of constructs that it should (e.g., paranoia, anomie; support for stricter voting laws) and should not (e.g., trustworthiness; extraversion; conscientiousness) theoretically be associated with. In the final study, we tested whether the GCB-5 is able to provide novel insights into the nature of conspiracist ideation by investigating its association with the tendency to approve of the use of nuclear weapons and other acts of virtuous violence (Fiske & Rai, 2014; see also Slovic et al., 2020).

Turning first to the results for the GCB-5′s reliability, we found consistent evidence across the five studies that a single latent factor underlies the GCB-5. Not only does this align with theory, which suggests conspiracist ideation is a monological belief system (Goertzel, 1994), but it also means that Cronbach's alpha is an appropriate index for estimating the reliability of the GCB-5. In all five studies, the Cronbach's alphas for the GCB-5 (αs = 0.71 - 0.80) were consistently above the conventionally accepted threshold of 0.70 (Nunnally, 1978; but see also Lance et al., 2006). They were somewhat lower than that seen for the GCB-15 (αs = 0.89 - 0.93), but this is to be expected from a short-form measure, especially when the short-form measure was designed to provide the same content coverage as its long-form counterpart. Taken together, the present findings indicate that the GCB-5 is a reliable measure of conspiracist ideation.

Turning to its criterion validity, we demonstrated that the GCB-5 is associated with the tendency to believe in a wide array of conspiracy theories (rs$_{BCTI-21}$ = 0.59 - 0.68; rs$_{BCTI-15}$ = 0.61 - 0.71), including the belief that an alien spacecraft crashed in Roswell, New Mexico, in 1947 (rs = 0.51 - 0.55); the belief that a powerful and secretive group known as the New World Order is planning take over all of the world's governments (rs = 0.45 - 0.54); and the belief that the US government allowed 9/11 to occur to achieve its own goals (rs = 0.44 - 0.54). For the most part, these associations were comparable to those seen for the GCB-15 and larger than those seen for the CMQ. We also found that the GCB-5 was moderately-to-highly associated with other generic measures of conspiracist ideation (rs$_{SELF-REPORT}$ = 0.54-0.77; rs$_{INFORMANT-REPORT}$ = 0.23–0.27), as well as with a COVID-19-specific measure of conspiracist ideation (r = 0.68). Again, for the most part, these associations were similar in magnitude to that seen for the GCB-15 and larger than that seen for the CMQ. These results suggest three things: (1) the GCB-5 is a criterion-valid measure of conspiracist ideation, (2) it has similar levels of criterion validity to the GCB-15, and (3) it has greater levels of criterion validity than the current go-to short-form measure of conspiracist ideation.

The GCB-5 also demonstrated a theoretically consistent pattern of associations with a diverse set of constructs, providing support for its construct validity. People scoring high on the GCB-5 were, for example, more likely to suffer from paranoia (r = 0.38) and delusions (rs = 0.46-0.52), as well as being more likely to feel a sense of anomie (rs = 0.30-0.39) and fatalism (r = 0.31). They were also more likely to express support for putting new laws into place to combat "widespread voter fraud" (r = 0.36) and more likely to express opposition to vaccine mandates (r = -0.25) and environmental regulations (r = 0.21). Even in the few cases where the GCB-5 did not demonstrate the expected

association, such as its null association with interpersonal trust in Study 2 (r = -0.15) or its null association with a need for uniqueness in Study 3 (r = 0.13), the effects were always in the expected direction and similar in magnitude to those seen for the GCB-15 and CMQ. In fact, nearly all of the associations used to evaluate the construct validity of the GCB-5 were comparable in size to those seen for the GCB-15 and the CMQ. The one exception was that the GCB-5 actually demonstrated a *larger* association with the tendency to entertain odd beliefs than did the CMQ (r = 0.46 versus r = 0.24). These results suggest three things: (1) the GCB-5 is a construct-valid measure of conspiracist ideation, (2) it has similar levels of construct validity to the GCB-15, and (3) it has similar levels of construct validity to the CMQ.

Finally, concerning the GCB-5′s usefulness for investigating novel research questions, we demonstrated that conspiracist ideation, as assessed by the GCB-5, was positively associated with the tendency to approve of the use of nuclear weapons, as assessed by responses to several questions about a hypothetical war between the US and Iran. Specifically, we found that people high in conspiracist ideation were more likely to (a) choose to launch a nuclear strike that would kill between 100,000 and 2,000,000 Iranian civilians than continue a ground war that would kill 20,000 American troops, (b) report that they have a strong preference for launching the nuclear strike, (c) approve of the US government making the same decision they did, (d) believe that such a nuclear strike would be ethical, (e) believe that Iran would be morally culpable for any deaths resulting from the nuclear strike because they started the war, and (f) believe that a nuclear response would be warranted if Iran used a nuclear weapon first. Moreover, we found that people high in conspiracist ideation were more likely to endorse beliefs that indicate a distrust or hostility towards one's perceived outgroup (e. g., the belief that raids should routinely be carried out on immigrants) and beliefs that indicate a willingness to engage in acts of violence for ostensibly moral reasons (e.g., the belief that women should be prohibited from having abortions, even if the pregnancy was the result of rape or incest). Taken together, these results indicate that those high in conspiracist ideation may subscribe to an us-versus-them mentality (van Prooijen & Lange, 2014) and, as a consequence, engage in acts of virtuous violence (Fiske & Rai, 2014; see also Slovic et al., 2020). Further work will be necessary to understand the exact nature of these relations, but, for now, the present findings illustrate that the GCB-5 is not simply a measure that is efficient, reliable, criterion-valid, and construct-valid. It is also a measure that has remarkable promise for investigating novel research questions about the psychology of conspiracy theories.

Before concluding, however, there is one final question that needs to be addressed: *what is the benefit of introducing another short-form measure of conspiracist ideation?* As noted in the introduction, a primary advantage of using a short-form measure (such as the GCB-5) over a long-form measure (such as the GCB-15) is that it requires fewer resources to administer and is less likely to result in participant fatigue. However, this doesn't answer why one would want to use the GCB-5 over one of the other short-form measures of conspiracist ideation that are already currently available. For example, there exists the 5-item *Conspiracy Mentality Questionnaire* (CMQ; Bruder et al., 2013), the 4-item *American Conspiracy Thinking Scale* (ACTS; Uscinski & Parent, 2014), and the *One-Item Conspiracy Measure* (1CM; Lantian et al., 2016), all of which have been shown to be valid in their own right. Although a full review and comparison of the existing short-form measures of conspiracist ideation is beyond the scope of the present manuscript, the GCB-5 has several advantages over these other short-form measures that are worth noting.

First, the present study found fairly consistent evidence that the GCB-5 has greater criterion validity than the CMQ. This does not, of course, indicate that the GCB-5 has greater criterion validity than all of the existing short-form measures of conspiracist ideation—the criterion validity of the GCB-5 has never been compared to the criterion validity of the ACTS or the 1CM. However, given the CMQ is currently the leading short-form measure of conspiracist ideation, it does indicate that

many researchers are not assessing conspiracist beliefs with as much accuracy as they theoretically could be. The GCB-5 appears to be one measure that could provide this additional accuracy.

Second, the GCB-5 was designed specifically with content validity in mind. Content validity is the extent to which a measure captures the full breadth of a construct (Cronbach & Meehl, 1955). The GCB-15 was designed to capture the full breadth of conspiracy beliefs by tapping each of the five themes of conspiracist ideation identified by Brotherton and colleagues (2013). When it came to creating the GCB-5, we attempted to retain as much of this conceptual breadth as possible by selecting one item from each of the GCB-15′s five factors. No such process informed the development of the CMQ, ACTS, or 1CM. These scales were intended to be general measures of conspiracist ideation, but they were developed without the use of a framework that would have helped ensure that this was actually the case.[14] As such, if a researcher wants to assess the full breadth of conspiracist belief using a short-form measure, they would be well advised to use the GCB-5.

Finally, the GCB-5 is based on one of the most popular (if not *the* most popular) measures of conspiracist ideation (Goreis & Voracek, 2019). A popular measure is not necessarily a good measure, but it does represent how a construct has typically been assessed within the literature. A result obtained using a short-form version of a popular measure is, therefore, easier to compare to the prior literature than is a result obtained using a bespoke short-form measure. Since the GCB-5 is based on the GCB-15, results obtained using the GCB-5 should be easier to compare to the bulk of the prior literature on conspiracist ideation than results obtained using any of the other existing short-form measures of conspiracist ideation.

8. Limitations and future directions

An oft-repeated adage among psychometricians is that scale evaluation is never over; there is always more than can be learned about any given measure. The present set of studies should, therefore, not be taken as the final word on the GCB-5. Instead, it should be taken simply as an initial investigation into the psychometric properties of the GCB-5. In this section, we outline four ways that this investigation can be extended in future work.

First, future work should assess the test–retest reliability of the GCB-5. In the present study, we assessed reliability by using an equivalence strategy (Cronbach, 1947). In other words, we examined the consistency of the GCB-5′s measurements across its items. We did not, however, assess the consistency of its measurements across time. Past research has found that scores on the GCB-15 assessed at one time are highly correlated with scores on the GCB-15 assessed at another time (Brotherton et al., 2013; Majima & Nakamura, 2020; Siwiak et al., 2019), but future work will be needed to establish whether these findings apply to the GCB-5.

Second, future work should make use of additional measures to assess the construct validity of the GCB-5. The measures used to evaluate the construct validity of the GCB-5 in the present study were, necessarily, a subset of all of the possible measures that could have been used. For example, we studied the relationship between the GCB-5 and COVID-19 conspiracist ideation, but we could have also examined its relationship with the tendency to believe in conspiracy theories about the 7/7 bombings (Swami et al., 2011) or the tendency to believe in conspiracy theories about election fraud (Wood, 2017). Likewise, we examined the relationship between the GCB-5 and delusional ideation, but we could have also examined its relationship with epistemically suspect beliefs (Garrett & Weeks, 2017) or a sense that the world is dangerous and unjust (Clifton et al., 2018). Although we believe the

present set of measures was appropriate for a preliminary validation effort, the use of different measures will be necessary to further establish the construct validity of the GCB-5.

Third (and relatedly), we would encourage future work on the validity of the GCB-5 to consider alternative sources of data. In the present study, we considered data from two sources (i.e., self-report ratings and informant-report ratings), but other sources of data are worthy of exploration. The GCB-5 could, for example, be examined in relation to behavioural-based measures of interpersonal trust (e.g., the trust game; Meuer & Imhoff, 2021) or life-records-based measures of delusional ideation (e.g., a past psychiatric diagnosis of schizophrenia; Escolà-Gascón, 2022). Not only would this help ensure that the findings identified here are not specific to the exact method used, but it would also allow for a more comprehensive understanding of the nature of conspiracist ideation.

Finally, future studies should evaluate whether the GCB-5 is able to assess conspiracist ideation in different countries and cultures. One of the purported benefits of assessing *generic* conspiracist beliefs (e.g., "Evidence of alien contact is being concealed from the public") instead of *specific* conspiracist beliefs (e.g., "The US government is hiding an alien spacecraft in Area 51") is that the scores are less likely to conflate a person's belief in a conspiracy theory with their familiarity with the conspiracy theory (Brotherton et al., 2013; Bruder et al., 2013). As an example, one can imagine that a single-item measure of conspiracist ideation that asks participants whether they believe in the *üst akıl* conspiracy theory would produce far higher scores in Turkey than it would in the US, not because there are necessarily more people in Turkey who believe in conspiracy theories, but simply because there are more people in Turkey who know what *üst akıl* means. Asking about generic conspiracist beliefs that are free of culturally specific content should go a long way in addressing this issue. The GCB-15 has been used to successfully assess conspiracist ideation in the UK (Brotherton et al., 2013), France (Lantian et al., 2016), Poland (Siwiak et al., 2019), Japan (Majima & Nakamura, 2020), and Iran (Atari et al., 2019), but it is yet unclear whether this property would extend to the GCB-5. Future work should examine the GCB-5's ability to assess conspiracist ideation across a diverse set of countries and cultures, including those that are not typically assessed in psychological research (see Henrich et al., 2010).

9. Conclusion

Conspiracy theory researchers have devoted substantial time and effort to developing various tools and methods for assessing conspiracist ideation, and for good reason. The tendency to believe in conspiracy theories is associated with a host of troubling beliefs and behaviours, including climate change denial (Lewandowsky et al., 2013b), political apathy (Butler et al., 1995), vaccine apprehensiveness (Jolley & Douglas, 2014a), Islamophobia (Uenal, 2016), xenophobia (Sapountzis & Condor, 2013), and antisemitism (Kofta & Sedek, 2005). In order to study why conspiracist ideation is associated with these troubling beliefs and behaviours, it is necessary to have measures of conspiracist ideation that are reliable, valid, and, in many cases, efficient. We believe the present set of five studies provides compelling evidence that the GCB-5 is one such measure.

Open Practices.

Data and analysis code are provided at: https://osf.io/cybuv/.

The studies reported in the present manuscript were not preregistered.

CRediT authorship contribution statement

Cameron S. Kay: Conceptualization, Data curation, Investigation, Methodology, Project administration, Visualization, Writing – original draft, Writing – review & editing. **Paul Slovic:** Conceptualization, Funding acquisition, Investigation, Methodology, Visualization, Writing – review & editing.

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[14] To be fair to the 1CM, it is only one item long. Capturing the full breadth of any construct is exceptionally difficult when you only have a single item to work with.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

We have shared the link to our data/code.

Appendix A

A.1. Generic conspiracist beliefs Scale – 5

Directions: Please indicate your level of agreement with each of the statements below using the following rating scale.

6 = Strongly agree.
5 = Moderately agree.
4 = Slightly agree.
3 = Slightly disagree.
2 = Moderately disagree.
1 = Strongly disagree.

1. The government permits or perpetrates acts of terrorism on its own soil, disguising its involvement.
2. Evidence of alien contact is being concealed from the public.
3. New and advanced technology which would harm current industry is being suppressed.
4. Certain significant events have been the result of the activity of a small group who secretly manipulate world events.
5. Experiments involving new drugs or technologies are routinely carried out on the public without their knowledge or consent.

Appendix B. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jrp.2022.104315.

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