UNIVERSITY of CALIFORNIA PRESS | Collabra: Psychology

Holtzman, N. S., Chopik, W. J., Boyer, T. W., & Konrath, S. H. (2024). Concept Creep of Collective Narcissism. *Collabra: Psychology*, *10*(1). https://doi.org/10.1525/collabra.117048

Methodology and Research Practice

Concept Creep of Collective Narcissism

Nicholas S. Holtzman[1], William J. Chopik[2a], Ty W. Boyer[3], Sara H. Konrath[4]

[1] Department of Psychology, Southeastern Louisiana University, Hammond, LA, US, [2] Department of Psychology, Michigan State University, East Lansing, MI, US, [3] Department of Psychology, Georgia Southern University, Statesboro, GA, US, [4] Lily Family School of Philanthropy, Indiana University - Purdue University Indianapolis, IN, US

Keywords: collective narcissism, concept creep, convergent validity, narcissism

https://doi.org/10.1525/collabra.117048

Collabra: Psychology

Vol. 10, Issue 1, 2024

Collective narcissism refers to overvaluing the group with which one identifies. In a widely circulated and attention-grabbing paper, Putnam and colleagues (2018) measured collective narcissism by asking people how much their state in the U.S.A. contributed to the nation's history. This led to some media reports proclaiming that the U.S.A. is "a nation of narcissists." We demonstrated here (valid $N = 539$) that Putnam's operationalization of collective narcissism had a small correlation ($r = .18$) with a traditional individual difference measure of collective narcissism, falling short of typical benchmarks for convergent validity. These results call into question whether collective narcissism can be measured as Putnam did. In the end, this empirical investigation has implications for "concept creep." Measures that lack convergent validity but use the same label (in this case, "collective narcissism") not only create confusion, but also increase the chances of unfounded yet highly publicized claims. In this case, the meaning of the new measure does not adequately reflect the meaning of the original construct—implicating concept creep of collective narcissism.

Putnam and colleagues (2018) examined how people estimate the contribution of their state to the overall history of the United States. Samples from all 50 states reported some degree of overestimation of the importance of their home state compared to what others said about their state (Zaromb et al., 2014, 2018). Putnam and colleagues (2018) drew on the concept of *collective narcissism*—an exaggerated belief about the importance of one's ingroup that is not sufficiently acknowledged by outsiders. Collective narcissism has been linked to perceived threats from and aggression toward outgroups, and holding one's ingroup in higher esteem, although this is often framed as a fragile type of esteem (Cichocka, 2016; Golec de Zavala et al., 2009; Golec de Zavala & Cichocka, 2012). Narcissism is a popular topic with public appeal, so when a study is released showing that the average American overestimates their state's contribution, the U.S. is readily labeled "a nation of narcissists" by some media reports, despite researchers' intentions to hedge their findings (Wan, 2018).

In our view, it was problematic that Putnam and colleagues (2018) made claims about collective narcissism without directly measuring it, and this emboldened columnists in the media to make an even greater inferential leap (i.e., that the U.S.A. is a nation of narcissists). Our purpose here is to evaluate the validity of Putnam's indirect measure of collective narcissism and to determine whether basic claims about collective narcissism were justified in the first place. We show that collective narcissism was not directly assessed and that the measure Putnam used did not sufficiently capture collective narcissism. Broadly, this is a case of "concept creep" (Haslam, 2016), in which a construct begins to lose its denotation. In this instance, the concept is creeping because a new measure was labeled as an indicator of "collective narcissism" without validation, thereby undermining its construct validity.

What is collective narcissism in this context?

The extent that this overestimation phenomenon entails *collective* or *individual narcissism* is an important theoretical and methodological issue. Overestimation of the importance of one's home state likely comes from several sources. For example, living in a state may lead to greater exposure to that state's history, whether communicated through formal education or living through that history, and this bias in availability may lead to overestimation (Tversky & Kahneman, 1973; Yamashiro & Roediger, 2021). Further, people struggle with statistical reasoning and have biases in

a NSH and WJC share first authorship

Correspondence concerning this article should be addressed to William Chopik, Department of Psychology; Michigan State University; 316 Physics Rd.; East Lansing, MI 48824. E-mail: chopikwi@msu.edu

making these types of judgments (Kahneman & Tversky, 1972; Reyna et al., 2009).

To the authors' credit, in addition to advocating for a type of ingroup affection / narcissism, Putnam and colleagues (2018) acknowledge some of these possibilities. These possibilities must be evaluated to assess if overestimation constitutes collective narcissism per se, and if it does so in ways that converge with existing approaches. In fact, we suspect that quantitatively estimating a region's contribution to history is a poor indicator of collective narcissism (Golec de Zavala et al., 2009); overestimation may (instead) reflect other psychological characteristics or ability levels—like simply being inaccurate with statistical or quantitative reasoning. Therefore, we predicted that the correlation between overestimation of one's state's contribution to history would be related to numeracy.

Clarifying what is associated with overestimation of a state's contribution to U.S. history.

Given the significant within-state variability in contribution estimates (Putnam et al., 2018), overestimation can be treated as an individual difference variable and subjected to standard psychometric analyses related to construct validity (Cronbach & Meehl, 1955). If overestimation of one's state's contribution is correlated strongly (e.g., $r > .50$) with an accepted measure of collective narcissism, then the case for the overestimation technique to measuring collective narcissism is strengthened. If, however, overestimation is weakly correlated with collective narcissism—or correlated just as highly with a different measure (e.g., numeracy)—it is unlikely that overestimation is an appropriate measure of collective narcissism. Put simply, this measure of overestimation should correlate strongly with scientifically rigorous measures of collective narcissism. Because collective narcissism is often conceptualized at the individual unit of analysis, we felt justified in examining its associations with other, individual-level phenomena. We pre-registered the hypothesis that the correlation would be less than or equal to .10.

Additionally, we had several peripheral hypotheses that we pre-registered, and thus report here for the sake of comprehensiveness. We aimed to test the difference between the correlation between overestimation and numeracy versus the correlation between overestimation and collective narcissism; this hypothesis would show that the phenomenon is more about numeracy than collective narcissism. We also hypothesized that there would be a correlation ($r > .30$) between identification with one's state and overestimation. Additionally, we predicted that thinking about one's home state would be positively correlated with overestimation of the state's role in U.S. history. Related to the prediction about numeracy, we hypothesized that (self-reported) SAT/ACT scores would negatively correlate with overestimation.

Method

We report how we determined our sample size, all data exclusions, all manipulations, and all measures in the study. This study was pre-registered and has available open materials, code, and data (See: https://osf.io/698qe/?view_only=27488a647aa74236a5885d7e19c6239a).

Participants

Participants ($N = 771$; valid $n = 539$) from a large, public university in Michigan participated for course credit. We pre-registered a stop rule of 750 participants, but incidentally collected 21 more participants than we pre-specified due to a failure to close the automated online data collection mechanism when we reached the target sample; data is available on the OSF website for cross-checking. The participants were mostly female (422 women; 115 men; 1 neither; 1 no answer) college students (age: $M = 19.66$; $SD = 2.04$). The following was the phrasing for the pre-registered exclusionary criteria: "We will exclude anyone who did not grow up in Michigan." The purpose of this is to create a uniform sample (i.e., it should involve people only from Michigan)—a sample that does not involve different state histories (and thus presumably different actual degrees of importance to U.S. history); 129 participants did not grow up in Michigan, so we excluded them. We have two questions embedded in the survey that ask simple questions that all participants should get correct (e.g., "Please mark 5, *strongly agree*"), and we excluded anyone who failed these attention checks; 147 participants failed at least one of these two. Additionally, we excluded all participants who completed the survey in under 5 minutes, which was 35 of them, as it would be nearly impossible to complete this survey diligently in that short length of time. Some of these exclusions were cross-classified (e.g., a participant failed attention checks and also was not from Michigan), so the number of participants for each exclusion will not sum to the total number of excluded participants, which was 232.

Materials

The descriptive statistics and Cronbach's alphas for every measure in our study are presented in Table 1. Brief justifications for including each measure are listed here: We included Putnam's critical item to see if it converged with collective narcissism. We included the collective narcissism measure from Golec de Zavala and colleagues (2009) as a benchmark for a validated measure of this construct. We also included a measure of identifying with one's state to see if it captured the various operationalizations of collective narcissism (e.g., if it captured Putnam's critical item). We measured thinking about one's state to see if it captured Putnam's critical item. We also gathered data on standardized test scores to see if those scores explained variance in Putnam's critical item, perhaps reflecting reduced reasoning capacities. Additionally, we measured pathological narcissism (including grandiose and vulnerable varieties) as a measure of individual differences in narcissism.

Putnam's Critical Item. In the original article, Putnam and colleagues (2018) used a single-item measure to capture the tendency to ascribe historical significance to one's state, and the authors framed this as an indicator of collective narcissism. That single item was used here. We employed the exact wording used in the original, namely, "You

said that you grew up in {state}. In terms of percentage, what do you think was {state's} contribution to the history of the United States? In other words, how responsible was {state} for the historical developments in the United States? Keep in mind that there are 50 states and that the total contribution for all states has to equal 100%." Note that the {state} placeholder was replaced with "Michigan" because participants were from Michigan. The participants answer using a sliding scale from 0 percent responsible to 100 percent responsible.

Golec de Zavala's Collective Narcissism. We used a standardized, valid, and reliable measure of collective narcissism from Golec de Zavala and colleagues (2009). Collective narcissism is the tendency to have grandiose views of one's own group (e.g., state). We used the following prompt, slightly modified from the original so that the measure made sense in the context of this study: "You indicated that you are from {state}–think of this as your 'group' for the questions below. Indicate how much you agree with the items below." A sample item is "I insist upon my group getting the respect that is due to it." The items are rated on a 1 (*I strongly disagree*) to 6 (*I strongly agree*) Likert scale.

Identifying with One's State. To assess the tendency to identify with one's own state, we created a two-item measure. The items were: "How much do you identify with {state}?" and "Is being from {state} meaningful to you in your life?" These were assessed on a Likert scale from 1 (*not at all*) to 5 (*very much*).

Thinking about One's State. To measure the tendency to think about one's state (i.e., accessibility), we created a one-item measure: "How often do you think about {state}?" This was measured on a Likert scale from 1 (*almost never*) to 5 (*very often*).

Numeracy Measures. We used two numeracy measures to help evaluate the hypothesis that quantitative understanding is associated with a reduced tendency to over-inflate one's assessment of the historical importance of one's state. We used Fagerlin's (2007) valid and reliable subjective numeracy scale and the Lipkus numeracy scale (2001). The Fagerlin measure contains eight items intended to assess one's subjective views on the ease with which they can use numerical information like fractions and percentages. A sample item is "How good are you at working with percentages?" Participants respond to this eight-item measure on a Likert scale from 1 (*not at all good*) to 6 (*extremely good*). The Lipkus measure contains three general items to assess one's numerical ability (we did not use the full scale because it contains irrelevant items); in contrast to the Fagerlin measure, this is an objective test, not a subjective measure of one's ability. A sample item is: "Imagine that we rolled a fair, six-sided die 1,000 times. Out of 1,000 rolls, how many times do you think the die would come up even (2, 4, or 6)?" The participants wrote their answer in a blank text box. The Lipkus measure is correlated with the Fagerlin measure (Fagerlin et al., 2007), indicating convergent validity, however, the Lipkus had low reliability in our study (Table 1).

Standardized Test Scores. Participants also provided self-reported standardized test scores, including the American College Test (ACT) and the Scholastic Aptitude Test (SAT). The possible range for the ACT is 1 to 36. The possible range for the SAT is 400-1600. We created *z*-scores for these self-reported scores and computed each participant's mean *z*-score across the two tests.

Pathological Narcissism. The pathological narcissism inventory (Pincus et al., 2009) is a valid and reliable 52-item measure of grandiosity and vulnerability typically seen in narcissistic people. A sample item is, "I often fantasize about being admired and respected" (1=*Not like me at all;* 6=*Very much like me*).

Procedure

Participants completed the Qualtrics survey online for course credit. First, they completed the consent form and demographic questions, including in which state they grew up. Next, they completed three blocks of questions (which here we'll label A, B, and C), and the order of these three blocks was randomized. The purpose of maintaining Putnam's approach and retaining these measures from Putnam's method was solely for fidelity of the replication (e.g., to eliminate potential confounding across implementations from different research groups); most of these measures are not directly relevant to our main point in this manuscript. In block A, to maintain consistency with Putnam's Qualtrics survey, participants listed the ten most important events in United States history and took a history quiz. In block B, they answered Putnam's critical question about the historical contributions of the state in which they grew up. In block C, they completed measures of collective narcissism (items were randomized), pathological narcissism (items were randomized), two measures of numeracy—the Fagerlin measure (items were randomized) and the Lipkus measure (items were randomized), identification with one's state (items were randomized), and they also completed a one-item accessibility measure about thinking of one's state. The sets of items within block C were also randomized.

Participants also completed items about states they did *not* grow up in (e.g., their percentage responsible for U.S.A. history). Then they provided their scores on the standardized college entrance exams—the SAT and ACT. Near the end, participants completed items about which states contributed most to U.S. history and which state has the most sway over the country. They were asked how much each of those highly contributing states contributed, in the percentage metric. They were asked which state overestimates their contribution the most. They listed the states in which they have lived for over five years. They indicated whether they looked up answers about U.S. history during the survey, and, if so, what they looked up. They were asked how difficult the survey was and were given a chance to provide open-ended feedback about the survey.

Results

To contextualize these results, if every state in the 50 United States is 2% responsible for the history of the U.S.A., then 2% should be the reported amount of a state's con-

Table 1. Descriptive Statistics and Cronbach's alpha for each measure.

			Actual Range		Possible Range		
	M	*SD*	Min	Max	Min	Max	α
Putnam's Critical Item	15.64	15.30	0.00	80.00	0.00	100.00	NA
Golec de Zavala Collective Narc.	2.80	0.86	1.00	5.22	1.00	6.00	0.83
Identify with State	3.78	1.06	1.00	5.00	1.00	5.00	0.84
Think about State	3.07	1.08	1.00	5.00	1.00	5.00	NA
Fagerlin Numeracy	4.04	0.91	1.38	6.00	1.00	6.00	0.77
Lipkus Numeracy	0.61	0.33	0.00	1.00	0.00	1.00	0.45
Numeracy Overall	0.01	0.83	-2.33	1.61	NA	NA	NA
Standardized Tests	0.00	1.00	-3.15	2.85	NA	NA	NA
PNI Vulnerable Narc.	3.02	0.95	1.08	5.73	1.00	6.00	0.94
PNI Grandiose Narc.	3.23	0.81	1.12	5.54	1.00	6.00	0.92
PNI Narcissism Overall	3.13	0.81	1.15	5.48	1.00	6.00	0.96

Note. α = Cronbach's alpha coefficient; Narc. = narcissism; PNI = Pathological Narcissism Inventory; Min = minimum score; Max = maximum score.

tribution to the history of the U.S.A., bringing the total to 100%. However, participants reported an estimation of Michigan's history that far exceeded 2% (i.e., 16%); this 16% estimate was identical to the (over-) estimation found in Putnam and colleagues (2018) for Michigan, and thus replicated one of Putnam's key results.

The correlations among the variables in our study are shown in Table 2, with the first column being the most important. Noteworthy was the small correlation (r = .18) between Putnam's critical item and Golec de Zavala's collective narcissism measure. The correlation between overall numeracy and Putnam's item was nominally larger in absolute value (r = -.26), suggesting that Putnam's item captures innumeracy at least as much as it captures collective narcissism. To test whether these correlations were different, we computed the absolute value of the overall numeracy index. The two correlations—with collective narcissism and with the overall numeracy index—were not significantly different (p = .16), according to Steiger's Case A formula (Steiger, 1980).

Putnam's critical item exhibited some medium correlations with measures linked to achievement or intelligence, including the separate numeracy scales (Fagerlin: r = -.16; Lipkus: r = -.27), and standardized test scores (ACT and SAT; r = -.27). Otherwise, Putnam's item was only trivially associated with other measures in our study. Namely, the associations between Putnam's item and identifying with one's state (r = .08), thinking about one's state (r = -.01), and the three indices of pathological narcissism (Vulnerable: r = .02; Grandiose: r = .07; Total Pathological Narcissism: r = .04) were trivial and not statistically significant in their zero-order form. As an exploratory analysis, we tested the difference between the correlation magnitudes using the Steiger Case A approach (Steiger, 1980). None of the differences were statistically significant, all ps > .10.

All in all, the profile of correlations suggests that Putnam's index captures numerical intelligence or numerical achievement at least as well as it captures anything related to narcissism, and, in some cases, more than measures of narcissism. Specifically, the Putnam item had very low correlations with individual (pathological) narcissism and low correlations with collective narcissism. If the Putnam item was an indicator of collective narcissism, then it would be reasonable to expect some non-trivial association with individual narcissism (as more traditional measures of collective narcissism show), but we did not find that. It is worth pointing out that collective narcissism as measured by Golec de Zavala's measure was indeed positively associated with individual (pathological) narcissism (r = .39), suggesting that this measure of collective narcissism had some validity in terms of partially reflecting some shared variance with individual narcissism. Finally, numeracy was unrelated to the collective narcissism measure by Golec de Zavala (r = -.01) and largely unrelated to PNI overall (r = .04). So, these measures of narcissism had little relation with numeracy.

This set of results raises questions about the convergent and discriminant validity of the Putnam item. Simply put, the Putnam item about ascribing historical significance to one's state does not seem to represent collective narcissism.

Discussion

We found that claiming that one's state has outsized significance in the history of the United States—dubbed a measure of "collective narcissism" in Putnam and colleagues (2018)—is only modestly related to collective narcissism as formally theorized by Golec de Zavala and colleagues (2009). This measure of significance in the history of the United States was related to the ease with which people understand numbers and percentages (i.e., numeracy). These two correlations were not meaningfully statistically different from each other. This means that the extent to which numeracy captures one's tendency to overestimate the significance of one's state's history is about the same as the extent to which classic measures of collective narcissism capture this tendency. Put bluntly, it's probably about quantitative ability just as much as it's about collective narcissism. This finding is remarkably consistent with

Table 2. Correlations (valid *n* = 539), 95% confidence intervals, and *p*-values.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Putnam's Critical Item	—	< .001***	.058	.746	< .001***	< .001***	< .001***	< .001***	.648	.127	.307
2. Golec. Collective Narc.	.18 [.10, .26]	—	< .001***	< .001***	.570	.339	.862	.004**	< .001***	< .001***	< .001***
3. Identify with State	.08 [.00, .17]	.33 [.25, .40]	—	< .001***	.582	.262	.793	.138	.450	.014*	.439
4. Think about State	-.01 [-.10, .07]	.24 [.16, .32]	.47 [.40, .53]	—	.001**	.014*	.001**	.436	.015*	< .001***	< .001***
5. Fagerlin numeracy(subjective)	-.16 [-.24,-.08]	.02 [-.06, .11]	.02 [-.06, .11]	.14 [.06, .22]	—	< .001***	< .001***	< .001***	.183	.007**	.037*
6. Lipkus numeracy(objective)	-.27 [-.35,-.19]	-.04 [-.13, .04]	-.05 [-.13, .04]	.11 [.02, .19]	.37 [.29, .44]	—	< .001***	< .001***	.730	.588	.664
7. Numeracy Overall	-.26 [-.34,-.18]	-.01 [-.09, .08]	-.01 [-.10, .07]	.15 [.07, .23]	.83 [.80, .85]	.83 [.80, .85]	—	< .001***	.242	.040*	.094
8. Standardized Testing	-.27 [-.36,-.17]	-.15 [-.24,-.05]	-.08 [-.17, .02]	.04 [-.06, .14]	.23 [.14, .33]	.39 [.30, .47]	.36 [.27, .45]	—	.179	.605	.308
9. PNI Vuln. Narc.	.02 [-.07, .10]	.30 [.22, .38]	-.03 [-.12, .05]	.10 [.02, .19]	.06 [-.03, .14]	.02 [-.07, .10]	.05 [-.03, .14]	.07 [-.03, .17]	—	< .001***	< .001***
10. PNI Grand. Narc.	.07 [-.02, .15]	.43 [.35, .49]	.11 [.02, .19]	.19 [.11, .27]	.12 [.03, .20]	.02 [-.06, .11]	.09 [.00, .17]	.03 [-.07, .13]	.72 [.68, .76]	—	< .001***
11. PNI Total Narc.	.04 [-.04, .13]	.39 [.31, .46]	.03 [-.05, .12]	.16 [.07, .24]	.09 [.01, .17]	.02 [-.07, .10]	.07 [-.01, .16]	.05 [-.05, .15]	.94 [.93, .95]	.91 [.90, .93]	—

Note. Correlations are below the diagonal with the 95% CIs in square brackets; exact *p*-values are above the diagonal: ***p<.001; **p<.01; *p<.05. Grand. = Grandiosity; Narc. = Narcissism; PNI = Pathological Narcissism Inventory; Vuln. = Vulnerable.

those reported in a recent paper (Putnam et al., 2024). Furthermore, we predicted that overestimation would be negatively related to ACT/SAT scores, and this prediction was indeed consistent with the data. So, there is converging evidence both within our results and across the (small) literature that overestimation reflects a general lack of cognitive facility.

Additionally, we tested the hypotheses that identification with one's state would be positively related (predicted $r > .30$) to overestimation of that state's contributions to U.S. history, however, this correlation was .08 and was not statistically significant. This failure to reject the null hypothesis may be traceable to psychometric issues, such as potentially low reliability of the measure we used. It may be fruitful to use a different, more robust, measure of identity (e.g., one reviewer pointed to Luhtanen & Crocker, 1992). We also predicted that thinking about one's state would be associated with overestimation, but it was not significantly associated. Instead, identifying with one's state associated with higher collective narcissism as measured by the Golec de Zavala (2009) measure of collective narcissism.

Overall, the emergent pattern is that there's a small-to-medium correlation between overestimation and collective narcissism as measured by Golec de Zavala (2009); there's also a negative relationship between numeracy and overestimation; this is buttressed by a similar negative relationship between standardized test scores (ACT/SAT) and overestimation, perhaps reflecting a measure of more general latent intelligence or scholastic achievement factor. This is largely consistent with Putnam and colleagues (2024), showing nice convergence across independent labs.

Putnam and colleagues (2018) were refreshingly agnostic about the exact origins of the overestimation of historic contributions. However, in labeling something as collective narcissism (i.e., in the title of the paper), our worry is that others will not be as careful in considering the implications of this research (Wan, 2018). Sometimes, expanding a concept like collective narcissism to characterize different sorts of behavior is both conceptually and methodologically appropriate. Indeed, in the original conceptualization of collective narcissism, Golec de Zavala and colleagues (2009) drew explicit parallels in how individual and collective narcissism overlap and depart from one another.

When creating a measure of a construct in a different context or different unit of analysis, several steps are necessary to ensure that the new measure is indeed capturing the phenomenon of interest (Flake et al., 2017; Flake & Fried, 2020). Otherwise, the field runs the risk of engaging in the problematic features of *concept creep*—in which concepts expand in their meaning to encompass a broader range of phenomena than before (Haslam, 2016). Although Haslam (2016) limited his discussion to concept creep surrounding ideas about harm and victimization, there is no reason why this recognition of concepts getting larger must be limited to these topics.

The same concept creep might be occurring for collective narcissism and narcissism in general. Concept creep may lead to expanding the definition of narcissism to include virtually any cognitive bias (e.g., overestimation) that involves some degree of self or group enhancement. The risk of interpretations from studies like Putnam and colleagues (2018) is that the definition of collective narcissism becomes so malleable that seemingly tangential indicators—such as overestimating how much one's own state contributed to history—are taken to characterize whole countries or regions as narcissistic.

One other interesting implication is that concept creep may not be limited to qualitative theorizing but may become stamped into the measures of those theoretical constructs. As concepts change through concept creep, the way measures get generated and labeled changes too, to reflect the content of the new (expanded) concepts. This seems to be precisely what happened with the *Psychological Science* paper (Putnam et al., 2018): The concept of collective narcissism became the label for a measure that was correlated only about .15 to .20 with collective narcissism as it was originally measured by Golec de Zavala and colleagues (2009).

With these points in mind, we must acknowledge several limitations of our study. Our results are based largely on a sample of (mostly) young, female college students from Michigan. So, one possibility is that the effects might be larger in other samples more representative of the nation. A related limitation is that because virtually all our participants were from Michigan, we could not compute the inflation index that Putnam and colleagues (2024) recommend, which contrasts the overclaiming of people from Michigan with the degree to which outsiders say Michigan is responsible for U.S. history; however, this would involve subtracting a constant from the personal overestimation of contribution to history, and thus it would not change the correlations we obtain. Another limitation is that some of our measures were admittedly first face-valid attempts at finding relationships with the critical item, and thus were not psychometrically sound (e.g., too few items per measure); naturally, these were kept brief for the sake of efficiency in this somewhat lengthy study for participants, but this aim for efficiency can detract from reliability. One final limitation is that we did not correct for the number of statistical tests performed, meaning that there is some increased risk of Type 1 error (false positives). The confidence intervals displayed in Table 2 alleviate some of these concerns, as they lead to similar conclusions, regardless of probability values from null hypothesis significance testing.

The improvement of psychological science depends on high quality measurement—including taking careful steps toward construct validation (Cronbach & Meehl, 1955). We fear that, in this case, the Putnam measure of collective narcissism is not actually a measure of collective narcissism. Our criticism in this article is leveled specifically at the article in *Psychological Science* (Putnam et al., 2018), and not as a general criticism of the scientists. Indeed, to their credit, Putnam's team has very recently corrected the interpretation of the critical item (Putnam et al., 2024) and now view their critical item as an indicator of overclaiming, which we find more plausible; it allows the concept and measurement of collective narcissism to remain faithful to the original theory. So, we applaud this change. Although

our manuscript is circumscribed in its foci, it represents a broad tenet of the mission of *Collabra: Psychology*. That is that honest, critical, and open discourse helps improve psychological science.

Author Contributions

NS Holtzman and WJ Chopik developed the study concept. All authors contributed to the study design. Testing and data collection were performed by NS Holtzman and WJ Chopik. NS Holtzman performed the data analysis and interpretation. NS Holtzman and WJ Chopik drafted the manuscript, and all authors provided critical revisions. All authors approved the final version of the manuscript for submission.

Conflicts of Interest Statement

The authors claim that they have no conflicts of interest with respect to this article. WJC is an editor at Collabra Psychology. He was not involved in the review process of this manuscript.

Data Accessibility Statement

All the data and R code is available at the OSF website (https://osf.io/698qe/).

Submitted: November 10, 2023 PDT, Accepted: March 20, 2024 PDT

References

Cichocka, A. (2016). Understanding defensive and secure in-group positivity: The role of collective narcissism. *European Review of Social Psychology*, *27*(1), 283–317. https://doi.org/10.1080/10463283.2016.1252530

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*(4), 281. https://doi.org/10.1037/h0040957

Fagerlin, A., Zikmund-Fisher, B. J., Ubel, P. A., Jankovic, A., Derry, H. A., & Smith, D. M. (2007). Measuring numeracy without a math test: development of the Subjective Numeracy Scale. *Medical Decision Making*, *27*(5), 672–680. https://doi.org/10.1177/0272989x07304449

Flake, J. K., & Fried, E. I. (2020). Measurement schmeasurement: Questionable measurement practices and how to avoid them. *Advances in Methods and Practices in Psychological Science*, *3*(4), 456–465. https://doi.org/10.1177/25152459209523

Flake, J. K., Pek, J., & Hehman, E. (2017). Construct Validation in Social and Personality Research: Current Practice and Recommendations. *Social Psychological and Personality Science*, *8*(4), 370–378. https://doi.org/10.1177/1948550617693063

Golec de Zavala, A., & Cichocka, A. (2012). Collective narcissism and anti-Semitism in Poland. *Group Processes & Intergroup Relations*, *15*(2), 213–229. https://doi.org/10.1177/1368430211420891

Golec de Zavala, A., Cichocka, A., Eidelson, R., & Jayawickreme, N. (2009). Collective narcissism and its social consequences. *Journal of Personality and Social Psychology*, *97*(6), 1074. https://doi.org/10.1037/a0016904

Haslam, N. (2016). Concept creep: Psychology's expanding concepts of harm and pathology. *Psychological Inquiry*, *27*(1), 1–17. https://doi.org/10.1080/1047840X.2016.1082418

Kahneman, D., & Tversky, A. (1972). Subjective probability: A judgment of representativeness. *Cognitive Psychology*, *3*(3), 430–454. https://doi.org/10.1016/0010-0285(72)90016-3

Lipkus, I. M., Samsa, G., & Rimer, B. K. (2001). General performance on a numeracy scale among highly educated samples. *Medical Decision Making*, *21*(1), 37–44. https://doi.org/10.1177/0272989x0102100105

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, *18*(3), 302–318. https://doi.org/10.1177/0146167292183006

Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G., & Levy, K. N. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment*, *21*(3), 365. https://doi.org/10.1037/a0016530

Putnam, A. L., Ross, M. Q., Soter, L. K., & Roediger, H. L. (2018). Collective Narcissism: Americans exaggerate the role of their home state in appraising U.S. history. *Psychological Science*, *29*(9), 1414–1422. https://doi.org/10.1177/0956797618772504

Putnam, A. L., Yamashiro, J. K., Tekin, E., & Roediger, H. L. (2024). Collective overclaiming is related to collective narcissism and numeracy. *Memory & Cognition*. https://doi.org/10.3758/s13421-023-01504-5

Reyna, V. F., Nelson, W. L., Han, P. K., & Dieckmann, N. F. (2009). How numeracy influences risk comprehension and medical decision making. *Psychological Bulletin*, *135*(6), 943. https://doi.org/10.1037/a0017327

Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin*, *87*(2), 245–251. https://doi.org/10.1037/0033-2909.87.2.245

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, *5*(2), 207–232. https://doi.org/10.1016/0010-0285(73)90033-9

Wan, W. (2018). America is a nation of narcissists, according to two new studies. *The Washington Post*. https://www.msn.com/en-ca/news/world/america-is-a-nation-of-narcissists-according-to-two-new-studies/ar-AAzyH6G

Yamashiro, J. K., & Roediger, H. L., III. (2021). Biased collective memories and historical overclaiming: An availability heuristic account. *Memory & Cognition*, *49*(2), 311–322. https://doi.org/10.3758/s13421-020-01090-w

Zaromb, F. M., Butler, A. C., Agarwal, P. K., & Roediger, H. L. (2014). Collective memories of three wars in United States history in younger and older adults. *Memory & Cognition*, *42*(3), 383–399. https://doi.org/10.3758/s13421-013-0369-7

Zaromb, F. M., Liu, J. H., Páez, D., Hanke, K., Putnam, A. L., & Roediger, H. L. (2018). We Made History: Citizens of 35 Countries Overestimate Their Nation's Role in World History. *Journal of Applied Research in Memory and Cognition*, *7*(4), 521–528. https://doi.org/10.1016/j.jarmac.2018.05.006

Supplementary Materials

Peer Review History

Download: https://collabra.scholasticahq.com/article/117048-concept-creep-of-collective-narcissism/attachment/225457.docx?auth_token=DggX18j7hmkjlWz-RdAu