

CORRIGENDUM

# Acquiescence Bias Inflates Estimates of Conspiratorial Beliefs and Political Misperceptions - CORRIGENDUM

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In the original publication of “Acquiescence Bias Inflates Estimates of Conspiratorial Beliefs and Political Misperceptions” (Hill and Roberts, 2023), 14 respondents with missing values for their education variable were coded as –3105 by the survey vendor, which we unfortunately did not notice. We thank Adam Bouyamourn, Andrés Cruz, and Joseph Ornstein for alerting us to this error.

We summarized the contribution of Hill and Roberts (2023) in the abstract as

With new surveys fielding questions asked in recent scholarship, we show that acquiescence bias inflates estimated incidence of conspiratorial beliefs and political misperceptions in the United States and China by up to 50%. Acquiescence bias is disproportionately prevalent among more ideological respondents, inflating correlations between political ideology such as conservatism and endorsement of conspiracies or misperception of facts. We propose and demonstrate two methods to correct for acquiescence bias. (Hill and Roberts, 2023, Abstract)

This mis-coding does not change any of the main results or contributions of the paper summarized in the abstract or main text. We still conclude that acquiescence bias affects responses to survey questions substantially, and stand by our methodological proposal to counteract it.

The large negative value –3105, however, influenced the estimated regression coefficients on education in our original Table 2, which presented correlations between individual characteristics and magnitude of acquiescence bias. We have estimated a corrected version of Table 2, setting those respondent education values to missing, below as Table 1. For reference, we also present the original uncorrected Table 2 as Table 2.<sup>1</sup>

The correspondence between individual characteristics and acquiescence bias was not of primary interest in Hill and Roberts (2023). Following earlier literature on acquiescence bias that found interesting correlations between magnitude of the bias and individual characteristics including numeracy, age, and education, however, we presented the correlations from our data for readers’ reference. In addition, our methodological approach also allows better estimates for these individual-characteristic correlations.

In the published article, about the education interaction we wrote

- “We find that acquiescence-response bias can have important effects not only on estimates of the population rate of beliefs, but also on the correlation between beliefs and individual characteristics such as education and political ideology”(p. 575).
- “In sum, for each of the studies that we refielded, we find that magnitude of acquiescence bias varies by characteristics of the respondent. Acquiescence bias for these questions is more common among very conservative subjects, very liberal subjects, younger subjects, those with innumeracy, and those with lower education” (p. 583).

<sup>1</sup>If other scholars might learn from our experience, that the education coefficients were estimated to five significant digits should have flagged our attention.

**Table 1.** Revision of Table 2, Hill and Roberts (2023, p. 584).

	Dependent variable: Agreement with the conspiratorial headline			
	All	Big fake	All	Big fake
Aligned	0.069 (0.009)	0.083 (0.013)	0.070 (0.009)	0.084 (0.013)
Pos keyed	0.140 (0.010)	−0.006 (0.013)	0.069 (0.028)	0.035 (0.036)
Numeracy			0.0002 (0.007)	−0.016 (0.009)
Age			−0.0001 (0.0003)	−0.001 (0.0004)
Education			−0.011 (0.003)	−0.012 (0.004)
Pos keyed X Aligned	0.024 (0.012)	0.068 (0.016)	0.024 (0.012)	0.067 (0.016)
Pos keyed X Numeracy			−0.015 (0.010)	−0.021 (0.013)
Pos keyed X Age			−0.001 (0.0004)	−0.003 (0.001)
Pos keyed X Education			0.024 (0.005)	0.026 (0.005)
Constant	0.410 (0.007)	0.380 (0.009)	0.470 (0.019)	0.500 (0.025)
Observations	15,431	7,707	15,286	7,635
R <sup>2</sup>	0.046	0.029	0.050	0.064
Adjusted R <sup>2</sup>	0.046	0.029	0.050	0.063

We evaluated the correlation between magnitude of acquiescence bias and individual characteristics through the interaction terms in the original Table 2 (i.e., the coefficient on “Pos keyed × Aligned,” “Pos keyed × Numeracy,” “Pos keyed × Age,” and “Pos keyed × Education”). To the extent the mis-coding corrected in the analysis presented here should change conclusions from the original publication, it would be through changes to the estimated coefficients on these interactions.

Comparing these coefficients in Table 2 versus Table 1, we find no substantive change in correlations for ideology (“Aligned”) or age. We find changes in the point estimate on numeracy. The change increases the magnitude of the coefficients and so would, if anything, strengthen what we offered as suggestive evidence of a correlation between numeracy and bias. However, in both cases the estimates are noisy, and so we did not present any strong conclusions that would require revision.

The interaction on education, however, does change substantively. With the corrected data set, acquiescence bias is *positively* instead of *negatively* correlated with education. This is surprising as previous literature (e.g., Campbell et al., 1960, pp. 512–514) had found that education is negatively correlated with acquiescence bias. This seems to us to merit further study.

We thus propose that readers revise their summary of the evidence from acquiescence bias negatively correlated with education to acquiescence bias positively correlated with education.

Table 2. Original Table 2, Hill and Roberts (2023, p. 584).

	Dependent variable: Agreement with the Conspiratorial Headline			
	All	Big Fake	All	Big Fake
Aligned	0.069 (0.009)	0.083 (0.013)	0.069 (0.009)	0.083 (0.012)
Pos Keyed	0.140 (0.010)	−0.006 (0.013)	0.170 (0.023)	0.140 (0.029)
Numeracy			−0.005 (0.007)	−0.022 (0.009)
Age			−0.0002 (0.0003)	−0.001 (0.0004)
Education			0.00002 (0.00001)	0.00002 (0.00002)
Pos Keyed*Aligned	0.024 (0.012)	0.068 (0.016)	0.025 (0.012)	0.069 (0.016)
Pos Keyed*Numeracy			−0.002 (0.010)	−0.007 (0.012)
Pos keyed*Age			−0.001 (0.0004)	−0.003 (0.001)
Pos Keyed*Education			−0.0001 (0.00002)	−0.00003 (0.00002)
Constant	0.410 (0.007)	0.380 (0.009)	0.420 (0.015)	0.450 (0.020)
Observations	15,431	7,707	15,419	7,701
R <sup>2</sup>	0.046	0.029	0.048	0.060
Adjusted R <sup>2</sup>	0.046	0.029	0.047	0.059

In addition to this corrigendum, we also publish corrected versions of the Online Appendix and the replication dataset (Hill and Roberts, 2022).

Analysis of responses to questions we repeated from Allcott and Gentzkow (2017) in our U.S. 2020 survey. Impact of Allcott and Gentzkow (2017) question wording on belief varies by ideological alignment. Left regression is all statements, right regression “Big Fake” statements. Standard errors clustered on the respondent in parentheses.

References

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