

# Review of: "Correlations between Socioeconomic Status (SES) and Biogeographic Ancestries: Indirect Evidence of SES Model Misspecification"

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Potential competing interests: No potential competing interests to declare.

This study performs a meta-analysis of the relationship between ancestry and SES, based on a thorough, systematic review of the literature and rigorous statistical methods.

The introduction requires some improvements. The hypothesis is only stated in ambiguous terms and should be clearly explained. Moreover, almost an entire paragraph should be removed because these are results that can be reported in the results or discussion section: "European BGA admixture proportions showed a positive correlation with SES indicators,  $r = .16$  (95% confidence interval: .13 to .19), whereas both Amerindian and African BGA admixture proportions were negatively correlated at  $r = -.11$  (95% confidence interval: -.15 to -.06) and  $r = -.13$  (95% confidence interval: -.17 to -.09), respectively. The same pattern emerges in examining the sign of the estimated association (correlation or other non-correlation statistics such as ANOVA or odds ratios giving directional association) across study samples: 58 out of 68 (85%) of the European BGA-SES estimated associations are positive, 2 of the 68 (3%) are negative, and in the remaining 8 of the 68 samples (12%) the results are indeterminate with no clear direction across measures of association within the study. In the case of Amerindian BGA-SES, 65 of the 76 samples (86%) show a negative association, 4 samples (5%) show a positive association, and the remaining 7 cases (9%) are indeterminate. For African BGA-SES associations, 63 of the 77 samples (82%) show negative estimated associations, 10 samples (13%) show a positive association, and the remaining 4 samples (5%) are indeterminate. In all three cases, the signed proportions are highly statistically significant against the null hypothesis of no underlying association."

Rather than presenting the results in the introduction, the authors should state what their predictions are regarding the direction and magnitude of association between the three ancestries and SES, based on previous studies. For example, if previous studies have already shown a negative association between African and Amerindian ancestry and SES or education or IQ, the authors should cite them.

Again, here it looks like the authors anticipated the conclusion: "Nonetheless, examining a broad swath of these studies, the meta-analytic results are clear and consistent despite not being the empirical focus in any of the individual studies." This sentence should be removed.

