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TITLE: Vaccine willingness and socioeconomic status: a biometrically controlled design

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ABSTRACT:

Recent reports detail health disparities amongst ethnic minorities during the Covid-19 pandemic (Hooper et al., 2020). These disparities are often attributed to socioeconomic status (SES), pre-existing health conditions (Ssentego et al., 2020), or Covid-19 severity (Yang et al., 2020). Interventions to mitigate these disparities must explicitly account for known gene-and-environmental confounds (Garrison & Rodgers, 2019; Williams et al., 2020).

Given the oft-mentioned necessity for a Covid-19 vaccine before returning to normalcy, we aim to identify the relationship between SES and vaccination willingness through a sibling-comparison design using the influenza vaccine as a proxy. We use data from the 1979 National Longitudinal Survey of Youth (n = 12,686). Applying a discordant-kinship model, we found a

significant relationship between SES and vaccine willingness, independent of gene-and-environmental variance.

Hooper, Nápoles, & Pérez-Stable (2020). COVID-19 and Racial/Ethnic Disparities. *JAMA*.

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Yang, Gui, & Xiong (2020). Comparison of Clinical Characteristics of Patients with Asymptomatic vs Symptomatic Coronavirus Disease 2019 in Wuhan, China. *JAMA Network Open*, 3(5)

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