The Funding Gap: Investigating Distributions of Research Funding in the NIH Associated With Communal Marginalization

Del Aguila, Carlos (School: New Rochelle High School)

Marginalization of historically disadvantaged communities manifests in academia through inequitable funding structures. Scientists identifying as members of minority groups face greater difficulty receiving research grants from the National Institute of Health, specifically. However, there is no current literature that considers the relationship community-wide marginalization, rather than the marginalization of individuals, may have on academic success. This viewpoint may prove vital in undoing the inequities observed for marginalized individuals worldwide. I used three publicly known databases to answer this question, NIH-RePORTER, US News and World Report Ranking of Research Colleges, and the US Census. Manually, I combined all three databases into one new database with 760 characteristics, including socioeconomic demographics, funding, and racial composition. Spearman's correlations were used to determine one-to-one, monotonic relationships between cross-database variables. A moderately positive correlation was found between black populations and the amount of funding an institution receives ($r=0.33$, $p=0.043$). However, a moderately negative correlation was found between white populations' funding ($r=-0.413$, $p=0.010$). All other relationships were statistically insignificant, with p-values greater than 0.05. Furthermore, the diversity of institutions themselves were not correlated with their amount of funding. The lack of significance across demographic data also paints a promising picture for the future. For a system to be equitable, no group can be more or less inclined to opportunity. Thus, the results suggest academic research is approaching equity.

Awards Won: