



While ethnicity is also primarily a sociocultural term, it is intertwined with biological precursors, parameters, and consequences for both individuals and groups that remain important to scrutinize. Ethnicity takes in components such as historical, linguistic, and psychological factors, each of which can be examined for possible biological correlations. A person's first language has been shown to influence brain physiology, which shapes their interpretation and behavior. Ideologies reflect languages and the social and cultural systems they belong to. Thus ethnic groups, which are otherwise biologically diverse, can have greater consistency in their social experience.

Racial and ethnic minorities are also underrepresented in clinical research, raising a concern because of the possibly different reactions of different races and ethnicities. A myriad of components in ethnicity can influence an individual's reaction to medication or biology in general. One detrimental social factor is a phenomenon called "weathering." Just as water erodes rock over time, systemic racism creates a chronic stress that breaks down the bodies and health of minority populations. This water trickles into the very scientific research that could help them, creating a loop of exclusion that pushes minority population further into lower qualities of life and access to healthcare. People of color often experience diabetes, heart disease, and metabolic diseases at earlier ages compared to white populations, excluding them from longitudinal studies. These studies aim to observe disease onset with age over time and often select the healthiest participants in order to see results. This exclusion of those who already have the condition being studied harms not only people of color but everyone impacted by scientific research. This and other forms of selection bias are important but often overlooked, making it crucial for scientists to not only re-evaluate old studies but also think more about their current study designs.

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