

A re-examination of the role of skin tone in within-race health disparities in Black Americans and an exploration of potential underlying mechanisms

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Findings from prior research investigating the association between skin tone and health status in Black Americans are mixed—some studies show that Black Americans with lighter skin tone have better physical/mental health than those with darker skin tone, while others show no association. Additionally, among the studies that have found an association between skin tone and health, very few have systematically investigated the mechanisms underlying the association. The goal of this study was two-fold: 1) to reconcile inconsistencies in previous findings; and 2) to explore multiple mechanisms through which skin tone may affect health in Black Americans. One hundred and eighteen self-identified Black Americans completed a series of measures, including physical/mental health as well as factors that may be associated with both skin tone and health (e.g., income, perceived discrimination, self-esteem), and then participated in a skin tone assessment. One likely reason for the previously mixed findings is the use of suboptimal techniques in past studies assessing skin tone. In the present study, we quantified skin tone by objectively assessing luminosity from participant faces using a spectrometer. There was a significant association between skin tone and mental health ($r = .21, p = .02$) and a marginally significant association between skin tone and physical health ($r = .16, p = .09$), indicating that Black Americans with lighter skin tone tend to be healthier than those with darker skin tone. Furthermore, a series of mediation analyses using bootstrapping technique provided preliminary results suggesting that the association between skin tone and mental health was mediated by both self-esteem and perceived discrimination independently, whereas the association between skin tone and physical health was mediated by self-esteem. These results offer further insight into the role of skin tone in within-race health disparities and may aid in the development of potential interventions as these mediators found in this study are relatively malleable psychological constructs.