

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

To Dye or Not to Dye : The Effect of Hair Color on First Impressions

Permalink

<https://escholarship.org/uc/item/5vc329gc>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 42(0)

Authors

Song, Amanda

Yadav, Devendra Pratap

Hu, Weifeng

et al.

Publication Date

2020

Peer reviewed

To Dye or Not to Dye : The Effect of Hair Color on First Impressions

Amanda Song

University of California, San Diego, San Diego, California, United States

Devendra Pratap Yadav

University of California San Diego, La Jolla, California, United States

Weifeng Hu

University of California, San Diego, San Diego, California, United States

Garrison Cottrell

UCSD, La Jolla, California, United States

Ed Vul

University of California, San Diego, La Jolla, California, United States

Abstract

How does hair color affect people's first impression of a face? Equipped with state-of-the-art Generative Adversarial Network (GAN) models, we are able to re-investigate the questions with strictly and precisely controlled image stimuli. By creating triplets of the same face image with different hair colors, we examine how black/brown/blond hair colors affect perception of attractiveness, trustworthiness and intelligence. Our study finds that if the original hair color is dark, the optimal choice in most cases is to stay in dark colors. If your original hair color is blond, changing into brown will, in general, make you look more intelligent, sometimes at the cost of attractiveness. The specific best color choice varies a lot more for people with blond hair. Furthermore, we train a neural network model that predicts people's impressions on faces in different trait dimensions accurately. This study could provide guidance to people regarding their image and impression control.