New study reveals people's faces evolve to match their names

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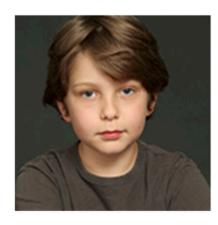Example of trials in Study 2. (A) is an example from the adult target set (left). (B) is an example from the child target set (right). This is a loose translation into English. Credit: *Proceedings of the National Academy of Sciences* (2024). DOI: 10.1073/pnas.2405334121

A new study has found that a person's face tends to evolve to suit their name. The researchers sought to determine whether parents choose a baby name based on what seems fitting for the baby's appearance, or if the process is the other way around—that, over the years, the individual's facial appearance changes to match the name given to them by their parents.

The study was [published](#) in the journal *Proceedings of the National Academy of Sciences*. The research team was led by Dr. Yonat Zwebner, Dr. Moses Miller, and Prof. Jacob Goldenberg of Reichman University's Arison School of Business, together with Noa Grobgeld and Prof. Ruth Mayo of the Hebrew University.

In the study, 9- to 10-year-old children and adults were asked to match faces to names. The findings revealed that both the children and the adults correctly matched adult faces to their corresponding names, significantly above the chance level. However, when it came to children's faces and names, the participants were unable to make accurate associations.

In another part of the study, a machine learning system was fed a large database of images of human faces. The computer recognized that the representations of the faces of adults with the same name were significantly more similar to each other than the representations of faces of adults with different names. Conversely, no significant similarity was found among children with the same name compared to [children](#) with different names.

The researchers concluded that the similarity between a person's face and their name results from a self-fulfilling prophecy. The facial [appearance](#) changes over a long period of time to align with social

stereotypes associated with the name. Such stereotypes can be formed in many ways, for example, because the name is linked to a famous figure or due to the connotations of a biblical name.

Dr. Yonat Zwebner, Arison School of Business, Reichman University says, "Our research highlights the broader significance of this surprising effect—the profound impact of social expectations. We have demonstrated that social constructs, or structuring, do exist—something that until now has been almost impossible to test empirically.

"Social structuring is so strong that it can affect a person's appearance. These findings may imply the extent to which other personal factors that are even more significant than names, such as gender or ethnicity, may shape who people grow up to be."

More information: Yonat Zwebner et al, Can names shape facial appearance?, *Proceedings of the National Academy of Sciences* (2024). DOI: 10.1073/pnas.2405334121

Provided by Reichman University