

Effects of School Spirit on Color Preferences: Berkeley's Blue-and-Gold vs. Stanford's Red-and-White



Rosa M. Poggesi, Karen B. Schloss and Stephen E. Palmer
Department of Psychology, University of California, Berkeley

Background

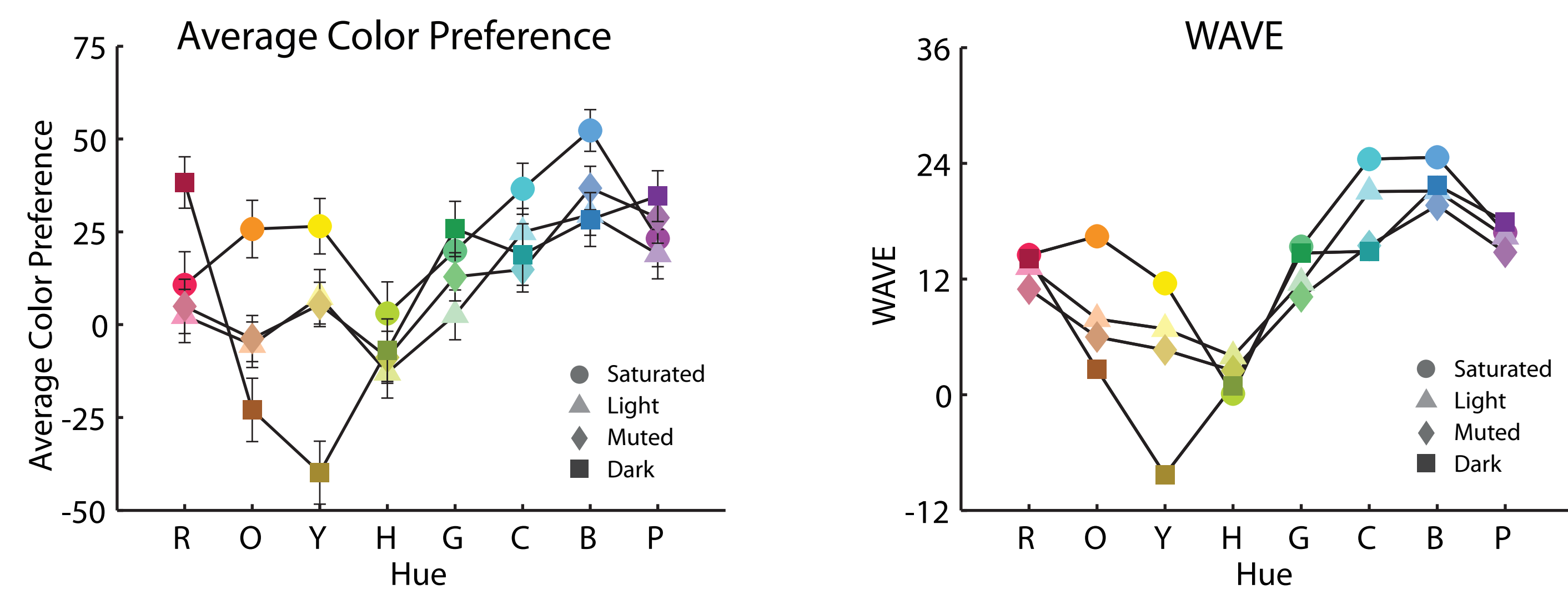
Ecological Valence Theory (EVT):

Preference for a given color is largely determined by peoples' affective response (positive/negative) to all of the objects/entities that they associate with that color.

Weighted Affective Valence Estimate (WAVE) of a color:

The average of the affective valence ratings of all objects associated with the color, weighted by the similarity of that color to the color of each associated object.

The WAVEs explain 80% of the variance in average color preferences



(Palmer & Schloss, 2010)

Implication of the EVT:

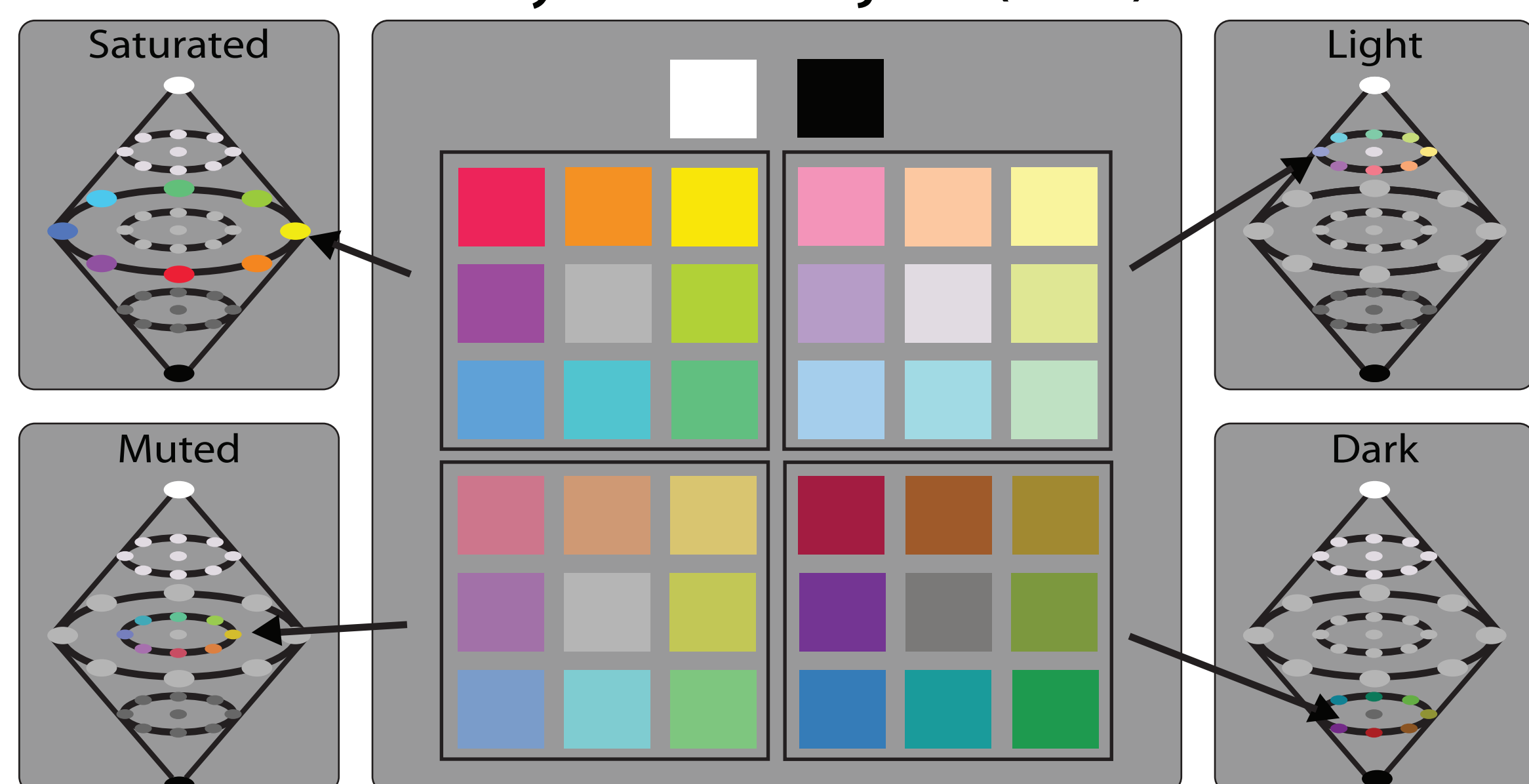
A person's preference for university colors should vary according to the strength of their affective connection with that university.

Research Questions:

Do students like their university's colors better than their rival university's colors?
Does their preference for their university's colors increase with the strength of their positive affect for the institution (school spirit)?

Colors

Berkeley Color Project (BCP)-37



University Colors

Berkeley
Blue Gold
Stanford
Red White*

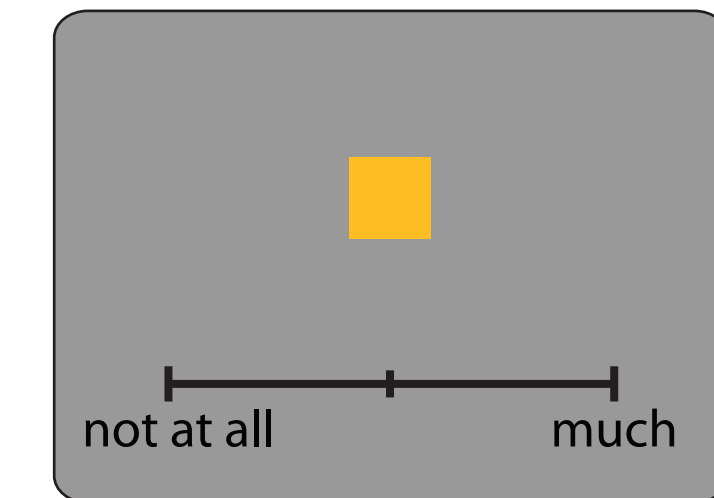
*included for in BCP-37

Munsell colors specified in CIE 1931 values through the Munsell Renotation Table (Wyszecki & Stiles, 1967)

General Methods

Preference for Single Colors

How much do you like this color?



Line-mark rating
(-100 to +100 px)

Colors

BCP-37

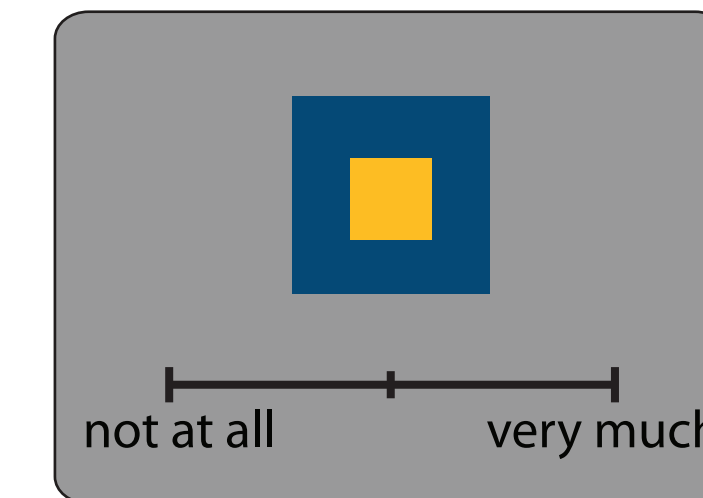
+

4 University colors



Preference for Color Pairs

How much do you like this pair of colors?



Line-mark rating
(-100 to +100 px)

Colors

4 University colors



+

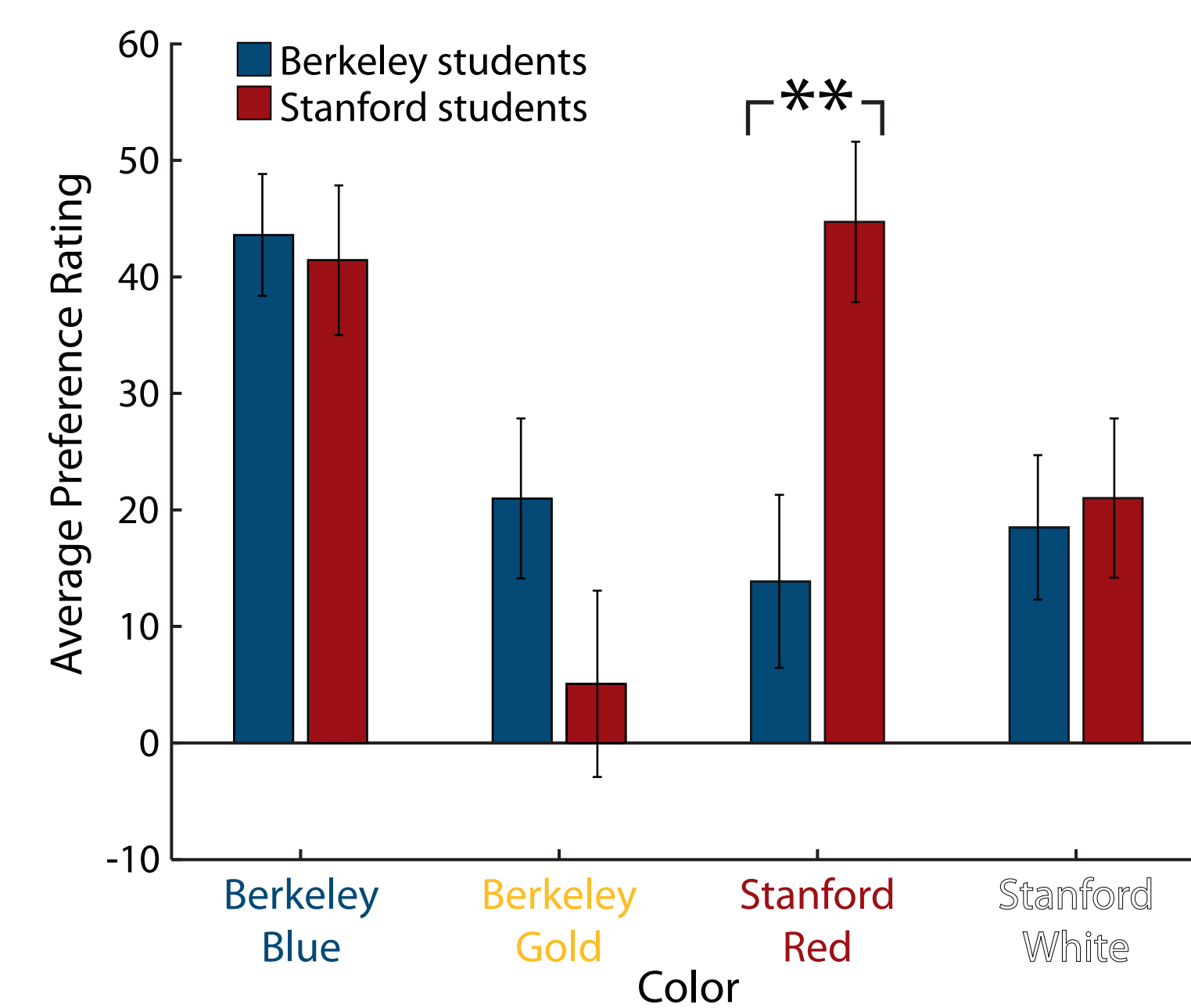
3 color-variants



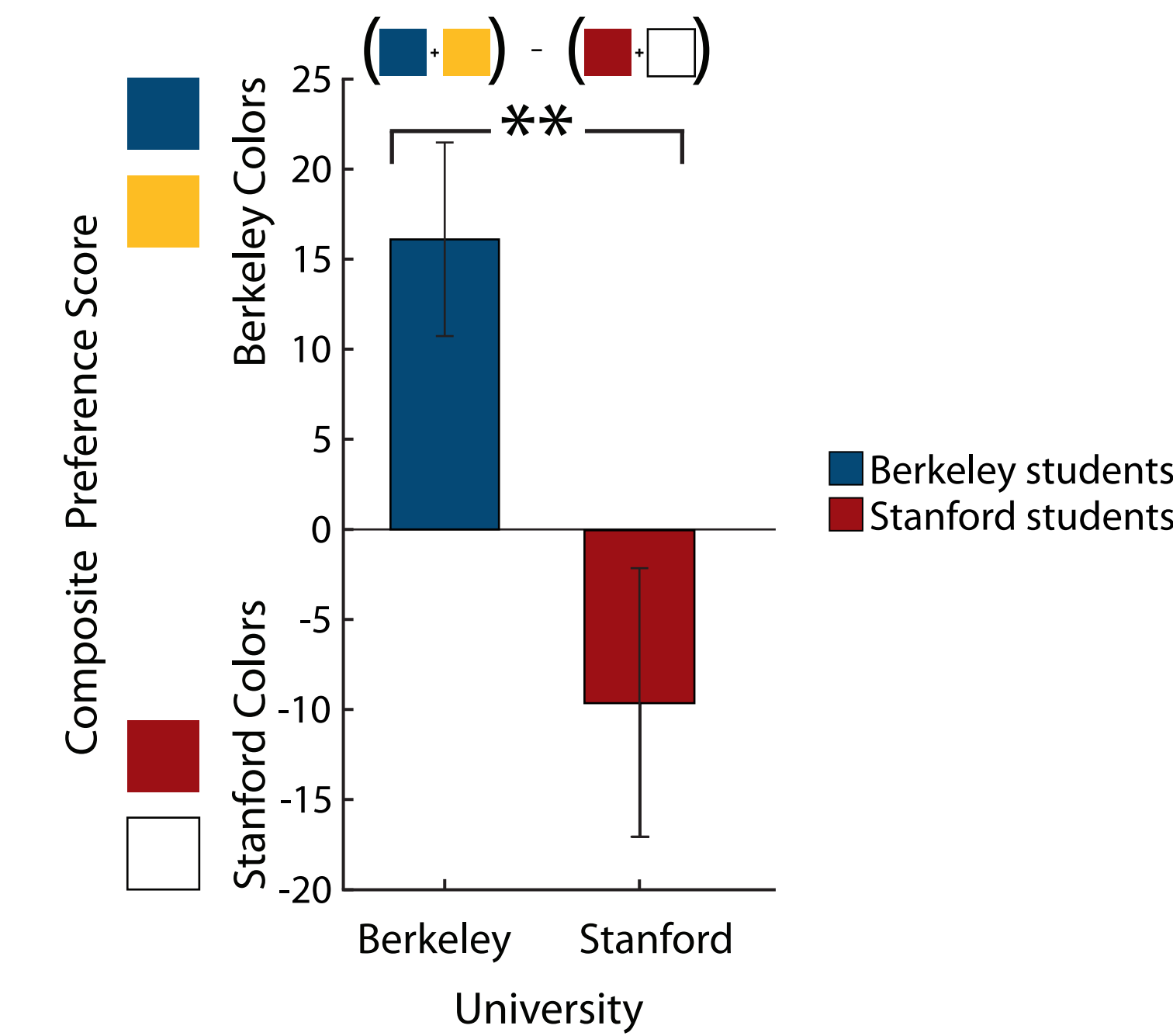
Participants rated their school spirit (Berkeley or Stanford) (1-9, 1 = anti-spirit, 9 = tons of spirit).

Preference for Single Colors

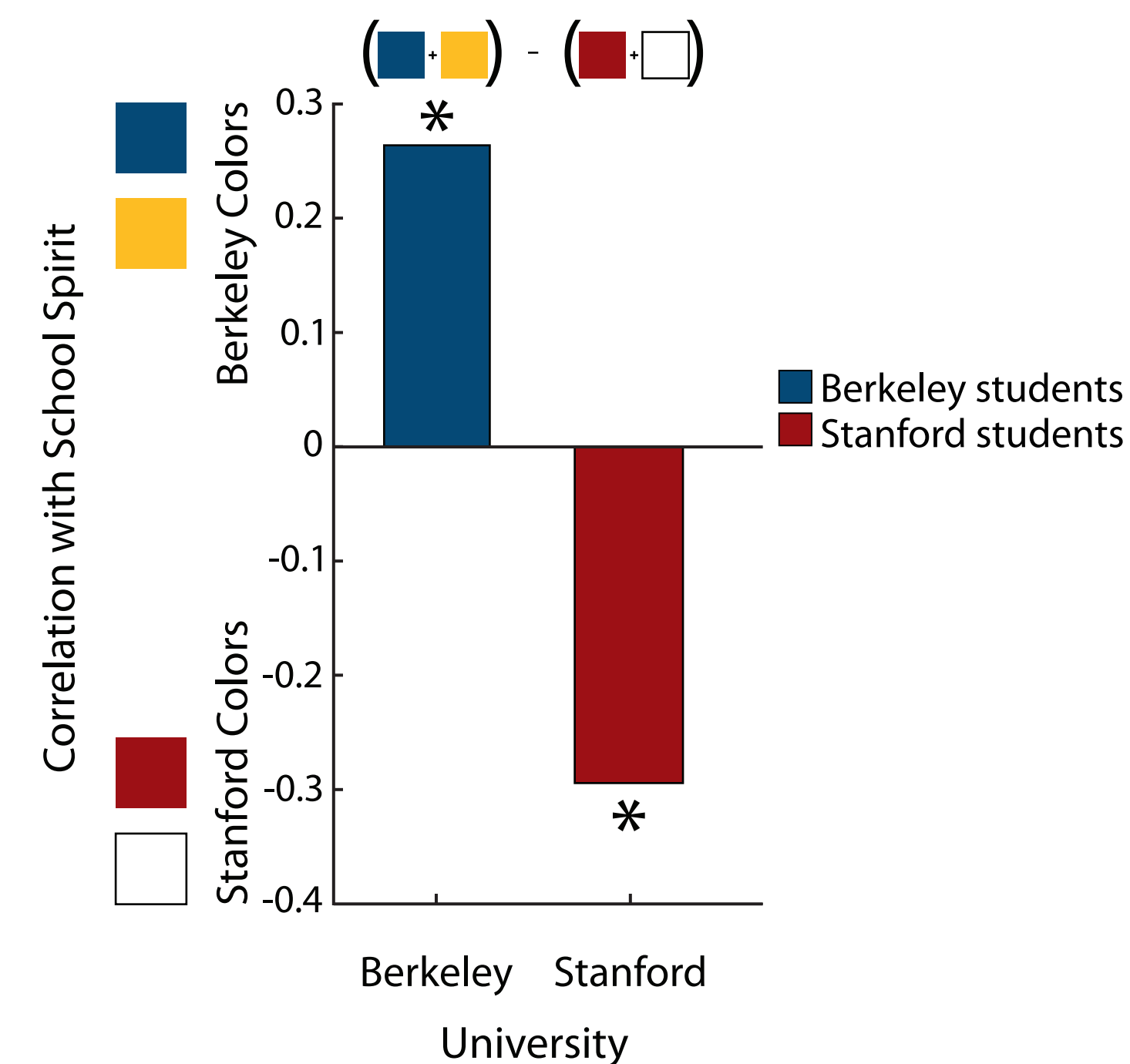
Preference for University Colors



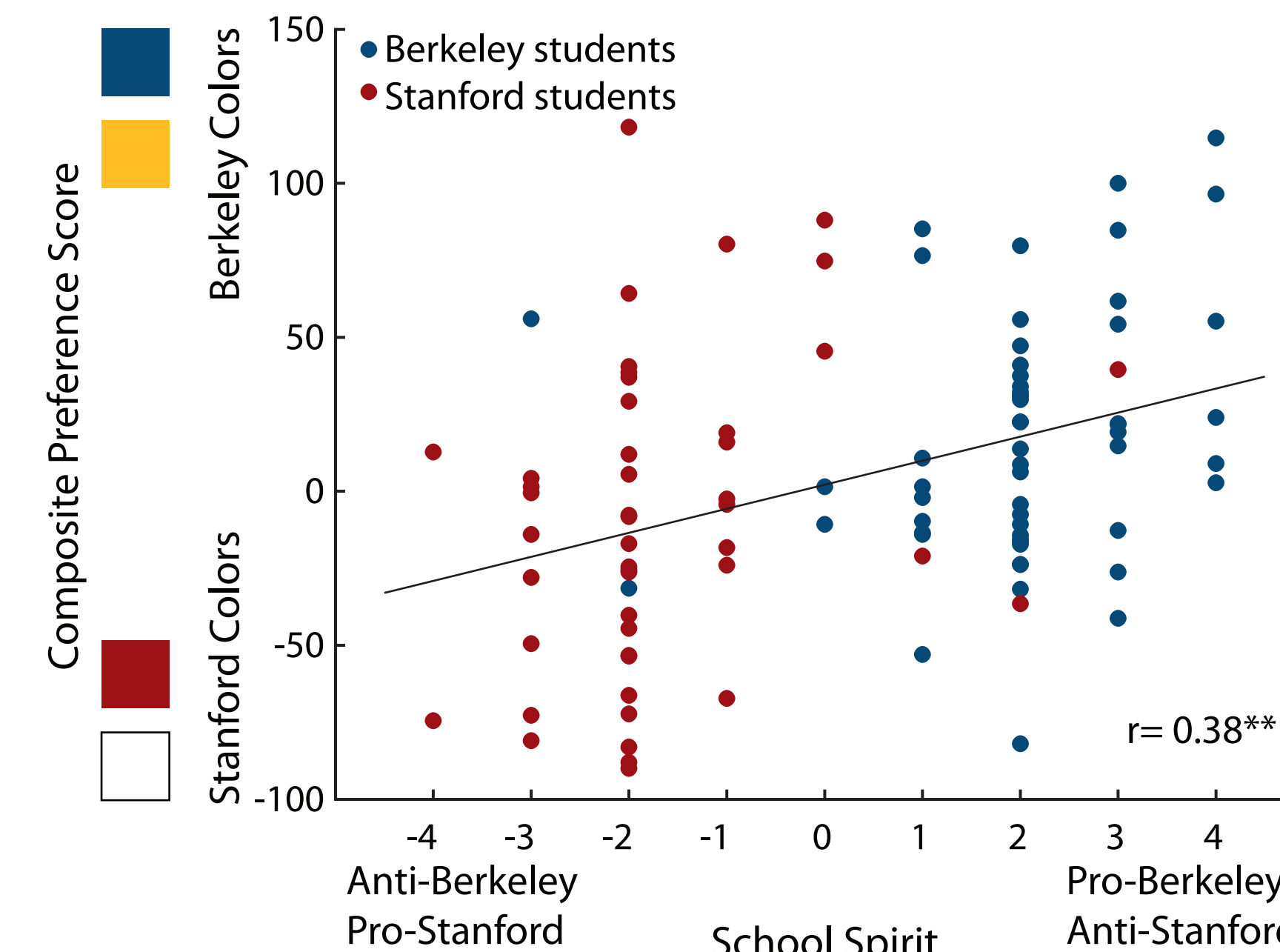
Composite Score for University Colors



Average Composite Score Correlated with Spirit



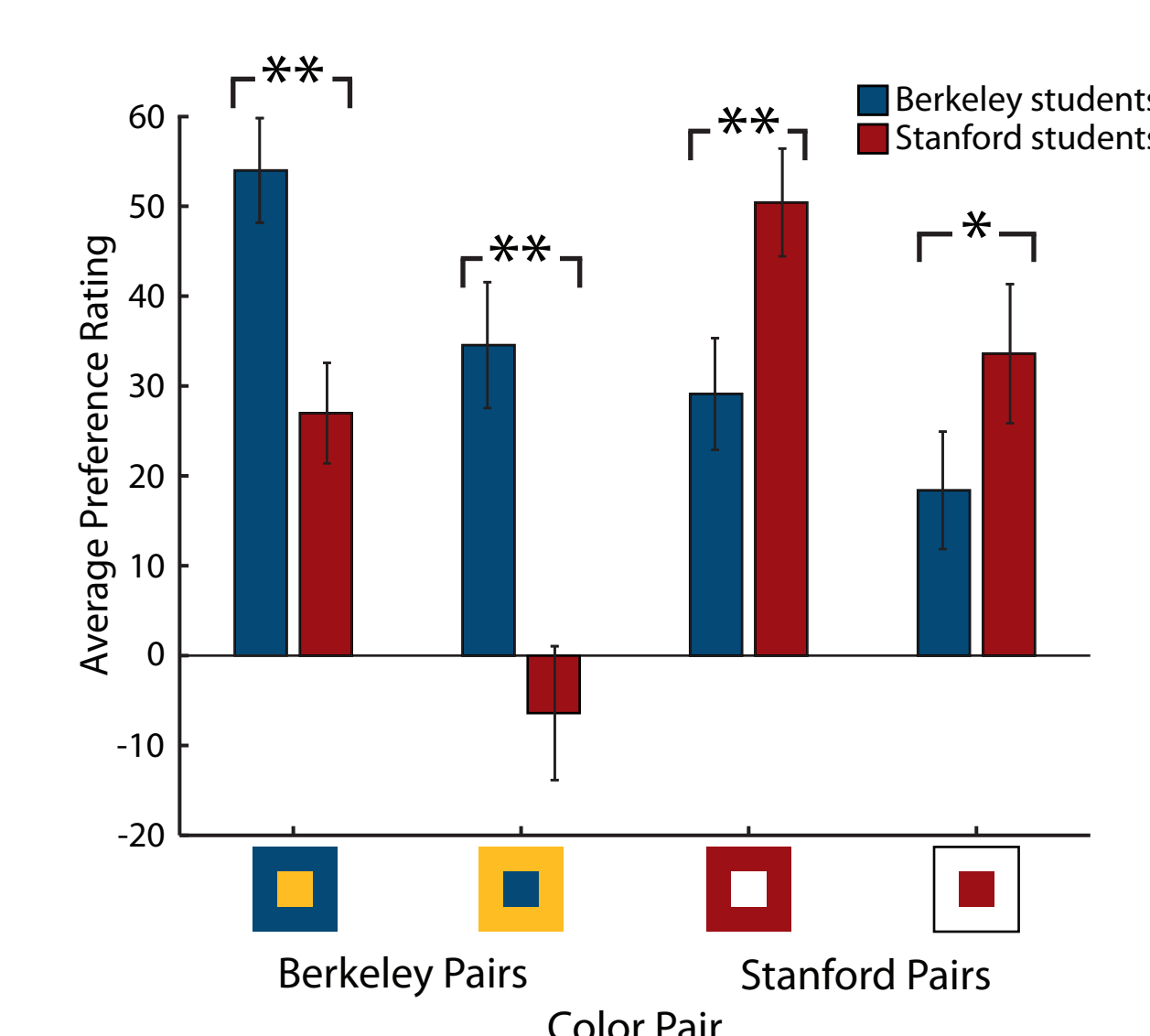
Composite Score Correlated with Spirit for Individuals



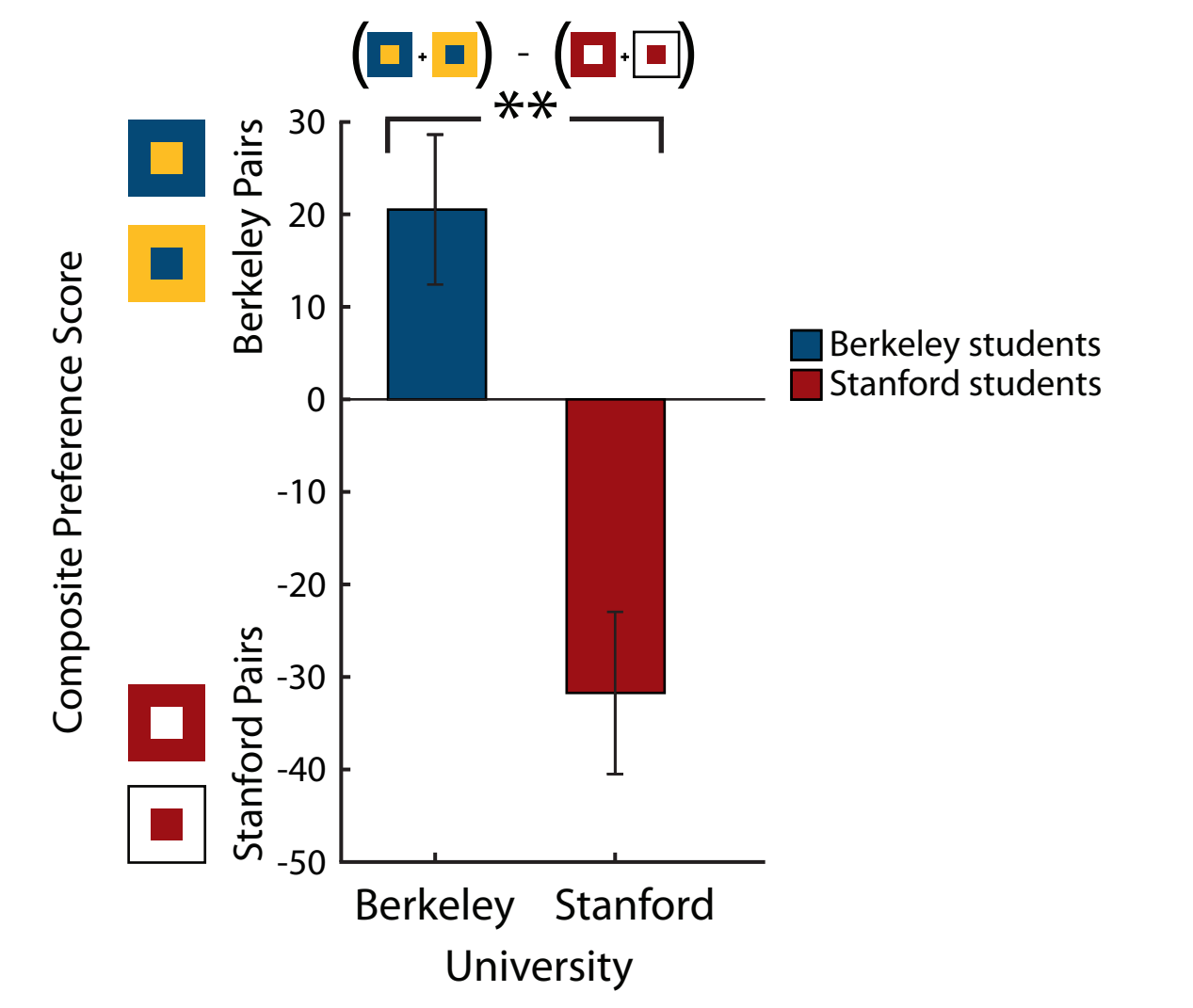
Preference for the BCP-37 colors most similar to the University colors (blue, yellow and red) were not different for Berkeley and Stanford students ($F_s < 1$).

Preference for Color Pairs

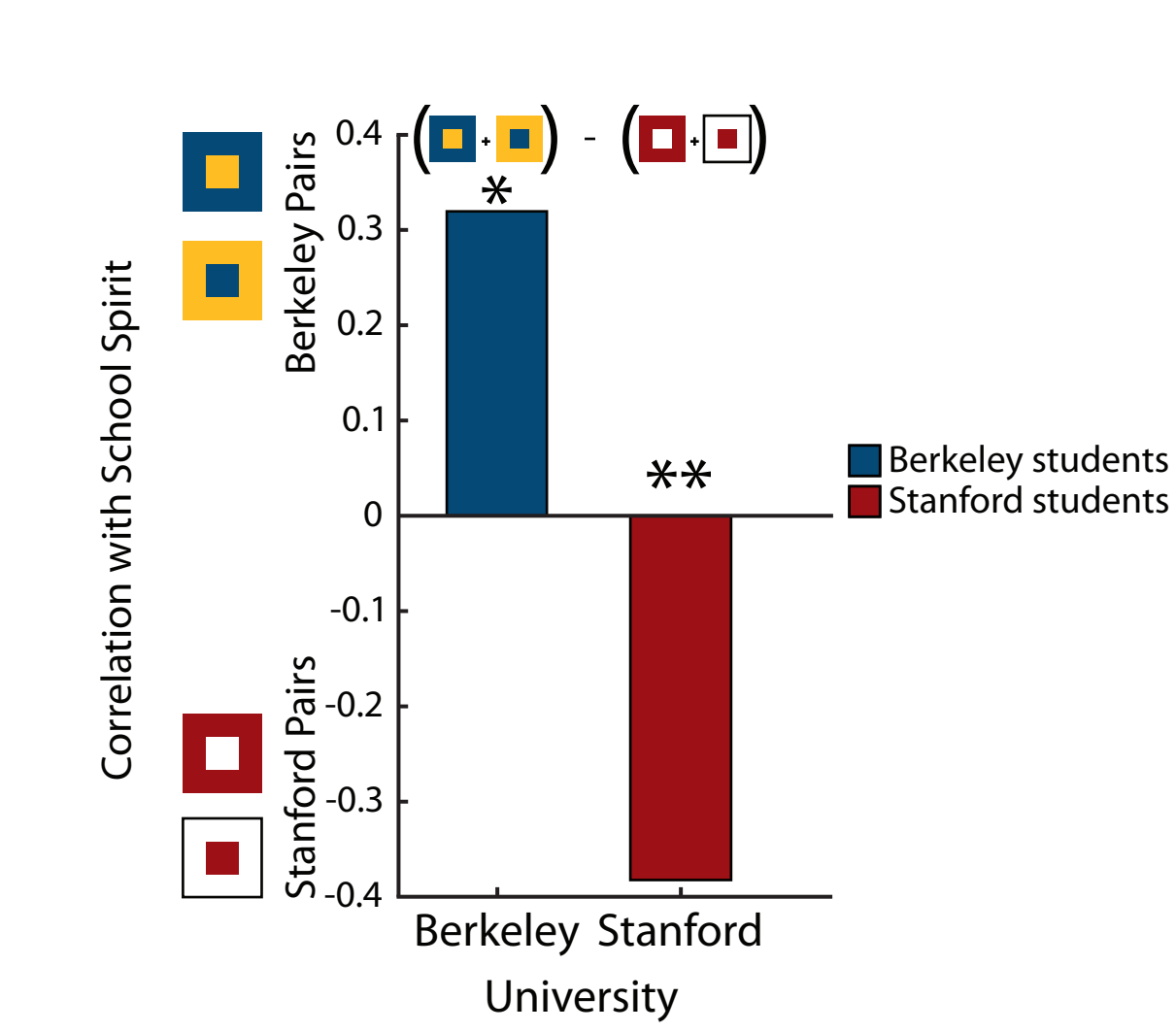
Preference for University Color Pairs



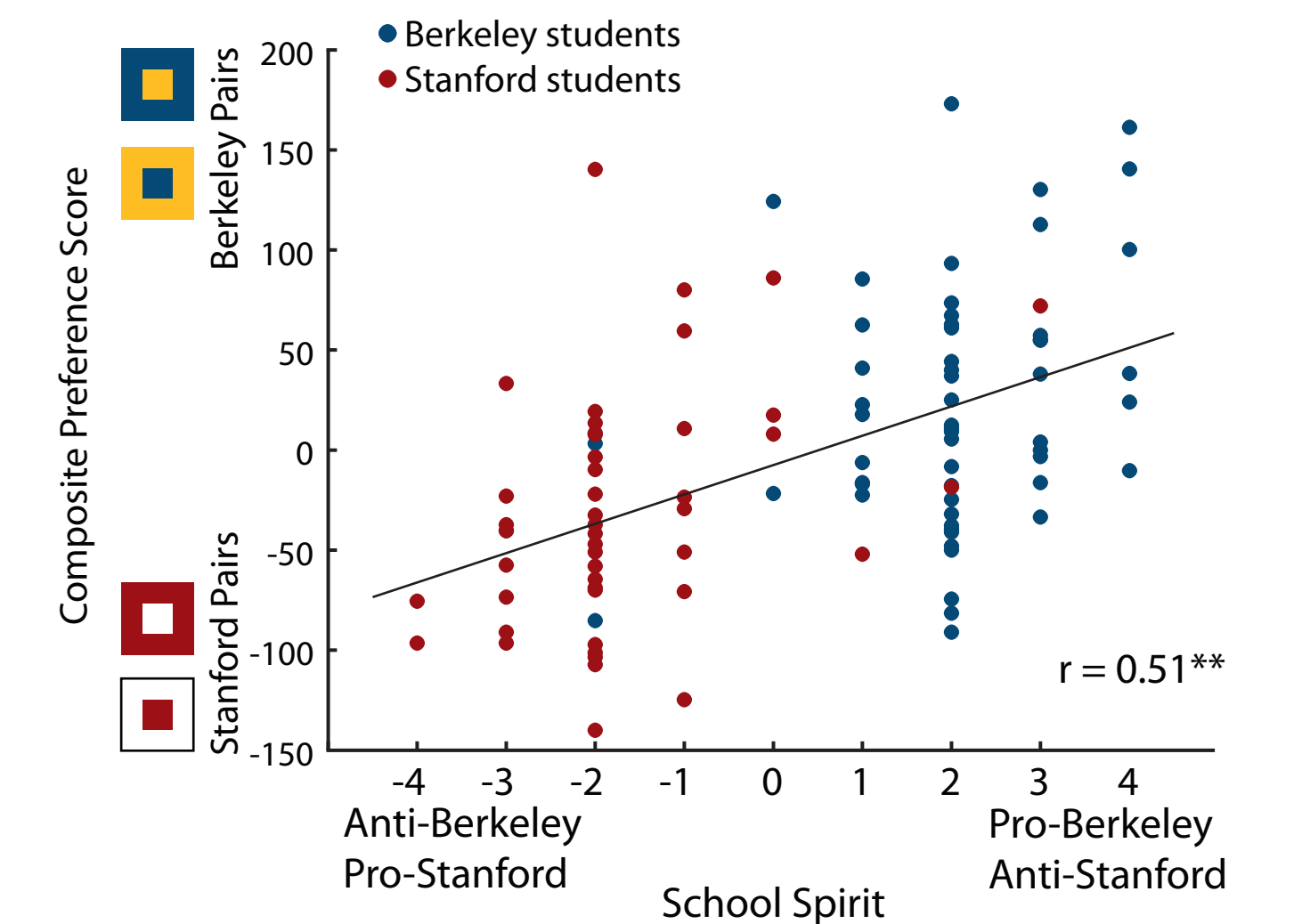
Composite Score for University Color Pairs



Average Composite Score Correlated with Spirit



Composite Score Correlated with Spirit for Individuals



Conclusions

Berkeley and Stanford undergraduates show systematic differences in preferences for university colors.

The magnitude of differential preference for Berkeley vs. Stanford colors correlates with the amount of school spirit (positive affect) the individuals feel for their own university.

These findings support the Ecological Valence Theory's claim that color preferences are causally determined by affective responses to associates of those colors:

It is unlikely that students choose their university because they like the university's colors and develop the strength of their school spirit with how much they like their university's colors.

References and Acknowledgements

- Palmer, S. E. & Schloss, K. B. (2010) An ecological valence theory of human color preference. *Proceedings of the National Academy of Sciences*.
Wyszecki G. & Stiles W.S. (1967). Color Science: Concepts and methods, quantitative data and formulas. New York, NY: John Wiley.
Munsell A.H. (1966) The Munsell Book of Color-Glossy Finish Collection. Baltimore, MD: Munsell Color Company.

Acknowledgements

We thank Jay McLelland for use of his lab space at Stanford University, as well as Mieke Leyssen, Sarah Linsen, Eli Strauss, Lily Lin, Zoe Xu, Jessica Jimenez, Aryn Shelander for their help in recruiting participants and collecting data. We also thank Amy's Natural Frozen Foods, National Science Foundation (#BCS-0745820) and Google for financial support.