

Does Green Really Clean?

How Gender and Color Impact Product Perceptions



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Research Idea

Prior research suggest conflicting findings in terms of universality of color preferences:

- Color blue is the most preferred of all color hues (Eysenck 1941; McManus, Jones, and Cottrell 1981)
- Color preference can vary by country and culture (Hurlbert and Ling 2007; Taylor, Clifford, and Franklin 2013).
- There are universal sex differences in color preferences, possibly originating from women's focus on gathering versus men's focus on hunting (Hurlbert and Ling, 2007).

The results of this stream of research suggest that women (more so than men) tend to dislike the color green.

Research question: Does color play a role in male and female evaluations of laundry detergent?

Study

We conducted an online study to examine preferences for laundry detergent as a function of color and scent.

Stimuli



Unscented



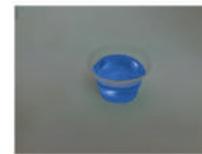
Unscented



Unscented



Herbal Scent



Herbal Scent



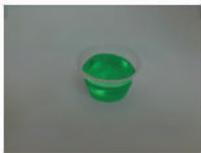
Herbal Scent



Citrus Scent



Citrus Scent



Citrus Scent



Clean Linen Scent



Clean Linen Scent



Clean Linen Scent



Floral Scent



Floral Scent



Floral Scent



Minty Scent



Minty Scent



Minty Scent

Sample & Design

- 3 (color: clear, blue, or green) x 6 (scent label: no scent, citrus, floral, herbal, clean linen, mint) full factorial.
- Each participant saw one full color image of a capful of laundry detergent
- Odor was manipulated by writing the odor of the detergent below the picture
- Key measures: Attitudes and purchase intention

Results

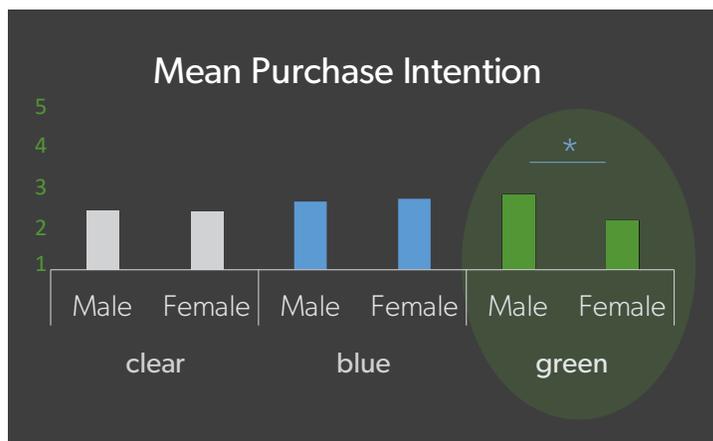
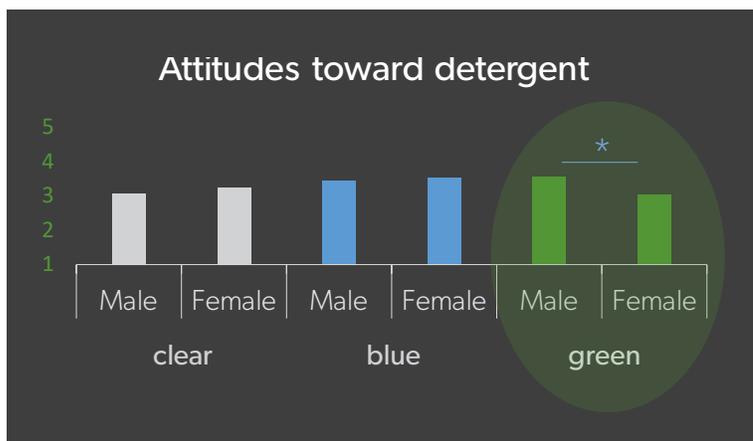
N= 370 undergraduates (43% female, mean age = 19.57)

Attitudes

- Main effect of scent
- Two-way interaction between gender and color ($F(2, 334) = 3.42, p = .034$; all other effects' $ps > .10$)
- Women's attitudes were not different from men's for the clear or blue detergent; but for the green detergent, women's attitudes were more negative than those of men ($M_{men} = 3.58$ vs. $M_{women} = 3.09, p = .017$)

Purchase Intention

- Main effect of scent
- Two-way interaction between gender and color ($F(2, 334) = 2.65, p = .072$; all other effects' $ps > .10$).
- Women's and men's purchase intentions were not different for the clear and blue detergents; but for the green detergent, women's purchase intentions were lower than those of men ($M_{men} = 2.79$ vs. $M_{women} = 2.19, p = .008$)



Practical Implications

Better understanding gender-based color preferences will aid in product development.

References

- 1) Eysenck, H. J. (1941). A critical and experimental study of colour preferences. *The American Journal of Psychology*, 54(3), 385-394.
- 2) Hurlbert, A. C., & Ling, Y. (2007). Biological components of sex differences in color preference. *Current biology*, 17(16), R623-R625.
- 3) McManus, I. C., Jones, A. L., & Cottrell, J. (1981). The aesthetics of colour. *Perception*, 10(6), 651-666.
- 4) Taylor, C., Clifford, A., & Franklin, A. (2013). Color preferences are not universal. *Journal of Experimental Psychology: General*, 142(4), 1015.