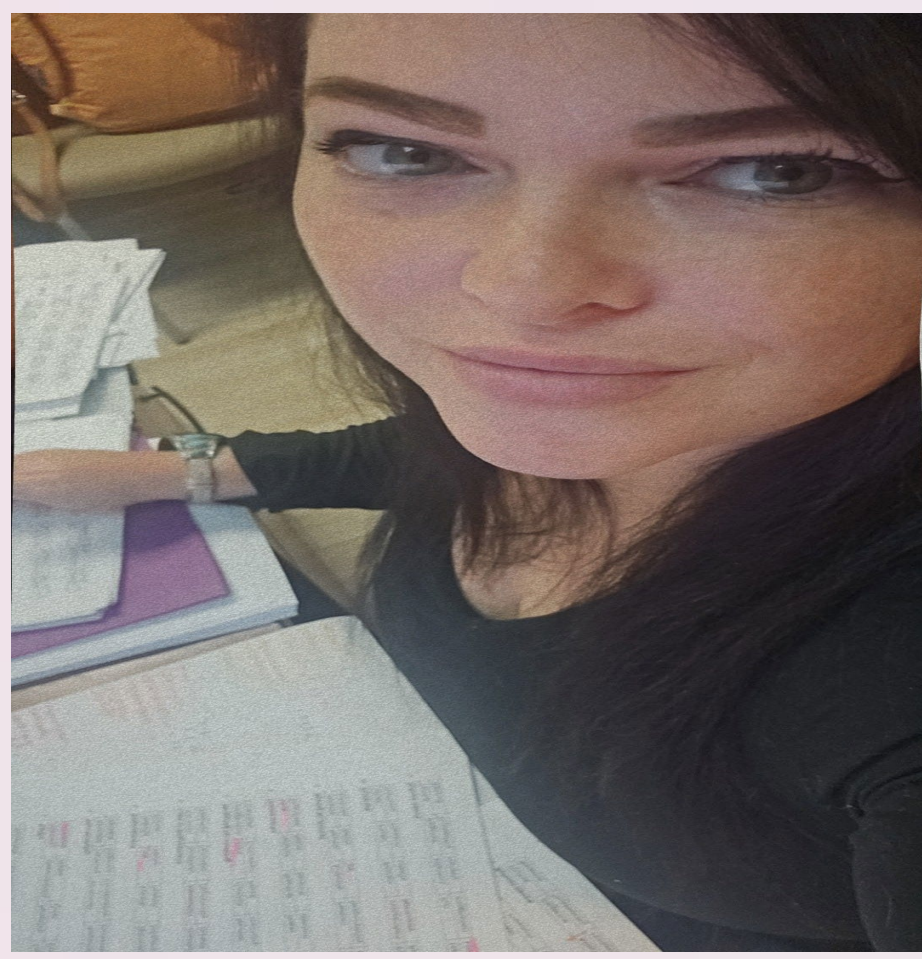


Is Color Personality a Pseudoscience?

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Introduction

Color personalities are associations between preferred colors and personality traits that were first presented in 1810 by Wolfgang von Goethe (Smith 1992). For example, someone with the favorite color is red will have a personality associated with excitement, energy, passion, courage, and attention. Although multiple studies have shown that personality traits are linked to the favorite color of the participant (Buchholz 2024), other studies report color personalities are a pseudoscience and not a legitimate personality test (Jue and Ha 2022). The hypothesis of this study is there is a significant relationship between color preference and personality traits.



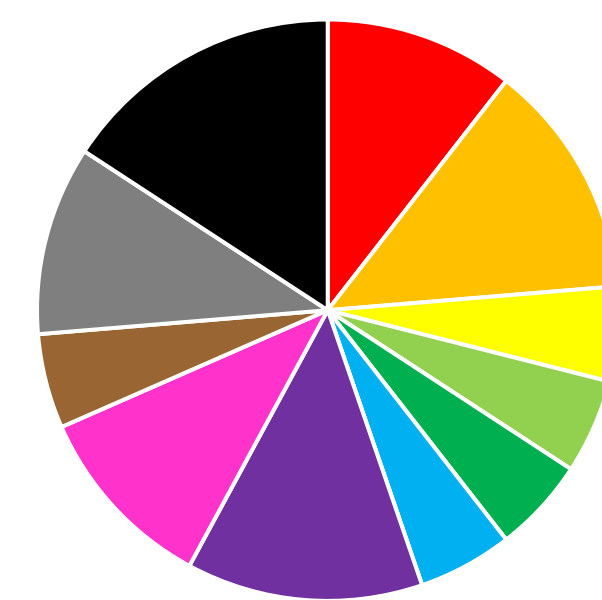
Color Personality of All Participants



- Red
- Orange
- Yellow
- Light Green
- Dark Green
- Light Blue
- Dark Blue
- Purple
- Pink
- Brown
- Gray
- Black

Figure 1. Color personality of all applicable participants (N=50).

Males



Females

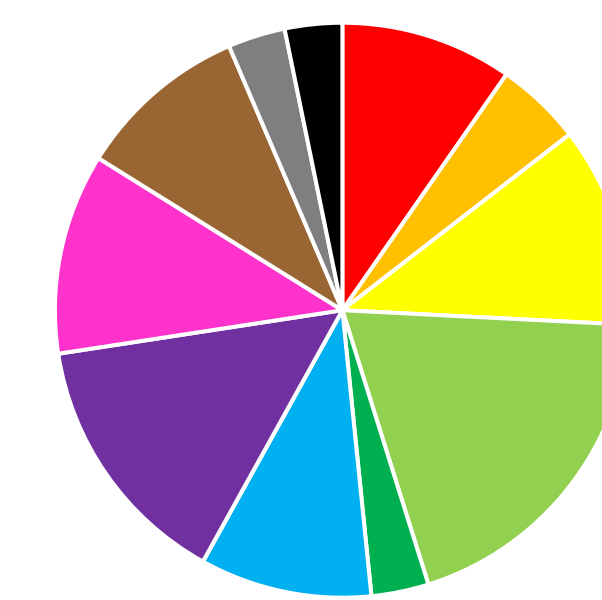


Figure 2. Color personality of all male (N=19) and female (N=31) valid participants.

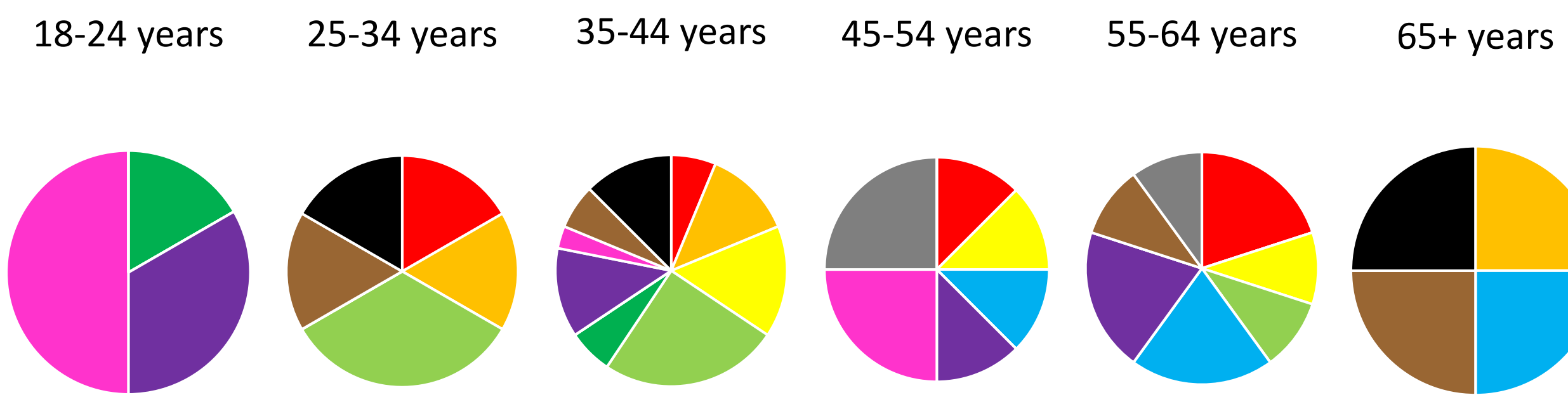


Figure 3. Color personality of all applicable participants between the ages of 18-24 years (N=6), 25-34 (N=6), 35-44 (N=16), 45-54 (N=8), 55-64 (N=10), and 65+ (N=4).

Results

- 13% (9) of the 70 participants selected answers of a single color in 50% or more of the questions.
- 29% (20) of the 70 participants did not select at least 20% of the answers in any single color and were omitted.
- 42% (21) of the 50 valid participants selected the majority of answers in a color that did not match 1st or 2nd color choice.
- 58% (29) of the 50 valid participants selected the majority of answers in the color that matched 1st or 2nd color choice.
- The number of valid participants that selected the majority of answers in a color that did not match their first or second color choice was not significantly different than the number of valid participants that selected the majority of answers in the color matching their first or second color choice (1-way ANOVA, $F_{1,98}=2.57, p=0.11$).

Color	Emotion	Color	Emotion
Red	Excitement Energy Passion Courage Attention	Dark Blue	Trusting Responsibility Loyalty Inner-Security Honesty
Orange	Optimistic Independent Adventurous Creativity Fun	Purple	Imagination Spirituality Compassion Sensitivity Mystery
Yellow	Enthusiasm Opportunity Spontaneity Happiness Positivity	Pink	Respect Love Immature Playful Admiration
Light Green	Growth Peace Fertility Kindness Dependability	Brown	Reliable Stable Honest Comfort Natural
Dark Green	Safety Harmony Stability Reliability Balance	Gray	Neutral Practical Conservative Formal Quiet
Light Blue	Freedom Self-Expression Trustworth Wisdom Joy	Black	Power Control Authority Discipline Elegance

Discussion

The concept of color personality claims that the colors individuals prefer or are drawn to reveal traits about their character or emotions (Andresen 2024). Similar to other studies, the results of this survey with 70 participants between the ages of 18 to 65+ found no significant relationship between color preference and personality traits. Further analyses revealed almost a third of surveyed participants were spread across the twelve color/personality types and only 13% of surveyed participants answered 50% of questions with a single color. This suggests that the majority of people are diverse in their personality traits and not limited to a specific personality type. Even with these results supporting color personality may be a pseudoscience, the 215-year debate continues over whether color personalities have scientific basis or if it is a pseudoscience (Rico 2015).

Literature Cited

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Rico, L. M. 2015. The Relationship Between Personality Type and Color Preference for Color Combinations. MBA thesis. *The Chicago School of Professional Psychology*.

Jue, J. and J.H. Ha. 2022. Exploring the Relationships Between Personality and Color Preferences. *Frontiers in Psychology* 13: 1065372.

Smith, D. P. 1992. Johann Wolfgang von Goethe's Theory of colors (1810): the Dispute with Sir Isaac Newton's Optics (1704) and the Influence of Goethe's Color Theory Upon the Pedagogic Approach of the Bauhaus. MS thesis. *The Ohio State University*.

WORD ASSOCIATION SURVEY						
What word do you associate with _____? Select 1 answer for each question.						
1. Homework	Energy	Adventurous	Happiness	Kindness	Reliability	Self-expression
	Inner-security	Sensitivity	Playful	Honest	Formal	Authority
2. Dentist	Optimistic	Happiness	Dependability	Safety	Joy	Responsibility
	Sensitivity	Admiration	Comfort	Neutral	Discipline	Excitement
3. Traffic	Positivity	Dependability	Reliability	Freedom	Inner-security	Imagination
	Immature	Stable	Quiet	Discipline	Energy	Fun
4. Your birthday	Kindness	Harmony	Self-expression	Responsibility	Compassion	Playful
	Reliable	Elegance	Conservative	Excitement	Adventurous	Spontaneity
5. Employment	Stability	Joy	Loyalty	Spirituality	Respect	Natural
	Formal	Power	Passion	Independent	Opportunity	Growth
6. Loss of employment	Inner-security	Sensitivity	Admiration	Comfort	Practical	Control
	Attention	Optimistic	Opportunity	Growth	Balance	Freedom
7. Shopping for clothing	Imagination	Love	Comfort	Neutral	Elegance	Excitement
	Creativity	Enthusiasm	Peace	Harmony	Self-expression	Responsibility
8. Theme parks	Love	Reliable	Practical	Power	Courage	Adventurous
	Happiness	Peace	Balance	Wisdom	Trusting	Mystery
9. Saving an animal	Reliable	Neutral	Authority	Passion	Optimistic	Positivity
	Kindness	Safety	Joy	Responsibility	Compassion	Respect
10. Funerals	Quiet	Power	Passion	Independent	Enthusiasm	Peace
	Harmony	Freedom	Loyalty	Spirituality	Respect	Natural
11. School dance	Formal	Elegance	Attention	Fun	Happiness	Fertility
	Balance	Trustworthy	Honesty	Imagination	Love	Natural
12. Birth of a baby	Elegance	Attention	Fun	Positivity	Fertility	Harmony
	Joy	Loyalty	Compassion	Admiration	Comfort	Practical
13. Your future	Energy	Creativity	Spontaneity	Growth	Stability	Freedom
	Trusting	Mystery	Immature	Stable	Conservative	Power
14. First love	Independent	Spontaneity	Fertility	Reliability	Trustworthy	Honesty
	Spirituality	Immature	Honest	Conservative	Control	Passion
15. Overcoming a challenge	Growth	Safety	Trustworthy	Honesty	Sensitivity	Admiration
	Stable	Quiet	Authority	Courage	Adventurous	Opportunity
16. Ideal partner	Stability	Wisdom	Trusting	Compassion	Playful	Reliable
	Practical	Discipline	Attention	Independent	Positivity	Dependability
17. Graduation	Wisdom	Trusting	Mystery	Respect	Honest	Formal
	Discipline	Excitement	Fun	Opportunity	Dependability	Balance
18. Favorite teacher	Honesty	Imagination	Immature	Stable	Neutral	Control
	Energy	Creativity	Spontaneity	Kindness	Reliability	Wisdom
19. Magic/fantasy	Mystery	Playful	Natural	Quiet	Authority	Courage
	Creativity	Enthusiasm	Peace	Stability	Self-expression	Inner-security
20. Pets	Love	Honest	Conservative	Control	Courage	Optimistic
	Enthusiasm	Safety	Trustworthy	Loyalty	Spirituality	
21. Which best describes you?	Male	Female	Non-binary	Prefer not to answer		
22. What age group are you?	18-24	25-34	35-44	45-54	55-64	65 or older
23. What is your most favorite color?	Red	Orange	Yellow	Light Green	Dark Green	Light Blue
	Dark Blue	Purple	Pink	Brown	Gray	Black
24. What is your 2 nd favorite color?	Red	Orange	Yellow	Light Green	Dark Green	Light Blue
	Dark Blue	Purple	Pink	Brown	Gray	Black