

Customer Color Preference Analysis DATA ANALYTICS REPORT Analysis of Independence between Age Group and Color Preference

Gender identityFavorite color (hex code format)1.4 Scope and LimitationsScope:Analysis focuses exclusively on gender identity and its relationship to favorite colors.

If $p\text{-value} < 0.05 \rightarrow \text{Reject } H_0$ (significant relationship)
If $p\text{-value} \geq 0.05 \rightarrow \text{Fail to reject } H_0$ (no significant relationship)

The 45+ age group dominates all colors (50-64% of each color's fans) This simply reflects the overall sample

$|r| \geq 2$: Potentially significant deviation
 $|r| \geq 3$: Strong significant deviation

Findings: ✓ ALL residuals fall within

7.3 What This Means in Practice 7.3.1 Age-Independent Color Preferences ✓ Universal Appeal: A 25-year-old