# Supplementary materials

Experiment 1. All color selections. Each row represents one participant.

| amusement | anger | annoyance | awe | boredom | confusion | contempt | contentment | disappointment | disgust | grief | elation | embarrassment | fear | happiness | interest | joy | pride | relief | sadness | serenity | shame | surprise |
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Experiment 1. All interactive 3D scatterplots are available at: <https://github.com/reirby/cognitively-congruent-color-palette-for-emotional-mapping>

Experiment 1. Results of post-hoc t-tests for “L” color dimension.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group1 | group2 | p | p.signif | p.adj | p.adj.signif |
| amusement | anger | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | annoyance | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | annoyance | 0.002 | \*\* | 0.438 | ns |
| amusement | awe | 0.131 | ns | 1.000 | ns |
| anger | awe | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | awe | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | boredom | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | boredom | 0.000 | \*\*\*\* | 0.003 | \*\* |
| annoyance | boredom | 0.148 | ns | 1.000 | ns |
| awe | boredom | 0.000 | \*\*\*\* | 0.004 | \*\* |
| amusement | confusion | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | confusion | 0.000 | \*\*\*\* | 0.005 | \*\* |
| annoyance | confusion | 0.242 | ns | 1.000 | ns |
| awe | confusion | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| boredom | confusion | 0.749 | ns | 1.000 | ns |
| amusement | contempt | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | contempt | 0.372 | ns | 1.000 | ns |
| annoyance | contempt | 0.024 | \* | 1.000 | ns |
| awe | contempt | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | contempt | 0.000 | \*\*\* | 0.089 | ns |
| confusion | contempt | 0.001 | \*\*\* | 0.180 | ns |
| amusement | contentment | 0.227 | ns | 1.000 | ns |
| anger | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | contentment | 0.773 | ns | 1.000 | ns |
| boredom | contentment | 0.000 | \*\*\*\* | 0.001 | \*\* |
| confusion | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| contempt | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | disappointment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | disappointment | 0.764 | ns | 1.000 | ns |
| annoyance | disappointment | 0.001 | \*\*\* | 0.145 | ns |
| awe | disappointment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | disappointment | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| confusion | disappointment | 0.000 | \*\*\*\* | 0.001 | \*\* |
| contempt | disappointment | 0.231 | ns | 1.000 | ns |
| contentment | disappointment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | disgust | 0.382 | ns | 1.000 | ns |
| annoyance | disgust | 0.000 | \*\*\*\* | 0.013 | \* |
| awe | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| confusion | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | disgust | 0.074 | ns | 1.000 | ns |
| contentment | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | disgust | 0.567 | ns | 1.000 | ns |
| amusement | elation | 0.279 | ns | 1.000 | ns |
| anger | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | elation | 0.665 | ns | 1.000 | ns |
| boredom | elation | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| confusion | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | elation | 0.890 | ns | 1.000 | ns |
| disappointment | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | embarrassment | 0.025 | \* | 1.000 | ns |
| awe | embarrassment | 0.000 | \*\*\* | 0.030 | \* |
| boredom | embarrassment | 0.501 | ns | 1.000 | ns |
| confusion | embarrassment | 0.298 | ns | 1.000 | ns |
| contempt | embarrassment | 0.000 | \*\*\*\* | 0.002 | \*\* |
| contentment | embarrassment | 0.000 | \*\*\*\* | 0.011 | \* |
| disappointment | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | embarrassment | 0.000 | \*\*\*\* | 0.005 | \*\* |
| amusement | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | fear | 0.228 | ns | 1.000 | ns |
| annoyance | fear | 0.000 | \*\*\*\* | 0.003 | \*\* |
| awe | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| confusion | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | fear | 0.034 | \* | 1.000 | ns |
| contentment | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | fear | 0.365 | ns | 1.000 | ns |
| disgust | fear | 0.735 | ns | 1.000 | ns |
| elation | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| embarrassment | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| confusion | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| embarrassment | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | happiness | 0.301 | ns | 1.000 | ns |
| anger | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | happiness | 0.010 | \* | 1.000 | ns |
| boredom | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| confusion | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | happiness | 0.025 | \* | 1.000 | ns |
| disappointment | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | happiness | 0.033 | \* | 1.000 | ns |
| embarrassment | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | interest | 0.018 | \* | 1.000 | ns |
| anger | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | interest | 0.384 | ns | 1.000 | ns |
| boredom | interest | 0.001 | \*\*\* | 0.117 | ns |
| confusion | interest | 0.000 | \*\*\*\* | 0.017 | \* |
| contempt | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | interest | 0.250 | ns | 1.000 | ns |
| disappointment | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | interest | 0.193 | ns | 1.000 | ns |
| embarrassment | interest | 0.003 | \*\* | 0.707 | ns |
| fear | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| happiness | interest | 0.001 | \*\*\* | 0.154 | ns |
| amusement | joy | 0.996 | ns | 1.000 | ns |
| anger | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | joy | 0.126 | ns | 1.000 | ns |
| boredom | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| confusion | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | joy | 0.221 | ns | 1.000 | ns |
| disappointment | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | joy | 0.272 | ns | 1.000 | ns |
| embarrassment | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| happiness | joy | 0.299 | ns | 1.000 | ns |
| interest | joy | 0.017 | \* | 1.000 | ns |
| amusement | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| anger | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | pride | 0.009 | \*\* | 1.000 | ns |
| awe | pride | 0.001 | \*\*\* | 0.122 | ns |
| boredom | pride | 0.299 | ns | 1.000 | ns |
| confusion | pride | 0.155 | ns | 1.000 | ns |
| contempt | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| contentment | pride | 0.000 | \*\*\* | 0.047 | \* |
| disappointment | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | pride | 0.000 | \*\*\*\* | 0.022 | \* |
| embarrassment | pride | 0.703 | ns | 1.000 | ns |
| fear | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| happiness | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| interest | pride | 0.009 | \*\* | 1.000 | ns |
| joy | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| amusement | relief | 0.189 | ns | 1.000 | ns |
| anger | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | relief | 0.849 | ns | 1.000 | ns |
| boredom | relief | 0.000 | \*\*\*\* | 0.002 | \*\* |
| confusion | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| contempt | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | relief | 0.921 | ns | 1.000 | ns |
| disappointment | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | relief | 0.810 | ns | 1.000 | ns |
| embarrassment | relief | 0.000 | \*\*\*\* | 0.015 | \* |
| fear | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| happiness | relief | 0.018 | \* | 1.000 | ns |
| interest | relief | 0.291 | ns | 1.000 | ns |
| joy | relief | 0.183 | ns | 1.000 | ns |
| pride | relief | 0.000 | \*\*\* | 0.064 | ns |
| amusement | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | sadness | 0.002 | \*\* | 0.444 | ns |
| annoyance | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| confusion | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | sadness | 0.000 | \*\*\*\* | 0.014 | \* |
| contentment | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | sadness | 0.005 | \*\* | 1.000 | ns |
| disgust | sadness | 0.021 | \* | 1.000 | ns |
| elation | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| embarrassment | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | sadness | 0.049 | \* | 1.000 | ns |
| grief | sadness | 0.001 | \*\*\* | 0.116 | ns |
| happiness | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| interest | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| joy | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| pride | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| relief | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | serenity | 0.083 | ns | 1.000 | ns |
| anger | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | serenity | 0.799 | ns | 1.000 | ns |
| boredom | serenity | 0.000 | \*\*\*\* | 0.015 | \* |
| confusion | serenity | 0.000 | \*\*\*\* | 0.002 | \*\* |
| contempt | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | serenity | 0.592 | ns | 1.000 | ns |
| disappointment | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | serenity | 0.497 | ns | 1.000 | ns |
| embarrassment | serenity | 0.000 | \*\*\* | 0.103 | ns |
| fear | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| happiness | serenity | 0.006 | \*\* | 1.000 | ns |
| interest | serenity | 0.548 | ns | 1.000 | ns |
| joy | serenity | 0.079 | ns | 1.000 | ns |
| pride | serenity | 0.002 | \*\* | 0.375 | ns |
| relief | serenity | 0.660 | ns | 1.000 | ns |
| sadness | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | shame | 0.874 | ns | 1.000 | ns |
| annoyance | shame | 0.001 | \*\*\* | 0.207 | ns |
| awe | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | shame | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| confusion | shame | 0.000 | \*\*\*\* | 0.002 | \*\* |
| contempt | shame | 0.286 | ns | 1.000 | ns |
| contentment | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | shame | 0.883 | ns | 1.000 | ns |
| disgust | shame | 0.466 | ns | 1.000 | ns |
| elation | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| embarrassment | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | shame | 0.286 | ns | 1.000 | ns |
| grief | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| happiness | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| interest | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| joy | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| pride | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| relief | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| sadness | shame | 0.003 | \*\* | 0.630 | ns |
| serenity | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | surprise | 0.276 | ns | 1.000 | ns |
| anger | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | surprise | 0.670 | ns | 1.000 | ns |
| boredom | surprise | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| confusion | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | surprise | 0.895 | ns | 1.000 | ns |
| disappointment | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | surprise | 0.995 | ns | 1.000 | ns |
| embarrassment | surprise | 0.000 | \*\*\*\* | 0.005 | \*\* |
| fear | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| happiness | surprise | 0.032 | \* | 1.000 | ns |
| interest | surprise | 0.195 | ns | 1.000 | ns |
| joy | surprise | 0.270 | ns | 1.000 | ns |
| pride | surprise | 0.000 | \*\*\*\* | 0.023 | \* |
| relief | surprise | 0.815 | ns | 1.000 | ns |
| sadness | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| serenity | surprise | 0.501 | ns | 1.000 | ns |
| shame | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |

Experiment 1. Results of post-hoc t-tests for “a” color dimension.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group1 | group2 | p | p.signif | p.adj | p.adj.signif |
| amusement | anger | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | annoyance | 0.004 | \*\* | 1.000 | ns |
| anger | annoyance | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | awe | 0.312 | ns | 1.000 | ns |
| anger | awe | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | awe | 0.000 | \*\*\*\* | 0.023 | \* |
| amusement | boredom | 0.038 | \* | 1.000 | ns |
| anger | boredom | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | boredom | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| awe | boredom | 0.258 | ns | 1.000 | ns |
| amusement | confusion | 0.144 | ns | 1.000 | ns |
| anger | confusion | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | confusion | 0.000 | \*\*\*\* | 0.004 | \*\* |
| awe | confusion | 0.635 | ns | 1.000 | ns |
| boredom | confusion | 0.506 | ns | 1.000 | ns |
| amusement | contempt | 0.099 | ns | 1.000 | ns |
| anger | contempt | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | contempt | 0.226 | ns | 1.000 | ns |
| awe | contempt | 0.007 | \*\* | 1.000 | ns |
| boredom | contempt | 0.000 | \*\*\* | 0.071 | ns |
| confusion | contempt | 0.002 | \*\* | 0.508 | ns |
| amusement | contentment | 0.001 | \*\*\* | 0.199 | ns |
| anger | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | contentment | 0.017 | \* | 1.000 | ns |
| boredom | contentment | 0.259 | ns | 1.000 | ns |
| confusion | contentment | 0.061 | ns | 1.000 | ns |
| contempt | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| amusement | disappointment | 0.090 | ns | 1.000 | ns |
| anger | disappointment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | disappointment | 0.000 | \*\*\*\* | 0.001 | \*\* |
| awe | disappointment | 0.477 | ns | 1.000 | ns |
| boredom | disappointment | 0.656 | ns | 1.000 | ns |
| confusion | disappointment | 0.818 | ns | 1.000 | ns |
| contempt | disappointment | 0.001 | \*\*\* | 0.220 | ns |
| contentment | disappointment | 0.100 | ns | 1.000 | ns |
| amusement | disgust | 0.001 | \*\* | 0.262 | ns |
| anger | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | disgust | 0.021 | \* | 1.000 | ns |
| boredom | disgust | 0.298 | ns | 1.000 | ns |
| confusion | disgust | 0.074 | ns | 1.000 | ns |
| contempt | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| contentment | disgust | 0.922 | ns | 1.000 | ns |
| disappointment | disgust | 0.119 | ns | 1.000 | ns |
| amusement | elation | 0.057 | ns | 1.000 | ns |
| anger | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | elation | 0.318 | ns | 1.000 | ns |
| awe | elation | 0.003 | \*\* | 0.820 | ns |
| boredom | elation | 0.000 | \*\*\*\* | 0.025 | \* |
| confusion | elation | 0.001 | \*\*\* | 0.199 | ns |
| contempt | elation | 0.820 | ns | 1.000 | ns |
| contentment | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | elation | 0.000 | \*\*\* | 0.080 | ns |
| disgust | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | embarrassment | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| anger | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | embarrassment | 0.066 | ns | 1.000 | ns |
| awe | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| confusion | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | embarrassment | 0.002 | \*\* | 0.603 | ns |
| contentment | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | embarrassment | 0.004 | \*\* | 1.000 | ns |
| amusement | fear | 0.024 | \* | 1.000 | ns |
| anger | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | fear | 0.540 | ns | 1.000 | ns |
| awe | fear | 0.001 | \*\*\* | 0.247 | ns |
| boredom | fear | 0.000 | \*\*\*\* | 0.006 | \*\* |
| confusion | fear | 0.000 | \*\*\* | 0.054 | ns |
| contempt | fear | 0.548 | ns | 1.000 | ns |
| contentment | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | fear | 0.000 | \*\*\*\* | 0.020 | \* |
| disgust | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | fear | 0.704 | ns | 1.000 | ns |
| embarrassment | fear | 0.014 | \* | 1.000 | ns |
| amusement | grief | 0.122 | ns | 1.000 | ns |
| anger | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | grief | 0.000 | \*\*\*\* | 0.004 | \*\* |
| awe | grief | 0.565 | ns | 1.000 | ns |
| boredom | grief | 0.581 | ns | 1.000 | ns |
| confusion | grief | 0.915 | ns | 1.000 | ns |
| contempt | grief | 0.002 | \*\* | 0.416 | ns |
| contentment | grief | 0.083 | ns | 1.000 | ns |
| disappointment | grief | 0.905 | ns | 1.000 | ns |
| disgust | grief | 0.099 | ns | 1.000 | ns |
| elation | grief | 0.001 | \*\*\* | 0.163 | ns |
| embarrassment | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | grief | 0.000 | \*\*\* | 0.045 | \* |
| amusement | happiness | 0.102 | ns | 1.000 | ns |
| anger | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | happiness | 0.000 | \*\*\*\* | 0.002 | \*\* |
| awe | happiness | 0.525 | ns | 1.000 | ns |
| boredom | happiness | 0.597 | ns | 1.000 | ns |
| confusion | happiness | 0.880 | ns | 1.000 | ns |
| contempt | happiness | 0.001 | \*\* | 0.258 | ns |
| contentment | happiness | 0.081 | ns | 1.000 | ns |
| disappointment | happiness | 0.934 | ns | 1.000 | ns |
| disgust | happiness | 0.097 | ns | 1.000 | ns |
| elation | happiness | 0.000 | \*\*\* | 0.094 | ns |
| embarrassment | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | happiness | 0.000 | \*\*\*\* | 0.024 | \* |
| grief | happiness | 0.968 | ns | 1.000 | ns |
| amusement | interest | 0.189 | ns | 1.000 | ns |
| anger | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | interest | 0.000 | \*\*\*\* | 0.006 | \*\* |
| awe | interest | 0.759 | ns | 1.000 | ns |
| boredom | interest | 0.399 | ns | 1.000 | ns |
| confusion | interest | 0.862 | ns | 1.000 | ns |
| contempt | interest | 0.003 | \*\* | 0.738 | ns |
| contentment | interest | 0.037 | \* | 1.000 | ns |
| disappointment | interest | 0.682 | ns | 1.000 | ns |
| disgust | interest | 0.046 | \* | 1.000 | ns |
| elation | interest | 0.001 | \*\* | 0.292 | ns |
| embarrassment | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | interest | 0.000 | \*\*\* | 0.080 | ns |
| grief | interest | 0.779 | ns | 1.000 | ns |
| happiness | interest | 0.741 | ns | 1.000 | ns |
| amusement | joy | 0.572 | ns | 1.000 | ns |
| anger | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | joy | 0.020 | \* | 1.000 | ns |
| awe | joy | 0.112 | ns | 1.000 | ns |
| boredom | joy | 0.009 | \*\* | 1.000 | ns |
| confusion | joy | 0.042 | \* | 1.000 | ns |
| contempt | joy | 0.271 | ns | 1.000 | ns |
| contentment | joy | 0.000 | \*\*\*\* | 0.020 | \* |
| disappointment | joy | 0.023 | \* | 1.000 | ns |
| disgust | joy | 0.000 | \*\*\* | 0.027 | \* |
| elation | joy | 0.178 | ns | 1.000 | ns |
| embarrassment | joy | 0.000 | \*\*\*\* | 0.007 | \*\* |
| fear | joy | 0.087 | ns | 1.000 | ns |
| grief | joy | 0.035 | \* | 1.000 | ns |
| happiness | joy | 0.027 | \* | 1.000 | ns |
| interest | joy | 0.058 | ns | 1.000 | ns |
| amusement | pride | 0.004 | \*\* | 0.990 | ns |
| anger | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | pride | 0.992 | ns | 1.000 | ns |
| awe | pride | 0.000 | \*\*\*\* | 0.021 | \* |
| boredom | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| confusion | pride | 0.000 | \*\*\*\* | 0.004 | \*\* |
| contempt | pride | 0.226 | ns | 1.000 | ns |
| contentment | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | pride | 0.000 | \*\*\*\* | 0.001 | \*\* |
| disgust | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | pride | 0.319 | ns | 1.000 | ns |
| embarrassment | pride | 0.063 | ns | 1.000 | ns |
| fear | pride | 0.543 | ns | 1.000 | ns |
| grief | pride | 0.000 | \*\*\*\* | 0.003 | \*\* |
| happiness | pride | 0.000 | \*\*\*\* | 0.001 | \*\* |
| interest | pride | 0.000 | \*\*\*\* | 0.006 | \*\* |
| joy | pride | 0.019 | \* | 1.000 | ns |
| amusement | relief | 0.000 | \*\*\* | 0.051 | ns |
| anger | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | relief | 0.006 | \*\* | 1.000 | ns |
| boredom | relief | 0.144 | ns | 1.000 | ns |
| confusion | relief | 0.026 | \* | 1.000 | ns |
| contempt | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | relief | 0.732 | ns | 1.000 | ns |
| disappointment | relief | 0.046 | \* | 1.000 | ns |
| disgust | relief | 0.658 | ns | 1.000 | ns |
| elation | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| embarrassment | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | relief | 0.038 | \* | 1.000 | ns |
| happiness | relief | 0.036 | \* | 1.000 | ns |
| interest | relief | 0.015 | \* | 1.000 | ns |
| joy | relief | 0.000 | \*\*\*\* | 0.004 | \*\* |
| pride | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | sadness | 0.218 | ns | 1.000 | ns |
| anger | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | sadness | 0.000 | \*\*\*\* | 0.012 | \* |
| awe | sadness | 0.804 | ns | 1.000 | ns |
| boredom | sadness | 0.381 | ns | 1.000 | ns |
| confusion | sadness | 0.825 | ns | 1.000 | ns |
| contempt | sadness | 0.004 | \*\* | 1.000 | ns |
| contentment | sadness | 0.037 | \* | 1.000 | ns |
| disappointment | sadness | 0.651 | ns | 1.000 | ns |
| disgust | sadness | 0.045 | \* | 1.000 | ns |
| elation | sadness | 0.002 | \*\* | 0.454 | ns |
| embarrassment | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | sadness | 0.001 | \*\*\* | 0.133 | ns |
| grief | sadness | 0.746 | ns | 1.000 | ns |
| happiness | sadness | 0.708 | ns | 1.000 | ns |
| interest | sadness | 0.958 | ns | 1.000 | ns |
| joy | sadness | 0.072 | ns | 1.000 | ns |
| pride | sadness | 0.000 | \*\*\*\* | 0.011 | \* |
| relief | sadness | 0.015 | \* | 1.000 | ns |
| amusement | serenity | 0.044 | \* | 1.000 | ns |
| anger | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| awe | serenity | 0.300 | ns | 1.000 | ns |
| boredom | serenity | 0.890 | ns | 1.000 | ns |
| confusion | serenity | 0.583 | ns | 1.000 | ns |
| contempt | serenity | 0.000 | \*\*\* | 0.067 | ns |
| contentment | serenity | 0.186 | ns | 1.000 | ns |
| disappointment | serenity | 0.749 | ns | 1.000 | ns |
| disgust | serenity | 0.217 | ns | 1.000 | ns |
| elation | serenity | 0.000 | \*\*\*\* | 0.022 | \* |
| embarrassment | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | serenity | 0.000 | \*\*\*\* | 0.005 | \*\* |
| grief | serenity | 0.665 | ns | 1.000 | ns |
| happiness | serenity | 0.684 | ns | 1.000 | ns |
| interest | serenity | 0.462 | ns | 1.000 | ns |
| joy | serenity | 0.009 | \*\* | 1.000 | ns |
| pride | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| relief | serenity | 0.095 | ns | 1.000 | ns |
| sadness | serenity | 0.442 | ns | 1.000 | ns |
| amusement | shame | 0.880 | ns | 1.000 | ns |
| anger | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | shame | 0.002 | \*\* | 0.586 | ns |
| awe | shame | 0.386 | ns | 1.000 | ns |
| boredom | shame | 0.052 | ns | 1.000 | ns |
| confusion | shame | 0.186 | ns | 1.000 | ns |
| contempt | shame | 0.070 | ns | 1.000 | ns |
| contentment | shame | 0.001 | \*\* | 0.306 | ns |
| disappointment | shame | 0.118 | ns | 1.000 | ns |
| disgust | shame | 0.002 | \*\* | 0.403 | ns |
| elation | shame | 0.038 | \* | 1.000 | ns |
| embarrassment | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| fear | shame | 0.015 | \* | 1.000 | ns |
| grief | shame | 0.158 | ns | 1.000 | ns |
| happiness | shame | 0.135 | ns | 1.000 | ns |
| interest | shame | 0.241 | ns | 1.000 | ns |
| joy | shame | 0.470 | ns | 1.000 | ns |
| pride | shame | 0.002 | \*\* | 0.557 | ns |
| relief | shame | 0.000 | \*\*\* | 0.081 | ns |
| sadness | shame | 0.274 | ns | 1.000 | ns |
| serenity | shame | 0.059 | ns | 1.000 | ns |
| amusement | surprise | 0.027 | \* | 1.000 | ns |
| anger | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | surprise | 0.496 | ns | 1.000 | ns |
| awe | surprise | 0.001 | \*\* | 0.279 | ns |
| boredom | surprise | 0.000 | \*\*\*\* | 0.007 | \*\* |
| confusion | surprise | 0.000 | \*\*\* | 0.062 | ns |
| contempt | surprise | 0.587 | ns | 1.000 | ns |
| contentment | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | surprise | 0.000 | \*\*\*\* | 0.023 | \* |
| disgust | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | surprise | 0.749 | ns | 1.000 | ns |
| embarrassment | surprise | 0.011 | \* | 1.000 | ns |
| fear | surprise | 0.950 | ns | 1.000 | ns |
| grief | surprise | 0.000 | \*\*\* | 0.051 | ns |
| happiness | surprise | 0.000 | \*\*\* | 0.027 | \* |
| interest | surprise | 0.000 | \*\*\* | 0.091 | ns |
| joy | surprise | 0.096 | ns | 1.000 | ns |
| pride | surprise | 0.499 | ns | 1.000 | ns |
| relief | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| sadness | surprise | 0.001 | \*\*\* | 0.151 | ns |
| serenity | surprise | 0.000 | \*\*\*\* | 0.006 | \*\* |
| shame | surprise | 0.017 | \* | 1.000 | ns |

Experiment 1. Results of post-hoc t-tests for “b” color dimension.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| group1 | group2 | p | p.signif | p.adj | p.adj.signif |
| amusement | anger | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | annoyance | 0.001 | \*\*\* | 0.163 | ns |
| anger | annoyance | 0.033 | \* | 1.000 | ns |
| amusement | awe | 0.005 | \*\* | 1.000 | ns |
| anger | awe | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | awe | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | boredom | 0.014 | \* | 1.000 | ns |
| anger | boredom | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | boredom | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | boredom | 0.849 | ns | 1.000 | ns |
| amusement | confusion | 0.798 | ns | 1.000 | ns |
| anger | confusion | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | confusion | 0.002 | \*\* | 0.447 | ns |
| awe | confusion | 0.002 | \*\* | 0.593 | ns |
| boredom | confusion | 0.007 | \*\* | 1.000 | ns |
| amusement | contempt | 0.406 | ns | 1.000 | ns |
| anger | contempt | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| annoyance | contempt | 0.010 | \* | 1.000 | ns |
| awe | contempt | 0.000 | \*\*\* | 0.069 | ns |
| boredom | contempt | 0.001 | \*\* | 0.303 | ns |
| confusion | contempt | 0.569 | ns | 1.000 | ns |
| amusement | contentment | 0.005 | \*\* | 1.000 | ns |
| anger | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | contentment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | contentment | 0.957 | ns | 1.000 | ns |
| boredom | contentment | 0.811 | ns | 1.000 | ns |
| confusion | contentment | 0.002 | \*\* | 0.555 | ns |
| contempt | contentment | 0.000 | \*\*\* | 0.066 | ns |
| amusement | disappointment | 0.000 | \*\*\* | 0.050 | ns |
| anger | disappointment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | disappointment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | disappointment | 0.331 | ns | 1.000 | ns |
| boredom | disappointment | 0.270 | ns | 1.000 | ns |
| confusion | disappointment | 0.000 | \*\*\*\* | 0.020 | \* |
| contempt | disappointment | 0.000 | \*\*\*\* | 0.001 | \*\* |
| contentment | disappointment | 0.363 | ns | 1.000 | ns |
| amusement | disgust | 0.016 | \* | 1.000 | ns |
| anger | disgust | 0.002 | \*\* | 0.429 | ns |
| annoyance | disgust | 0.310 | ns | 1.000 | ns |
| awe | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | disgust | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| confusion | disgust | 0.033 | \* | 1.000 | ns |
| contempt | disgust | 0.116 | ns | 1.000 | ns |
| contentment | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disappointment | disgust | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | elation | 0.104 | ns | 1.000 | ns |
| anger | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | elation | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| awe | elation | 0.230 | ns | 1.000 | ns |
| boredom | elation | 0.349 | ns | 1.000 | ns |
| confusion | elation | 0.062 | ns | 1.000 | ns |
| contempt | elation | 0.014 | \* | 1.000 | ns |
| contentment | elation | 0.215 | ns | 1.000 | ns |
| disappointment | elation | 0.031 | \* | 1.000 | ns |
| disgust | elation | 0.000 | \*\*\*\* | 0.012 | \* |
| amusement | embarrassment | 0.946 | ns | 1.000 | ns |
| anger | embarrassment | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | embarrassment | 0.000 | \*\*\* | 0.118 | ns |
| awe | embarrassment | 0.006 | \*\* | 1.000 | ns |
| boredom | embarrassment | 0.016 | \* | 1.000 | ns |
| confusion | embarrassment | 0.746 | ns | 1.000 | ns |
| contempt | embarrassment | 0.366 | ns | 1.000 | ns |
| contentment | embarrassment | 0.005 | \*\* | 1.000 | ns |
| disappointment | embarrassment | 0.000 | \*\*\* | 0.060 | ns |
| disgust | embarrassment | 0.013 | \* | 1.000 | ns |
| elation | embarrassment | 0.117 | ns | 1.000 | ns |
| amusement | fear | 0.753 | ns | 1.000 | ns |
| anger | fear | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | fear | 0.000 | \*\*\* | 0.047 | \* |
| awe | fear | 0.012 | \* | 1.000 | ns |
| boredom | fear | 0.030 | \* | 1.000 | ns |
| confusion | fear | 0.570 | ns | 1.000 | ns |
| contempt | fear | 0.251 | ns | 1.000 | ns |
| contentment | fear | 0.012 | \* | 1.000 | ns |
| disappointment | fear | 0.001 | \*\*\* | 0.158 | ns |
| disgust | fear | 0.006 | \*\* | 1.000 | ns |
| elation | fear | 0.189 | ns | 1.000 | ns |
| embarrassment | fear | 0.804 | ns | 1.000 | ns |
| amusement | grief | 0.000 | \*\*\*\* | 0.009 | \*\* |
| anger | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | grief | 0.145 | ns | 1.000 | ns |
| boredom | grief | 0.119 | ns | 1.000 | ns |
| confusion | grief | 0.000 | \*\*\*\* | 0.003 | \*\* |
| contempt | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| contentment | grief | 0.165 | ns | 1.000 | ns |
| disappointment | grief | 0.622 | ns | 1.000 | ns |
| disgust | grief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | grief | 0.009 | \*\* | 1.000 | ns |
| embarrassment | grief | 0.000 | \*\*\*\* | 0.010 | \* |
| fear | grief | 0.000 | \*\*\* | 0.030 | \* |
| amusement | happiness | 0.030 | \* | 1.000 | ns |
| anger | happiness | 0.001 | \*\*\* | 0.183 | ns |
| annoyance | happiness | 0.207 | ns | 1.000 | ns |
| awe | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| boredom | happiness | 0.000 | \*\*\*\* | 0.002 | \*\* |
| confusion | happiness | 0.058 | ns | 1.000 | ns |
| contempt | happiness | 0.185 | ns | 1.000 | ns |
| contentment | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| disappointment | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| disgust | happiness | 0.805 | ns | 1.000 | ns |
| elation | happiness | 0.000 | \*\*\* | 0.033 | \* |
| embarrassment | happiness | 0.025 | \* | 1.000 | ns |
| fear | happiness | 0.013 | \* | 1.000 | ns |
| grief | happiness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| amusement | interest | 0.241 | ns | 1.000 | ns |
| anger | interest | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | interest | 0.000 | \*\*\*\* | 0.001 | \*\*\* |
| awe | interest | 0.097 | ns | 1.000 | ns |
| boredom | interest | 0.171 | ns | 1.000 | ns |
| confusion | interest | 0.155 | ns | 1.000 | ns |
| contempt | interest | 0.044 | \* | 1.000 | ns |
| contentment | interest | 0.091 | ns | 1.000 | ns |
| disappointment | interest | 0.009 | \*\* | 1.000 | ns |
| disgust | interest | 0.000 | \*\*\* | 0.075 | ns |
| elation | interest | 0.647 | ns | 1.000 | ns |
| embarrassment | interest | 0.266 | ns | 1.000 | ns |
| fear | interest | 0.390 | ns | 1.000 | ns |
| grief | interest | 0.002 | \*\* | 0.577 | ns |
| happiness | interest | 0.001 | \*\*\* | 0.190 | ns |
| amusement | joy | 0.943 | ns | 1.000 | ns |
| anger | joy | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | joy | 0.001 | \*\*\* | 0.190 | ns |
| awe | joy | 0.004 | \*\* | 0.922 | ns |
| boredom | joy | 0.011 | \* | 1.000 | ns |
| confusion | joy | 0.852 | ns | 1.000 | ns |
| contempt | joy | 0.443 | ns | 1.000 | ns |
| contentment | joy | 0.003 | \*\* | 0.862 | ns |
| disappointment | joy | 0.000 | \*\*\* | 0.033 | \* |
| disgust | joy | 0.018 | \* | 1.000 | ns |
| elation | joy | 0.087 | ns | 1.000 | ns |
| embarrassment | joy | 0.888 | ns | 1.000 | ns |
| fear | joy | 0.697 | ns | 1.000 | ns |
| grief | joy | 0.000 | \*\*\*\* | 0.005 | \*\* |
| happiness | joy | 0.034 | \* | 1.000 | ns |
| interest | joy | 0.209 | ns | 1.000 | ns |
| amusement | pride | 0.053 | ns | 1.000 | ns |
| anger | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | pride | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | pride | 0.373 | ns | 1.000 | ns |
| boredom | pride | 0.518 | ns | 1.000 | ns |
| confusion | pride | 0.030 | \* | 1.000 | ns |
| contempt | pride | 0.006 | \*\* | 1.000 | ns |
| contentment | pride | 0.350 | ns | 1.000 | ns |
| disappointment | pride | 0.065 | ns | 1.000 | ns |
| disgust | pride | 0.000 | \*\*\*\* | 0.003 | \*\* |
| elation | pride | 0.757 | ns | 1.000 | ns |
| embarrassment | pride | 0.061 | ns | 1.000 | ns |
| fear | pride | 0.105 | ns | 1.000 | ns |
| grief | pride | 0.021 | \* | 1.000 | ns |
| happiness | pride | 0.000 | \*\*\*\* | 0.009 | \*\* |
| interest | pride | 0.443 | ns | 1.000 | ns |
| joy | pride | 0.043 | \* | 1.000 | ns |
| amusement | relief | 0.000 | \*\*\* | 0.064 | ns |
| anger | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | relief | 0.381 | ns | 1.000 | ns |
| boredom | relief | 0.311 | ns | 1.000 | ns |
| confusion | relief | 0.000 | \*\*\* | 0.026 | \* |
| contempt | relief | 0.000 | \*\*\*\* | 0.002 | \*\* |
| contentment | relief | 0.417 | ns | 1.000 | ns |
| disappointment | relief | 0.915 | ns | 1.000 | ns |
| disgust | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | relief | 0.039 | \* | 1.000 | ns |
| embarrassment | relief | 0.000 | \*\*\* | 0.077 | ns |
| fear | relief | 0.001 | \*\*\* | 0.202 | ns |
| grief | relief | 0.546 | ns | 1.000 | ns |
| happiness | relief | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| interest | relief | 0.012 | \* | 1.000 | ns |
| joy | relief | 0.000 | \*\*\* | 0.043 | \* |
| pride | relief | 0.078 | ns | 1.000 | ns |
| amusement | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| boredom | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| confusion | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| disappointment | sadness | 0.000 | \*\*\*\* | 0.010 | \*\* |
| disgust | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| embarrassment | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| grief | sadness | 0.000 | \*\*\* | 0.095 | ns |
| happiness | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| interest | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| joy | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| pride | sadness | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| relief | sadness | 0.000 | \*\*\*\* | 0.005 | \*\* |
| amusement | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| anger | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| awe | serenity | 0.011 | \* | 1.000 | ns |
| boredom | serenity | 0.010 | \* | 1.000 | ns |
| confusion | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contempt | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| contentment | serenity | 0.014 | \* | 1.000 | ns |
| disappointment | serenity | 0.124 | ns | 1.000 | ns |
| disgust | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| elation | serenity | 0.000 | \*\*\* | 0.052 | ns |
| embarrassment | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| fear | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| grief | serenity | 0.309 | ns | 1.000 | ns |
| happiness | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| interest | serenity | 0.000 | \*\*\*\* | 0.008 | \*\* |
| joy | serenity | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| pride | serenity | 0.001 | \*\*\* | 0.166 | ns |
| relief | serenity | 0.096 | ns | 1.000 | ns |
| sadness | serenity | 0.009 | \*\* | 1.000 | ns |
| amusement | shame | 0.406 | ns | 1.000 | ns |
| anger | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | shame | 0.000 | \*\*\*\* | 0.005 | \*\* |
| awe | shame | 0.046 | \* | 1.000 | ns |
| boredom | shame | 0.092 | ns | 1.000 | ns |
| confusion | shame | 0.280 | ns | 1.000 | ns |
| contempt | shame | 0.096 | ns | 1.000 | ns |
| contentment | shame | 0.043 | \* | 1.000 | ns |
| disappointment | shame | 0.003 | \*\* | 0.856 | ns |
| disgust | shame | 0.001 | \*\* | 0.275 | ns |
| elation | shame | 0.424 | ns | 1.000 | ns |
| embarrassment | shame | 0.443 | ns | 1.000 | ns |
| fear | shame | 0.606 | ns | 1.000 | ns |
| grief | shame | 0.001 | \*\*\* | 0.188 | ns |
| happiness | shame | 0.003 | \*\* | 0.638 | ns |
| interest | shame | 0.731 | ns | 1.000 | ns |
| joy | shame | 0.363 | ns | 1.000 | ns |
| pride | shame | 0.267 | ns | 1.000 | ns |
| relief | shame | 0.004 | \*\* | 1.000 | ns |
| sadness | shame | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| serenity | shame | 0.000 | \*\*\*\* | 0.002 | \*\* |
| amusement | surprise | 0.642 | ns | 1.000 | ns |
| anger | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| annoyance | surprise | 0.000 | \*\*\*\* | 0.023 | \* |
| awe | surprise | 0.018 | \* | 1.000 | ns |
| boredom | surprise | 0.041 | \* | 1.000 | ns |
| confusion | surprise | 0.472 | ns | 1.000 | ns |
| contempt | surprise | 0.192 | ns | 1.000 | ns |
| contentment | surprise | 0.016 | \* | 1.000 | ns |
| disappointment | surprise | 0.001 | \*\*\* | 0.242 | ns |
| disgust | surprise | 0.004 | \*\* | 0.925 | ns |
| elation | surprise | 0.240 | ns | 1.000 | ns |
| embarrassment | surprise | 0.690 | ns | 1.000 | ns |
| fear | surprise | 0.882 | ns | 1.000 | ns |
| grief | surprise | 0.000 | \*\*\* | 0.047 | \* |
| happiness | surprise | 0.008 | \*\* | 1.000 | ns |
| interest | surprise | 0.473 | ns | 1.000 | ns |
| joy | surprise | 0.588 | ns | 1.000 | ns |
| pride | surprise | 0.138 | ns | 1.000 | ns |
| relief | surprise | 0.001 | \*\* | 0.309 | ns |
| sadness | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\*\* |
| serenity | surprise | 0.000 | \*\*\*\* | 0.000 | \*\*\* |
| shame | surprise | 0.710 | ns | 1.000 | ns |

Experiment 2. Multiple-response hypergeometric tests per cell. Each value is a percentage of participants who selected the emotion as represented by the corresponding color. Highlighted cells denote a significant (α = 5%) multiple-response hypergeometric test per cell.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | amusement | anger | annoyance | awe | boredom | confusion | contempt | contentment | disappointment | disgust | elation | embarrassment | fear | grief | happiness | interest | joy | none | pride | relief | sadness | serenity | shame | surprise |
| #e23dc2 | 21.28 | 1.06 | 6.38 | 5.32 | 1.06 | 10.64 | 2.13 | 5.32 | 0 | 0 | 14.89 | 3.19 | 0 | 0 | 24.47 | 13.83 | 35.11 | 2.13 | 24.47 | 2.13 | 1.06 | 2.13 | 2.13 | 31.91 |
| #f080f1 | 23.4 | 1.06 | 6.38 | 11.7 | 0 | 3.19 | 0 | 5.32 | 2.13 | 1.06 | 18.09 | 1.06 | 0 | 1.06 | 26.6 | 13.83 | 36.17 | 7.45 | 18.09 | 8.51 | 1.06 | 1.06 | 0 | 29.79 |
| #eda4b3 | 25.53 | 1.06 | 3.19 | 5.32 | 2.13 | 1.06 | 0 | 9.57 | 2.13 | 1.06 | 17.02 | 11.7 | 0 | 0 | 26.6 | 12.77 | 43.62 | 5.32 | 18.09 | 3.19 | 0 | 12.77 | 4.26 | 13.83 |
| #eeb8e0 | 19.15 | 0 | 2.13 | 10.64 | 1.06 | 2.13 | 1.06 | 9.57 | 0 | 1.06 | 14.89 | 3.19 | 0 | 0 | 34.04 | 14.89 | 36.17 | 6.38 | 25.53 | 3.19 | 0 | 11.7 | 1.06 | 13.83 |
| #62202b | 1.06 | 24.47 | 18.09 | 4.26 | 8.51 | 3.19 | 8.51 | 9.57 | 7.45 | 9.57 | 1.06 | 5.32 | 4.26 | 5.32 | 3.19 | 7.45 | 2.13 | 14.89 | 9.57 | 1.06 | 7.45 | 3.19 | 7.45 | 1.06 |
| #9b1c45 | 6.38 | 18.09 | 18.09 | 5.32 | 2.13 | 3.19 | 10.64 | 5.32 | 6.38 | 4.26 | 4.26 | 7.45 | 3.19 | 3.19 | 8.51 | 20.21 | 11.7 | 13.83 | 9.57 | 4.26 | 4.26 | 8.51 | 4.26 | 6.38 |
| #ac1011 | 2.13 | 71.28 | 37.23 | 2.13 | 0 | 0 | 17.02 | 0 | 3.19 | 11.7 | 1.06 | 6.38 | 13.83 | 4.26 | 5.32 | 9.57 | 4.26 | 1.06 | 4.26 | 0 | 5.32 | 1.06 | 6.38 | 6.38 |
| #dc2265 | 21.28 | 7.45 | 9.57 | 8.51 | 0 | 4.26 | 2.13 | 4.26 | 1.06 | 0 | 12.77 | 3.19 | 0 | 1.06 | 27.66 | 15.96 | 30.85 | 10.64 | 15.96 | 1.06 | 0 | 4.26 | 3.19 | 23.4 |
| #ef2119 | 7.45 | 56.38 | 34.04 | 4.26 | 0 | 3.19 | 13.83 | 1.06 | 6.38 | 5.32 | 3.19 | 12.77 | 11.7 | 2.13 | 2.13 | 3.19 | 2.13 | 3.19 | 4.26 | 0 | 1.06 | 0 | 2.13 | 19.15 |
| #c94949 | 7.45 | 40.43 | 22.34 | 2.13 | 4.26 | 3.19 | 10.64 | 5.32 | 4.26 | 2.13 | 2.13 | 9.57 | 8.51 | 1.06 | 7.45 | 9.57 | 4.26 | 11.7 | 3.19 | 0 | 2.13 | 1.06 | 8.51 | 7.45 |
| #f07723 | 19.15 | 4.26 | 14.89 | 11.7 | 1.06 | 7.45 | 2.13 | 1.06 | 2.13 | 3.19 | 14.89 | 3.19 | 3.19 | 0 | 20.21 | 17.02 | 17.02 | 7.45 | 9.57 | 2.13 | 1.06 | 1.06 | 1.06 | 22.34 |
| #e5914e | 14.89 | 2.13 | 7.45 | 4.26 | 1.06 | 11.7 | 5.32 | 7.45 | 1.06 | 2.13 | 15.96 | 2.13 | 2.13 | 1.06 | 17.02 | 15.96 | 23.4 | 17.02 | 8.51 | 4.26 | 0 | 7.45 | 2.13 | 9.57 |
| #f9b308 | 14.89 | 1.06 | 19.15 | 8.51 | 2.13 | 8.51 | 2.13 | 6.38 | 1.06 | 3.19 | 24.47 | 3.19 | 7.45 | 0 | 27.66 | 7.45 | 35.11 | 2.13 | 13.83 | 0 | 1.06 | 3.19 | 3.19 | 15.96 |
| #ebe049 | 23.4 | 0 | 12.77 | 11.7 | 1.06 | 2.13 | 1.06 | 4.26 | 0 | 4.26 | 29.79 | 1.06 | 3.19 | 0 | 29.79 | 13.83 | 48.94 | 2.13 | 11.7 | 2.13 | 2.13 | 1.06 | 2.13 | 22.34 |
| #4290ac | 4.26 | 0 | 0 | 10.64 | 6.38 | 2.13 | 2.13 | 31.91 | 2.13 | 0 | 5.32 | 0 | 0 | 3.19 | 22.34 | 19.15 | 15.96 | 5.32 | 5.32 | 19.15 | 5.32 | 39.36 | 0 | 7.45 |
| #34b0f4 | 14.89 | 0 | 5.32 | 11.7 | 1.06 | 0 | 1.06 | 12.77 | 1.06 | 1.06 | 23.4 | 0 | 1.06 | 0 | 32.98 | 21.28 | 28.72 | 1.06 | 5.32 | 11.7 | 4.26 | 26.6 | 0 | 14.89 |
| #8ce7f7 | 11.7 | 0 | 0 | 5.32 | 1.06 | 1.06 | 2.13 | 12.77 | 0 | 0 | 25.53 | 0 | 0 | 0 | 34.04 | 22.34 | 34.04 | 6.38 | 7.45 | 19.15 | 1.06 | 29.79 | 0 | 11.7 |
| #c9f1ec | 7.45 | 0 | 1.06 | 11.7 | 7.45 | 3.19 | 1.06 | 17.02 | 0 | 0 | 17.02 | 0 | 1.06 | 0 | 14.89 | 13.83 | 18.09 | 9.57 | 3.19 | 19.15 | 2.13 | 37.23 | 0 | 9.57 |
| #91a3cf | 3.19 | 0 | 1.06 | 6.38 | 7.45 | 2.13 | 1.06 | 29.79 | 3.19 | 1.06 | 5.32 | 1.06 | 0 | 8.51 | 7.45 | 11.7 | 9.57 | 6.38 | 4.26 | 19.15 | 15.96 | 42.55 | 1.06 | 2.13 |
| #ada8ff | 12.77 | 0 | 2.13 | 11.7 | 2.13 | 5.32 | 2.13 | 15.96 | 0 | 2.13 | 18.09 | 1.06 | 0 | 0 | 14.89 | 13.83 | 20.21 | 4.26 | 7.45 | 12.77 | 3.19 | 24.47 | 2.13 | 14.89 |
| #424326 | 1.06 | 5.32 | 4.26 | 2.13 | 8.51 | 4.26 | 6.38 | 15.96 | 17.02 | 27.66 | 1.06 | 4.26 | 6.38 | 12.77 | 1.06 | 6.38 | 0 | 14.89 | 0 | 7.45 | 12.77 | 8.51 | 12.77 | 3.19 |
| #465838 | 1.06 | 3.19 | 6.38 | 4.26 | 7.45 | 4.26 | 7.45 | 15.96 | 10.64 | 23.4 | 1.06 | 3.19 | 2.13 | 2.13 | 6.38 | 9.57 | 3.19 | 12.77 | 1.06 | 7.45 | 4.26 | 23.4 | 4.26 | 2.13 |
| #767928 | 2.13 | 0 | 6.38 | 0 | 8.51 | 6.38 | 10.64 | 7.45 | 7.45 | 41.49 | 1.06 | 9.57 | 6.38 | 3.19 | 3.19 | 5.32 | 2.13 | 15.96 | 2.13 | 6.38 | 3.19 | 8.51 | 5.32 | 0 |
| #3fad41 | 12.77 | 0 | 6.38 | 3.19 | 1.06 | 2.13 | 6.38 | 17.02 | 4.26 | 10.64 | 12.77 | 4.26 | 2.13 | 3.19 | 19.15 | 27.66 | 17.02 | 7.45 | 4.26 | 7.45 | 0 | 11.7 | 5.32 | 11.7 |
| #6e6c68 | 0 | 3.19 | 1.06 | 1.06 | 50 | 8.51 | 3.19 | 7.45 | 19.15 | 3.19 | 0 | 3.19 | 9.57 | 28.72 | 0 | 3.19 | 0 | 6.38 | 0 | 2.13 | 28.72 | 3.19 | 10.64 | 1.06 |
| #838586 | 0 | 1.06 | 5.32 | 1.06 | 52.13 | 10.64 | 2.13 | 6.38 | 14.89 | 5.32 | 0 | 2.13 | 5.32 | 18.09 | 0 | 2.13 | 0 | 8.51 | 0 | 6.38 | 29.79 | 6.38 | 6.38 | 1.06 |
| #a0a1a5 | 1.06 | 0 | 3.19 | 1.06 | 45.74 | 9.57 | 5.32 | 17.02 | 12.77 | 2.13 | 0 | 0 | 2.13 | 12.77 | 2.13 | 2.13 | 0 | 15.96 | 1.06 | 6.38 | 18.09 | 13.83 | 8.51 | 1.06 |
| #eee3e8 | 9.57 | 1.06 | 2.13 | 10.64 | 11.7 | 5.32 | 0 | 14.89 | 1.06 | 2.13 | 3.19 | 2.13 | 0 | 0 | 9.57 | 7.45 | 14.89 | 18.09 | 8.51 | 11.7 | 2.13 | 21.28 | 1.06 | 8.51 |
| #204c6e | 1.06 | 2.13 | 2.13 | 1.06 | 10.64 | 2.13 | 6.38 | 28.72 | 7.45 | 2.13 | 2.13 | 0 | 3.19 | 12.77 | 2.13 | 4.26 | 2.13 | 10.64 | 4.26 | 12.77 | 26.6 | 35.11 | 2.13 | 0 |
| #40718f | 2.13 | 0 | 1.06 | 4.26 | 6.38 | 7.45 | 3.19 | 27.66 | 9.57 | 0 | 2.13 | 0 | 4.26 | 9.57 | 8.51 | 9.57 | 4.26 | 8.51 | 5.32 | 13.83 | 28.72 | 34.04 | 0 | 1.06 |
| #282a36 | 1.06 | 11.7 | 2.13 | 0 | 15.96 | 5.32 | 7.45 | 8.51 | 14.89 | 9.57 | 0 | 0 | 26.6 | 40.43 | 1.06 | 3.19 | 1.06 | 8.51 | 2.13 | 2.13 | 38.3 | 3.19 | 14.89 | 2.13 |
| #070808 | 0 | 12.77 | 4.26 | 2.13 | 9.57 | 5.32 | 10.64 | 3.19 | 18.09 | 9.57 | 1.06 | 3.19 | 31.91 | 51.06 | 0 | 4.26 | 2.13 | 5.32 | 0 | 4.26 | 35.11 | 2.13 | 12.77 | 1.06 |

Experiment 2. Probabilities of color being interpreted as a particular emotion, obtained by multinomial logistic regression.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | amusement | anger | annoyance | awe | boredom | confusion | contempt | contentment | disappointment | disgust | elation | embarrassment | fear | grief | happiness | interest | joy | pride | relief | sadness | serenity | shame | surprise |
| #e23dc2 | 0.1019 | 0.0051 | 0.0303 | 0.0254 | 0.0051 | 0.0508 | 0.0104 | 0.0253 | 0.0001 | 0.0001 | 0.0725 | 0.0150 | 0.0000 | 0.0000 | 0.1167 | 0.0669 | 0.1689 | 0.1165 | 0.0097 | 0.0051 | 0.0105 | 0.0100 | 0.1540 |
| #f080f1 | 0.1118 | 0.0052 | 0.0305 | 0.0559 | 0.0000 | 0.0152 | 0.0000 | 0.0248 | 0.0100 | 0.0051 | 0.0870 | 0.0050 | 0.0000 | 0.0052 | 0.1268 | 0.0660 | 0.1724 | 0.0866 | 0.0410 | 0.0051 | 0.0053 | 0.0000 | 0.1409 |
| #eda4b3 | 0.1182 | 0.0050 | 0.0146 | 0.0249 | 0.0101 | 0.0049 | 0.0001 | 0.0448 | 0.0099 | 0.0049 | 0.0790 | 0.0538 | 0.0000 | 0.0001 | 0.1232 | 0.0598 | 0.2030 | 0.0844 | 0.0153 | 0.0000 | 0.0596 | 0.0201 | 0.0643 |
| #eeb8e0 | 0.0948 | 0.0000 | 0.0105 | 0.0518 | 0.0052 | 0.0101 | 0.0054 | 0.0477 | 0.0000 | 0.0052 | 0.0730 | 0.0148 | 0.0000 | 0.0000 | 0.1623 | 0.0726 | 0.1735 | 0.1262 | 0.0156 | 0.0000 | 0.0582 | 0.0053 | 0.0675 |
| #62202b | 0.0068 | 0.1609 | 0.1169 | 0.0280 | 0.0560 | 0.0210 | 0.0555 | 0.0624 | 0.0479 | 0.0630 | 0.0070 | 0.0353 | 0.0280 | 0.0354 | 0.0202 | 0.0484 | 0.0140 | 0.0621 | 0.0066 | 0.0487 | 0.0207 | 0.0483 | 0.0069 |
| #9b1c45 | 0.0364 | 0.1009 | 0.1044 | 0.0308 | 0.0122 | 0.0182 | 0.0605 | 0.0300 | 0.0367 | 0.0249 | 0.0244 | 0.0423 | 0.0179 | 0.0184 | 0.0483 | 0.1135 | 0.0671 | 0.0546 | 0.0255 | 0.0239 | 0.0486 | 0.0243 | 0.0363 |
| #ac1011 | 0.0096 | 0.3363 | 0.1749 | 0.0096 | 0.0001 | 0.0001 | 0.0809 | 0.0000 | 0.0145 | 0.0544 | 0.0051 | 0.0304 | 0.0644 | 0.0198 | 0.0244 | 0.0453 | 0.0196 | 0.0201 | 0.0001 | 0.0246 | 0.0052 | 0.0299 | 0.0306 |
| #dc2265 | 0.1075 | 0.0384 | 0.0477 | 0.0424 | 0.0000 | 0.0208 | 0.0111 | 0.0212 | 0.0054 | 0.0001 | 0.0649 | 0.0157 | 0.0000 | 0.0054 | 0.1403 | 0.0808 | 0.1577 | 0.0799 | 0.0052 | 0.0000 | 0.0210 | 0.0154 | 0.1190 |
| #ef2119 | 0.0376 | 0.2890 | 0.1723 | 0.0220 | 0.0000 | 0.0163 | 0.0700 | 0.0055 | 0.0335 | 0.0277 | 0.0167 | 0.0648 | 0.0601 | 0.0106 | 0.0107 | 0.0159 | 0.0109 | 0.0213 | 0.0001 | 0.0055 | 0.0000 | 0.0109 | 0.0983 |
| #c94949 | 0.0447 | 0.2435 | 0.1331 | 0.0117 | 0.0257 | 0.0184 | 0.0627 | 0.0313 | 0.0253 | 0.0125 | 0.0129 | 0.0569 | 0.0519 | 0.0064 | 0.0443 | 0.0573 | 0.0260 | 0.0190 | 0.0001 | 0.0131 | 0.0066 | 0.0522 | 0.0443 |
| #f07723 | 0.1065 | 0.0224 | 0.0828 | 0.0645 | 0.0059 | 0.0415 | 0.0121 | 0.0060 | 0.0114 | 0.0180 | 0.0835 | 0.0179 | 0.0182 | 0.0000 | 0.1128 | 0.0949 | 0.0951 | 0.0540 | 0.0112 | 0.0060 | 0.0061 | 0.0060 | 0.1233 |
| #e5914e | 0.0891 | 0.0132 | 0.0443 | 0.0262 | 0.0063 | 0.0695 | 0.0317 | 0.0441 | 0.0063 | 0.0126 | 0.0960 | 0.0123 | 0.0123 | 0.0063 | 0.1018 | 0.0955 | 0.1394 | 0.0520 | 0.0257 | 0.0000 | 0.0448 | 0.0129 | 0.0576 |
| #f9b308 | 0.0716 | 0.0051 | 0.0923 | 0.0398 | 0.0100 | 0.0406 | 0.0104 | 0.0305 | 0.0051 | 0.0148 | 0.1168 | 0.0148 | 0.0352 | 0.0000 | 0.1321 | 0.0360 | 0.1669 | 0.0660 | 0.0001 | 0.0051 | 0.0151 | 0.0147 | 0.0767 |
| #ebe049 | 0.1028 | 0.0000 | 0.0565 | 0.0510 | 0.0047 | 0.0090 | 0.0048 | 0.0190 | 0.0000 | 0.0191 | 0.1286 | 0.0046 | 0.0138 | 0.0000 | 0.1314 | 0.0601 | 0.2146 | 0.0507 | 0.0087 | 0.0099 | 0.0048 | 0.0093 | 0.0966 |
| #4290ac | 0.0212 | 0.0000 | 0.0001 | 0.0522 | 0.0311 | 0.0102 | 0.0110 | 0.1585 | 0.0103 | 0.0000 | 0.0262 | 0.0001 | 0.0000 | 0.0159 | 0.1112 | 0.0951 | 0.0783 | 0.0261 | 0.0958 | 0.0267 | 0.1934 | 0.0000 | 0.0366 |
| #34b0f4 | 0.0683 | 0.0000 | 0.0241 | 0.0534 | 0.0050 | 0.0001 | 0.0051 | 0.0566 | 0.0050 | 0.0050 | 0.1055 | 0.0001 | 0.0050 | 0.0000 | 0.1513 | 0.0975 | 0.1315 | 0.0243 | 0.0526 | 0.0190 | 0.1216 | 0.0000 | 0.0689 |
| #8ce7f7 | 0.0536 | 0.0000 | 0.0001 | 0.0238 | 0.0048 | 0.0047 | 0.0095 | 0.0586 | 0.0000 | 0.0001 | 0.1174 | 0.0001 | 0.0000 | 0.0000 | 0.1556 | 0.1000 | 0.1571 | 0.0333 | 0.0869 | 0.0048 | 0.1362 | 0.0000 | 0.0531 |
| #c9f1ec | 0.0399 | 0.0000 | 0.0057 | 0.0634 | 0.0400 | 0.0170 | 0.0060 | 0.0917 | 0.0000 | 0.0000 | 0.0930 | 0.0001 | 0.0058 | 0.0000 | 0.0796 | 0.0745 | 0.0974 | 0.0174 | 0.1041 | 0.0120 | 0.2001 | 0.0000 | 0.0520 |
| #91a3cf | 0.0181 | 0.0000 | 0.0057 | 0.0347 | 0.0409 | 0.0112 | 0.0060 | 0.1616 | 0.0173 | 0.0058 | 0.0284 | 0.0057 | 0.0000 | 0.0467 | 0.0407 | 0.0629 | 0.0521 | 0.0231 | 0.1044 | 0.0868 | 0.2302 | 0.0059 | 0.0117 |
| #ada8ff | 0.0686 | 0.0000 | 0.0116 | 0.0626 | 0.0116 | 0.0282 | 0.0119 | 0.0852 | 0.0000 | 0.0114 | 0.0977 | 0.0056 | 0.0000 | 0.0000 | 0.0791 | 0.0733 | 0.1069 | 0.0402 | 0.0684 | 0.0166 | 0.1293 | 0.0117 | 0.0801 |
| #424326 | 0.0063 | 0.0315 | 0.0251 | 0.0117 | 0.0502 | 0.0252 | 0.0373 | 0.0941 | 0.0997 | 0.1645 | 0.0064 | 0.0256 | 0.0373 | 0.0772 | 0.0063 | 0.0375 | 0.0001 | 0.0000 | 0.0444 | 0.0750 | 0.0505 | 0.0758 | 0.0185 |
| #465838 | 0.0068 | 0.0199 | 0.0417 | 0.0279 | 0.0489 | 0.0279 | 0.0480 | 0.1037 | 0.0691 | 0.1512 | 0.0070 | 0.0203 | 0.0134 | 0.0138 | 0.0409 | 0.0631 | 0.0210 | 0.0068 | 0.0482 | 0.0274 | 0.1510 | 0.0278 | 0.0144 |
| #767928 | 0.0141 | 0.0000 | 0.0443 | 0.0008 | 0.0584 | 0.0424 | 0.0720 | 0.0503 | 0.0500 | 0.2830 | 0.0073 | 0.0658 | 0.0434 | 0.0217 | 0.0210 | 0.0360 | 0.0138 | 0.0151 | 0.0444 | 0.0215 | 0.0584 | 0.0363 | 0.0000 |
| #3fad41 | 0.0669 | 0.0001 | 0.0335 | 0.0173 | 0.0055 | 0.0109 | 0.0328 | 0.0883 | 0.0219 | 0.0569 | 0.0666 | 0.0228 | 0.0104 | 0.0169 | 0.1005 | 0.1455 | 0.0896 | 0.0231 | 0.0402 | 0.0001 | 0.0611 | 0.0281 | 0.0608 |
| #6e6c68 | 0.0000 | 0.0171 | 0.0057 | 0.0038 | 0.2662 | 0.0459 | 0.0173 | 0.0402 | 0.1026 | 0.0175 | 0.0000 | 0.0174 | 0.0517 | 0.1547 | 0.0000 | 0.0171 | 0.0000 | 0.0000 | 0.0107 | 0.1529 | 0.0174 | 0.0559 | 0.0059 |
| #838586 | 0.0000 | 0.0061 | 0.0301 | 0.0040 | 0.2977 | 0.0613 | 0.0122 | 0.0365 | 0.0833 | 0.0301 | 0.0000 | 0.0115 | 0.0304 | 0.1014 | 0.0000 | 0.0119 | 0.0000 | 0.0000 | 0.0365 | 0.1698 | 0.0355 | 0.0353 | 0.0062 |
| #a0a1a5 | 0.0064 | 0.0000 | 0.0197 | 0.0044 | 0.2755 | 0.0577 | 0.0318 | 0.1024 | 0.0783 | 0.0127 | 0.0000 | 0.0001 | 0.0123 | 0.0762 | 0.0128 | 0.0130 | 0.0000 | 0.0064 | 0.0378 | 0.1087 | 0.0845 | 0.0526 | 0.0065 |
| #eee3e8 | 0.0650 | 0.0072 | 0.0143 | 0.0710 | 0.0789 | 0.0355 | 0.0000 | 0.0996 | 0.0072 | 0.0139 | 0.0220 | 0.0135 | 0.0000 | 0.0000 | 0.0647 | 0.0493 | 0.1001 | 0.0569 | 0.0791 | 0.0148 | 0.1423 | 0.0072 | 0.0573 |
| #204c6e | 0.0063 | 0.0129 | 0.0128 | 0.0044 | 0.0618 | 0.0124 | 0.0369 | 0.1702 | 0.0432 | 0.0125 | 0.0127 | 0.0001 | 0.0184 | 0.0745 | 0.0125 | 0.0249 | 0.0126 | 0.0251 | 0.0748 | 0.1545 | 0.2038 | 0.0127 | 0.0000 |
| #40718f | 0.0112 | 0.0000 | 0.0057 | 0.0230 | 0.0342 | 0.0410 | 0.0175 | 0.1513 | 0.0530 | 0.0001 | 0.0115 | 0.0001 | 0.0235 | 0.0519 | 0.0465 | 0.0528 | 0.0231 | 0.0290 | 0.0764 | 0.1576 | 0.1849 | 0.0001 | 0.0058 |
| #282a36 | 0.0049 | 0.0549 | 0.0090 | 0.0006 | 0.0757 | 0.0248 | 0.0351 | 0.0397 | 0.0695 | 0.0449 | 0.0000 | 0.0000 | 0.1256 | 0.1947 | 0.0049 | 0.0152 | 0.0048 | 0.0097 | 0.0091 | 0.1824 | 0.0152 | 0.0701 | 0.0092 |
| #070808 | 0.0007 | 0.0565 | 0.0199 | 0.0180 | 0.0421 | 0.0244 | 0.0469 | 0.0141 | 0.0797 | 0.0418 | 0.0028 | 0.0153 | 0.1401 | 0.2274 | 0.0005 | 0.0206 | 0.0065 | 0.0008 | 0.0195 | 0.1564 | 0.0069 | 0.0563 | 0.0026 |