Will It Blend?

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Abstract—**Over the last years, research has been made to ascertain if the blending of two or more colors can convey, in a efficient way, the information contained in two or more variables, using color blending techniques. Nonetheless, previous investigation has not come to an agreement.**

With our user study, we have found that CMYK is the color model that best resembles the users' expectations, while the orange, green and yellow color-blending results are the ones which generate shorter distances to between the reference colors and the ones indicated by the users. On the other hand, the CIE-L*C*h* Color Model is the one which is farther apart from the users' mental model of color. We have also detected that there is a mild indicator that it exists a difference between the responses from Female and Male users, but only in a few color blendings. All the data collected was developed through a user study with 259 users, which was supported by an online user studies platform called *BlendMe!*.

We gathered a set relevant implications of using color blending techniques, in the InfoVis field of research, besides providing a set of questions which remain unanswered and could turn out as an interesting source of future work, and a cleaned dataset containing the data collected from the user study which could be further analyzed by other researchers.

Index Terms—**End-User Programming, Trigger-Action Programming, Event Processing, Task Automation, Internet Services**

References

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