

Does monitor color affect productivity?

Once upon a time, all computer monitors were putty-colored. Recently, the wheel of fashion has rotated and black has become the color of choice for monitors. However, an influential European organization, the Swedish Confederation of Professional Employees, recommends that the reflectance of computer monitor bezels be at least 0.2, a recommendation that disallows black monitors. The Lighting Research Center examined the effect of different monitor bezel reflectances on visual comfort, visual fatigue, and office task performance.

Nineteen temporary office workers worked at three computer workstations, in a simulated office setting, for three 8-hour days. During each day, the workers performed a data entry task, a numerical verification task, and a simple reading task. Each task was completed for one hour in the morning one hour in the afternoon, and at two different type sizes. The data entry task required the worker's eyes to move repeatedly across the bezel, from paper to screen. The numerical verification task required the worker to fixate on the monitor screen. The reading task required the worker to use the full width of the monitor screen. The three workstations used the same computer system, but each had a monitor with a different colored bezel: white, putty, and black.



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Results

The results obtained showed that:

- The three bezel colors had no statistically significant effects on the performance of any of the tasks. However, performance for all three tasks was significantly worse for 6-point type relative to 12-point type.
- The putty-colored monitor was considered the most comfortable of the three, but none caused a high level of discomfort.
- The black bezel was the most preferred by the workers, while the white bezel was the least preferred.

Conclusion

LRC researchers concluded that there is no scientific basis for a lower bound on the reflectance of monitor bezels. In everyday language, black monitors are OK.

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