

Review of: "Finding the illuminance levels for walkers in a prominent public park in New Delhi during the post-twilight period for healthy visual comfort, security, and other related parameters."

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Potential competing interests: No potential competing interests to declare.

Overall, the paper is written descriptively, but it would be more impactful if it reached scientific writing and reporting results standards. The interesting experiment would benefit from being more precisely described and justified, allowing reproducibility.

Title :

The title could be more straight to the point, the goal appearing earlier and being less specific, such as:

"Finding the illuminance levels for healthy visual comfort, security, and other related parameters of outdoor walking during the post-twilight period."

Abstract:

I would suggest that authors be less specific in the abstract. For example, avoid citing numbers and indicate proportion only as half the point...

Introduction:

The introduction part should focus on the description of the state of the art and topic description. For this reason, I would advise describing the park's choice in the methodology part under the second point, which would be more appropriate from my point of view. The description of the topic should also be extended. At the end of the introduction, there is no hypothesis, expectation, or explicit goal the study should test or fulfil. I would recommend that the authors indicate at least one of those.

Materials and Methods:

It would be appreciated to have more details about the Outdoor lighting standards. I suggest that authors include the amount or range of illuminance (in lux, lx) and correlated colour temperature (CCT, in kelvin, K) of the light recommended. The interpretation of the results would be more straightforward if authors formulated a range of lx and K which satisfies all the standards or ranges allowing to satisfy those standards. Making it clear what the expected or optimal values are. From

my point of view, the description here lacks indications of the timing. When was the first and the last measurement is taken? For the discussion, how could the timing have impacted the measurements?

A more in-depth description of the park, such as the presence of public lighting (street light and illuminated buildings), would deepen the understanding of the location.

Results:

I would suggest adding the standard deviation of the measurements along with the mean.

Figure 3 is overwhelming; what makes it particularly difficult to read seems to be the crossing of the lines on the left side. While I understand this is to respect the timing of measurements, the figure could be clarified and augmented with arrows showing the path direction and indexes of the measurements (or, even better, the time of the measurements).

For figure 4, rather than having a grouped illuminance, it would be more informative to have a histogram of the complete range, with vertical lines or shaded areas reflecting the standards. These modifications would allow the readers to see the number of measurements compliant with standards.

An additional figure between Figures 3 and 4 could be done. This figure could represent a histogram or line chart showing the measurement in order, allowing us to visualise the "zebra effect".

Discussion:

The author should provide a rationale for the zebra effect. Is it due to public lighting or lighted building? Or was it due to measurement error?

This sentence is unclear and should be reformulated: "On the other hand, low lighting, which is throughout the pathway uniformly, would have created a better effect regarding the sense of lighting for security. »

Overall, the discussion lack of citations. In this sense, I think the discussion would benefit a rewriting, including more details and being more explicit, including citations. For example, the fact that light pollution might raise the melatonin level and the circadian rhythm should be justify and made more explicit: what levels does impact on those factors?

Finally, I would recommend proofreading the paper as there are a few errors, such as uniformly, that should be uniform in the discussion.