

Review of: "The Impact on People's Well-being of Utilizing Greenery in the Design of High-rise Residential Building Balconies"

Abel Sepúlveda

Potential competing interests: No potential competing interests to declare.

Although the research topic is interesting and the methodology is based on VR, which has the potential to study views out, there are several shortcomings in the methodology and other points:

- Most of the figures were not mentioned in the text.
- Page 4: Why 2 groups and why 2 environments per group? All these decisions should have justification.
- Page 4: What did you mean by "residual effects"?
- What was the duration of the exposure in the VR immersive environment?
- Page 5: Why did you not use 180 deg as a fish-eye lens?
- Page 5: How were the sickness symptoms checked out?
- Page 5: What about the HVAC conditions? Thermal or acoustic discomfort could bias the results totally.
- Figure 3 was not mentioned in the text.
- Page 5: "Also, virtual reality technology helped to eliminate some of the interference factors in the experiment, such as auditory perception, olfactory system, and interaction with surrounding people"

How come?

- Page 6: Why did you ask participants demographic questions? Were these analyzed somehow?
- Table 1: Although these questions are standard, most of them cannot be answered by the participants if they are not experiencing or have experienced the real building. I do not think these questions are appropriate for this study, which is based on VR.
- Page 6: From which city were the participants?
- Page 6: Why did you consider these eligibility criteria?
- Page 7: What do you mean by "damages"?
- Page 7: "We designed a balcony with four different amounts of greenery and, in order to allow for a fair comparison, all of them were constructed with equal visual quality (sharpness and resolution)." This is not clear. Why did you not include all the combinations of greenery location?
- Tables 3, 4, and 5: Abbreviations should be explained, and the analysis should be further explained.
- Page 7: What is the PLS test?
- Page 9: "Nevertheless, the values of skewness and kurtosis of variables are in the range between 1.96 and -1.96. Therefore, the normality of the research variables is accepted. In this way, parametric tests can be used to analyze the

data." Grammatically not correct, please rewrite.

- Figure 5: Label for x-axis was not added.
- Page 11: "Surprisingly, the competence figure is different from others." This is not clear.
- Page 11: What is the abbreviation for variance?
- Page 13: "This outcome is contrary to that of Roe et al. (2013), who found a notable interaction effect between gender and percentage green space on mean cortisol concentrations, demonstrating a positive effect of higher green space concerning cortisol measures in women but not in men." Why could this happen?
- Page 13: "Residents who spent most of their time on balconies experienced better well-being when exposed to greenery." This conclusion cannot be drawn from your results.
- Page 14: "Experiencing greenery on balconies was associated with feeling happier, satisfied, connected to others, independence, and having the ability to do something successfully, which led to higher well-being." What about thermal comfort? I guess this could be really different in different seasons, depending on the climate.