

Review of: "Could geographical features of green spaces influence physical exercise? Examining the roles of neighbourhood diversity and single status"

Mo Wang¹

¹ Guangzhou University

Potential competing interests: No potential competing interests to declare.

The paper offers contribution to the existing body of knowledge regarding green spaces, physical activity, and their socio-demographic moderators. With a few refinements, it can deliver its message and findings with enhanced clarity and precision.

Abstract:

The abstract generally provides a clear understanding of the study's objective, methods, and findings. However, the phrase "from the green exercise" in the methods section appears out of context and may need rephrasing.

While the study aims to examine the mediating role of neighborhood diversity and single status, the results provided in the abstract focus mainly on moderation, not mediation. Clarification is required.

The abstract mentions various regression models, but the specific independent and dependent variables aren't detailed.

This can make it challenging to discern what was predicted by what.

The conclusion gives an implication of the study but seems to introduce a new aspect – "how work time can influence level and time of green physical exercise" which was not previously discussed in the abstract.

Introduction:

The introduction effectively establishes the relevance of green spaces and nature connectedness to health and well-being. However, the transition between the importance of green spaces and physical activity in the context of green spaces could be smoother.

The study's aims are clearly stated, but the phrase "Considering fixed effects of socio-demographic factors..." could benefit from elaboration or simplification for clarity.

Method:

While the sample size (1387) is reasonably large, it's concentrated on full-time employed individuals aged 22-65. This limits the generalizability of the findings to this specific demographic.

The dataset was originally designed to study the influence of the social and physical environment in the workplace on health. Using it to study green spaces may introduce some bias, as the original survey may not have adequately captured all relevant variables for the new purpose.

For variables like marital status and neighborhood diversity, the categorization seems a bit arbitrary, and no justification is

provided. It's essential to clarify why specific categories were chosen.

The recoding of education levels might oversimplify the variable and lump potentially heterogeneous groups together. The reason for this grouping should be clear.

There's an inconsistency in the perceived quality of green spaces. The original question has responses from "Terrible" to "Excellent", but the recoding talks about travel duration (10 minutes, 15 minutes). This needs clarification.

There might be bias introduced by deleting observations with "Don't know" or "prefer not to say". Deleting these observations might introduce non-response bias.

The definition of a "daily visit" seems to exclude those who visit a few times a week, which may be a significant portion of the sample. This might lead to a loss of granularity in the data.

"Non-vigorous exercise" is not well defined, considering vigorous exercise has been. The boundary between these two categories could be subjective among respondents.

It's vital to consider the possibility of multicollinearity, especially when dealing with multiple independent variables.

The hierarchical regression analysis is a good approach, but the method section doesn't explain the procedure or rationale for the hierarchy.

The use of both logistic and linear regression is justified, but it would be beneficial to include checks for model assumptions, such as linearity, normality, and homoscedasticity, among others.