

# Review of: "[Review] Exploring an integrated decision-making model to enhance the employee-oriented built environment in urban green buildings: A Review"

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Potential competing interests: No potential competing interests to declare.

## Comments

### Title

Given the central key-concept of the study, in my opinion, work-environment or more specifically office place is more appropriate than built environment.

### Keywords

Urban built environment may not be a suitable keyword for this article, as work-environment or specifically office building instead are more recommended.

### Introduction Section

What specific and tangible problem is addressed by this study? What is the context of the study? Is it a local, international, or global issue? I am not sure if the problem is same in different developing countries in different world regions, if it is possible to address a problem at such a broad and pervasive level, and if so, if such a broad approach would be somehow fruitful to solve a particular problem in a practical level in the context of the study? How this study may help in reducing the environmental impacts of the building industry, and how it assists in enhancing the overall environmental sustainability, pollution, carbon emission, heat generation, space utilisation and efficiency, length and quality of building operation and life cycle, and etc.? What are the potential scientific/practical contributions of the study?

The problem statement should specifically address the most critical challenges existed in the context of the study, discuss the various environmental impacts of these challenges, and the negative consequences generated in both human side and ecological side, and finally explain how the aim and scope of the study might be contributed to the identified problems and their environmental impacts and negative consequences.

This study in addition lacks a critical gap and research question, which are contributed to the problem addressed by this study. The main question is what question is expressed and why? In the last paragraph of the paper, the comprehensive explanation of employee comfort in relation to work places is mentioned. If this is the research gap, first it should be linked to the context of the study to show this is a significant insufficiency for employees and has priority in the future investigation or there are some other issues, satisfaction, health, well-being, attachment, etc. to be addressed. If so, this

concept should give centrality throughout the article, and even in the title and keywords. As in the last paragraph of introduction, it is stated that the literature review indicated the impacts of working in green building on employees in many different aspects, these impacts and the different aspects should be discussed deeply and broadly in a separated literature review section, and the developed integrated decision making model as well as employee-oriented work environment should be also able to cover these aspects. The study needs a clear explanation about how the key-concepts of the research may help in addressing this research question.

The article also lacks a research scope, which gives the reader a specific concentration frame. The research scope could assists in highlighting a focal point for the study in relation to the different problems existed in the context of the study, and in concentrating on this focal point throughout the different stages of the research. The different areas/aspects of employee-oriented built environment, e.g. outside aspects vs. inside aspects, the different types and categories of office buildings, e.g. private vs. governmental, small-scale vs. large/medium-scale would have different concerns and might be considered separately in different studies. In introduction section it is stated that employee comfort has not been comprehensively explained, while in the literature the main emphasis is on employee satisfaction. The author should clearly explain if these two concepts are same or they looks at different aspects/levels of employees' motivations. It is not also clear why this study emphasise employee satisfaction as the central concept of employee-oriented built environment. There some other concepts e.g. attachment, well-being, health, and etc. which may affect the motivations, perceptions, and behaviours of people in a built environment, and should be considered in employee-oriented decision making model. Why the employee satisfaction is selected as a central key-concept throughout the study? The study should also clarify what level of people-environment interrelationships, motivational level, perceptual level, and behavioural level is addressed, and why. Addressing the different levels of employee response to their work-environment would result in different methodological approach and then developing a suitable instrumentation, e.g. different data collection methods, like survey, observation, laboratory, field data, and smart technology, and different analysis techniques. This is too critical in developing the selection criteria of the previous studies and research works for the analysis.

Addressing a problem at such a broad and general level would also prevent from having practical contributions and outcomes in relation to the problems addressed in the context of the study. The study scope would shed light on an area of the study context with a particular condition and more concrete and tangible problems, and then would help in the provision more fruitful outcomes. Without a research scope, the study confronts a serious shortage which detracts from reliability of the outcomes. In other words reliability of the outcomes in such a broad and widespread context is a matter of serious doubt.

## Literature Review Section

The second shortage of the article is the absence of a comprehensive and critical literature review. This is a review paper, and its foundation is based on previous experiences, but the literature review section has different mission and vision. A critical literature review would provide a suitable platform to extensively and comprehensively explain the key-concepts of the study from the viewpoints of different scholars, and to make an overview on the origins of the study, the historical background and the evolutionary progress of the research area, and finally a critical review and cross comparison of the

different research conducted in the recent past decades.

In the literature review, the central key-concepts of the study, i.e. integrated decision-making model and employee-oriented built environment should be deeply conceptualised and dismantled via a cross comparison among different studies conducted in the field and by highlighting the different components and elements, alongside the conceptual domain of the concept, the interrelationships between these two key-concepts and other critical concepts in the related fields, e.g. green building, smart construction technology, environmental sustainability and etc.. The critical review should ends at a developed conceptual platform/framework of the study, addressing the interplay between the different aspects/components of the research, and the process of this interplay, and the final outcomes/products of the process.

Another question is related to the green building criteria and tools in developing countries specially in the context of the study, if it is possible to identify a green-office building in such diverse and broad contexts, if there is any wide body of reliable research conducted in the developing countries, and if so how this might be applicable in the context of the study. In the absence of green-building criteria in developing countries, how the results of the studies conducted in developed countries could be somehow fruitful in the context of developing countries, e.g. the local environment of this study. However, it might be more reliable and trustworthy to perform a field research based on local primary data collected from the office buildings located in the context of the study.

### **Methodology Section**

The study lacks an extensive discussion of criteria and reasons behind the selection of previous works and analysis works. There might be also many different kinds of research works employing different types, levels, and approaches, and developing many different types of methodologies, e.g. surveys, laboratory, smart technologies, simulation, field data, and observation. It may not be possible to study them in a single study without considering their differences and a critical cross comparison among them.

The number of previous studies selected for this study, the search and finding criteria and manner, and the data platform which employed as their access sources. What types of research publications, Conference presentation/proceeding, journal papers, and etc. are selected, and at which publication reliability and popularity, level, e.g. WOS, Scopus, Q1/Q2/Q3/Q4, or the received citation? Regarding the number of studies, and their publication type and level, I am not sure if this paper can be categorised as systematic literature review.

### **Results Section**

Given the results of the analysis, the main comment is lack of in depth discussion on the findings of the study. The results section should be presented in a separate section, and it is too critical to discuss the outputs of the analysis in the context of the study via using triangulation techniques, and in relation to the study problem, gap, and scope. The results section the current situation is a just simple report of the analysis outputs without an in depth criticism.

### **Conclusion Section**

Given the insufficiencies in addressing a research problem, gap, and scope, a critical literature review and a proper conceptual platform, and in developing a particular research methodology and the criteria and logic for the selection of research works, data collection methods, and analysis techniques the study are not able to provide a scientific/practical contribution.

In conclusion section, the employee period or better to say the length of employee and their socio-economic characteristics are stressed as effective variables, which means that something other than satisfaction might affect the employee-environment interrelationships. This is a kind of proof regarding the insufficiencies in the conceptual platform of the study about the impacts of employee satisfaction, well-being, health, attachment on employee-oriented work environment.

The next question is what critical, unique, and new products are provided by this study. This might be a drawback emerged by the insufficiencies in developing a particular research problem, gap, and scope generated from the beginning point of the study.

### **Overall Comment**

The topic of this paper is very interesting and targets an important/component of long-term environmental sustainability, which is users' environmental perception/behaviours and affects the space utilisation, efficiency, length and quality of building operation and lifecycle. However the study at the current format, confronts insufficiencies which detracts from its reliability, and should be revised in the next round of the revision.

The article, mostly stressed the impacts of green office building on employees in different aspects, e.g. satisfaction/comfort rather than the impacts of integrated decision model in enhancing human-oriented work environment. They seems to be two different topics, and the latter one needs the determination of the impacts of implemented integrated decision-making model on employees' motivation, attitudes, and perceptions. This means the evaluation of some practical products of the model in construction industry, which requires an experimental field study and real observation.

At the end, the study most reorganised throughout its different parts/sections, to be more precise, specific and straight forward to the point. Regarding the necessity of conducting a systematic literature review, it is also important to cover a relatively wider body of literature, to select a range of highly reliable publication and data sources conducted by well-known and top scholars and researcher. The last point is the necessity of addressing how the outcome of the research generated from the critical review of these studies can be transferred to the context of the study to provide a set of fruitful and practical contributions/products.