CITIES IN A CHANGING WORLD:
QUESTIONS OF CULTURE, CLIMATE AND DESIGN

• Paper / Proposal Title:
Highlighting the Necessity of Study on Post-Occupancy Evaluation for Climate Adaptive Building Shells and Review of Current Developments

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• Abstract (300 words):
In today's world sustainability and the energy consumption is without a doubt, one of the most critical issues in any field and field of architecture is not exceptional. Buildings as one of the big human footprints in the natural environment are playing a significant role in achieving the general goal of sustainability in cities. Among building components, building shells are the essential elements for accomplishing the mentioned goal. But due to the static conventional construction methods, during time achieving this goal has been difficult. Thus, designing a building shell which can answer the user's need, and reducing energy consumption is a complicated task. One of the proposed alternatives for building shell design in digital age, by the possibilities that technology developments can provide in this era, is Climate Adaptive Building Shells (CABS). Based on many studies documented in the literature, this system is offering solutions for reducing energy consumption and improving the building performance. But to achieve the ultimate sustainability, just concentrating on energy issue is not enough, and the user's satisfaction is another crucial point. In the study, it has been tried to discuss the need for focusing on
this aspect of research. In this manner, the study is highlighting lack of investigation on Post-Occupancy Evaluation (POE) for Climate Adaptive Building Shells.

In all sectors, evaluating the product after it is in use has an important place. This evaluation has even extra importance in the digital area, since due to technological and digital developments user's expectations are higher. But in the building sector, there is a lack of interest and concern for going back to the designs and evaluating it after occupation. This lack of interest brought us to the point that the sector is facing many buildings with the same mistakes; this fact can clarify the importance of POE. As mentioned before, the lack of research on POE for CABS is even more significant and needs extra attention. In the second part of the study, it has been tried to find out all the developments and proposed conceptual models related to POE and CABS to give the broader perspective on the current situation of the field.

To sum up, this review based study which is part of the more comprehensive ongoing PhD study is highlighting the need to focus on POE for CABS by using PRISMA methodology. After clearing the lack of literature research, it has been tried to gather and review all the developments, proposals and models related to the same topic to explain the current situation of this research area.

**Keywords:** Sustainability, Climate Adaptive Building Shells, Post-Occupancy Evaluation.

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**Dr. S. Müjdem Vural** was born in Istanbul on 1972. She is currently a Professor of Architecture at Eastern Mediterranean University, Faculty of Architecture. She has concluded her master's studies in 1997 and got her PhD Degree in 2004 with a thesis entitled as "Risk Assessment in Indoor Air Quality" from Yildiz Technical University, Faculty of Architecture. Her specific areas of expertise are building biology, environmental design, sustainability, construction and materials. She has given lectures related to her expertise for more than 20 years. She has publications in construction, building biology and sustainability studies at both national and international levels. She has been the advisor for the EcoMod project (held in University of Virginia), which was awarded in the USA. She has served as a jury member for national and international architectural competitions. She has given lectures all around Europe on behalf of LLP-Erasmus Teaching Staff Mobility and also led the IP Project in the framework of Erasmus. She has taken part in many national and international research projects.

**Nazgol Hafizi** was born in Tehran in 1991. She is currently an architecture PhD Candidate in Eastern Mediterranean University with the main research interest on building construction techniques, sustainability and users satisfaction. She graduated from Bachelor of Architecture in 2015 and Master of Science in 2017. She is a full-time Research and Teaching Assistant since 2015 to Present. She has been assisting lectures related to her expertise since 2015. In addition, she is members of different committees and activities in Faculty of Architecture. She successfully passed the PhD qualifying exam in 2018-2019.
Spring academic semester, and since then working on the PhD Thesis with the title of “Development of Post-Occupancy Evaluation Method for Climate Adaptive Building Shells: In case of user’s satisfaction”.