DIY BIOPHILIA: DEVELOPMENT OF THE BIOPHILIC INTERIOR MATRIX AS A DESIGN TOOL



KEY TERMS

- Biophilia refers to humans' innate need to connect with nature.
- Biophilic design is the incorporation of nature into the building of a home to connect one to their natural environment.

THE PROBLEM

- People are spending more time inside and away from nature (urbanization & advancements in technology)
- It is important to spend time with nature due to its positive affect on our physical and psychological wellbeing.
- Little research about exactly how to incorporate nature into environment.





THE STUDY

This study expanded upon the Biophilic Design Matrix (BDM) by McGee & Marshall-Baker, which was influenced by Kellert's biophilia attributes. The finalized BDM include 6 elements & 54 attributes. The six elements of biophilic designs initially used are:

- 1. Environmental features (i.e. living plants)
- 2. Nature shapes and forms (i.e. organically shaped plants
- 3. Natural patterns and processes (i.e. natural ratios and scales
- 4. Light and space (i.e. natural lighting)
- 5. Place-based relationships (geography & culture)
- 6. Human nature relationships (i.e. prospect & refuge)

CONCLUSIONS

20 interior designers and 3 architects were interviewed using cognitive testing to seek areas of improvement for the BDM. Participants found biophilic design to be important but had little experience using it. This study improved the BDM by including more color, light, and materials. It also reduced the cognitive demand of the BDM and improved its vocabulary. Designers found this easier to use than the original BDM.



CITATION:

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