End-user features in the sustainable furniture design through supra-functionality needs

ABSTRACT

There is an alternative approach to design sustainable furniture beyond functionality and usability needs. In this alternative, emotional and pleasure demands are considered which are referred to as supra-functionality needs. The positive emotional interaction between an enduser and a product can persuade the owner to keep the product for a longer period. Keeping existing products for longer time will help the sustainable design objectives. The important question is what features affect this emotional interaction with the end-user. This study investigates the impact of end-user's gender and income on keeping an existing home sofa for a longer period in case that the product gives them a "Good sense". In this study, three hundred and eighty-eight Malaysian users answered the Likert scale question, which is "I keep my old sofa for longer periods because it gives me a Good sense". "Good sense" presents end-user's supra-functionality needs. The research team used a quantitative approach and two-way analysis of variance to analyse the effect of the end-user's gender and income on keeping a home sofa for longer periods. The results show that there is a significant difference between male, female, and families' household income categories in "keeping the old sofa for Good sense". In all household income categories, men had more agreed with keeping the existing sofa for longer periods except only one income category. A Post-Hoc test shows families with an average household income have more emotional interaction with their sofa. Furniture with supra-functional aspects makes the end-user, especially the men, to keep their existing products for longer time in families with an average income.

Keyword: Sustainable design; Supra-functional needs; Furniture design; Home sofa; Enduser needs