

**ABSTRACT:**

Meeting human needs is considered as fundamental to sustainable human settlement. However, in micro level developments particularly in respect of a housing unit, for example, an operational definition of sustainability which will be useful in its practical implementation, has yet to be developed. To address this, the author posits that theories on the relationship between the environment and the person can be taken as a conceptual frame of reference. One of them is the theory of Person-Environment Congruence (PEC). This theory conceptualizes "congruence" as the favourable outcome of the person-environment relationship. Achieving PEC is considered as the most important criteria that supports the concept of housing sustainability. In the context of housing, the author considers that PEC is achieved when the dwelling place can offer its inhabitants a place which meets their basic needs. In order to operationalize this concept in terms of housing unit design, the author propagates the use of the Means-End Chain (MEC) research model to explore the relationship between a person and his or her environment. The combination of the two concepts facilitates the identification of those housing attributes emphasized in the home-making process, together with the users' perceptual orientation towards those attributes. To experiment with the application of the MEC research model in respect of exploring the concept of PEC, a case study was conducted on 15 renovated and personalized houses in a mass housing scheme in Malaysia. The traditional MEC methods were maintained with some modifications to accommodate the various housing characteristics. The results suggest that the MEC research model is able to link the relevant housing unit attributes to user values, and it is potentially applicable in the design of a housing unit. The results also indicated that user participation is essential in home making process, in order to achieve and maintain sustainability