

論 文 要 旨

Thesis Abstract

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<p>主論文題名 (Title)</p> <p>The Relationship of Physical and Social Environments with Active Ageing among Older Adults: A Case Study in the Malaysian Neighbourhoods of Johor Bahru</p>			
<p>内容の要旨 (Abstract)</p> <p>1. Introduction and Research Objectives</p> <p>An ageing population poses a major challenge to low and middle-income countries such as Malaysia which is related to an increased prevalence of non-communicable diseases among older adults due to physical inactivity. Focusing on developing an active ageing living environment is the preferred solution to deal with this problem. The physical and social neighbourhood environments (PNE & SNE) can affect active ageing among older residents from the context of physical activity (PA) level. A walkable neighbourhood design and outdoor environment can provide access to daily activities that can improve older people's walkability & physical activity. This encouraged daily social interactions that leads to informal and supportive relationships that eventually strengthens the community's social capital. The objectives of this research are to examine the objective and subjective measures of PNE & SNE, and their direct and indirect relationship with (PA) levels of older residents.</p> <p>2. Methodology</p> <p>The PNE objective (PNEO): land use mix entropy, population density, traffic intersection density and distance to facilities such as mosque and recreational area; and PNE subjective (PNES): comprised of respondent's neighbourhood perceptions based on the NEWS-A questionnaire items: and their relationship with older adults' PA were analyzed. The PA was measured objectively based on the IPAQ questionnaire items. Concurrently, the SNE objective (SNEO): social networks and sociability; and SNE subjective which measures the respondent's social perception towards the community in their neighbourhood (SNES): generalized trust, collective action and cooperation, and perception towards community groups: and their relationship with older adults' PA were also analyzed. The SNEO and SNES items were based on the SC-IQ questionnaire items and findings from the author's pilot survey. The questionnaire items were combined and a survey was conducted on 280 older residents in four neighbourhoods of Johor Bahru city, Johor, Malaysia. Cross-tabulations and correlation analyses were conducted to analyse the significant relationships based on the main objectives of this research.</p>			

3. Results

It was found that PNEO, PNE, SNEO and SNE items showed significant relationships. The most profound relationships with PA level were demonstrated in two or more neighbourhoods: distance to facilities such as mosques and recreation areas, and land use mix entropy (PNEO); perceived neighbourhood accessibility, perceived traffic safety, and lack of cul-de-sacs (PNE); participation in community activities (SNEO) especially 'gotong-royong' activities, recreation, religious, and collaboration programs; and lastly perceived generalized trust and perception towards community groups (SNE). Moreover, an observation of the four neighbourhoods showed similar physical characteristics which may also greatly influence the significant results that were obtained in this study such as the existing traffic network condition, residential segregation, functional neighbourhood centrality area, and physical barriers. The conceptual model was improved based on the significant results and every item showed a significant relationship except for one PNE item which is the perception towards neighbourhood aesthetics. But, based on the recurrence of the direct and indirect significant results in all neighbourhoods, the most profound items in influencing the PA level of Malaysian older adults are for PNEO: distance to facilities such as mosque and recreational facility, land use mix entropy; and for SNEO: participation in community activities (SNEO) especially 'gotong-royong' activities, recreation, religious, and collaboration programs. Furthermore, unrelated to the PNE and SNE, the socio-economic indicators especially gender and period of stay might also be an important influence to the physical activity level of older adults in these neighbourhoods.

4. Conclusion

This study has achieved the objective of this study which was to analyse the relationship between the objective and subjective PNE and SNE measures with PA level of older adults. Hypotheses were validated to prove the relationships underlying the PNE, SNE and PA. Some results can be generally summarised, while others were unique for each study area due to the neighbourhood's own physical characteristics. The findings from this study can help to contribute to existing knowledge in the neighbourhood environment planning especially in highlighting the important objective and subjective measures of the PNE and SNE. The result of this study can be implemented by making it compulsory to create a neighbourhood plan & pedestrian master plan which considers the preferred suitable attributes of older people as it is suitable for all generations, as this can also increase the future neighbourhood-based PA. However, some limitations arised from this study since the respondent's location in the neighbourhood influence their neighbourhood perception and a majority of respondents were Malay and Muslim older adults, which are not representative of the whole population in each neighbourhood. The specific results of this study are hoped to improve Malaysia's housing policy and guidelines in the future through comprehensive spatial neighbourhood planning in consideration of the physical and social neighbourhood measures. Future research involving using another methodical approach such as the structural equation modelling to obtain the desired model of PNE, SNE and PA can be taken into consideration.