

UNIVERSITI TEKNOLOGI MARA

PRESCHOOL PHYSICAL
LEARNING ENVIRONMENTS
AND CHILDREN'S COGNITIVE
SCHOOL READINESS IN KLANG
VALLEY, MALAYSIA

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Thesis submitted in fulfilment
of the requirements for the degree of
Doctor of Philosophy
(Built Environment)

Faculty of Architecture, Planning and Surveying

October 2019

ABSTRACT

Cognitive abilities of Malaysian children have fallen behind considerably. Recently, the Ministry of Education (MOE) introduced measures to address this issue and MOE preschools were tasked to ensure children are cognitively ready for primary school. But, evidences suggest that the quality of preschool physical environments (PPE) have received little attention. No study on the relationship between PPE quality and cognitive school readiness (SR) in MOE preschools exists in Malaysia. Hence, adopting a Piagetian approach to children's cognitive development, this study is motivated to explore the association between these two elements in Malaysia. A prospective cohort study was done on 6-year old MOE preschool children in Klang Valley, Malaysia. The CPERS5 scale and BSRA-3 instrument were used to assess PPE quality and cognitive SR respectively. Correlation analysis was done to study the relationship between these two aspects and regression analysis was done to construct predictive models for children's SR. Throughout the study, cognitive SR remained moderate and unsatisfactory for a 6-year old while PPE quality of MOE preschools were fair - none were poor nor excellent. Overall PPE design quality demonstrated significant positive influence on children's overall cognitive SR but overcrowding was found in all MOE preschools; the ratio of usable space per child was too small. Consequently, access to core facilities were unsatisfactory among most MOE preschools. However, among the PPE aspects, preschool size, circulation, modified open-planning and quality of quiet and messy activity spaces were found to be the most important aspects to maximise children's cognitive SR. Interestingly, predetermined aspects of MOE preschools such as location, image and scale were praiseworthy and found to be significant compounding factors contributing to higher quality of all PPE aspects especially safety and security. Among activity areas, play yards were found to be the most disproportionately designed and facilities for disabled children were grossly lacking. Likewise, teacher-specific facilities namely private office rooms and storage were also insufficient. Fundamentally, the study found that the Piagetian approach to PPE design is generally appropriate for application in Malaysia but minor adjustments must be made. Conclusively, MOE preschools in Klang Valley, Malaysia were generally found wanting in terms of PPE design quality; a comprehensive review of design approach is needed for Malaysian MOE preschools to maximise cognitive SR. Most importantly, a well-thought off preschool design concept will go a long way to ensure Malaysia achieves a preschool system that commands international recognition in the future.

ACKNOWLEDGEMENT

All praises to the Most Gracious, Merciful and Almighty God, who showed me the path and granted me good health, patience and perseverance for the completion of this thesis. Above all, I would like to take this opportunity to express my deepest gratitude to the special ones who have extended their assistance in this study.

To my main supervisor, Professor Dr. Sabarinah Sheikh Ahmad for being an exceptional mother figure, mentor, advisor and role model for me, whose expertise and her vast knowledge were generously shared. Her sincere apprehension, encouragement, patience and continuous dedication in supervision had inspired and motivated me to achieve greater goals.

To my co-supervisor, Associate Professor Dr. Izaham Shah Ismail for the supervision opportunities given. Being an expert in educational field, he was truly an eye-opener to me. His shared input and knowledge were undoubtedly beneficial for this area of study. To my sponsor, Malaysian Ministry of Higher Education for making this study possible with their financial aid and support - the MyBrain15 scholarship and Fundamental Research Grant Scheme (FRGS). To the staff at the Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (UiTM), and various other agencies and authorities for their support, assistance and permission that eased the every stages of this study.

To the children, teachers and parents of the Ministry of Education (MOE) preschools who participated in this study, for sparing some time from their busy schedule. Working with young kids was truly fun and a wonderful experience.

To my fellow colleagues, for sharing their knowledge and ideas to assist me, and also their moral supports and journey experiences had motivated me to complete this study. Our regular coffee breaks and other social activities together have been of incredible value to me and at many times helped me through some bumpy bits in the track. Lastly, special thanks to my beloved husband, Yazid, and son, Noah, who always believe in me and were always there for me through my every ups and downs, and making my problems seem a lot smaller. To my parents, brothers and sisters, and the rest of the family for their unconditional love, supports, care, understanding and encouragements. Thank you all, without every one of you, I would not be able to go through this challenging PhD endeavour successfully!

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