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SPACE UTILIZATION OF SELECTED CHILD CARE  
CENTRES IN OFFICE BUILDING IN MALAYSIA

BY

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INTERNATIONAL ISLAMIC UNIVERSITY  
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Kulliyyah of Architecture and Environmental Design  
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## ABSTRACT

There is no doubt the child care facilities in Malaysia have been around for more than two decades thus the regulations stipulated in the Child Care Centre Act 1984 which only described on the procedures and processing requirements on setting up the centre does not elaborate on the developmentally appropriate space and its utilization for child care centre in a specific type of building. The problems resulted to inconsistency in implementation of the minimum guidelines into physical settings of space utilization of child care centres in office building. This is due to lack of obligation and coordination between the child care experts, policy makers, the architects/interior designers, building owners (providers) and the operators in incorporating the appropriateness of spaces towards early child care development in the built environment. The objectives of the research are: (i) to identify and compare local standards with various guidelines and procedures from standards of other countries in order to adopt and adapt for better quality child care facilities in office buildings; (ii) to investigate various constraints whether office building particulars has a good match with the child care requirements in order to establish appropriate office building attributes for child care centres; and finally, (iii) to study whether the space utilization of child care centres in office buildings corresponds with the minimum guidelines in order to identify exemplary practice as a benchmark. The research methodology used are on-site observations checklists, questionnaires to working mothers and interviews with operators on child care centre in office building that measures the correlations between the office building particulars and the space utilization that meet the child care centre minimum guidelines. A pilot study was carried out to test the methods and finally seven case studies were identified whereby six centres are from Malaysia (four (4) from Kuala Lumpur, one (1) from Putrajaya and one (1) from Kota Kinabalu, Sabah) and one (1) from Singapore. The case studies were based on selected child care centres at the workplace by the local experts and authorities. The analyses and findings showed that based on the selected case studies, there were no child care centres which have their space utilization met all specifications and adherence towards the minimum guidelines. As for the results for the operators and working mothers, they were generally fair in terms of quality, problems faced, satisfaction and the importance of the child care centre in office buildings. Hence there were no distinct findings between centres as they did not have other references for comparison. The following indicators have been identified in order to measure developmentally appropriate space through its layout, capacity enrolment, ratio space per child, physical environment and safety measurement; to be used as guidelines for setting up child care centre at various types of office building plans for architects, providers, operators and local agencies complete this thesis. The recommendations of this study are for various levels such as the policy makers and local authorities; to provide availability in promoting developmentally appropriate spaces in buildings for children, to upgrade the Manual for Procedure and Setting up of Child Care Centres, to regulate better quality and regulation; to providers to facilitate better productivity; and operators to increase quality care and ensure a safe environment. Finally to designers who will promote child-oriented design for the child care centre in office buildings and child experts who will train and increase trainings quality and industrial promotions.

## ملخص البحث

لا شك في أن التسهيلات لرعاية الطفولة في ماليزيا وجدت منذ زمن لا يقل عن عقدين كما نصت التعليمات في مركز رعاية الطفل قرار 1984 بوصفه المبدئي ، والمعالجة اللازمة في تهيئة المركز لم تتوسع إلى حد التطور الذي يُخصّص مساحة ملائمة من حيث استخدامه لمركز رعاية الطفولة في نوعية بناء خاص. أنتجت المشاكل تضاربا في تطبيق أدنى التعليمات في الترتيب المادي للمساحة المستخدمة لمراكز رعاية الطفولة في عمارة المكاتب. هذا بسبب قلة الإلتزام والتنسيق بين خبراء هذا المجال، ومخططين، ومُصممين تصميميا داخليا، وأصحاب المباني (المعدون) ومنفذين في التكامل المناسب للمساحة فيما يتعلق بالتطور المبكر في بيئة الأعمار لرعاية الطفولة. وتتمثل أهداف هذا البحث في: 1- تمييز ومقارنة المستويات المحلية مع تعليمات متنوعة وإجراءات على مستويات الدول الأخرى لكي تتبنى وتتكيف في الوسائل الممتازة لرعاية الطفولة في عمارات المكاتب. 2- فحص القيود المختلفة في خاصيات عمارة المكاتب إن كان لها انسجام مع متطلبات رعاية الطفولة لكي تُؤسس عمارة مكاتب ملائمة تناسب مراكز رعاية الطفولة. 3- وأخيرا الدراسة عن المساحة المستخدمة لمراكز رعاية الطفولة في عمارات المكاتب في كونها مطابقة لأدنى التعليمات للتعرف على النموذج التطبيقي كورشة أعمال. إن منهج البحث المستعمل متمثل في موقع قائمة الملاحظات ، والإستفتاءات الخاصة بالأمهات المشتغلات والمقابلات مع المنفذين في مراكز رعاية الطفولة في عمارة المكاتب التي تقيس الإرتباطات بين خاصيات عمارة المكاتب والمساحة المستخدمة التي تناسب أدنى التعليمات لمركز رعاية الطفولة . ولقد تم إجراء دراسات أولية لاختبار المناهج، وأخيرا توصلت الاختبارات إلى التعرف على سبع دراسات، ستة من مراكزها في ماليزيا؛ أربعة من كوالالمبور، واحد من بوتراجايا، واحد من كوتا كينابالو، (صباح)، وواحد من سنغافورة. واستندت الدراسات على اختيار مراكز رعاية الطفولة من حيث موقع العمل عن طريق سلطات ومحليين خبراء. بدلت التحليلات والنتائج المستندة على الدراسات المختارة على عدم وجود مركز رعاية الطفولة التي ناسبت مساحتها المستخدمة كالمواصفات وتمسكت بأدنى التعليمات. أما بالنسبة إلى نتائج للمنفذين و الأمهات المشتغلات ، فإنهم كانوا متوسطون بصورة عامة من ناحية النوعية، والمشاكل التي يواجهونها، ومدى اقتناعهم ونظرهم إلى منفعة مراكز رعاية الطفولة في عمارات المكاتب. فلذلك ما كان هناك نتائج متميزة بين المراكز، وذلك لعدم وجود مصادر أخرى للمقارنة. وميزت المؤشرات التالية لكي تقيس تطورا ملائما للمساحة خلال تخطيطها، وتسجيل سعتها، ونسبتها لكل طفل، تستعمل البيئة المادية ومقياس الأمان كتعليمات مبدئية لمركز الرعاية لأنواع مختلفة من خطط عمارة المكاتب؛ للمصممين، والمجهزين، والمنفذين والوكالات المحلية لتكملة هذه الدراسة. فإن توصيات هذه الدراسة تتمثل في مستويات مختلفة، مثل: صنّاع القرار والسلطات المحلية؛ لتزويد التسهيلات في تزويد متطور للمساحات الملائمة في المباني للأطفال، ولترقية دليل الإجراءات وبدء مراكز رعاية الطفولة ، ولتنظيم أحسن الأنواع والتعليمات ؛ إلى المجهزين تسهيلات لمعدل إنتاج أفضل، وإلى المنفذين لزيادة نوعية العناية وتضمين بيئة آمنة. وأخيراً إلى المصممين الذين يروجون تصميم التوجيهات لمركز رعاية الطفولة في عمارات المكاتب، وإلى الخبراء المتخصصين في التدريب وفي تزويد نوعيات فعالة في الترقيات الصناعية لهذا المجال.

## APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master of Science in Built Environment.

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## DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Emilda Rita Sjahrial

Signature .....

Date .....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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**SPACE UTILIZATION OF SELECTED CHILD CARE CENTRES IN  
OFFICE BUILDING IN MALAYSIA**

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Signature

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Date

*This thesis is dedicated to*  
*Joen Halim Sjahrial,*  
*Rania Mohd Razif ,*  
*and Ar. Dr. Asiah Abdul Rahim.*



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# CHAPTER 1

## GENERAL INTRODUCTION

### 1.1. RESEARCH PROBLEM

As a child I have seen my mother's involvement and commitment in the early childhood development and education. Now as a working mother the starting point of this study was an interest in the awareness of behaviour and society within the context of environmental designs in the field of early child care. This research is further elaboration from articles in the media promoting plans and dialogues from the government and ministries to organizations, practitioners and those involved in children's welfare.

(“Most moms have little time for their children” The Malay Mail, 25 March, 2004: 18; “Government may offer perks for workplace child care centres”, The Star, 9 August, 2004; “Nursery units in local councils needed”, The Star, 6 November 2004; “*Kata dua kepada majikan* (Shahrizat's ultimatum to employers), Kosmo, 26 January 2005: 2; “Equally at home with their child” Ridzwan A. Rahim, News Straits Times, 9 January, 2006: 4; “9,000 *Pengasuh tiada tauliah* (9,000 uncertified child minders)”, Norfatimah Ahmad, Berita Harian, 17 April, 2006: 1; “Govt plans to license babysitters, child care centre”, Lee, Daphne, The Star, 29 April 2006: 4; “ Child care is no child's play”, Lee, Daphne, The Star, 30 April, 2006: pp 4-5; “Firms not heeding calls for crèches”, Bernama, The Star, 1 May 2006: 20)

There had been many studies in urban planning of child care centre in neighbourhood area. According to Siti Hajar (1989) and Atkah Salwa (2003), there were no clear and standardized guidelines in design for child care centre in Malaysia. Since then there has been no record on design guideline specified for child care centre in specific building such as an office building but a general “Guideline for Kindergarten in the Federal Territory, Kuala Lumpur, 1989” (City Hall Kuala Lumpur, 1989). Both Atkah Salwa (2003) and Nik Munerahanim (2004) described that safety and security

were the main considerations in providing a safe environment for children within the neighbourhood areas. Other studies related to architecture built and environment by Asiah Abdul Rahim (1994) investigates the relationship between the theories of early childhood education, the educational methods used to implement them and the design of buildings used for these purposes; Nurhasnidah Hasnim (2004) described that children need quality environments for growth and development; and Norzaiti Ahmad (2005) investigates the design solutions for accident free and safe environment for children in vertical housing.

There is no doubt that the child care facilities in Malaysia have been around for more than two decades (Siti Hajar, May 1989; Atkah Salwa, May 2003) thus the regulations stipulated in the Child Care Centre Act 1984 which only described the procedures and processing required on setting up the centre did not elaborate on the developmentally appropriate space and its utilization for child care centre in a specific type of building. The problems resulted to inconsistency in implementation of the minimum guidelines into physical settings of space utilization of child care centres in office building. This is due to lack of obligation and coordination amongst the child care experts, policy makers, the architects / interior designers, building owners (providers) and the operators incorporating the appropriateness of spaces towards early child care development in the built environment.

This research will study on issues related to problems in measuring the space utilization of child care centre in office building as follows:

- i. Identifying indicators from various guidelines that integrates the developmentally appropriate practice for child care within the office building particulars (see Chapter 1),

- ii. Measuring the consistency on site of physical settings in space utilization for child care centre with minimum guidelines in office buildings (see Chapter 3).

In order to investigate these problems a detailed study was carried out in three phases as described in Chapters 5, 6 and 7. The findings of this study are presented in Chapter 8; the aim of this chapter is to present conclusions derived from these findings.

Phase 1:

The research deals with observation based on criteria derived from literature (in Chapter 3) different building particulars with various heights and layouts and their adherence to minimum guidelines (see Chapter 5),

Phase 2:

This investigation covers the observation on various physical setting relationships between the selected criteria (from Chapter 3) and the space utilizations from each child care centres (see Chapter 6),

Phase 3:

The study further considers views based on focus group survey which covers interviews with child care operators to identify their hands on problems related to the space and activities. Finally questionnaires were distributed to a group of working mothers who send their children for child care facilities at their workplace (see Chapter 7).

In addition, in Phase 1, Phase 2 and Phase 3 the problems arising from the case study (i and ii above), which were largely caused by lack of consideration or knowledge towards implementation and enforcement of developmentally appropriate spaces for children by the authorities, providers, operators and designers were also investigated as an essential part of this study, leading to detailed guidelines and design recommendations.

## **1.2. RESEARCH OBJECTIVES**

In correspond to the above study, one of the Goals and Visions of Kuala Lumpur by the year 2020 is to achieve a world class working environment. Workplaces should be well equipped and provided with a pleasant working environment with supporting institutions such as libraries, information services as well as child care facilities for working mothers (City Hall Kuala Lumpur, 2003). In order to achieve the objective of this study, several indicators of the primary key elements related to architectural settings based on local minimum guidelines were identified and correlate with the implementation on site for measuring the effectiveness and efficiencies of space utilization of child care in office buildings.

The objectives of the study have been formulated as follows:

- i. To identify and compare local standards with various guidelines and procedures from standards of other countries in order to adopt and adapt a better quality child care facilities in office buildings;
- ii. To investigate various constraints whether office building particulars has a good match with the child care requirements in order to establish appropriate office building attributes for child care centres;
- iii. To study whether the space utilization of child care centres in office buildings corresponds with the minimum guidelines in order to identify exemplary practice as a benchmark.

## **1.3. SCOPE OF RESEARCH**

This study will cover two major issues that are related to social issues in early child care within the workplace and architectural issues on the physical settings and requirements. The scopes of study are as follows:

Social issues in early child care within the workplace (refer to Chapter 2):

- i. Urbanization and increased number of working mother at workplace (Siti Hajar Husin, 1989, Noraini Mohd Nor, 1993: 7, Bala, 1999)
- ii. Child care centre development, demand and practices in the US, Singapore and Malaysia (Siti Hajar Husin, 1989:7, 22-29)
- iii. Agencies that promote child care centre facilities (The Malaysian Child Care and Education Guide, 2005/2006:, 17-20, 42-46)
- iv. Study on developmentally appropriate spaces (US General Services Administration, 1998, Tan Hwee She, 1999: 7-8, Ministry of Community Development, Youth and Sports, 2004, Clark, A. 1995, National Association for the Education of Young Children, 1987/998: 22-29)

Architectural issues on the physical settings and requirements (refer to Chapter 3):

- i. Elaborates on the physical settings of the office building such as building terminology, heights and layouts (adapted and purpose built) which are associated with the child care centres in office buildings (Nurhasnadira, 2004, Khoo Kim Choo, 1999, Bala, 1999, Emporis, 2004: 34-37)
- ii. Findings from the literature are drawn together based on a comparison of the minimum guidelines for child care centres in 3 countries (US, Singapore and Malaysia)
- iii. This review will identify criteria for best physical settings in space utilization to be used in this study.

#### **1.4. SIGNIFICANCE OF RESEARCH**

This research will be accessible in obtaining for substantial information and enhance the existing policy in order to upgrade the level of developmentally appropriate