

UNIVERSITI PUTRA MALAYSIA

USER SATISFACTION TOWARD BABY ROOM DESIGN AND FACILITIES IN SELECTED SHOPPING CENTERS IN KLANG VALLEY, MALAYSIA.

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USER SATISFACTION TOWARD BABY ROOM DESIGN AND FACILITIES IN SELECTED SHOPPING CENTERS IN KLANG VALLEY, MALAYSIA.

YEONG YIN MEI

Thesis submitted to the School of Graduate Studies, Universiti Putra Malaysia, in fulfillment of the requirements for the Degree of Master of Science

September 2014

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Abstract of this thesis is presented to the Senate of Universiti Putra Malaysia in Fulfillment of the requirement for the Degree of Master of Science.

USER SATISFACTION TOWARD BABY ROOM DESIGN AND FACILITIES IN SELECTED SHOPPING CENTERS IN KLANG VALLEY, MALAYSIA.

By

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September 2014

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The World Health Organization (WHO) is known to advocate breastfeeding. Nevertheless, Borneo Post Online reported, the breastfeeding rate in Malaysia has been worrying low and such declining trend seems to be apparent in other Asian countries as well. One of the factors that could contribute to the unwillingness of Malaysian mothers to breastfeed is the lack of baby care and parenting facilities, which are installed in baby rooms in public places. The purpose of this research is to examine user satisfaction with the design and facilities of baby rooms in shopping centers in Klang Valley, to identify factors that affect user satisfaction with the design and facilities provided as well as develop recommendation on how the design and facilities of baby rooms can be enhanced. To investigate, a series of questionnaire surveys was conducted in the selected shopping centers in Klang Valley, Malaysia. The data analyses were conducted in the form of descriptive analyses which involve T-Test and Annova that were obtained by utilizing the statistical analysis program, SPSS 21. The findings revealed that the respondents were satisfied a little for all components in the baby room and particularly scored the lowest mean for security system in the baby room. Subsequently, some new and effective suggestions particularly for the provision of security and space planning for a baby room are proposed. This suggest that there is an imperative for shopping centers to improve and renew the design approach of a baby rooms, especially for security aspect to ensure that it is comfortable, beautiful and functional for space users. It is anticipated that this new will encourage space users to occupy baby room and mothers to breastfeed their baby which in turn would lead to improve the breastfeeding rate in Malaysia.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains.

KEPUASAN PENGGUNA TERHADAP REKA BENTUK BILIK BAYI DAN KEMUDAHAN-KEMUDAHAN DI PUSAT MEMBELI-BELAH TERPILIH DI LEMBAH KLANG, MALAYSIA.

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Pertubuhan Kesihatan Sedunia (WHO) diketahui menyokong penyusuan susu ibu. Walaubagaimanapun Borneo Post Online telah melaporkan bahawa, kadar penyusuan susu ibu di Malaysia adalah rendah, membimbangkan dan arah aliran menurun ini seolah-olah sama di negara-negara Asia yang lain juga. Salah satu faktor yang menyumbang kepada keengganan ibu-ibu di Malaysia untuk menyusu adalah disebabkan oleh kekurangan kemudahan penjagaan bayi dan keibubapaan, yang dipasang dalam bilik-bilik bayi di tempat awam. Kajian ini bertujuan untuk mengkaji kepuasan pengguna terhadap rekabentuk dan kemudahan bilik bayi di pusat-pusat membeli-belah di Lembah Klang, untuk mengenal pasti faktor-faktor yang mempengaruhi kepuasan pengguna terhadap rekabentuk dan kemudahan yang disediakan serta membangunkan cadangan bagaimana reka bentuk dan kemudahan bilik bayi boleh ditingkatkan. Untuk mengkaji, satu siri kajian borang soal selidik telah dijalankan di pusat-pusat membelibelah terpilih di Lembah Klang, Malaysia. Analisis data dalam bentuk analisis deskriptif yang melibatkan ujian-T dan ANOVA telah dijalankan melalui penggunaan program analisis statistik, SPSS 21. Hasil kajian telah menunjukkan bahawa responden berpuas hati dengan semua komponen di dalam bilik bayi dan memberi skor min terendah bagi sistem keselamatan di dalam bilik bayi. Seterusnya, beberapa cadangan yang baru dan berkesan terutamanya untuk keselamatan dan perancangan ruang untuk bilik bayi. Ini menunjukkan bahawa terdapat keharusan bagi pusat membeli-belah untuk memperbaiki dan memperbaharui pendekatan dalam merekabentuk bilik bayi terutama untuk aspek keselamatan dan memastikan bahawa ianya menyediakan sebuah bilik bayi yang selesa, cantik dan berfungsi untuk pengguna. Seterusnya, ianya dijangka bahawa pendekatan

baru ini dapat menggalakkan pengguna ruang untuk menggunakan bilik bayi dan ibuibu untuk menyusukan bayi mereka yang akan membawa kepada peningkatan kadar penyusuan susu ibu di Malaysia.



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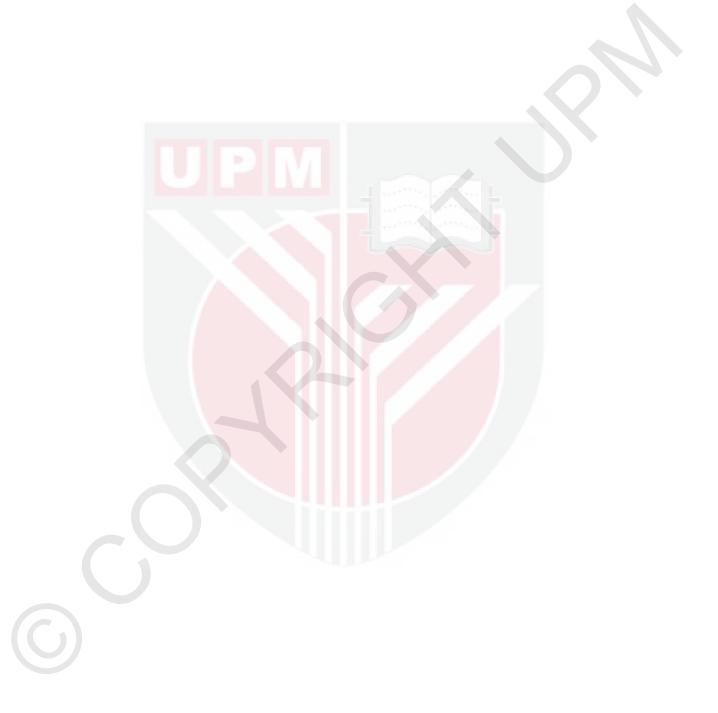
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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

WHO World Health Organization

IAQ Interior Air Quality

DV Dependant Variables

DV Independent Variables

SPSS Statistical Package For Social Sciences

QOL Quality Of Life

UNICEF United Nations International Children's Emergency

Fund

ASID American Society Of Interior Design

UBBL Uniform Building By Law

IEQ Indoor Environmental Quality

HVAC Heat, Ventilation And Air-Conditional

HCHO Human Carcinogen

VOC Volatile Organic Compounds

MS Malaysia Standard

PWD People With Disabilities

CCTV Closed-Circuit Television System

MFLS Malaysian Family Life Survey

M Mean

UK United Kingdom

WIFI Wireless Local Aare Network

TV Television

CHAPTER 1

INTRODUCTION

1.1 Background of Studies

In the modern age of rapid consumerism and vast commercialization, shopping centers as commercial and public spaces have become an interactive space for all levels of the civilization (Zheng, 2006), transpiring the shopping centers as salient social piazzas. Recent development seems to suggest that, the owners and stakeholders of the shopping centers are more conscious in providing a more comfortable and user-friendly environment by setting up various spaces and facilities to accommodate heterogeneous shoppers' needs and interests. The baby room, subsequently, although is not usually seen as important as other facilities like the restrooms is fast becoming an essential necessity. A baby room is declared as a specific space that allows parents or caretakers to carry out the activity for breastfeeding, expressing milk, changing for baby and preparing milk for their kids and infants. (Baby Care Room Development Control Plan, 2006). Predominantly, the main function of the baby room is to allow and encourage mothers to breastfeed. In compliance with the World Health Organization (WHO) recommendation, mothers are encouraged to breastfeed their baby exclusively up to six months (Committee on Nutrition, American Academy of Pediatrics, 1989) but surprisingly, the trend in Malaysia seems to be suggesting the opposite preference (Borneo Post Online, 2012). Consequently, one is enticed to wonder whether the low breastfeeding rate is influenced by the inadequacy of breastfeeding and baby facilities in public places, especially given the fact that shopping center as an interaction places reflects that family or mothers always spending time in public places like the shopping centers is high.

1.2 Problem Statement

In Malaysia, there are many breastfeeding program have been implemented prevalently in the society. The Ministry of Health has introduced the National Breastfeeding Policy in 1993, as well the Baby Friendly Hospital Initiative, which implemented by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) in 1991. (Ministry of health, 2008) Despite the fact that breastfeeding is well known to provide poignant health benefits for mothers and babies (American Academy of Pediatrics, 2000), the breastfeeding rate in Malaysia had remained ominously low. Reported by the president of Malaysian Breastfeeding Association, Moin (2008), claimed that in Malaysia, they are only 14.5% of babies were exclusively breastfed below six months in 2006. Additionally, the news has duly reported on Borneo Post Online, Haris (2012) claimed that only 23.7% of the babies born in Malaysia are breastfed exclusively in the first six months, reflecting a relatively low breastfeeding rate in the country He emphasized that such declining trend is appear in other Asian countries as well and

claimed that there are only five per cent of mothers breastfeed in Thailand, there is less than 20 per cent in Vietnam, and 28 per cent in China.

Dr Safurah (2008), declared the findings from the National Health and Morbidity Survey 2, it significantly shown that there is sign of breastfeeding decline in Malaysia and the breastfeeding rate has drop sharply in 9.7%, in the year of 1996. She claimed that Malaysia is truly lacking of support for working women especially breastfeeding facilities in public spaces and work places and suggested is important to enhance the breastfeeding facilities equipped in the public spaces.

One of the factors that could contribute to the unwillingness of Malaysian mothers to breastfeed is the lack of baby care and parenting facilities, which are installed in baby rooms in public places. A baby room should be specifically designed and built for parents or the children's caretakers. One of the prominent research data derived from Azhari et.al (2012) revealed that baby rooms constructed and installed in shopping centers within Klang Valley possess commendable accessibility but lacking of effort in designing aspect and emphasized on many are still questioning about the quality and efficiency of the baby room provided in the shopping center. A preliminary test conducted by Yeong (2014) has demonstrated that 39.7% of space users are facing some form of difficulties when they occupy and utilize the baby room (Refer below Figure 1.1). There are 33.3% of the space users rated baby room in shopping centers are under poor category, 32.1% rated the furniture is in poor conditions. These fact findings show that users have negative perception towards the design, condition and quality for the baby room.

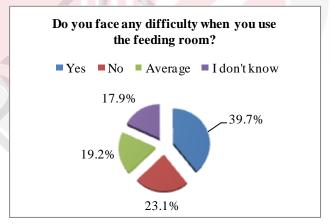


Figure 1. 1: 39.7 % of The Space Users Encounter Some Difficulties When They Occupying The Baby Room. (Yeong, 2014)

This hints that the development, construction, installation and management of baby rooms in shopping centers prominently lack of considerations for users need. Therefore, the conditions, consequently affect potential users' willingness to use and satisfaction for the baby room for breastfeeding.

1.3 Research Question

As presented in the previous section in related to issues and problems about breastfeeding room, a few research questions have been formulated for this study that would guide the research process. The questions are;

- i. To what extend are the baby rooms in existing shopping centeres in Klang Valley fulfilled users' needs and requirement?
- ii. What is the level of users satisfaction with the interior design and facilities of baby rooms in existing shopping centres and what are the factors that effect their satisfaction.

1.4 Research Objective

Therefore, the goal of this study is to assess and identify the users' satisfaction toward the design of the baby room located in Malaysian shopping centers. The objectives of the study are,

- 1) To examine user satisfaction with the design and facilities of baby rooms in shopping centers in Klang Valley, particularly in relation to:
 - a) interior environmental factors,
 - b) baby facilities and equipment,
 - c) and interior design aspects
- 2) To identify factors that affect user satisfaction with the design and facilities provided in baby room in Klang Valley shopping centres.
- 3) To develop recommendation on how the design and facilities of baby rooms can be enhanced.

1.5 Significant of study

To date, there is lack of studies that examine the physical environments and designs of baby rooms in Malaysia shopping center particularly to the approach of interior factors. The research done by Azhari et.al (2012) only studies Malaysian Public Accessibility to Baby Care Room in Shopping Malls. McIntyre et.al. (1999), only study the suitability of breastfeeding facilities outside the home which is a general audit of baby change rooms in shopping centres. This research did not specifically study and emphasis for interior environment or satisfaction issue. This research provides better feedback and responsive input for designers in developing a quality environment for baby room. Subsequently, after obtaining the results, new and possible implications of the study are discussed at the end of the thesis in order to ensure that the baby rooms are designed as the best interaction space with good qualities and supportive environment for the space users.

This research may benefit and significantly provide insightful knowledge to interior designers, architects and academic fields, to appreciate, have better understanding and knowledge to design and execute baby room. This study will positively improve the appearance and function of baby rooms. Ultimately, it encourages space users to use baby room extensively.

1.6 Outline of the Thesis

This thesis is categorized into 5 chapters and they are listed and briefly described below.

Chapter 1: This chapter briefly introduces the topic of breastfeeding. It argues that the prevalence pervasive importance of breastfeeding is widely known by the public, but the breastfeeding rate remained worryingly low in Malaysia, especially in the state of Selangor. It further explains and clarifies the topic particularly the background and current conditions of baby rooms located in Malaysian shopping centers. The problem statements, research objective, research questions, scope of study are also outlined respectively in detail. Additionally, the breastfeeding culture and practices in Malaysia are concisely revealed in this chapter as well.

Chapter 2: Literature review and clear analytical directions are discussed in chapter 2. It briefly discusses some topics pertaining to breastfeeding and extensively on topics pertaining to baby room interior environment. It also reviews the theoretical understanding and academic considerations on various factors influencing interior environment including lighting, color, materials application, aesthetic aspect and Indoor Air Quality (IAQ) control etc. The literature review also highlights various problems relevant to interior environment especially the philosophical arguments of human satisfaction and perception toward a particular interior environment.

Chapter 3: The introduction of the survey questionnaire approach utilized, the method used, how it was used and why it was employed for the thesis are described in chapter 3. Furthermore, the process of research development was systematically designed from conception to the final phase by providing a clear methodological understanding. The respondents' sample background is introduce, the actual test with few dependent variables (DV) and independent variables (IV) are also clearly described. This chapter also explains the tests deployed to analyze the DV and IV which includes T-Test, Anova, Descriptive and several other data analytical tools. Statistical Package for Social Sciences (SPSS) version 21 was utilized to analyze the data elucidated from the questionnaire that was structured in five points Likert scales and open ended questions.

Chapter 4: This chapter discusses and indicates the process of data analysis that leads to the enlightenment of the answer to the research questions and objectives. This chapter analyzes the data derived from actual test; assesses the findings of the research, including the comments written and documented in the questionnaire related to the users' satisfaction toward baby room.

Chapter 5: The final chapter argues and summarizes the significant findings from the questionnaire survey, potential implications, criticism on research, avenues for future research and limitations.



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