A Study of Community and Work-based Child-care Centers
BAR 613: Research Thesis (2015-2016)

A Study of Community and Work-based Child-care Centers

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B02/37007/2010

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DECLARATION:

This Thesis is my original work and has not been presented in any other University or Institution for the purpose of awarding a degree to the best of my knowledge. This thesis is submitted in partial fulfilment of the examination requirements for the award of the Bachelor of Architecture degree, in the Department of Architecture and Building Science at the University of Nairobi.

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Arch. Musau Kimeu
REACH
as high as you can, and then reach a little higher.
There you will find magic and possibility.
And maybe even cookies.

Marc Johns
ACKNOWLEDGMENTS:

It is said that gratitude is not only the master of virtues, but the parent of all the others. And in this chi, I hope to pour out my deepest gratitude to all who have added so much value towards the completion of this work.

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DEDICATION:

To my parents Mr. and Mrs. Nyanchoga and My brothers Ian and Nick Nyanchoga.
A Study of Community and Work-based Child-care Centers

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Abstract:

Research has provided ample support for the assertion that, even though the family remains as the major stimulus on children’s outcomes, the superiority and steadiness of the child care that young children obtain, also have imperative effects as well (Barbour and Scully, 2014). Childcare is a common difficulty for the majority of parents who labor for income or wish to engage in employment. With the various needs of childcare for the Kenyan working parents, and the need for capital causing them to labor for longer hours, entrepreneurs and companies are capitalizing more in day care centers to meet the demand for specified child care services. A spot check in the major towns in Kenya discloses outrageous trends where some centers are even run in faintly lit rooms in apartments. Most of the childcare centers are being run in retrofit buildings that were not initially designed with the child in mind. The buildings require greater spatial articulation so as to fully engage the growing child.

As such, the main aim of this study is to examine how the current day care centers in Kenya, fit in with the developmental needs and growth factors of the child; mainly physiological and psychological needs of children between the ages of 3 months - 3 years. Other objectives include an assessment of the spatial configurations, the examination of user comfort and also to establish the quality of the perceptual environments in the day-care centers.

Study parameters are drawn from literature written by reputable architects such as, Christopher Day, Anita Olds and Mark Dudek who have done tremendous research on child-care environments in relation to the developmental needs and growth factors of the child. Literary work of respectable psychologists such as (Berk, 2013) and Celia (2016) was also deemed important in finding children’s development stages. Arising from this, three parameters are obtained for the purpose of the study. These include, the physiological environment, entailing the need for child-sized furnishings customized to meet the age-specific needs of the child and maintaining visual and audible links between the care-giver and child. The perceptual environment involves use of appropriate colors and textures both indoors and outdoors and finally user comfort comprising, appropriate lighting, background noise and indoor air quality standards.

The case-study method is employed in a descriptive study so as to compare the case-studies with parameters obtained from the literature review. This was used so as to understand the phenomena unfolding within the selected case-studies. The cases include: Little Steps Child-care Center for Working Professionals, a work-based center found in Westland’s, Nairobi and Little Smiles Play-group and Child-care center, a community-based center, situated in Kileleshwa, Nairobi.

The findings drawn from the field-studies reveal a great deal. With regards to the physiological environment, many of the furnishings in both centers fall out of the standards, however both cases are able to facilitate audible and visual contact to an extent. The cases also attempt to provide a perceptual environment that stimulates both visual and tactile cues in children, nevertheless, feeling and mood in relation to these matters are not extensively addressed. Lastly, user comfort is achieved only partially, as seen in the lighting, background noise, temperature and relative humidity readings obtained.

Grounded on the research findings from the cases studies, the author concludes and then goes on to recommend strategies that could enhance the cases studied along with upcoming day-care centers with regards to the parameters outlined above. Recommendations for future research are also identified, enlightening areas for further research and study.
Chapter 1

Introduction
1.1 Introduction

High quality child-care programs provide a safe and nurturing place for children to engage in play undertakings and grow, through activities that assist children to advance intellectual, physical, social and emotional skills, Fig. 1.11, (Child Action Inc., 2015). Research points out that even though the family remains as the major stimulus on children’s outcomes, the superiority and steadiness of the child care that young children obtain also have imperative effects, as well (Barbour and Scully, 2014). Current research has exposed that the early years (ages 0-5) are the most delicate for brain development. More than 90% of brain development occurs during this period. The people who aid in the child-care, are also those who help shape the child’s mind, Fig. 1.12. Society, children, families, employers, communities, and the nation as a whole benefit from high quality child care. Fostering a healthy, successful, future workforce is essential to everyone’s well-being (Children’s cabinet, 2015).

Childcare is a common difficulty for the majority of parents who labor for income or wish to engage in employment. This is brought about by various reasons such as growing numbers of families where both parents are or would wish to be income generators. Moreover the rising numbers of single-parental families has brought new challenges in childcare. Even so, family members such as aunts and grandparents, who were traditionally the care-givers, are nowadays more and more unreachable due to relocation, increased distances and employment (Cassirer and Hein, 2010).

In most countries, looking after children was traditionally considered to be the responsibility of families alone, mainly the women (Cassirer and Hein, 2010). In Kenya, extra-familial care for the younger children is predominantly common in urban and agricultural rural areas, including...
farms, where mothers, the primary care-givers are at work for many hours, and traditional caregivers (e.g., grandmothers and older siblings) are open to care for the younger ones (Swadner, 2000).

However, within the urban set-up where families do not live with the extended family, extra-familial care is not so common with the grandparents still residing in the village. New trends in urban areas are seeing both parents laboring for longer hours in order to provide for their families. Many people are choosing to get married at a later stage in life meaning having children at their career peak. The generation Y employees who are often referred to as the “young and the restless” tend to quit jobs without much thought and also believe in rising fast through their career ranks to senior levels. Subsequently, they tend to find a conflict between work and family life (Ngahu, 2014).

Dudek (1996) argues that the urbanized woman is showing more attachment to work and is more removed from older forms of family. Younger women are exhibiting different features; showing less sentiments than older women and are more of risk takers into exciting things such as foreign travel among others. Many professional women demand to continue their careers after childbirth only wishing to take a few days off to deliver and settle their children. In these circumstances, children’s day-care settings are becoming vital instruments in the liberation of women, making the experience of the day-care center important in the child’s life as compared to that of the family home.

Kenya has approximately 2 million people who are officially employed according to Kenya’s National Bureau of Statistics. Yet even so, with women occupying more than half of the population, their part in official employment is not so weighty, with only 29% of them in employment which shows a decrease from above 30% earlier. Locally, officially employed women were legally permitted to two months paid maternity leave after which it was extended by a month. The private-sector businesses were hesitant in hiring women within their childbearing ages. On the contrary, social attitudes are varying with more single women applying for work and a greater number of women working in higher level positions (Brown, 2011).

For the majority of working parents in Kenya child care is an issue of great concern. Who is left to care for the baby when their maternity leave is over? And will it be in favor of the child? Moreover, health information mentions that exclusive breastfeeding for a period of six months is vital for children’s full development. This goes to show many full-time working women are depriving their children of their nutrients (Brown, 2011).
1.2 Background of the Study:

Having housemaids is a common phenomenon in Kenya and many working parents employ them to help reduce their work load and better manage their lives. However, many of the house-maids left to care for children while parents are away at work may even lack the qualifications and training to do so. According to Mammalete (2015), sadly, many parents assume they know their children’s’ caregivers, until the impossible happens.

The greatest fear of parents that the house-maid may jeopardize their children’s safety has been highlighted in various segments of the local news recently. This was seen when a newly hired maid in Kenya, acknowledged as Grace Mwikali Mwema, was arrested by the Kenyan police after she was caught on camera, Fig. 1.13, breastfeeding her employer’s nine months old baby (Ikeji, 2015). Another similar situation arose, when police were hunting for a suspected kidnapper who vanished with a toddler left in her care. The girl, Flora Wangare, was left with a new house help as the two parents went to work. On returning in the evening, they found the child and the house help missing. It was apparently found that there was a collaboration between a tout and the house-girl (Odongo, 2015). To make matters even worse, a house-maid in Uganda was caught on camera beating a child, clouding anxiety not only to the child’s parents, but also to the world, Fig. 1.14, (BBC News Africa, 2014).

Parents are also finding the care-givers very demanding. Veronica Wanjiku, a parent argues; demands have been brought about by the workers becoming progressively savvy about employment laws such as minimum wage, health care cover, and other allowances — leading to a high cost of sustaining them which countless struggling parents may not afford to pay (Zidisha, 2015).
With the various needs of childcare for the Kenyan working parents, and need for capital causing them to labor for longer hours, entrepreneurs and companies are capitalizing more in day care centers to meet the demand for child care services. In the last three years, an increasing number of day care centers catering for children too young to be registered in kindergartens, have budded into urban centers. Emergent residential estates are now providing day-care centers in their planning, and an increasing amount of corporate firms have capitalized in day-care facilities in order to lessen worries for working parents, and so improve their production at the work place (Wafula, 2010).

It seems that choices are threatened, with the need to surge households’ income as living costs go up. This forces many parents to make a serious choice; whether to stay at home and sleep starving, or leave their babies at day-centers as they work to lift the family kitty (Obegi and Orengo, 2014).

Nevertheless, the particular number of upcoming day-care centers for children in the country is unspecified. Nairobi and Mombasa are stated to be having many as the need is there. A spot check in the major towns in Kenya discloses outrageous trends, where some centers are even run in faintly lit rooms in apartments. Geoffrey Nderi, a curriculum development professional in Nairobi, mentions that there is need for the situation to be rectified. “We urgently need to integrate child care into our education system. The starting point is establishing a tough legal framework to run the centers. This will keep at bay those rushing for money at the expense of children’s health and cognitive development. We must also ensure the right qualifications. For now, the current porous situation only exposes our children to serious implications,” he mentions (Obegi and Orengo, 2014).

Safaricom and Craft Silicon are examples of companies which have come up with day care centers for their staff, with Standard Chartered Bank being the latest to embrace the trend to start a day care facility within its new headquarters. David Mirito, a house-help bureau manager stated that, more people are seen to depend on day care centers to look after their children while they go about their daily tasks with the increase of two-income households (Wafula, 2010).

The need for appropriate spatial environments for growing children, which help to provide a seamless transition from home to future learning environments, is becoming apparent for the urban working class parent even with the rising cases of abuse of children who are left to untrained domestic workers, lacking basic education to care for the children.
1.3 Problem Statement:

Various scholars have established the design parameters for child-care environments. Day (2007) stated that careful thought of children's needs may result in unusual buildings. However, their architecture should be designed discretely to respond to the child's development in order to cater for their needs. This translates into an environment that nurtures and also inspires the child. The architecture is therefore subservient to them, so as to strengthen and pave a way in the world for them.

Dudek (2005) argues that the significance in the design of childcare environments is in the details. These are the salient features that enable children to successfully relate to their environments so that it comes to be not just a home away from home, but also a place for exploration, discovery and developing environmental awareness.

Research shows that young children can flourish and excel in child care settings outside of their homes. These centers or family child care homes can be exhilarating places for young kids when provided with good care and necessary precautions. The physical environment has a fundamental role in providing a place for children to succeed. Gaining an understanding of the role of the physical setting in childcare, assists the providers to develop a conducive setting for the children (Maxwell, 1998).

However, this is to be fully realized in many day-care centers in Nairobi, Kenya. The quality of the spaces is still in need of further study to cater for the various developmental, psychological and physiological needs of the growing child from infancy to toddler years. The current physical environments; functional space articulation, interior design including the scale of furnishings, the perceptual environment and outdoor play area lack sufficient articulation for the developing and growing child. Social groupings, occupancy comfort, safety and health measures are also other factors that strongly affect the physiological and psychological child development and exploration within their environments.

The child-care facilities currently being used are retrofits. The buildings require greater spatial articulation so as to fully engage the growing child. Therefore, this study seeks to investigate the quality of the environments provided in the day-care centers in Nairobi, Kenya.
1.4 Research Objectives:

The main objective;

To examine how the current day care centers in Kenya fit in with the developmental needs and growth factors of the child.

(Physiological and psychological needs of the child; 3 months -3 years)

The sub-objectives;

i. To assess the spatial configurations of day-care centers in Nairobi, Kenya.

ii. To examine user comfort in the day-care centers.

iii. To establish the quality of the perceptual environment in the day-care centers.

1.5 Research Questions:

The research questions include:

i. What spatial configurations are used in the day-care centers?

ii. Is the user comfort achieved in the day-care centers?

iii. How is the perceptual environment designed in the day-care centers?

1.6 Justification of the Study:

There is need for quality child care environments which offer children safety and holistic growth opportunities. This is therefore brings the need to study how the current day-care centers are equipped in terms of spatial organization to offer a suitable environment for the children that they care for.
1.7 Significance of the Study:

The study aims to benefit child care providers, parents, and children. It will offer insights on the quality of the day-care centers and provide information that can be used to improve them as well as for future ones. If the environment is effectively designed for the children, it may provide a seamless transition from home to the kindergarten environment. Day-cares may foster exciting environments for young kids while ensuring the children’s safety.

1.8 Scope of the Study:

The studies seen below focused on child development in educational facilities mainly in kindergarten architecture, which have structured learning environments. The scope of the ages of children studied was 3–6 years.


Whereas, precedent theses, have touched on matters pertaining to the effect of child development in educational facilities, this study however aims to add to the research of children in the line of day-care facilities for children. The children here are in involved in play activities to facilitate their development while also being looked after by caregivers when their parents are at work.

Here the children are still growing and the environment shall be used to cater for their developmental needs. The study will focus on;
• The age groups 3 months-3 years, which will be looked at in-depth. The developing child shall be examined with all the changes that are happening as they are growing both physiologically and psychologically.

1.9 Limitations of the Study:

The time allocated to the study was limited and could not allow the researcher to go through all the day-care centers and do an in-depth study. Due to financial limitations, the study uses a narrow scope of study. Moreover, a number of relevant research literature in this topic are not available in the local library, internet or shops. There researcher also experienced lengthy protocols and procedures, when gaining access to many of the child-care centers due to various security reasons. Even more, many regulations in the child-care centers, restricted the researcher from fully engaging in the centers.
1.10 Definitions of Operational Terms:

**Child:**
In the context of this study, the child is a being within the age-group of 3 months - 3 years.

**Childcare:**
Child-care is used to refer to places that take care of children before they can enter the formal education setting.

**Daycare/crèche facilities:**
These are places or organizations that take care of children throughout the day typically while their family members are at work.

**Workplace daycare/crèche:**
Some companies give the alternative of workplace crèches which aid in providing care for the baby while the parents are at work.

**Community daycare/crèche:**
These are run in the form private-based daycares or home-based daycares. Care-givers take care of the babies with the help of assistants. The private-based centers usually have more children, while the home-based centers are run by the owners with few nannies or qualified care-givers who take care of the children mainly because of limited amounts of space for children.
**Organization of the Study:**

CHAPTER 1; introduces the study at hand. The problem statement is clearly defined along with the research objectives and questions.

CHAPTER 2; gives knowledge on the manner in which the physical environment caters for children’s growth factors. With this, variables of infant and toddlers child-care environments are discovered and used as guidelines in the next chapter.

CHAPTER 3; sees the author carrying out the case-study method as the preferred strategy within a descriptive study of child day-care centers in work places and neighborhoods in the Nairobi area. This is because of the nature of the study and the phenomena that is to be studied.

CHAPTER 4; carries the weight of the study, and is where the author conducts a field study to identify salient features found in child-care centers using variables identified in chapter two.

CHAPTER 5; brings the study to a close where the author is able to use the findings from the field-work to come up with conclusions and recommendations for child-care centers.