



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم

# بسم الله الرحمن الرحيم



**MONA MAGHRABY**



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التوثيق الإلكتروني والميكروفيلم



# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
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### يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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# **The Impact of Psychological and Cultural Factors on Pediatric Healthcare Facilities Design in Egypt**

A Thesis submitted in partial fulfillment of the requirements of the degree of  
Master of Science in Architectural Engineering

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## **DISCLAIMER**

This thesis is submitted as a partial fulfillment for the degree of Master of Science in Architectural Engineering at the Faculty of Engineering, Ain Shams University. The author carried out the work included in this thesis during the period from April 2016 to October 2019, and no part of it has been submitted for a degree or a qualification at any other scientific entity.

The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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**Date** / /2020



## **ABSTRACT**

Pediatric healthcare environments play a vital role in the healing process. They need to adapt to children's psychological, social, spatial, spiritual, and cultural needs. Failing to adapt, the healing process can be undermined by stress, anxiety, and reduced satisfaction. However, the complexity of healthcare environments, due to functional requirements and user variety, may drive designers to disregard these factors in favor of adhering to regulations, codes, and guidelines. Recently, interest in patient-centered environments and evidence-based design has grown globally, as the need to define factors affecting the humanization of healthcare buildings arises.

In Egypt, there is little research dedicated to the design of pediatric healthcare facilities. The lack of information may lead to neglect of children's needs or use of international models that may not suit the Egyptian culture. Since the Egyptian healthcare market is expanding rapidly to accommodate society demands, the need to fill the literature gap has evolved to provide evidence-based, informative research that can support design decision-making.

This research aims to explore the impact of psychological and cultural factors on the design of the healing environments for children in Egypt. Qualitative methods are used to collect data on patients' interaction with the built environment in terms of social support, positive distraction, and perception of control. Observations, behavioral mapping, and participatory design techniques were used with children from five inpatient pediatric units in Cairo.

Results highlighted culture-specific issues that are related to the Egyptian context. Social support is shown to impact families, where control and privacy were compromised to seek social interaction. Opportunities for the formation of social support groups were observed. Positive distraction was more significant to patients, where the view from the window and thematic design impact were observed. Children's insights on inpatient room design were also recorded to include their perception of the environment. Results were summarized in a set of design recommendations for pediatric healthcare facilities.

**Keywords:** Supportive Design; Environmental Psychology; Healthcare Architecture; Evidence-based Design, Culture Responsive





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