ADMISSION POLICIES TO ARCHITECTURE EDUCATION APPLYING SPATIAL ABILITY TESTS TO ASSESS STUDENTS' READINESS TO ARCHITECTURE EDUCATION

By

ENAS MOHAMED ABDEL MONEM ELGAZZAR

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY
in
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Under the Supervision of

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Title of Thesis:

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Key Words:
Admission policies; Spatial ability; Readiness; Prediction of Success

Summary:

The research aims to find a valid tool that can measure the state of readiness of architecture students to reduce the obstacles. Also, this research proposes a predictive model of success that complements current procedures of admission to architecture higher education in Egypt to overcome its limitation on predicting success. It is proposed to utilize spatial ability and assess its capacity to measure student readiness and assess its capability to predict success in first studio.

This research is an empirical, quantitative case study. The results show a strong significant correlation between students' skill-level on spatial ability and studio performance. Also, this thesis outlines a predictive equation model of success. Findings suggest incorporating the spatial ability test score in the admission process to architecture education as a better predictor of success

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

Name: Enas Mohamed Abdel Monem Elgazzar Date: / /2019

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Dedication

To my beloved husband Hesham and my two precious children Youssef &Yahya

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Nomenclature

OECD	Organization for Economic Cooperation and Development
IBRD	The International Bank for Reconstruction and Development
UIA	Union International for Architects
UNESCO	United Nations Educational, Scientific and Cultural Organization
AIA	Australian Institute of Architects
SA1	Spatial Ability Test 1
SBST	Santa Barbara Solid Test
HSR	High School Record (the score which represents; the final secondary school leaving exam result or other equivalent certificates e.g. IGCSE, American Diploma, …,etc)
GPA	Grade Point Average (of Engineering Preparatory Year)
ASAT	Architectural School Aptitude Test
SAT	Scholastic Aptitude Test
MCAT	The Medical College Admission Test
SPU	Strategic Plane Unite, Ministry of Higher Education
ESA	Education Sector Analysis
ESE	Egyptian Syndicate of Engineering in Egypt