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A virtual conference on mental health
and well being in the 4th industrial
revolution.

Good Health and Happiness through Responsible Architecture

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ABSTRACT

Introduction: Universal culture has accepted the fact that to sustain good health is part of the concept of achieving the state of happiness and thus life's success. While good health and happiness are both intangible, physical entities that make up the fabric and environment to achieve the state of happiness take its toll of responsibility. In Architecture, where the art and science of building spaces, environment and memories; architecture has a responsibility of supporting the process and sustaining the intangible good health and happiness, from the intent it was originally created to the flexibility of the facility for onward use. In response to making humanity as central to architectural works, this paper intends to focus Architecture in the light of its responsibility as social art and science of physical building and environment that supports good health and thus happiness. **Materials and method:** Qualitatively by the description of the framework and output, content analysis and case studies both from practice and academia, primarily based on the Holy Quran, tradition of the Prophet Pbuh and accepted maxims are sought. **Results:** Health and Happiness are defined as how architecture is related to both. A framework of criteria that governed tangible and intangible contribution of architectural environment and facility/structure/evidence-based norms to both health and happiness are laid as a guide for different conditions and circumstances. **Conclusion:** Architecture itself is both a tangible and intangible entity that supports the make- up of MAN from birth till death as from his state of good health to ill health as well as happiness and sadness. To understand Architecture is to understand humanity. Architecture is the result of humanity whether one cares to create spaces and aesthetic to support the emotion or to remain isolated and remain inhumane as most in current world do.

Keywords: Architecture, Health, Happiness, Responsibility, Social, Humanity

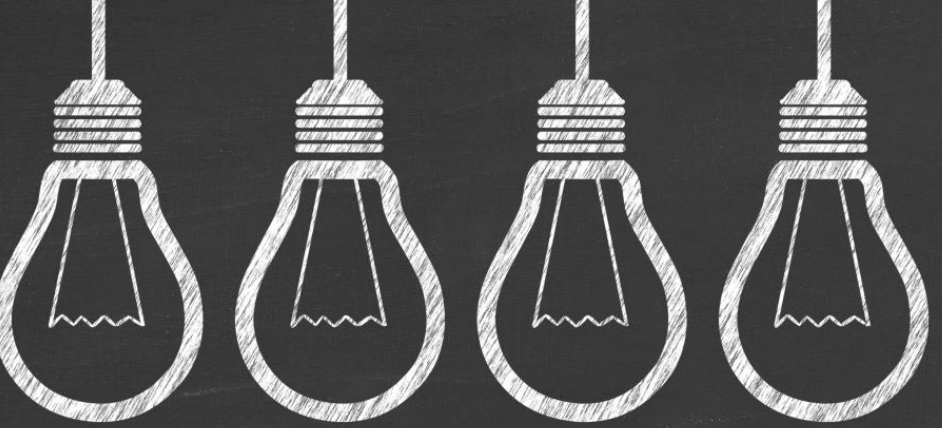
- *"Bismillah Al Rahman Al Raheem"*
-

Worldly life is temporary until afterlife to our real home... Jannah..



Surah Al-Insan, Verse 20:

*And when you look there (in Paradise),
you will see a delight (that cannot be
imagined), and a great dominion.*



Outline

- Introduction
- Setting the Framework
- Conclusion

Introduction

- Universal culture, such as WHO and the 3rd UN Sustainable Goals (2015), “Good Health and Wellbeing”, supports that **good health is part of the concept of achieving the state of happiness** and thus life’s success.
- However, Man, being central to the phenomena, is influenced by the environment – **built and natural, tangible and non-tangible** throughout his/her life to sustain the balance.



Aim of the Paper

- This paper is about linking Architecture to Wellbeing through responsible architecture.
- The aim is to realized that **Good Health and Happiness can be attained through Responsible Architecture.**
- **Responsible architecture** is in response to making humanity as central to architectural works while we are on earth.

Mental Health and Well Being

- With increasing acknowledgement of the important role mental health plays in achieving global development goals to ensure healthy lives and promote well-being for all at all ages, all 17 goals are interlinked (WHO).



The paper's objective

- This paper thus **focus on Architecture**

...in the light of its responsibility as social art and science of physical building and environment that supports good health and thus happiness

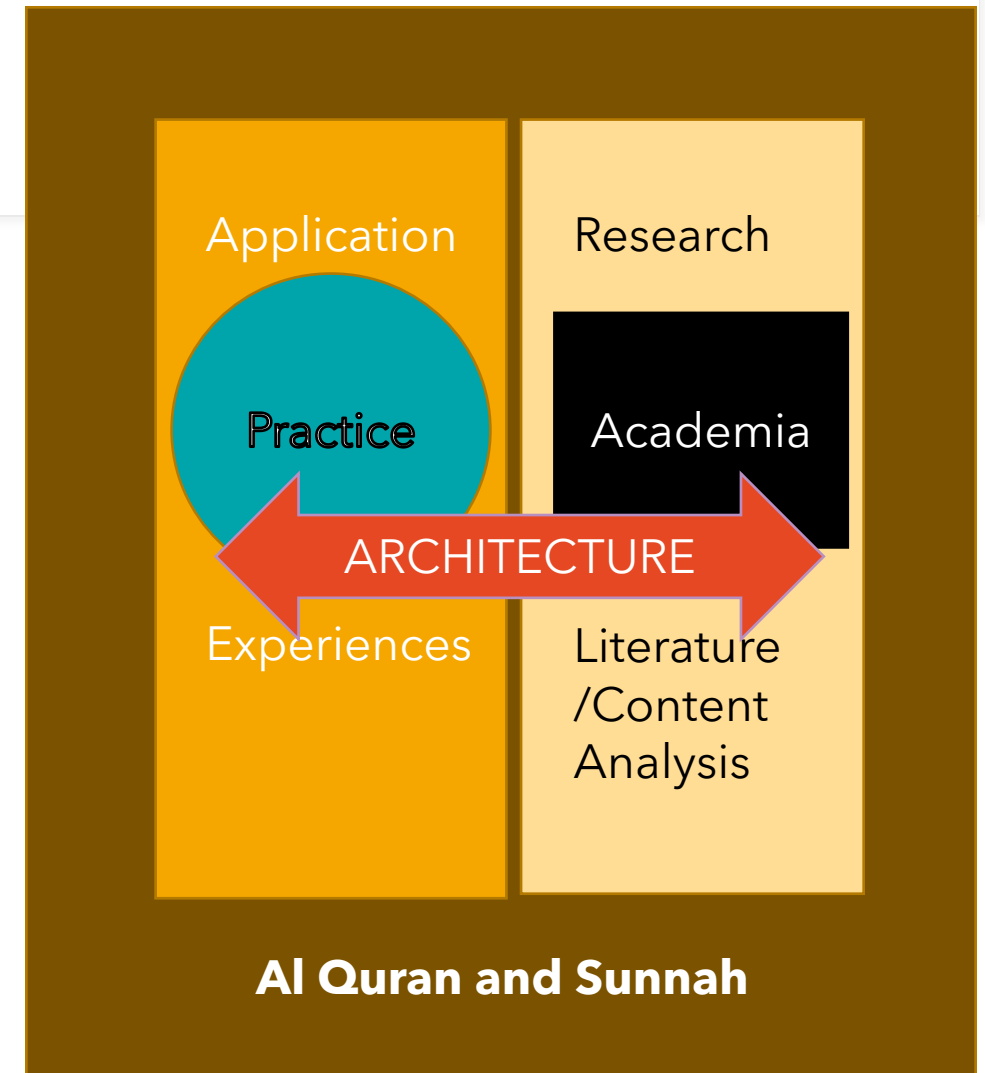


Setting the Framework

Architecture in the light of its responsibility as social art and science of physical building and environment that supports good health and thus happiness

Methodology of Approach

- Qualitative Method by the description of the framework and expected output, explorative using **content analysis and case studies both from practice and academia**, in reference to the Holy Quran, tradition of the Prophet Pbuh as well as the accepted maxims.



— THE PARAMETER

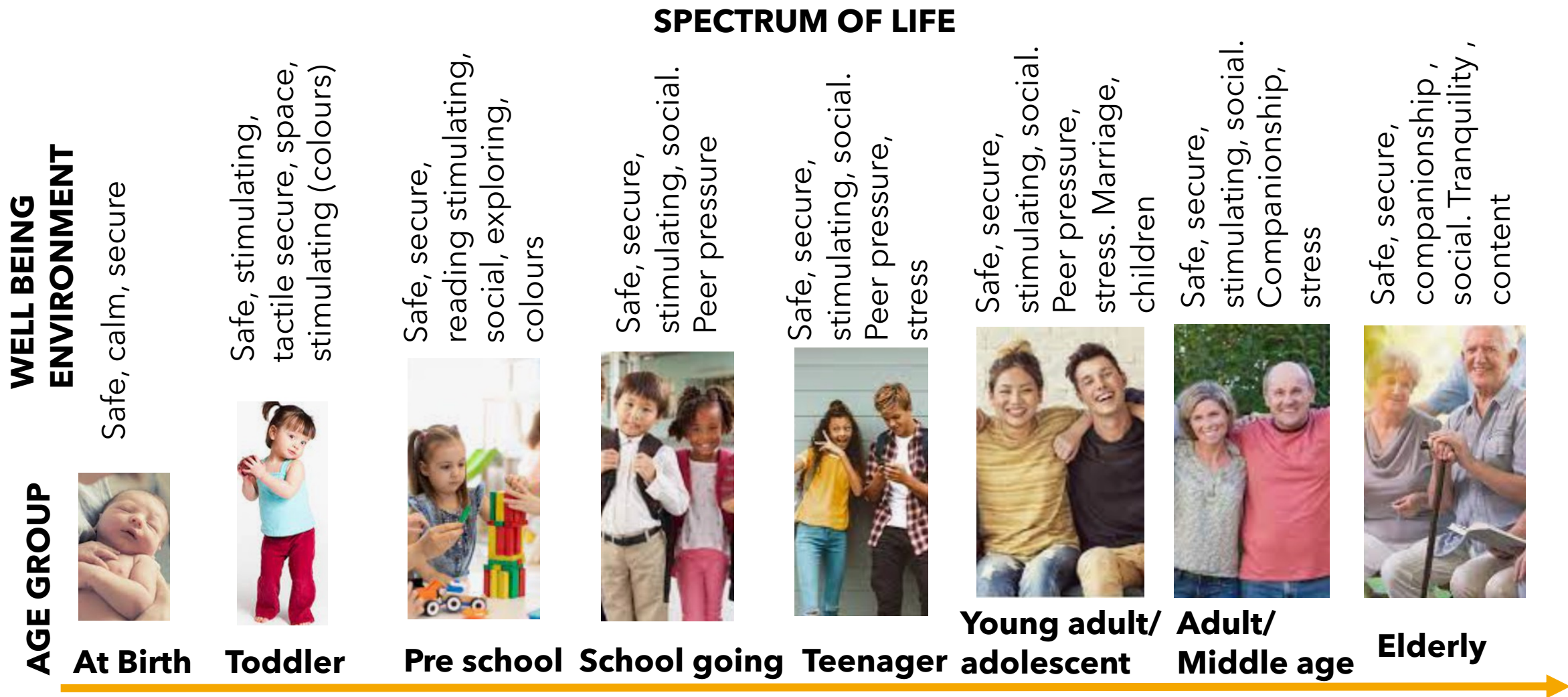
- *"And for those who fear Allah, He always prepares a way out, and He provides for him from sources he never could imagine. And if anyone puts his trust in Allah, sufficient is Allah for him. For Allah will surely accomplish His purpose: verily, for all things has Allah appointed a due proportion."*(Quran, 65: 2-3)





The Scope

Architectural interpretation
of the needs to support
Mental Health for Daily Life
in ordinary habitat



The healthcare expression 'from Womb-Tomb and from Cradle to Grave' covers the physical expression of Man's life span on earth. Each stage has its own sphere and dimension of health and wellbeing, and form of happiness despite life's pressures. Research findings support the idea that the configuration of a physical environment might not appeal equally to people of different ages (Laatikainen, T.E., Broberg, A., Kyttä, M., (2016).

FACILITIES FOR ALL



Home, hospital, daycare

At Birth



Home, Daycare,
Clinic, Playground, etc

Toddler



Home, Preschool,
Clinic, playground,
other

Pre school



Home, Schools,
Gym, Sports
complex, Bus
station,

School going



High School, home,
shopping mall,
library, gym, sports
complex, other

Teenager



Home, University,
Shopping, Garden,

**Young adult/
adolescent**



Safe, secure,
stimulating, social.
Companionship,
stress

**Adult/
Middle age**



Safe, secure,
companionship ,
social. Tranquility ,
content

Elderly

Varies typology of building and environment with different design approaches meeting various needs
Build in the various era, geography, climate and culture.

Mental Health

- According to WHO, **Mental health is essential to our overall well-being and as important as physical health.** When we feel mentally well, we can work productively, enjoy our free time, and contribute actively to our communities.
- Mental health, according to *Institute for Muslim Mental Health (na)* is our emotional, psychological, and social well-being. **Mental health does not only affect the way we think, feel, and act but also how we handle stress, relate to others, and make choices.** Mental health is not limited to emotional problems.

What is Happiness?

- Happiness in the Qur'an refers to happiness in this world and the hereafter. Happiness in the hereafter, or everlasting felicity, is the *ultimate goal of the believer*. All the joys that humans experience in this world are a means to ultimate happiness in the next world, and they acknowledge God with gratitude for the blessings granted them (Yasien Mohamad (2019)).

How does Quran support human ailments?

According to Yassien Muhammad (2019), the ethical philosophy of the Qur'an is not purely intellectual, but that it is bound up with a **diagnosis of human suffering and an intuitive conception of human flourishing...** in their attempt to grapple with human suffering, try to articulate a mode of living in the world. The ethical philosophy of Quran propose a theory of **immoderate desire** that they believe to be **the root cause of human ailments, whether physical, psychological, or spiritual in nature.**

Why Architecture?

- The **purpose of Architecture is to improve human life.**
Architecture create timeless, free, joyous spaces for all activities in life.
- The infinite variety of these spaces can be as varied as life itself and they must be as sensible as nature in deriving from a main idea and flowering into a **beautiful entity**. (10 May 2011. [The Purpose of Architecture | The John Lautner Foundation](#))
- Architecture is where **the art and science of building spaces, environment and memories** ([Merriam-Webster](#)).

Why Architecture?

- "**Architecture** is the **scientific art of making structure express ideas**. Architecture is the triumph of human imagination over materials, methods, and men to put man into possession of **his own** earth (in charge). 19 Aug 2019 ([Architecture Definition Includes Construction & Design - ThoughtCo](#))

Why Architecture?

- Understanding the purpose of architecture and how it originate from, it is therefore imperative that, **architecture has a responsibility** of **supporting the process in sustaining the intangible good health and happiness** of the users, from the intent the structure/project/space was originally created to the flexibility of the facility for onward use.

How can architecture support happiness?

- **'Experiencing Architecture'**, Steen Eiler Rasmussen (1963) describes the multi-sensorial way of perceiving architecture: "Architecture is not produced simply by adding plans and sections to elevations. It is something else and something more. It is impossible to explain precisely what it is -its limits are by no means well-defined. On the whole, art should not be explained; it must be experienced." (Herssens J. & Heylighen A. (2007))
- Every touching experience of architecture is multi-sensory; qualities of space, matter and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton and muscle" (Pallasmaa 2005).

Literature Review 1 -interpreting Happy Design

Dolunay Dogahan (2020) reviewed Channon, B (2019) Happy by Design: A Guide to Architecture and Mental Wellbeing, that had collated research-backed design elements that have a positive impact on our 'happiness' and well-being.

Light: Access To Daylight And Control Of Artificial Light

Natural And Tactile Materials

Stimulation

Avoid Overstimulation

Spaces For Activity And Spaces For Calm

Control - Letting Occupants Alter Their Spaces

Literature Review 1 -interpreting Happy Design

- **Day light.** Being connected to the outside world through detecting changes in temperature and light gives reference to our body clock whilst not being able to do so could be 'disorienting and even distressing'
- Artificial light** is also as important for our wellbeing : the temperature of the light, the harshness and glare can all affect our moods negatively, such as bright lights making depression-prone people become more depressed as research suggests, whilst **correctly used light can provide comfort, feelings of intimacy and calmness.**
- The use of **natural and tactile materials**, such as exposed brickwork, timber furniture, linen and cotton, plays an important role in stimulation of the senses, and the inherent need to be connected to nature.
- Avoid overstimulation**, especially crucial for introverts that prefer "environments that are not over-stimulating and rely on quiet time to re-energise.

Daylight, View, Nature, Access to outside



Good Health and Happiness through Responsible
Architecture

Literature Review 1 -interpreting Happy Design

- Hence, a good building should be allowing for **spaces for activity and spaces for calm**. With ability to cut out noise and light is also crucial to our wellbeing as having comfortable furniture and bed.

Research also shows that **letting occupants alter their spaces**, and having control over, such as being able to have control to dim the lights, alter the temperature, layout of furniture, block noise out and store away our belongings, provide the much-needed calm in the homes, away from the chaos of the city.

**The less one feel in control of our situation or detached from nature, the more the increase in our stress levels and the likelihood of suffering from mental health issues such as depression and anxiety.

Literature Review 1 -interpreting Happy Design

Channon(2019)collate that the positive impacts of being able to be **in control over the environments** and to have a **connection to nature either** provided through sunlight, wind, views to greenery or to water had reported to have better mental wellbeing than those who those living in cities.

“The perception of control is closely linked to our happiness. Psychological studies have shown that if we believe we have more control we feel more content, even if our actual levels of control are unchanged... A desire to regain control can be closely connected to many more long-term psychological problems such as eating disorders or obsessive behaviour,” explains the book.

Literature Review 1 -interpreting Happy Design

- **When focusing on providing more homes and shelter, the quality of the living spaces offered should be part of deal** especially for those people that are forced to stay at home; free to go back outside; and those that have little mobility to be able to go out and exercise or even to feel the fresh air and to get light on a daily basis (Dogahan, D(2020).

We need regulations that not only focus on safety but also on the health and wellbeing of inhabitants surrounding sustainability and the provision of more affordable housing for a healthier, happier society ([Dogahan. D\(2020\)](#))

Literature Review 2- Architecture of Happiness

Choice means Chaos

According to De Botton, A. an author "Architecture of Happiness" in an interview on 'Talk of the Nation' Radio station, October 11, 2006, he said, '....although choice is a wonderful thing in many areas of life, when it comes to architecture, when a city or a town where all the buildings look different, they all seem like they're in a way having an argument among themselves.

Style is endless and relative

That can be very disorienting and confusing. And among many architects for really a hundred years or so, there's been a search to try and find some style which would win everyone over so that we wouldn't have chaos in our cities, and that search is ongoing.

- Homeliness - old buildings...has meaning...domesticity-nostalgic
- Calming influence- repetition can be good quality
- Building communicate emotions....
- Moral message...tell us the story...
- Beauty is not just aesthetic.. A promise of happiness.

Literature Review: From the Quran

- ***And give good tidings to those who believe and perform righteous deeds that theirs shall be Gardens underneath which rivers run; whenever they are with fruits therefrom, they shall say, 'This is the provision we received before'; and they were given a likeness of it... (Qur'an 2:25).***

Yasien Mohamed (2019)

This verse refers to the inhabitants of heaven who remember that they experienced similar provisions in this world although it is never the same. Happiness in the Qur'an refers to a permanent state in paradise and not a state of mere physical joy in this world. *"They rejoice in the life of this world, yet the life of this world compared to the hereafter is but a fleeting joy"* (Qur'an 13:26). Praiseworthy joy, however, is to enjoy the bounties of God and to be grateful to Him for those bounties.

Literature Review: Muslim Scholars and Sharia

Ahmed Farid Mustapha (1986), described the importance of basic “material” standards such as health regulations that requires cross ventilation and penetration of sun-rays, potable water, sewerage system, drainage system, accessibility, communication, technologies and other positive effort to facilitate humans as the applied values agreeable to Islam.

The Islamic (Shari’a) Law reveal guidelines between not only man and his Creator but also the relationship between man and man and that between types of societies. In the light of urbanism, the Shari’a place strong emphasis on the need for privacy; building heights; building forms; external spaces; aesthetics; architecture; social interaction; and again the climatic constraints, local building materials, technology and so on.

Literature Review: Quran and Muslim Scholars

,Verily, in the creation of the heavens and of the earth, and the succession of night and day; and in the ships that speed through the sea with what is useful to man; and in the waters which God sends down from the sky, giving life thereby to the earth after it had been lifeless, and causing all manner of living creatures to multiply thereon; and in the change of the winds, and the clouds that run their appointed courses between sky and earth: [in all these] there are signs for people who use their intelligence.'

[The Qur'an, 2: 164]

According to Mohd Kamal Hassan (2011), the verse on the left, together with Q. Al-Játhiyah 45: 5, Q. Al-Rād 13: 4, S. Al-Naíl 16: 12, 66-67 clearly indicate Allah's desire that human beings should use the intellect to understand the laws of nature and the benefits it brings as Allah's generous provision to mankind.

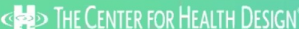
He re-emphasied that the intellect is also to be used to draw moral lessons from the history of nations or civilizations which were destroyed by Allah (S.W.T) because of their injustices and inequities.

How do we get new information to Improve?

RESEARCH - issue-literature-hypothesis-post occupancy -feedback- applied - review.....

EVIDENCE-BASED DESIGN

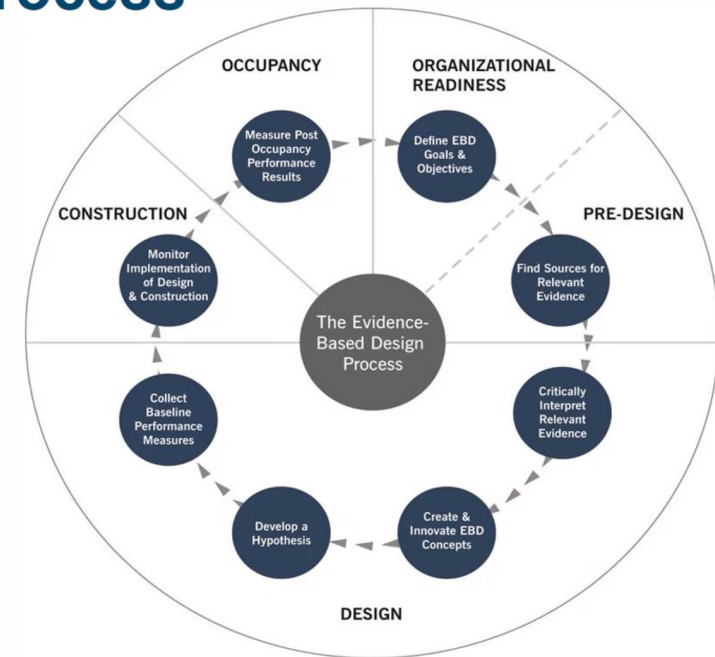
IS THE PROCESS OF **BASING DECISIONS** ABOUT THE BUILT ENVIRONMENT ON **CREDIBLE RESEARCH** TO ACHIEVE THE **BEST POSSIBLE OUTCOMES**

 THE CENTER FOR HEALTH DESIGN®

 DESIGNCAN

EBD Process

Listed in SG1



 THE CENTER FOR HEALTH DESIGN®

 DESIGNCAN

How does architecture affect health and wellbeing?

Salutogenic Design

Psychosocially supportive design stimulates and engages people, both mentally and socially, and supports an individual's sense of control.

[Source: Dilani, A \(2012\) The Influence of Design and Architecture on Health \)](#)

The basic function of **psychosocially supportive design** is to start a mental process by attracting human attention, which may reduce anxiety and promote positive psychological emotions.

Health processes could be **strengthened and promoted by implementing design that is salutogenic**, i.e., that focuses on the factors that keep us well, rather than those that make us unwell.

Salutogenic research is based on identifying wellness factors that maintain and promote health. (Antonovsky 1991)

The aim of **salutogenic design** is to create environments that stimulate the mind in order to create pleasure, creativity, satisfaction and enjoyment. There is an important relationship between an individual's health and the characteristics of the physical environment.

Salutogenic Design vs Pathogenic Design

- Nature and its Meaning for Health
- The Influence of Light on Health
- Art, Healing and Wellbeing
- The Physical Environment and Productivity
-

[Source: Dilani, A \(2012\)
The Influence of Design and Architecture on Health](#)

Research had shown that with salutogenic perspective forms theoretical framework for **psychosocial supportive design**, it can stimulate, engage and improve an individual's sense of coherence and thereby strengthen their coping strategies and promote health.

To implement psychosocially supportive design it is necessary that the whole organisation understands the meaning of a salutogenic perspective. Knowledge of which environmental factors contribute to health and wellbeing can thereafter be guidelines in making political decisions.

How does architecture affect health and wellbeing?

The physical, social and cultural factors are generally addressed by the mainstream architecture programs. However, the **cognitive human factors require scientific and interdisciplinary research.**

Cognitive reactions to the environment have only recently attracted the attention of scientific research. In the 1980s Changeux (1985) made the first link between **brain-mind activity and environmental design.**

John Zeisel, chairman of the Academy of Neuroscience for architecture (ANFA), smelled the uncultivated sphere of action which was discovered by Changeux and started a pioneering research track **combining neurology with architecture**

How does architecture affect health and wellbeing?

- O'Neill (2001) related this perception system to **architecture** and for her the **haptic** sphere covers even more. **It involves the integration of many senses, such as touch, positional awareness, balance, sound, movement and the memory of previous experiences, which finally all combine into one holistic whole.** [\(HAPTIC ARCHITECTURE BECOMES ARCHITECTURAL HAP\)](#)

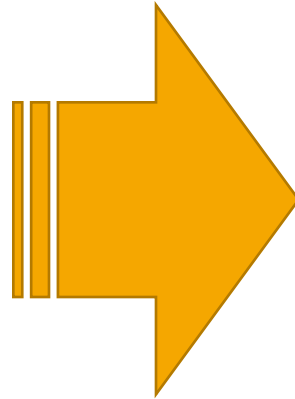
Incorporating both neuroscience and **architectural** design, Auckland University Technology (AUT) researchers are examining at what magnitudes **architecture** and urban design **can** negatively **affect** Aucklanders on a daily basis resulting in increased stress and anxiety levels, reduced productivity and focus and several other symptoms and indicators.¹¹
Oct 2019

[Neuro-architecture: How do buildings affect mental health ...](#)

Case Study in Academia and Practice

Academia

- Design thesis
- Dissertation
- Research



Practice

- Guidelines
- Design
- Policy papers

Conclusion

- Health, well-being and happiness other than those defined in Islam, is relative and fleeting unless one is grateful (for the normal) and exempted for the ill.
- Architecture itself is both a tangible and intangible entity that supports the make-up of MAN from birth till death as from his state of good health to ill health as well as happiness and sadness while on earth.
- To understand the state of Architecture is to understand the state of humanity as proven in history.
- Collaboration and engagement between designers and stakeholders/users is very important at the onset to set the design requirements in positive mode.
- Research through the various method available should be recognized and include in all projects for a meaningful result.
- Architecture is the result of humanity whether one cares to create spaces and aesthetic to support the emotion or to remain isolated and remain inhumane as most in current world do.

JAZAKALLAH KHAIR FOR LISTENING

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Bibliography

- Herssens J. & Heylighen A., 'HAPTIC ARCHITECTURE BECOMES ARCHITECTURAL HAP'in . Retrieved at http://www.arbetsliv.eu/nes2007/papers/A34_Herssens.pdf
- [Channon](#),B. (2019) Happy by Design: A Guide to Architecture and Mental Wellbeing. RIBA Publishing
- Alan De Botton, 'The Architecture of Happiness', October 11, 2006 10:00 AM ET , Heard on [Talk of the Nation](#) at <https://www.npr.org/templates/story/story.php?storyId=6247700>
- Dilani, A, ' The Influence of Design and Architecture on Health', in [HealthManagement, Volume 12 - Issue 4, 2012](#). Retrieved at <https://healthmanagement.org/c/imaging/issuearticle/the-influence-of-design-and-architecture-on-health>
- Norwina Mohd.Nawawi, 'Islamic Perspective To Healthcare Architecture - an overview of the Medieval Islamic World with Case Study of Contemporary Healthcare Architecture in Malaysia', paper presented at UIA WP Public Health, 17-27th July 2002, Berlin, Germany.
- Norwina Mohd Nawawi, Abdul Razak Sopian & Srazali Aripin , 'Architectural Design for Infectious Disease Facilities: Brief Design review of case studies from the past & current facilities in Malaysia and around the globe' at Medical Requirement And Design Of Infectious Disease Facilities Workshop, 28 - 30 September 2020, Pulse Grande Hotel, Putrajaya, Malaysia

Bibliography

- Dolunay Dogahan, '(Un)happy By Design' in DESIGN INDUSTRY · 20th April 2020. Retrieved at <https://involvedmag.com/unhappy-by-design/>
- Mohammad Reza Afroogh, 'Architecture from the Perspective of the Holy Qur'an' in Journal of Architecture and Construction, Volume 2, Issue 3, 2019, PP1-6.
- Yasien Mohamed, 'The Idea of Happiness in the Quran', in POLITICS & PRACTICAL THEOLOGY ISLAMIC ETHICS, SEPT 12, 2019. Retrieved at <https://yaqeeninstitute.org/yasienmohamed/the-idea-of-happiness-in-the-quran>
- Laatikainen, T.E., Broberg, A., Kytta, M., (2016). The physical environment of positive places: Exploring differences between age groups. Preventive Medicine, 95, 85-91.
- Neuro-architecture: How do buildings affect mental health? In Practice, Architecture Now, 11 October 2019. Retrieve at <https://architecturenow.co.nz/articles/neuro-architecture-how-do-buildings-affect-mental-health/>

Bibliography

- Institute of Muslim Mental Health (n.a) Islam and Mental Health. Retrieve at <https://muslimmentalhealth.com/islam-mental-health/>
- Ahmed Farid Moustapha. August 1986. Islamic Values in Contemporary Urbanism. First Australian International Islamic Conference.
- Mohd Kamal Hassan, 'The Human Intellect, Divine Revelation and Knowledge Based on Al- Qaradowi's Work: al-Aql wa al-Ilm fi al-Qur'án al-Karīm ' in Revelation and Science Vol. 01, No.03 (1433H/2011) 1-12. Retrieve at http://irep.iium.edu.my/10946/4/the_human_intellect%2C_divine_revelation_and_knowledge_-KamalHassan.pdf