

Designing Non-Depressive Urban Built Environment: Case Study of Damietta City, Egypt

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Re qualifying Our cities for happiness and health.

Urbanization

70% by 2050
(UN, 2015)

Effect on Health

Physical health Mental health

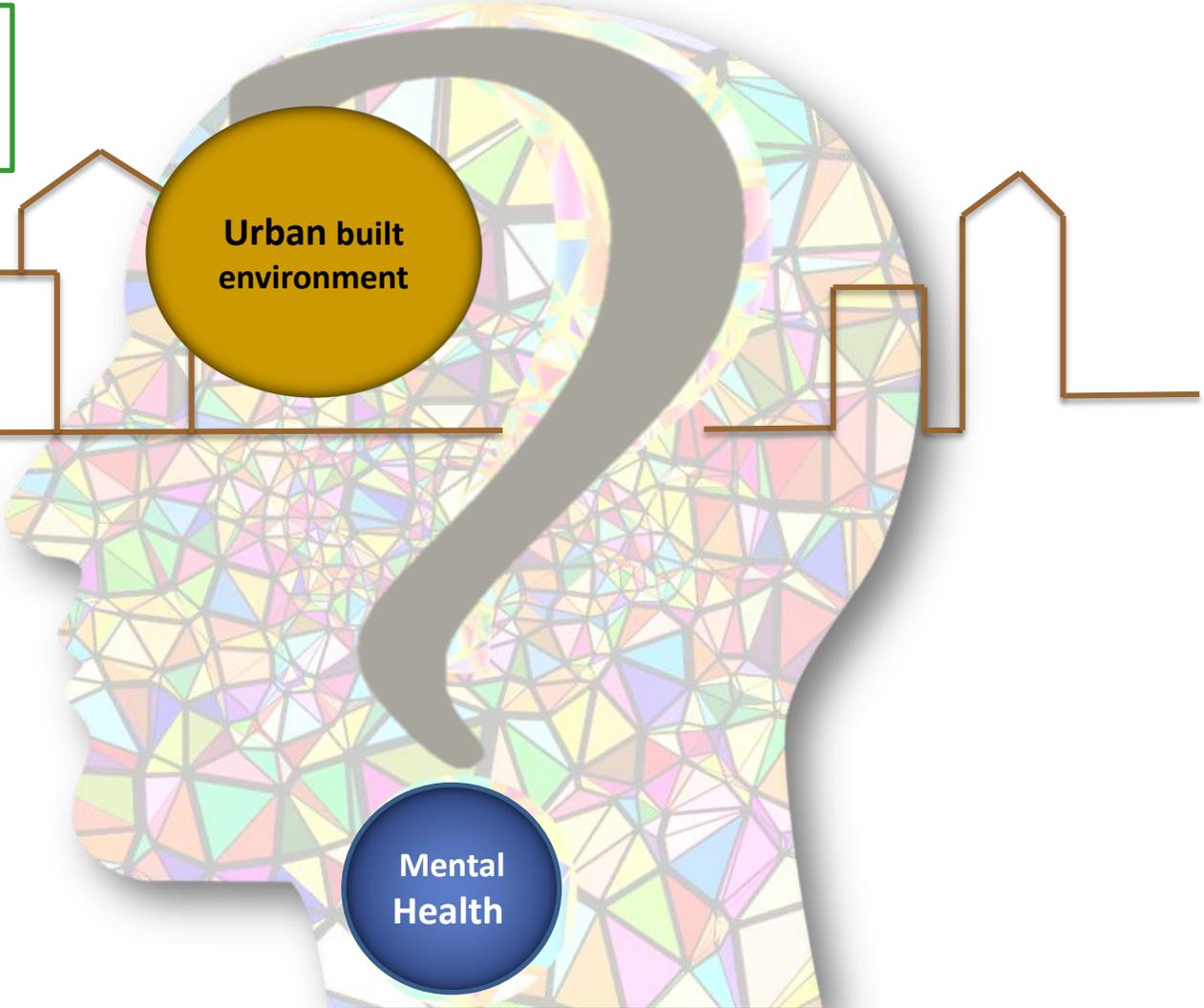
Urban health

HEALTHY CITY
1986

HAPPY CITY

ACTIVE CITY

GREEN CITY

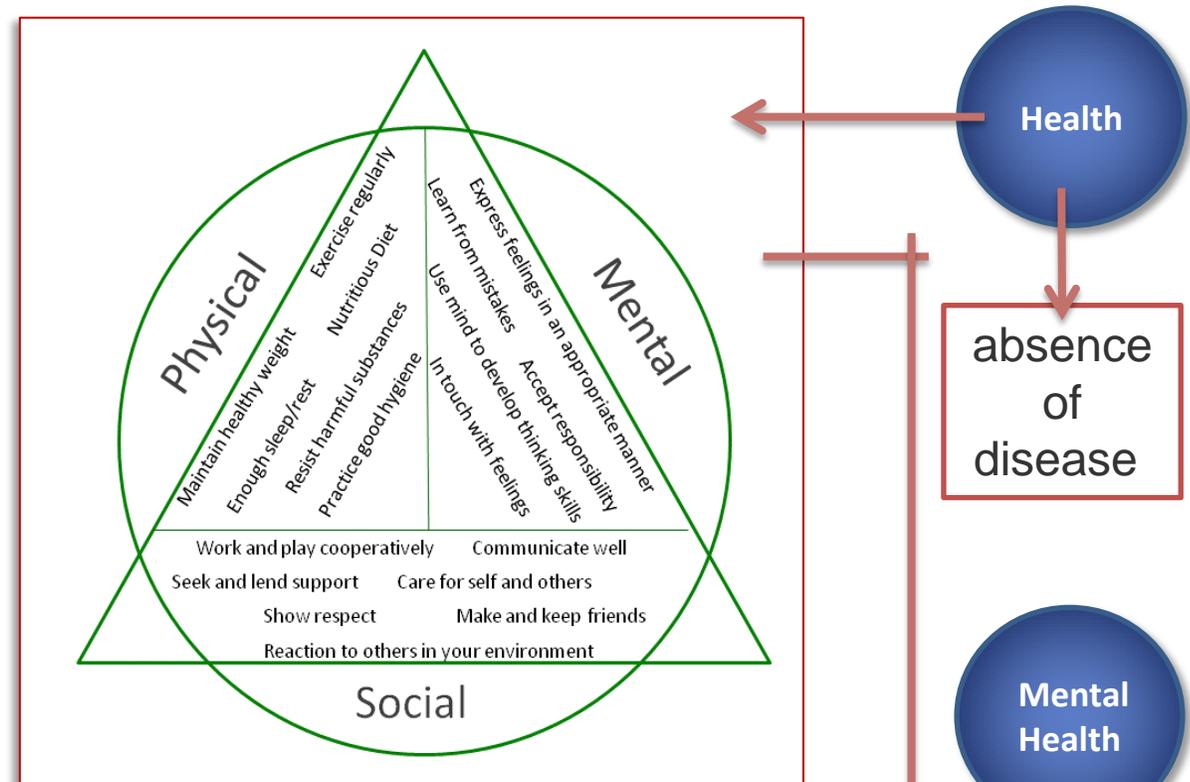


Is there a relationship between?
How we can improve M.H through urban design?

MENTAL HEALTH RELATED ISSUES

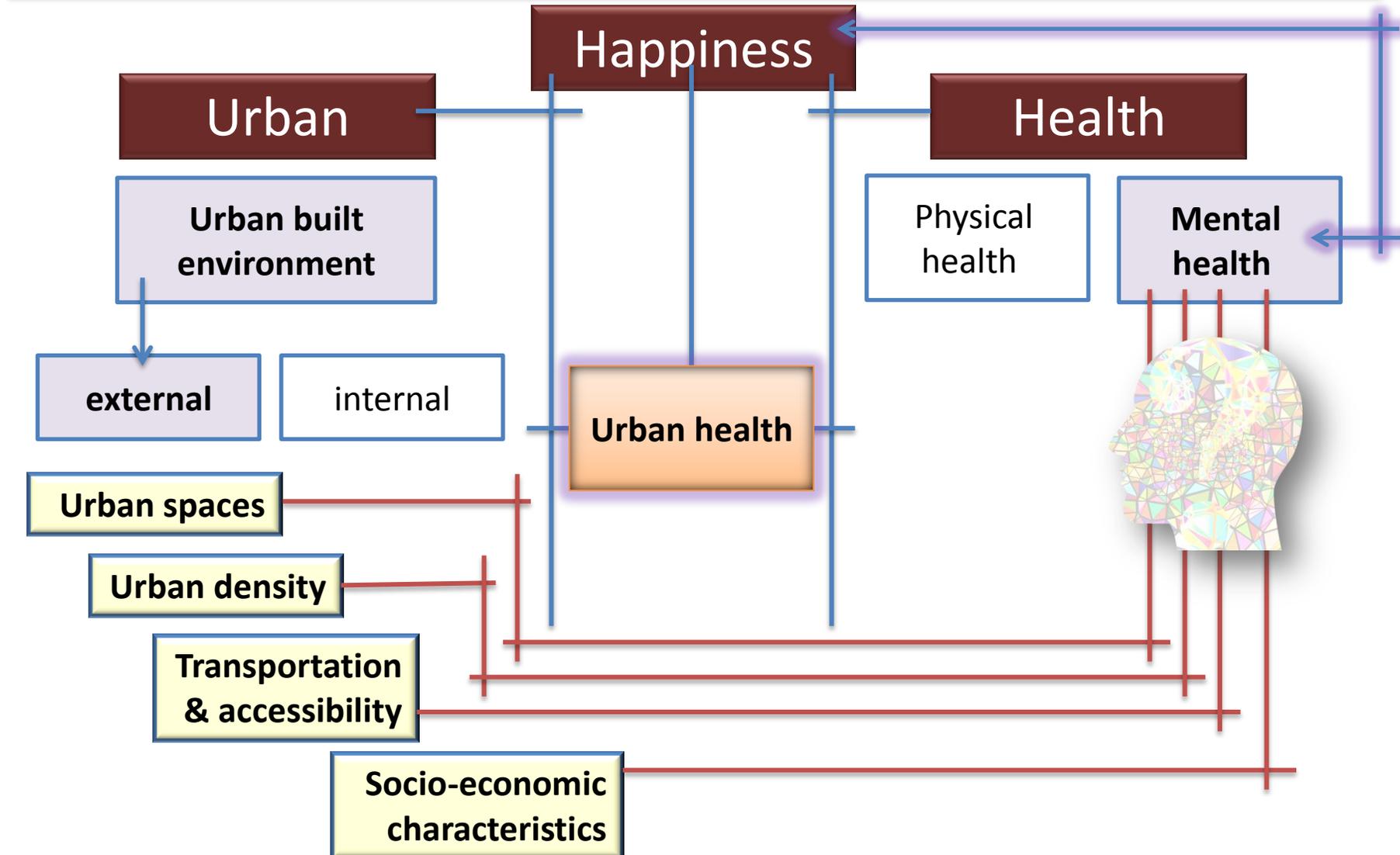
- **1 in 4** people will have a diagnosable mental illness . (WHO)
- Mental disorders are **the third largest source** of disease burden after cancers and cardiovascular diseases, but **the largest source** of disability burden 7.4% ,(Begg S, et al.2007)
- Many mental health problems are more common in cities: **Depression (39% more)**, **Anxiety (21% more)** and **Schizophrenia (double)**. (WHO)
- the evidence that urban living causes mental illness is inconclusive and biased by self-selection.(Litman ,2017).

HEALTH & MENTAL HEALTH

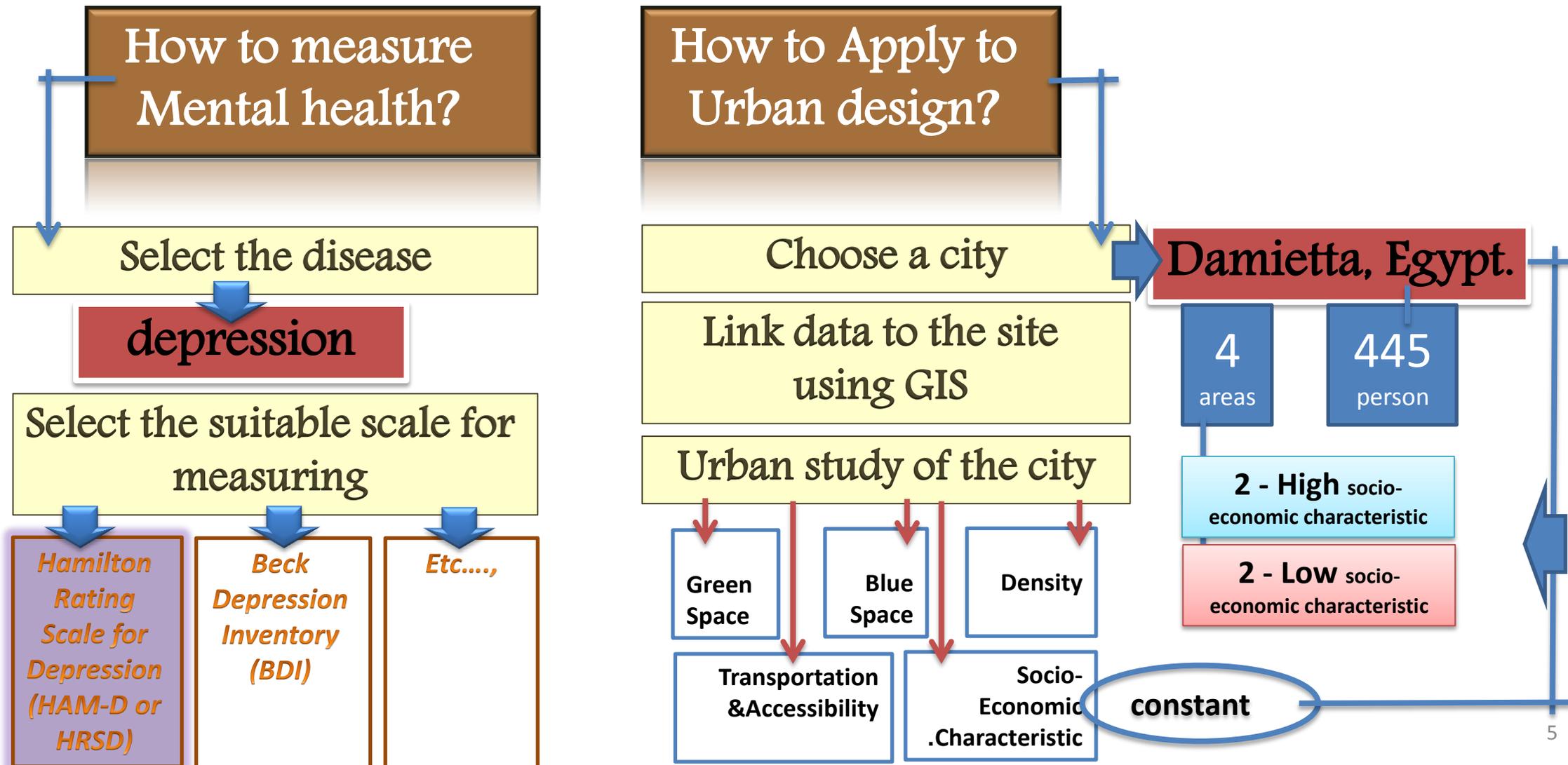


A state of **well-being** in which every individual **realizes his or her own potential**, can **cope with the normal stresses of life**, can **work productively and fruitfully**, and **is able to make a contribution** to her or his community

Theoretical study



Practical study.

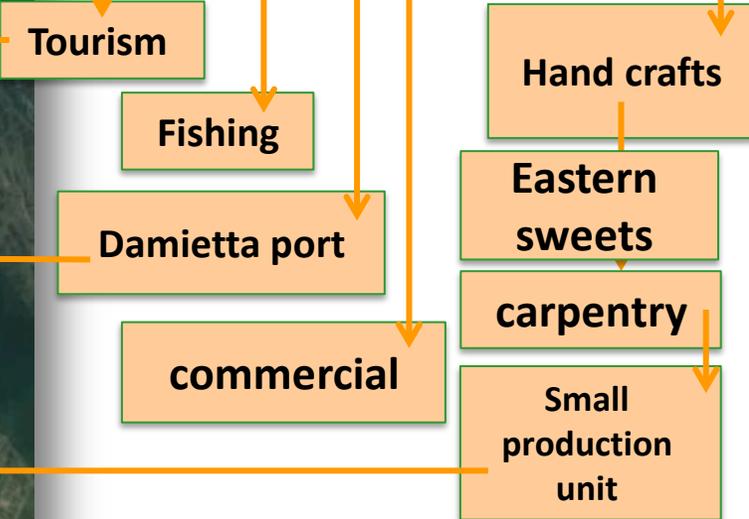


Damietta city , Egypt

- Location
- Economic
- Social
- Urban



Diversity in the economic base



No unemployment

Youth & children work



low socio-economic characteristic

High socio-economic characteristic

Damietta (4 areas) – 445 people

Location

Economic

Social

Urban

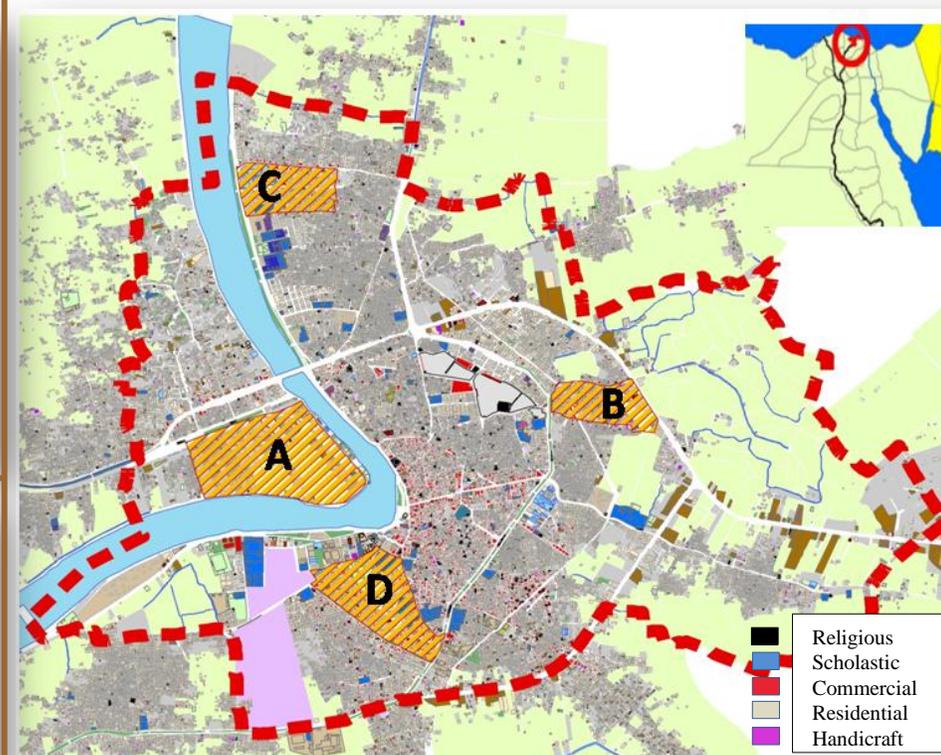
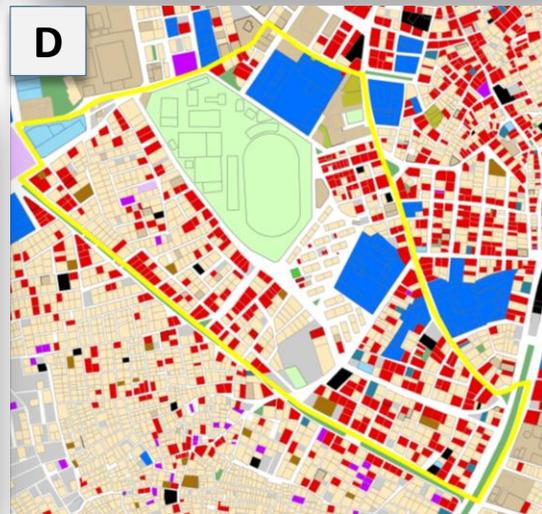
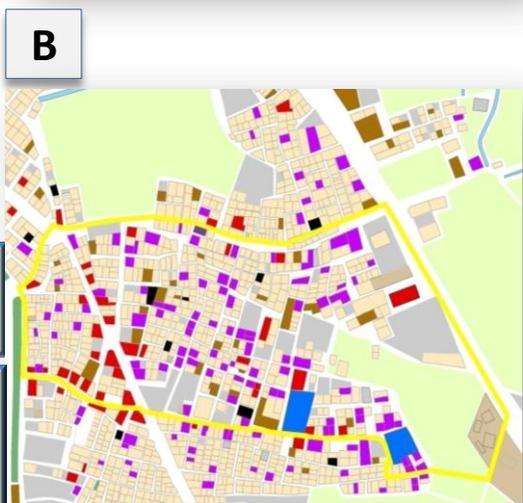
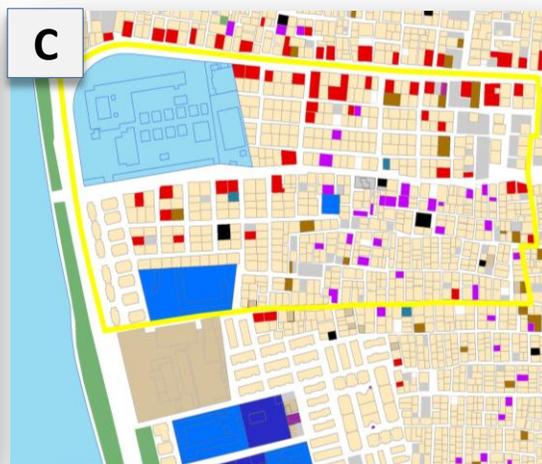
Green Space

Blue Space

Density

Transportation & Accessibility

Socio-Economic .Characteristic



low socio-economic characteristic

High socio-economic characteristic

(Green spaces)

Location

Economic

Social

Urban

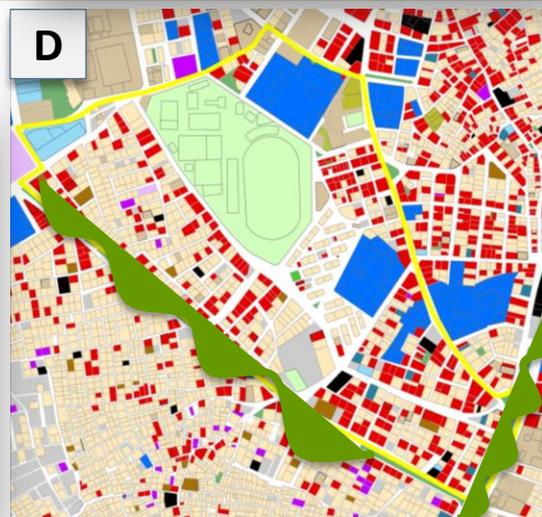
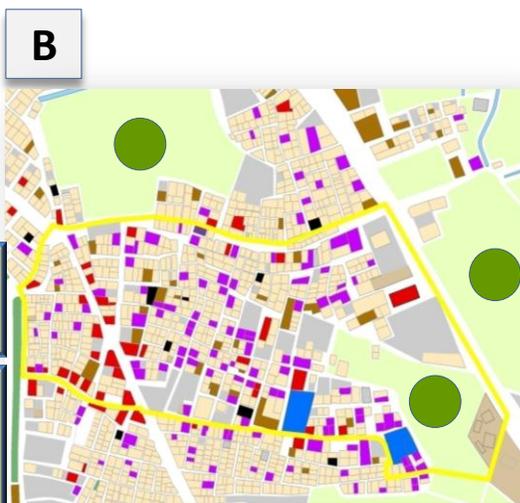
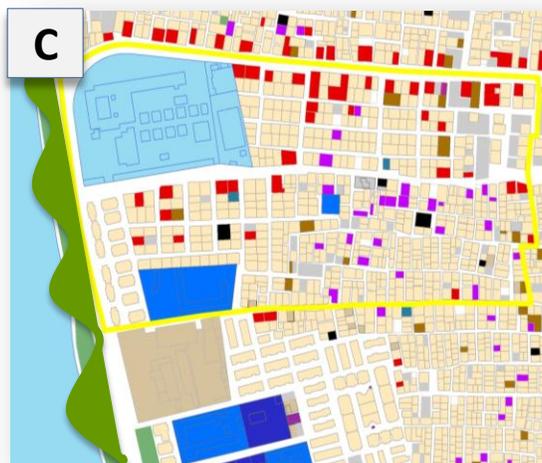
Green Space

Blue Space

Density

Transportation & Accessibility

Socio-Economic .Characteristic



low socio-economic characteristic

High socio-economic characteristic

(Blue spaces)

Location

Economic

Social

Urban

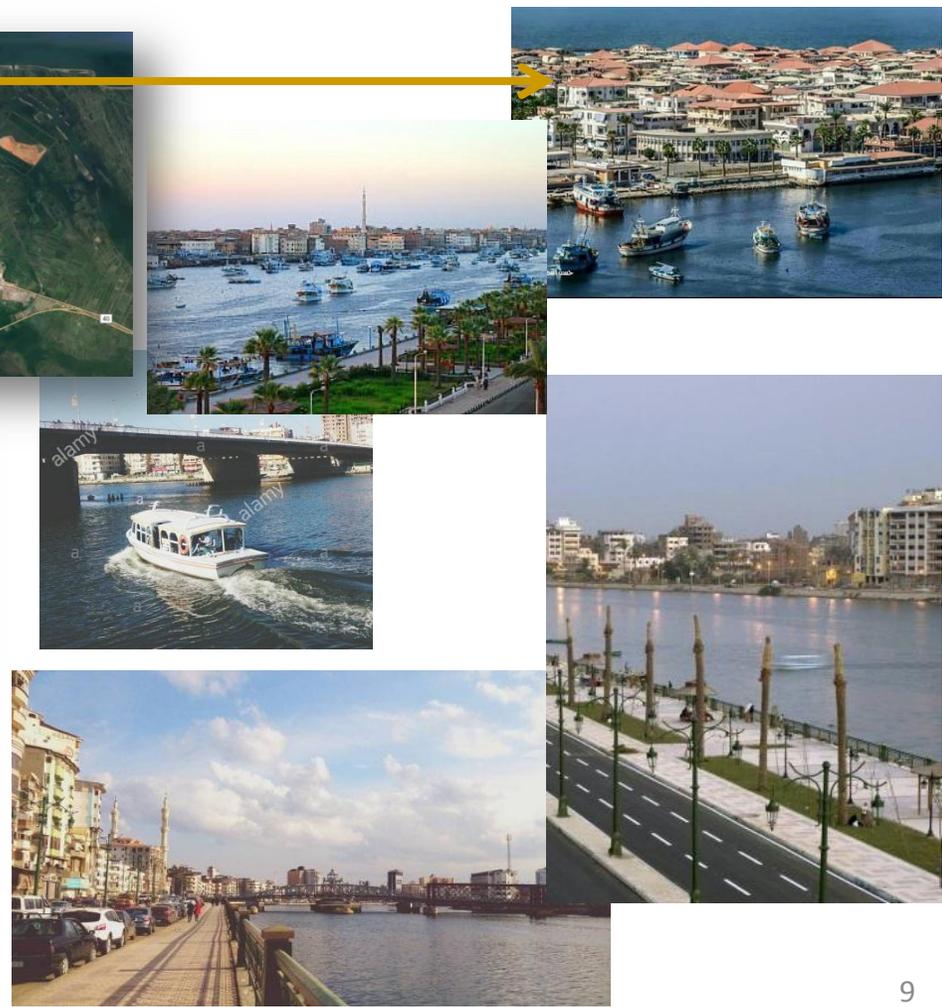
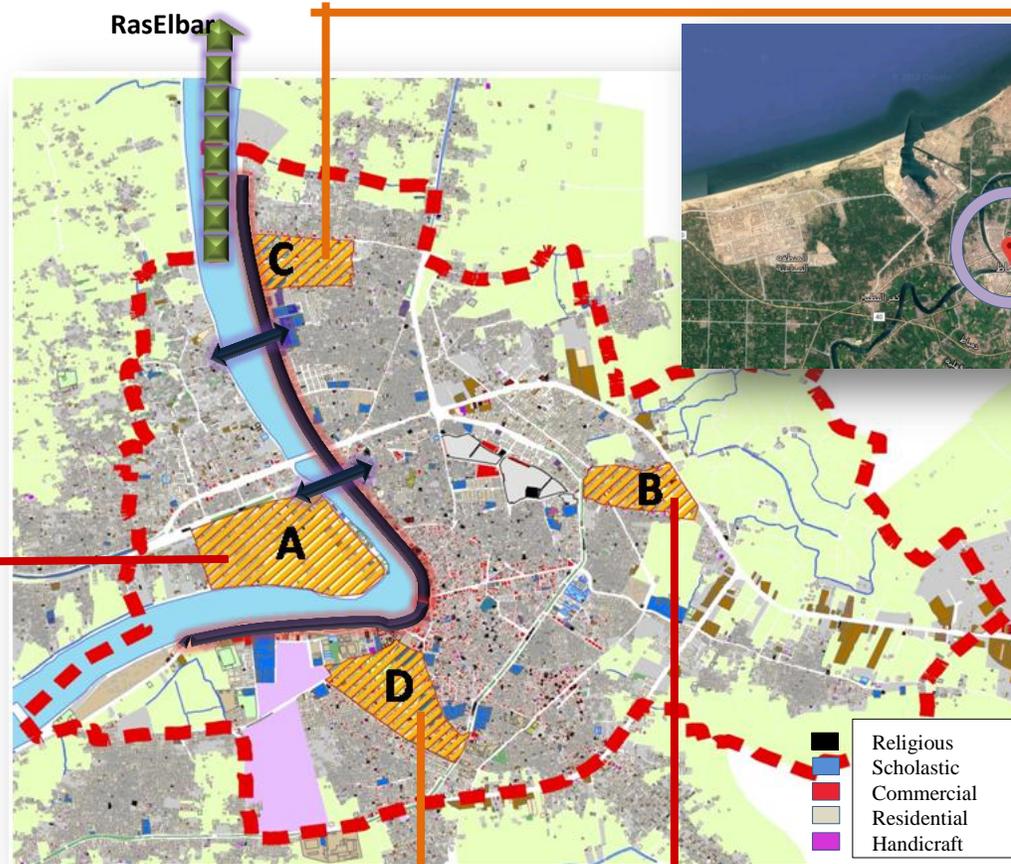
Green Space

Blue Space

Density

Transportation & Accessibility

Socio-Economic .Characteristic



Waterfront

Weekly trips

Daily trips

low socio-economic characteristic

High socio-economic characteristic

(Density & Mixed uses)

Location

Economic

Social

Urban

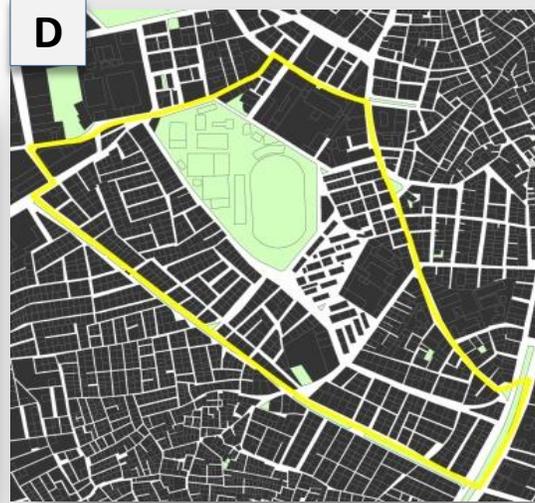
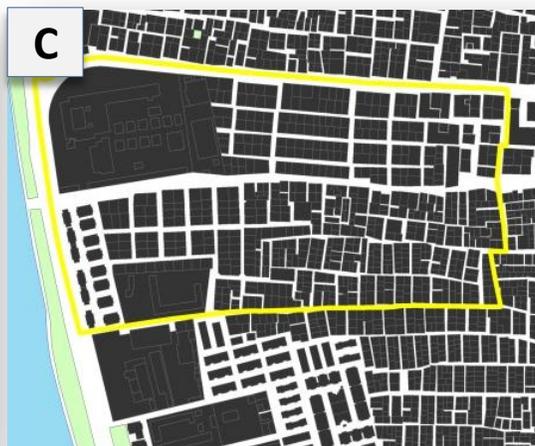
Green Space

Blue Space

Density

Transportation & Accessibility

Socio-Economic .Characteristic



low socio-economic characteristic

High socio-economic characteristic

Transportation & Accessibility

Location

Economic

Social

Urban

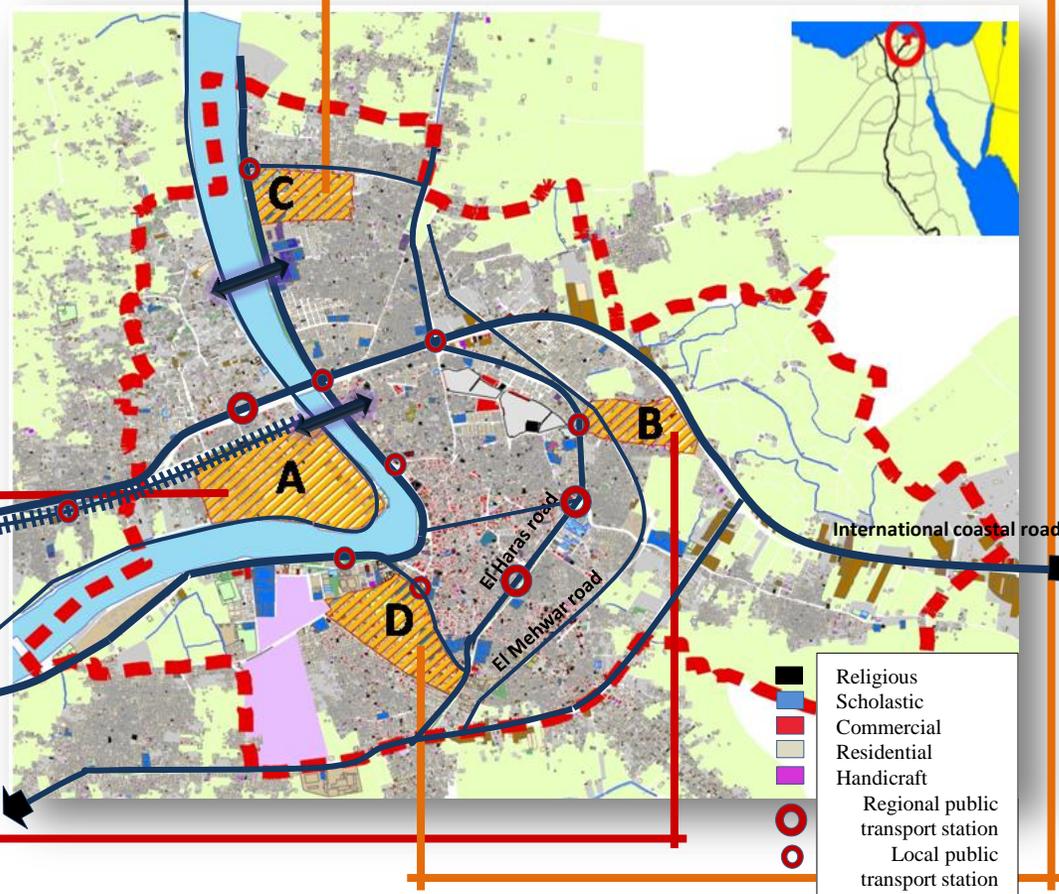
Green Space

Blue Space

Density

Transportation & Accessibility

Socio-Economic .Characteristic



Statistical Analysis of the Data

Table (1): Relation Between Severity Of Depressive Symptoms With Areas In Damietta (n=445) . ANALYSIS by SPSS

Area do you live in Damietta	Severity of depressive symptoms										Total	
	Normal (n=97)		Mild (n=105)		Moderate (n=94)		Severe (n=63)		Very severe (n=86)		(n=445)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
A	26	26.8	17	16.2	15	16	24	38.1	15	17.4	97	21.8
B	20	20.6	23	21.9	30	31.9	7	11.1	17	19.8	97	21.8
C	15	15.5	31	29.5	20	21.3	13	20.6	18	20.9	97	21.8
D	25	25.8	19	18.1	17	18.1	12	19	24	27.9	97	21.8
Others	11	11.3	15	14.3	12	12.8	7	11.1	12	14	57	12.8
χ^2 (p)	29.428* (0.021*)											

χ^2 : Chi square test

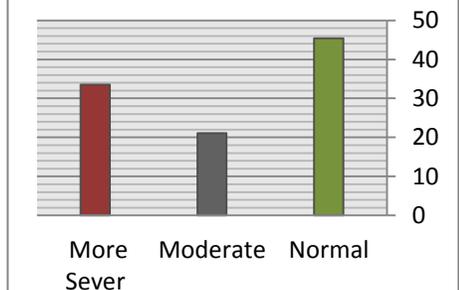
p: p value for comparing between groups

*: Statistically significant at $p \leq 0.05$

(HAM scale) doesn't express a diagnosis of depression disorder

but

gives indicative scores for symptoms severity.



33.5% of the total sample required for entry into a clinical trial.

indirect evidence of relationship between M.H & Urban built environment.

we can improve M.H through urban built environment.



Human Needs

Human Senses

socio-economic Characteristic

low



High



urban built environment attributes

Poor urban environment

Rich urban environment

Urban Design

satisfying

Direct interaction

With urban built environment attributes (green, blue, ...)

Damietta city

accessibility and proximity to work

focus of

calm, services and availability of a green area

During the daily experience



Can paint a Mental picture of the place on soul and mind.

Thank You