



Impact of Residential Environment on Mental Health - A Study on South Zone of Kolkata City

KEYWORDS

Residential Environment, Mental Health, Flat and Own House

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ABSTRACT *The residential environment in which inhabitants live plays a vital part of their live. The aim of the present investigation is to study the impact of residential environment on mental health of the inhabitants belonging to flat and own houses of South zone of Kolkata City. Accordingly, a group of 200 inhabitants (100 male and 100 female) were selected as sample in this investigation. A General information schedule, Impact of physical factors on mental health questionnaire and Impact of social factors on mental health questionnaire were used as tools. The findings reveal that impact of both physical and social factors of residential environment on mental health is comparatively better as opined by the inhabitants belonging to flat houses than that of the own houses. But no gender difference was observed in this regard. Considering the findings of the study measures may be taken to create better residential environment considering both physical and social factors so that the inhabitants may live in the better environment in comparison to the existing environmental condition.*

INTRODUCTION

The word "environment" is most commonly used describing natural environment and means the sum of all living and non-living things that surround an organism or group of organisms. Residential area is a type of land use where the predominant use is housing. Various factors affect human being in different ways. The individual living in the residential environment is affected both physically and psychologically by the way they perceive the changes in their environment. Life itself is a complicated phenomenon and its satisfaction is also very complex. Quality of life (life satisfaction) and the environment and also the community in which one lives (neighbourhood satisfaction) are typically the yardsticks used when endeavouring to determine the extent or lack of human happiness. According to Westaway (2004), "good health is essential for life satisfaction, and housing is the most important aspect of neighbourhood satisfaction". Households vary in size, composition, and other characteristics that may affect various aspects of health. In addition, households are the most immediate social context in which individuals form intimate connections that form the basis of social support and integration. Easterlow and Munro (2003) examined the relationships between housing and health inequalities by suggesting that housing actually contributes to the accumulation or depletion of the health capital of individuals and communities. This study proposes that housing can either promote well-being or increase susceptibility to disease, and in some instances housing system appears opposite effect for people whose resilience is low or whose health is in decline. Residential environment and housing have multiple effects on mental and physical health of residents' life. Mental health is a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life (World Health Organisation, 2003). Mental condition of people is determined by a multiplicity of factors including biological (e.g. genetics, gender), individual (e.g. personal experiences), family and social (e.g. social support) and economic and environmental (e.g. social status and living conditions) detrimental effects on both mental and physical health (Evans, 2001, 2003). Various studies have shown direct and indirect influence of residential factors on mental as well as physical health of the residents residing in those areas. Such studies have highlighted both a positive as well as negative effects which are directly or indirectly caused by the residential factor. Studies have found a direct correlation of mental well-being with quality of housing (Kearns et al, 1993). Depression is commonly associated with poor housing, and housing

was identified as being a significant factor in cases of chronic depression (Brown and Harris, 1982). Beside this, Howden-Chapman et al. (1996) explains the decreased ability to cope with mental and physical problems if the living environment is crowded, noisy, dilapidated and cold. Poor social support networks also play a major role in the causes of depression, and this emphasises the fact that not only must the standard of individual dwellings be considered as a determinant of health, but the location of the dwellings within residential environment. Neighbourhood characteristics physical, structural and social are related to mental health outcomes. Studies that focus on adult mental health outcomes find that neighbourhood economic disadvantage influences major depression and substance abuse and mental illness (Silver et al., 2002). Bad circumstances in neighbourhood relations may generate social pathologies aggressiveness, vandalism, depression, anxiety, somatic complaints, and even paranoid feelings and ideas. Several studies, particularly in the field of social and environmental psychology have shown the influence of environmental factors such as pollution, level of noise and crowding on mental health, depression symptoms and social well-being (Halpern, 1995; Leventhal and Brooks-Gunn, 2003; Gomez-Jacinto and Hombrados - Mendieta, 2002). In addition, symptoms of stress, anxiety, irritability, depression, social misconduct are also related to housing condition. It is also accepted that stressful housing conditions can aggravate pre-existing psychiatric pathologies (Evans, 2003). Considering the above the present investigation has been designed to study the impact of physical and social factors of residential environment on mental health as perceived by the inhabitants belonging to flat and own houses of south zone of Kolkata city.

OBJECTIVES

1. To study the impact of physical factors of residential environment as perceived by the inhabitants belonging to flat and own house of south zone of Kolkata city
2. To study the impact of social factors of residential environment as perceived by the inhabitants belonging to flat and own house of south zone of Kolkata city.

HYPOTHESES

Hypothesis - I: Impact of physical factors of residential environment on mental health as perceived by the inhabitants belonging to flat and own houses of south zone of Kolkata city differ significantly.

Hypothesis - II: Impact of social factors of residential environment on mental health as perceived by the inhabitant belonging to flat and own house of south zone of Kolkata city differ significantly.

Hypothesis - III: Impact of both physical and social factors of residential environment as perceived by the inhabitants belonging to flat houses of south zone of Kolkata city are differentially associated with gender difference.

Hypothesis - IV: Impact of both physical and social factors of residential environment as perceived by the inhabitants belonging to own houses of south zone of Kolkata city are differentially associated with gender difference.

STUDY AREA AND SAMPLE

A group of 200 inhabitants (100 from flats house and 100 from own house) were selected as sample in this investigation. The pertinent characteristics of the inhabitants are as follows:

Age: 31-50 years

Gender: Equal gender ratio.

Education: At least graduate.

Duration of stay in the same environment: At least 10 years in the same environment.

TOOLS USED

- 1. General information schedule:** It consist of items like name, address, age, gender, education, occupation, duration of stay in the same environment etc.
- 2. Impact of physical factors on mental health questionnaire:** It consists of 30 statements answerable in a five point scale from strongly agree to strongly disagree where high score indicates good impact of physical factors of residential environment on mental health and vice-versa. The odd – even split – half reliability is 0.79.
- 3. Impact of social factors on mental health questionnaire:** It consists of 30 statements answerable in a five point scale from strongly agree to strongly disagree where high score indicates good effect of social factors of residential environment on mental health and vice-versa. The odd – even split – half reliability is 0.81.

ADMINISTRATION, SCORING AND STATISTICAL TREATMENT

The General Information Schedule, Impact of physical factors of residential environment on mental health questionnaire and Impact of social factors of residential environment on mental health questionnaire were administered on a selected group of subjects by giving proper instruction. Data were collected and properly scrutinised. Scoring was done with the help of scoring key. Tabulation was done for each group and for each test separately. For general information schedule frequencies and percentages were calculated. Mean and S.D were calculated for other two questionnaires. Comparisons were made by applying t-test.

RESULT AND INTERPRETATION

The general characteristics data inserted in Table – 1 reveal the characteristic features of the subjects, under study.

Table – 1 : General characteristic features of the subjects under study

General Characteristics	Flat House		Own House	
	Frequency	Percentage	Frequency	Percentage
Age in years				
31 – 40 years	49	49.00	58	58.00
41 – 50 years	51	51.00	42	42.00

Education				
Graduate	53	53.00	54	54.00
Post-Graduate	47	47.00	46	46.00
Occupation				
Service	58	58.00	56	56.00
Business	42	42.00	44	44.00

Data inserted in Table – 2 reveals the comparative picture between the two groups of inhabitants belonging to the flat and own house of south zone of Kolkata city in terms of perceived impact of physical factors of residential environment on mental health. From the mean score, it can be said that there seems to be indication of moderate level of impact of physical factors of residential environment on mental health as opined by two groups of inhabitants but it is comparatively better as opined by the inhabitants belonging to flat houses than that of the own house. Analysis of data further reveals that inhabitants living in both flat and own houses have given much importance to physical factors related to noise, surrounding area of living space and quality of the housing. The same finding has also been revealed by the research findings conducted by Brown and Harris (1982), Kearns et al (1993) and Howden –Chapman et al (1996). Thus, the **Hypothesis – I** which postulates **“Impact of physical factors of residential environment on mental health as perceived by the inhabitants belonging to flat and own houses of south zone of Kolkata city differ significantly”** – is accepted in this investigation.

Table – 2 : Comparison between the inhabitants belonging to flat and own houses in terms of perceived impact of physical factors on mental health

Category	Impact of N	Physical factors on mental health		t - value
		Mean	S.D.	
Flat House	100	96.38	13.62	3.15*
Own House	100	92.25	12.39	

Score range : 30 – 150, High score indicates good impact and vice-versa, * p < 0.01

Comparison was also made between the two groups of inhabitants belonging to flat and own house of south zone of Kolkata city in terms of perceived impact of social factors of residential environment on mental health (Data inserted in Table – 3). Findings reveal that there seems to be indication neither high nor low level of social factors of residential environment on mental health as opined by two groups of inhabitants but comparatively better opinion was given by the inhabitants of flat houses than that of the own house. Neighbourhood relationship takes an important role in this regard. The same finding has also been reveals by the research findings conducted by Evans (2001) and Silver et al (2002). Thus, the **Hypothesis –II** which postulates **“Impact of social factors of residential environment on mental health as perceived by the inhabitant belonging to flat and own house of south zone of Kolkata city differ significantly”** - is also accepted in this investigation.

Table – 3 : Comparison between the inhabitants belonging to flat and own houses in terms of perceived impact of social factors on mental health

Category	Impact of N	Social factors on mental health		t - value
		Mean	S.D.	
Flat House	100	97.64	12.58	4.27*
Own House	100	92.34	12.16	

Score range : 30 – 150, High score indicates good impact and vice-versa, * p < 0.01

Data inserted in Table – 4a and 4b reveal the comparative picture between the male and female group of inhabitants belonging to flat houses in terms of perceived impact of both physical and social factors on mental health. No significant difference was observed in this regard. Thus, the **Hypothesis –III**, which postulates, **“Impact on physical and social factors of residential environment on mental health as perceived by the inhabitants belonging to flat houses of south zone of Kolkata city are differentially associated with gender difference” - is rejected in this investigation.**

Table – 4a : Comparison between the male and female group of inhabitants belonging to flat houses in terms of perceived impact of physical factors on mental health

	Impact of	Social factors	on mental health	
Category	N	Mean	S.D.	t - value
Male	100	93.22	12.36	0.57*
Female	100	92.12	14.45	

Score range : 30 – 150, High score indicates good impact and vice-versa,

* Difference is insignificant

Table – 4b : Comparison between the male and female group of inhabitants belonging to own houses in terms of perceived impact of social factors on mental health

	Impact of	Social factors	on mental health	
Category	N	Mean	S.D.	t - value
Male	50	93.42	12.19	1.00*
Female	50	92.34	12.16	

Score range : 30 – 150, High score indicates good impact and vice-versa,

* Difference is insignificant

Data inserted in Table – 5a and 5b reveal the comparative picture between the male and female group of inhabitants belonging to own houses in terms of perceived impact of both physical and social factors on mental health. No significant difference was observed in this regard. Thus, the **Hypothesis – IV**, which postulates, **“Impact on physical and social factors of residential environment on mental health as perceived by the inhabitants belonging to own houses of south zone of Kolkata city are differentially associated with gender difference” - is rejected in this investigation.**

Table – 5a : Comparison between the male and female group of inhabitants belonging to own houses in terms of perceived impact of physical factors on mental health

	Impact of	Physical factors	on mental health	
Category	N	Mean	S.D.	t - value
Male	50	94.72	14.19	1.72*
Female	50	98.04	12.95	

Score range : 30 – 150, High score indicates good impact and vice-versa,

* Difference is insignificant

Table – 5b : Comparison between the male and female group of inhabitants belonging to own houses in terms of perceived impact of social factors on mental health

	Impact of	Social factors	on mental health	
Category	N	Mean	S.D.	t - value
Male	50	95.90	12.56	1.96*
Female	50	98.38	12.49	

Score range : 30 – 150, High score indicates good impact and vice-versa,

* Difference is insignificant

CONCLUDING REMARKS

The present investigation has revealed a comprehensive picture of the physical and social factors of residential environment on mental health as opined by the inhabitants belonging to flat and own house of south zone of Kolkata city. Problems due to noise, quality of building structure, living space, neighbourhood relationship are some of the important factors which create impact of the residential environment on mental health of the inhabitants belonging to flat and own houses of South zone of Kolkata city. Individuals living in various type of residential environment may redirect their views considering their stereotype ideas which help them to create healthier environment in the near future. Knowledge towards a better residential environment can be upgraded which ultimately help to improve the quality of living environment.

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