

## STUDY ON THE EFFECTS OF OVERCROWDING ON THE PHYSICAL AND MENTAL HEALTH OF HOSTEL OCCUPANTS IN VARANASI

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### ABSTRACT

The physical and mental health effects of overcrowding among students living in the university hostel. It also explored the influence of age and gender on the perceived effect of overcrowding. The sample consists of 450(245 males and 205 females) young adult drawn from seven halls of resident within the campus. The selected participants completed a questionnaire crowding effect.that assessed both the physical and mental health status. The result shows that experience of overcrowding, loss of privacy, number officially allocated to the room and the total number of room occupants had significant joint effect on the physical and mental health status of hostel occupants. It was also revealed that the type of room significant influence of gender and age on perception of

**KEY WORDS** :Overcrowding,Mentalhealth,Hostel, Occupants

Crowding as a concept in environment psychology is one of the three sub areas that comprise the literature on human spatial behavior; the other two are interpersonal distancing and small-group ecology. Crowding is viewed as a situation in which individuals are confronted with environmental circumstances beyond their control. Stokols (1976) differentiate crowding from density, though the two concept look similar. He opined that density is a necessary but not a sufficient condition for individual to experience the feeling of being crowded. Levy and Herzog (1974) also attempt a distinction between crowding and density. The former is basically measured as either the ratio of personal to rooms or as the living area per person. The latter is measured as the number of persons residing within a standard area unit (square mile, square kilometers, acre, and hectare)..

Mitchell(1971) conducted from his Hong Kong study that while overcrowding produces superficial sign of mental stress (complaining, unhappiness, worry) and certain problem relating to control of children, it does not cause deeper and more basic levels of emotional strain and hostility. Kalin and Perlin (1967) found that stains and irritations caused by overcrowding do precipitate a certain amount of minor mental illness, mainly psychoneurotic symptoms including a large component of precipitate a certain amount of minor mental illness, mainly psychoneurotic symptoms including a large component of somatisation but not related to the

several mental disorders which result in hospitalization. Gove , Hughes and Galle (1979) found that experience of crowding were associate with poor physical health by being strongly associate with getting insufficient sleep, catching infectious disease, having to do chores being unable to get a good rest and not being care for by others when sick. In contrasts to these positive finding, gale et al. (1972); Schoor (1966) opined that if crowding is related to physical health, it is because persons in crowded household are physically run down, more susceptible to infectious disease and when sick,areinvolved in a flow of activity, and consequently cannot get a good rest and not cared for. Moge Schmitt (1966) from his epidemiology study of the city of Honolulu also tends to dismiss crowding as a significant correlate of measures of health and social disorganization. In the same direction, Edwards, tuedore and saruda (1994) study on the effect of both subjective and objective crowding on human living finding shows a possible factors constructing to deficiencies in mental well-being,family relations, sexual relations and reproductive behavior but no effect on health status, thus confirming the inconsistency of research finding to establish a concrete on the effect of crowding on human health.

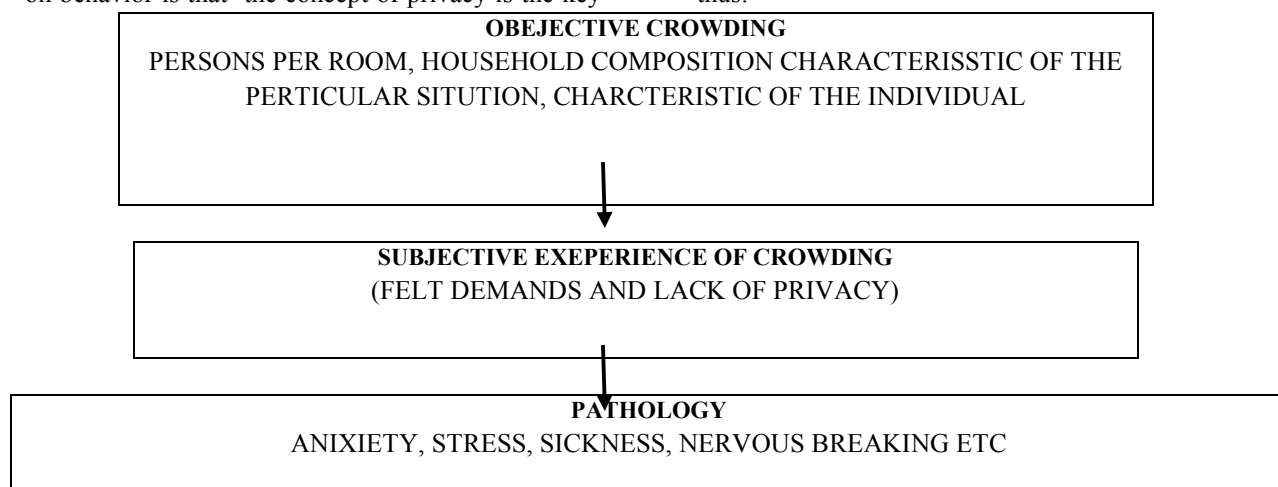
### Theoretical Perspectives

The theoretical literature on the experience of crowding focuses on the two analytical oriented concept; an excess of stimulation and lack of

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privacy. Baldassare (1995) reported another model tagged "mental stress model" of household crowding. This model raised the argument that objective household overcrowding conditions lead to the subjective experience of crowding, which in turn, results in mental stress. It is the individual stress developed from well-being. Perhaps the best theoretical decision of the effects of the environment on behavior is that the concept of privacy is the key

to Altman, while recognizing the importance of stimulus over-load, feel that the concept of privacy is the key to understanding crowding. A modified version of subjective/objective model of crowding as proposed by Gove et al (1979) was employed in this study to examine and explain the nature of health consequences, associated with residential crowding among university students. The model is presented thus:



Source: Gove, et al, 1979

### Statement of the Problem

The rate at which the world population is increasing with little or no associated rise in the resources needed to meet this upward trend call for examination of some of the consequences that such population explosion may have on human living. Despite the level of world civilization, it is not uncommon to find people living a dormitory life in a single room. This is in contrast with WHO conventional standard of one person per room (Marsella et al, 1971). As the number of students seeking admission into B.H.U universities increases, yearly the provisional structures put in place for conducive learning of which good housing is one tends to be in shortage of expected demand. As a result of inadequate funding which makes it impossible to provide adequate facilities to meet this demand, the available ones are being rationed among teeming population of students, thus giving rise to overcrowding and stretching of the facilities.

### Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance:

1. Experience of overcrowding will not have significant effect on physical health of hostel occupants.
2. Experience of will not have significant effect on mental health of hostel occupants.
3. Type of room will not have significant influence on the physical and mental health of hostel occupants.
4. Gender will have no significant influence on the experience on the experience of overcrowding, privacy and health status.
5. Age will have no significant influence on the experience of overcrowding privacy and health status.

### METHODS

#### Research Design

Quasi-experimental descriptive design with no equivalent control group was used in this study. Two groups of students were studied: those who reside living in a multi-bedded room and those who are living in single-bedded room.

**Sample and Sampling Procedures**

Banaras Hindu University residing in the halls of resident constitute the target population for this study. Four hundred and fifty (245 males and 205 females) young adult participant in this study. They were selected from six undergraduate halls and one postgraduate hall. The study adopted a multistage sampling strategy. The halls constitutes were a stratum from which rooms were selected and participants drawn. Systematic sampling technique was employed to select the rooms. The total number of rooms in each hall was divided into kth number to get the required sample size.

**Instrument**

The instrument for the study consists of a four page questionnaire divided into four sections. Sections are deals with the respondents' socio-demographic variables and section two addressed reported levels of crowding experience, items in section one and two were self-designed by the

researcher based on the previous review of related works on the concepts. The third and fourth section consists of item that measure physical health status and Awaritefe Psychology Index (API) which assessed the mental health of the participants. Crowding as a concept in this study is operationalised by the measure (persons per room) (P/R) and conceptualized as the subjective experience of an excess social demand and/or lack of privacy.

**RESULTS**

Table 1 present the most frequently reported symptoms of physical illness. It ranges from catarrh to urinary tract infection (UTI). As observed, majority of these symptoms can be contracted through contact with others (Communicable Diseases) and are likely to be as a result of overcrowded environment.

**Table: 1 Mean Rank of Ten Most Frequent symptoms of Physical Illness**

Symptoms	Mean	Rank
Catarrh	8.50	1
Insect	7.72	2
Malaria	7.35	3
Cough	7.04	4
Skin rash/itching	6.88	5
Cold/flu	6.78	6
Headache	6.68	7
Boils/keloid	5.84	8
Eczema	5.77	9
Urinary Tract Infection(UTI)	5.45	10

The list of ten commonly symptoms of mental malfunctioning and their mean rank is shown in table 2. Most of the listed symptoms can be sign of acute stress, resulting from pressure and demand of academic work. The generality of student living in

the hostel lacks privacy and control over who comes to the room and when. These conditions limit the individual occupant to decide and plan the daily activities in the room. These often result to inadequate sleep, weakness and getting worried.

**Table: 2 Mean Rank of the Ten most Commonly Reported Symptoms of Mental Health**

Symtoms	Mean	Rank
Loss of weight	34.14	1
Weakness (tiredness)	32.16	2
Poor sleep(inadequate sleep)	31.20	3
Always thinking	31.17	4
Feel lazy to get up from bed in the morning	31.02	5
Drowsiness(always feeling sleepy)	29.90	6
Restless	29.53	7
Shyness	28.70	8
Stomach is turning (not comfortable)	28.57	9
worried	28.50	10

## DISCUSSION

In this study, a number of crowd induced health issues have been raised. The identification of the most reported symptoms of physical illness such as Cattarh, Malaria, cough, skin rash. Cold/flu, urinary tract infections (UTI) are possible diseases that can be contracted in an overcrowded environment. Most of them are air-borne infection diseases which are easily distributed once there is congestion of human population. In situation where people are overcrowded, the resources available to them may not be sufficient, hence people tends to compete for are limited resources. In such condition where people of different genetical and environmental background are brought to live under the same roof, dwells together, share their things together, a lot of social, mental and health consequences may emanate from such living arrangement. Such overcrowded environment with little or no sanitary measures provides avenue for epidemiological development and spreading of contagious infectious distress such as tuberculosis and respiratory infections (Krieger and Higgins,2002), and with psychosocial distress among both adults and children; children who live in crowded housing housing may have poorer cognitive and number of studies indicate that crowded conditions (measured in terms on the number of people per household) are associate with increased incidence of colds, ashtma, influenza and diarrhea, particularly in young children (Kearns et al, 1992; Causon-Kaas et al, 1997). Elender et al (1998)

studies risk factors for tuberculosis in England and Wales and found that rates were significantly higher in household with more than one person per room.

Overcrowding, as revealed in this study has significant influence on the mental state and health of hostel occupant. Among the most commonly reported symptoms, poor sleep, loss of weight, lethargy, lack of privacy, restlessness, and worry are found to have negative effects on the mental functioning and respondents.

## CONCLUSION

From the finding this story, it can be concluded that overcrowding has significant negative effects on both the physical and mental health occupants. The type room and being female also impact significantly on the residents health.

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