

The experience of living in crowded cities: A case study of Govindpuri area of South Delhi

MOHD. KARAR AHMAD

Department of Geography, Jamia Millia Islamia (A Central University)
New Delhi (India)

ABSTRACT

Crowding is a common phenomenon in metros cities, especially in underdeveloped and developing countries of the world and India is one of them. The study area falls under the highly crowded area of Govindpuri, South Delhi. It is found that most of the houses in the locality are too small to live in for leading a normal way of life. The rooms in these houses are very small and not constructed properly. There is no space for partition in between in most of houses in the locality. All the members of the family live in the same place/room without any privacy. People are forced to live in the narrow space as the respondents of the locality are more or less of the same economic status. The area is also very noisy and unhygienic. The paper examines the measures of crowding encountered by the residents of the study area. The paper concludes, inter alia, that surrounding effected crowding and crowding proper are two principal measures of crowding. The study examines the socio- psychological problems of the overcrowded population living in Delhi. A lot of consequences are generated by the crowding in the area, broadly criminality and elinquencies, physical (physiology) disorder and ethical and behavioural degeration are the important outcomes after the factor analysis. High density areas generate strain among the residents which is reflected in their pattern of inter-personal communication. They feel unease in communicating with others not only in family but also with other residents of the locality. Quarrel behaviour among siblings and use of abusive language are some of the outcomes of crowded living conditions.

Key Words : Crowding, Small houses, Socio-psychological problems, Respondents, Measures, Govindpuri

INTRODUCTION

Crowding is an ambiguous concept, hard to define comprehensively. However, a rapid demarcation of crowded locality is carried out on its physical manifestation in terms of housing congestion, density or persons-area ratio within houses. As such, housing areas with high population density and housing congestion are considered crowded or overcrowded. Generally, these are slums in the inner city or outer city where such conditions are manifest. These slums, squatters and shanty towns, in all likelihood, have high density with greater possibility of more intense crowding in environmentally unhygienic conditions.

The common factors for the significant increase in chronic type of crowding in the urban centres among others includes high natural increase, rural to urban migration an increasing cost of

How to cite this Article: Ahmad, Mohd. Karar (2018). The experience of living in crowded cities: A case study of Govindpuri area of South Delhi. *Internat. J. Appl. Soc. Sci.*, **5** (5) : 493-506.

land etc. Apart from rapidly increasing urban population and globalization, societies in these countries are industrializing at a faster rate relative to pre-globalization times with an expanding service sector. As such, a lot many human resources, skilled and unskilled, of these countries are settling down in the urban centres for education, health care, employment and better quality of life etc. With the concentration of major activities as well as high population growth, these crowded and congested urban centres have become the site of many socio-psychological and physiological problems arising as a consequence of crowding.

Crowding has no universally accepted definition. It is generally characterised as “psychological stress or friction which is generated in settings where the concentration of people to the area is a high ratio.” (Error! Hyperlink reference not valid.). However, Baron and Richardson (1994) have elaborated crowding as a perceived state of mind that may occur due to conditions of high population density. However, many writers often use the terms “density” and “crowding” interchangeably. Apart from space limitation by reason of high people to space ratio, household equipment, furniture and other space occupying objects may also cause shortage of space for movement and other normal activities and create perception of crowding.

To measure any type of crowding needs a variety of indicators in different dimensions such as physical, socio-psychological and economic. It is generally assumed that the prevalence of higher density is a common prerequisite condition for the phenomenon of crowding, but the phenomenon of crowding is not necessarily a precondition for the higher density condition all the time. For instance, crowding is acutely felt in the prevailing strained social relations. However, density is one of the most important characteristics of crowding. To elaborate it further, the density condition is an important key measure to understand the attributes of a particular area. To measure the actual density condition, it is quite essential to have the adequate information about the area under residential land. Besides, physical density is also one of the major determinants of physical crowding where a variety of household effects are taken into consideration. The degree of crowding solely depends on the space provided for free interaction among the household members *i.e.* the greater degree of crowding is the result of narrower space for free interaction due to larger number of household effects. Thus the availability of household effects which are physical in nature plays a vital role in the measurement of crowding. The phenomenon of crowding is also influenced by the condition how one perceives his past environmental conditions relative to the present one. It is one of the most important aspects in measuring the phenomenon of crowding. Moreover, the phenomenon of crowding is also acutely influenced by the factors of economic activities. The commercial, industrial, transport and services, and their locations in any particular area influence the population distribution that leads to differential densities.

The consequences of crowding are manifold. The overall quality of life is affected. Some of the outcomes of crowding can be observed in terms of its impact on mental health, physical health, human social behaviour, women and children related issues, etc. Previous and current researches on animal crowding and subsequently on human crowding started with inmates of jails, hostels and dormitories in the developed and in few cases in the developing or underdeveloped countries. Their correlation has demonstrated high density living condition which is an indicator of various socio-psychological pathologies such as depression, bipolar disorder, schizophrenia, frustration, aggressions, arousal etc. (Stokols, 1972; Epstein, 1981; Vine, 1981; Miller and Nardini, 1997; Roush, 1999). Besides the social and psychological pathologies, high density has serious effects on human health and stress related problems, behavioural and cognitive problems, social withdrawal and many more aspects of human life. Crowding has created many health and behavioural issues like heart diseases,

infant death rates, venereal diseases, uterine dysfunction such as suppressed menstruation cycles. Crowding may indirectly affect the number of pregnancies by making contraceptive practices, frequent intercourse and family planning decision besides juvenile delinquencies, illegitimacy, divorce, social disintegration, develop distrust and antagonism (Dean *et al.*, 1975). Therefore, for its negative impact on human health and well-being, crowded housing is one of the major concerns of policy-makers and authorities on housing in both developing and developed nations.

Literature review :

Numerous studies have been made to explore the relationship between crowding and human behaviour by the scholars of Psychology, Sociology and Geography in high density living areas. Generally most of the research has been focused on the socio- economic conditions of slums or informal settlements. But due to crowding so many social evils, psycho- mental problems yet hadn't to be focused. Very first time Calhoun (1962) has done research on rat population, which investigates that they become aggressive when they are provided adequate food and water. Further, he allowed to a greater number of rats that occur in natural's conditions. It has been observed that the rats voluntarily crowded at the main feeding area rather than other feeding areas. He has reported that the rats become hyperactive and aggressive, sexually assaulting, killing and cannibalizing the new-born as their density went above a point. Schmitt (1966) has conducted a study on the relationship between density and various diseases in Honolulu. He found out that there is strong correlation between population density and socio-psychological disorders. He has reported an intense relationship between density on one hand and death rate, incidents of tuberculosis and venerable diseases, mental hospital admissions, juvenile delinquency and imprisonment on the other. Hall's study (1966) has shown that the adverse effects of crowding in the animal colonies lead to social disorganisation, excessive aggression and massive death rats. One positive experiment found by Goeckner *et al.* (1973) has found that rats reared under crowded condition showed poor performance on complex task but the effect of density was not observed on simple task Dean *et al.* (1975) in their research on effects of spatial and perceptual crowding state that the concept of crowding is very complex and it cannot be reduced to purely physical dimensions. Spatial size, number of people and personal needs play a key role to determine perceptions of crowding and their behavioural consequences. They further note that crowding is one of the many environmental factors that may affect health. However, they maintain that prevalence of infectious diseases can be attributed to high-density. Johnson and Booth (1976) have examined the influence of crowding on reproduction and found out that constant stress of crowded situation may directly influence uterine dysfunction such as suppressed menstruation cycles, bleeding between periods, excessive vaginal discharges. Stokols *et al.* (1972) pointed out that crowding experience in residential setting is highly predictive of sensitivity to crowding in certain non-residential environments. The perceived crowding at home and negative feelings about the residential physical environment are associated with unfavourable reactions to both the physical and social dimension of non-residential settings. Bradley *et al.* (1992) have found that crowding may cause illness such as whooping cough, polio, diarrhoea, malaria, meningitis, acute respiratory infections, influenza, hepatitis B, stunting, chronic diseases and stress. Blackman *et al.* (1989) conducted a study on housing areas in northern Ireland and found that housing problems are significantly associated with the symptoms of psychological distress among children, where overcrowding is one of the housing factors. Lepore *et al.* (1991) have found that social hassles may have more negative consequences than unsocial ones. Social hassles appear to have negative effects on mood, emotional well-being and depression. They further state that people

who experience social hassles in their home have higher levels of psychological distress as a result of crowded living conditions than their counterparts who have not been living in crowded home. Kempson (1999) conducted interviews with Bangladeshi households in Tower Hamlets. He found that overcrowding is significantly associated with the problems of lack of privacy, broken sleep and conflict over the use of rooms. Miligram (1970), visual disorder in city dwellers is caused by high density due to a related condition of psychological stress. High density also leads to social withdrawal through its psychological effect. Levy and Herzog (1974) have observed in their paper that density plays an important role in mortality and morbidity rates of individuals. They have further pointed out that density has led to crimes and delinquency, particularly property offences, sexual crime, illegitimacy and divorce rates in the Netherlands. On the positive side, they have observed that crowding correlates with low suicide rates and the presence of a stable family, particularly a larger one. Wilner *et al.* (1987) have noted one major consequence of crowding as lack of sound sleep and suggested that this might have an adverse effect on educational attainment of children.

The research keys or essence keys, developed and applied in the case study of Govindpuri and other localities as these have been developed on the basis of preliminary analysis of pooled descriptions of respondents from the localities. This also has the advantage of Comparison Among The Localities.

Objectives :

- (1) To examine Measures of crowding in the study area
- (2) To analyses the main consequences of crowding in the study area

METHODOLOGY

Inhermeneutical research data construction takes place through interaction between the researcher and respondents and is final outcome of a continuous conversation. Therefore, in view of time at the disposal of respondents and in view of number of participants (respondents), conversations have been recorded using electronic recorded to understand meanings latter in the lab with the help of other related informal interviews notes of interviewers and their narrations of experience which they have undergone during data collection. Each field assistant has been trained for a fortnight with regard how to approach a willing interviewee with an unstructured interview scheduled and what ethics they have to follow and how to tackle the situation when an interviewee goes stray from the experience regarding crowding and related aspects. In order to judge their capability to carry out such interviews, a pilot survey was carried out in the study area. For the case of Govindpuri, a questionnaire was made to maintain the interview track and very specific questions were asked to know crowding measures and consequences. Generally the four elements take the researchers to know the crowding condition of the any population such as physical, social, psychological and economic conditions of the area or population. All these elements have been taken in the paper except the economic condition of the area concerned.

First of all a pilot survey has been conducted before sample survey. A randomly sample survey has been collected from the slum clusters from entire the study area. Govindpuri area has been selected for the sample survey because this area is a notified slum. National capital Delhi has large numbers of notified slums or densely populated areas. But due to limitation of time only Govindpur area has been selected for the propose of study. The slum pocket has fairly a large number of households that impact on locality to each other or *vice- versa*.

Study area :

Govindpuri slum is composed of Navjeevan Camp, Bhumiheen (Landless People) Camp and Jawaharlal Nehru Camp which are not only adjacent to each other, but also extend into each other. Presently it covers an area of 8662 m². However, proposed land use changed initially into jhuggis-jhopri clusters. It was settled by penniless in-migrants from West Bengal, Bihar Eastern Uttar Pradesh, Odisha and Rajasthan and other states. The initial clustering was formed by small groups consisting of kinsmen, relatives, fellow-villagers or those intimately known to each other. Later few small time shopkeepers and small business men of Punjab origin joined them to do business there. Earlier than 1991, dwellings units in the area were makeshift made of material like mud, mortar, broken bricks and with thatched roofs (or roofs made of tarpaulin used tin sheets and other sundry materials). These dominated the housing pattern of the area. In 1991 a major outbreak of fire gutted most of huts in Bhumiheen Camp. In order to protect themselves from such accidents, residents with the assistance of government built pucca (of fire burnt bricks) and semi-pucca (of fire burnt bricks with sunburnt bricks or mud). In Govindpuri there is no provision of ventilation except doors which open narrow lanes. Most of the houses have only one tiny room where the whole family has to eat, sleep and live together however, a significant segment of the residents could manage only *kuchcha* (of sunburnt bricks or mud) houses since government assistance could not reach them. It has been alleged by this section that most of the financial assistance given by the government was grabbed by the local powerful men and distributed among their own groups.

RESULTS AND DISCUSSION**Measures of crowding**

Two major dimensions of measurement of crowding have been identified by factor analysis that were carried out on fourteen (14) key essences (variables) obtained from lived experiences of sample respondents from Govindpuri. All these fourteen variables represent various physical, surrounding, mental state and behavioural aspects indicating crowding. The factor structure of measures of crowding is given in Table 1.

Factor structure:

These two measures (factors) of crowding together explain 62.77 per cent variability in the fourteen (14) variables across the respondents in Govindpuri. The first factor is titled as “*Surrounding and locality effected Crowding*”. This factor explains the highest variability across the respondents in the locality amounting to 47.37 per cent of the total variability of all variables. The second factor is called “*Crowding proper*” and explains 15.40 per cent of the total variability.

Table 1 : Measures of crowding

Sr. No.	Factors	Percentage of total variance explained
1.	Surrounding and locality effected crowding	47.37
2.	Crowding proper	15.40
	Per cent total variance explained	62.77

Since all other factors extracted before varimax rotation explained less than 5 per cent variability. These two variables have been retained and rotated for greater clarity in interpretation and designated according to the loadings of variables on them. It is to be underlined that almost in all factors analyses of measure, fewer latent dimensions explaining higher variance are obtained in

Govindpuri. As a matter of fact, in spite of people from diverse climate ranging from humid West Bengal to arid and semi-arid Rajasthan converging at Govindpuri, the respondents' experiences have been more or less similar consequently producing fewer dimensions (factors) by factor analysis. It means people in Govindpuri have less divergent lived experience. Therefore, homogeneity of communities in terms of socio-economic characteristics and living conditions in the locality has resulted in convergent lived experiences.

Factor 1: Surrounding Effectuated Crowding:

Surrounding effectuated crowding is the major dimension of measure of crowding in Govindpuri. It explains 47.37 per cent (Table 1) of total variance. This dimension of measures of crowding is characterised by mainly nine (09) variables which load very high on this dimension except one associated variable that does not load so high on this factor. Irritating behaviour loads highest and positively (0.978) on this factor. It shows that the people of Govindpuri have adopted an irritating behaviour due to unsatisfactory living conditions in homes and their surrounding as well as the locality. Their reaction to the events or happening in their surrounding is highly irritating, sometimes leading to violence. It is because of their sufferings of a sub-human life over a long period that has made them aggressive to which overcrowding has also contributed significantly. Generally, dissatisfaction with living conditions at home find vent outside where they also face different problems.

Other variables apart from irritation factors impacting on their behaviour and feeling of crowding are unhealthy surrounding (0.959), disappointing surrounding (0.924), and inclination to change residence (0.881), noisy place (0.873), unwelcoming attitude (0.827), exasperation (0.787), displeasure (0.707) and uneasiness (0.546). All of these variables have high factor loadings and are positively associated with this dimension and show that surrounding locality has affected a sense of crowding (high density/congestion). The behavioural variables which load high can elicit a feeling of crowding.

These variables clearly show level of dissatisfaction of the residents of the locality that has bearing on their behavioural patterns. A large number of them have expressed their intention to come out of this situation by moving out of the locality because they have still alive in them some human dignity which one can easily loose in the conditions of their life. The place where they are

Table 2 : Factor 1- Surrounding effectuated crowding

Sr. No.	Variables	Factor loadings
1.	Congested small house	-0.104
2.	Lack of privacy (small space)	-0.286
3.	Noisy place	0.873
4.	Unhealthy surrounding	0.959
5.	Disappointing surrounding	0.924
6.	Inclination to change residence	0.881
7.	Uncomfortable	-0.123
8.	Aggravation	0.246
9.	Displeasure	0.707
10.	Uneasiness	0.546
11.	Exasperation	0.787
12.	Welcoming	0.304
13.	Unwelcoming	0.828
14.	Irritating	0.978
	Per cent of total variance explained	47.37

living is very noisy. Children are frequently found playing and making noise in front of the door of neighbours because there is no park for children to play. The houses are already very small and insufficient to live well for all the members of the family. In such condition, there is no question of using the house for any indoor game by their children.

The surrounding environment is also very unhealthy. The water overflowing drain, the piles of filth with flies buzzing over them are common features in this crowded area. The people have become disappointed with such surrounding. The government and other concerned authorities do not take any action to improve sanitary conditions of the locality. A large number of the respondents think to move out of the locality as one of the best option to get rid of the problems arising from the unwholesome environment that prevails in the locality.

The people of that area are very displeased with their surroundings that have made their life very uneasy. They are frustrated at the atmosphere in which they are breathing. Their frustration can be seen by their behaviour when guests visit their house. They are unwelcoming as it irritates them. They do not find any reason to welcome guests according to the Indian tradition, because they are already living in a problem area suffering from a number behavioural and health related diseases due to unfavourable and unhealthy environment.

Factor 2: Crowding Proper:

Factor 2 is designated as crowding proper which explains 15.40 per cent (Table 3) of the total variance of all variable of measures of crowding. It is the second major dimension of measure of crowding. Out of fourteen (14) variables, four have high factor loadings on this dimension. These four variables are lack of privacy (small space) which loads as high as 0.924 and congested small house which loads 0.861 on this dimension followed by aggravation (0.459) and uneasiness (0.426). All of these variables are positively associated on this dimension of proper crowding.

The major problem in crowded area is smallness of houses. It is found that almost all houses in Govindpuri are too small to live a normal life. These houses have not only very small space inside but are also not constructed properly. It is a kind of temporary arrangement. There are very few cemented or ferro-concrete houses. A large number of houses are made up of wooden, curtains, teen shades etc. They look like tents made in a refugee camp. There is no proper arrangement of toilets and bath rooms. There is no space for partition in most of houses. All the members of the family have to live in the same place/room without any privacy. In one family, parents, adult sons and daughters along with their spouses and children live together. In such cases it is impossible to maintain privacy. Many a time, it often happens that the other members of the same family see their brother or sister or even parents making love with their spouse. It definitely leaves an adverse impact on children and youngsters' minds and behaviour. But there is no way to maintain privacy due to overcrowding.

Sometimes, this unavoidable situation makes residents irritate and frustrated. They start annoying and quarrelling with other members of the family on trivial issues. It makes their life uneasy because they do not feel comfortable with the family members due to small space in the house and lack of privacy.

In short, it can be said that most of physical, behavioural and social problems have arisen due to overcrowding in Govindpuri. If a person finds it impossible to make available basic needs of life (proper house, food, and clothes), the person may not lead a moral and normal life and will be exposed to a number of mal practices including heinous crimes and other temptations.

Table 3: Factor 2- Crowding proper		
Sr. No.	Variables	Factor loadings
1.	Congested small house	0.861
2.	Lack of privacy (small space)	0.924
3.	Noisy place	0.111
4.	Unhealthy surrounding	0.034
5.	Disappointing surrounding	-0.027
6.	Inclination to change residence	0.043
7.	Uncomfortable	0.157
8.	Aggravation	0.459
9.	Displeasure	0.226
10.	Uneasiness	0.426
11.	Exasperation	0.143
12.	Welcoming	0.021
13.	Unwelcoming	-0.232
14.	Irritating	-0.051
	Per cent of total variance explained	15.4

Consequences of crowding:

In accordance with the reasons of homogeneity of population residing in Govindpuri, the factor analysis has reduced twenty-eight (28) variables into only three (03) major factors (dimensions) in Govindpuri. These three dimensions in the study area explain a higher variance of the variables across the respondents.

Factor structure:

The first factor labelled as “*Criminality and Delinquencies*” also has structured as the most important factor as a consequences of crowding. It explains the highest, *i.e.* 36.40 per cent of the total variability. The second order dimension like Batla House is “*Physical (Physiology) Disorders*”. This factor explains 27.58 per cent of the total variability across respondents in the locality. These two variables independently explain higher variability in the first dimension in Batla House. The third order factor is “*Ethical and Behavioural Degeneration*”. It combines the two separate dimensions of consequences in Batla House and explains 18.91 per cent of the total variability. These results are shown in Table 4.

Table 4 : Factor structure (Govindpuri)		
Sr. No.	Factors	Percent of total variance explained
1.	Criminality and delinquencies	36.40
2.	Physical (Physiology) disorders	27.58
3.	Ethical and behavioural degeneration	18.91
	Per cent of total variance explained by three factors	82.89

Factor 3: Criminality and Delinquencies

In the case of Factor 1, six variables load are very high. These variables are crime against women or decadence (0.986), quarrelsomeness (0.983), respect to women in locality (-0.981), incest behaviour or depravity with factor loading of 0.972, offensive behaviour or foul language with factor loading of (0.949) and child delinquency with factor loading of (0.936). In addition,

some other variables with high loadings are cantankerousness (0.876), irritation (0.741), troublesome married life (0.792) and child immorality (0.848). However, it is noted that the category of variables which do not load so high and positive on this factor but are significant includes distraction (0.557), poor family communication or adjustment (0.617), improper environment for study (0.557) and insecurity (0.587). Loadings on this factor are given in Table 5.

Table 5 : Factor 3: Criminality and delinquencies		
Sr. No.	Variables	Factor loading
1.	Incoherent Speech Disorder	0.099
2.	Distraction	0.557
3.	Speech Disorder (Stammer)	0.035
4.	Poor Family Communication	0.617
5.	Forgetfulness (Scattered Memory)	-0.091
6.	Distrust (Low Self-Esteem)	0.063
7.	High Sex Drive	-0.215
8.	Improper Environment for Study	0.557
9.	Insecurity	0.587
10.	Family Behaviour Dissatisfaction	0.272
11.	Quarrelsome Family Environment	-0.033
12.	Lack of Complacency	0.303
13.	Health Problem	0.246
14.	Suffocation	0.331
15.	Respiratory Problems	0.076
16.	Hypertension	-0.311
17.	Gynaecological Disorders	0.143
18.	STDs	0.176
19.	Cantankerousness	0.876
20.	Irritation	0.741
21.	Quarrelsomeness	0.983
22.	Offensive Behaviour (Foul Language)	0.949
23.	Troublesome Married Life	0.792
24.	Child Delinquency	0.936
25.	Respect to Women in Locality	-0.981
26.	Crime against Women (Decadence)	0.986
27.	Incest Behaviour (Pervasive Depravity)	0.972
28.	Child Immorality	0.848
	Per cent of total variance explained	36.40

Crime against women is the lead variable with a loading of (0.986) on factor of *criminality and delinquencies*. It indicates that the cases like rape, molestation and violation of modesty of women in crowded environment are common phenomena. Women are not safe while walking through market or on the road. A number of cases of theft, robbery, chain snatching, pick pocketing and purse snatching, etc. are reported from the locality and some residents are indicted in sodomy cases. These are the consequences of crowding because perhaps the youth of the slums and crowded areas find it a way to make fast or quick money and satisfy their mean emotions.

It is further confirmed by widespread criminality and delinquency as supported by a high

loading of incest behaviour (0.972). It is further indicated by immoral behavioural of children (0.848) within and outside (in sheets/locality) of households with a quite high loading of their delinquency (0.936).

As a whole, this dimension refers to unethical or immoral characteristics and criminal as well as delinquent acts of residents. This behavioural pattern indicates some stress on the back of mind consequent upon crowding in same measure. It indicates that people are generally angry and annoying and difficult to deal with or argue with. They are not ready to hear any logical argument. Obviously such behavioural patterns developed in them use of foul language (0.949), make them quarrelsome (0.983) and cantankerous (0.876). These people have developed irritation (0.741), poor communication with family (0.617), distraction (0.557) culminating not only in troublesome married life (0.792) but also in improper environment for study by children (0.557). Naturally, in such environment everyone in the locality feels insecure (0.578) in terms of property, honour and respect.

Factor 4: Physical (Physiology) Disorders

In the case of Factor 2, it should be noted that variables from the categories of psychological and physical disorders load almost equally high with a slight edge of variables in the physical (physiology) disorders. The highest loading of (0.973) is observed in the case of the respiratory problems followed by gynaecological disorders (0.962). The third important variable on this factor is STDs with a loading of (0.942). The next important variable which loads significantly is suffocation with a loading of (0.933) and then health problems (0.881). All these variables refer to experienced physical disorders.

High sex drive with component loading of 0.717 is a kind of psychological pathology. It occurs due to lack of privacy and small space wherein parents with children live and sleep in the same room. As a result, when parents or other married couples in the family make love, they have high probability to be exposed and seen by other family members present there. It leads to arousal of early arousal of sex drive. As a consequence rape, incest and illicit relations take place. Sometimes, these cases are reported to the police. High sex drive is not a coincidence, it is an effect of crowding documented in several studies of jail crowding wherein it leads to homosexuality. Similarly, speech disorder (stammering) is also a psychological disorder which may result from stress of crowding and from violence and anger in household.

In general, health problems and suffocation variables are positively associated with this factor as pointed out in Govindpuri. People feel unhealthy partly as a result of crowding and partly because of unwholesome environment and pollution from heavy traffic from all sides of the locality. They are exposed to suffer from different infectious and respiratory diseases by reason of high room occupancy (persons/room). They feel suffocation as their houses are very small and there is paucity of fresh air as there is no ventilation in almost all houses and less exchange of fresh air in narrow and sometimes blind alleys in Govindpuri. Their health problems related to hypertension loads on this factor as high as (0.878). It indicates that the people are suffering from hypertension and heart-related ailments in crowded and congested areas which are aggravated by psychological stress.

STDs are commonly prevalent in the locality as indicated by its very high loading on this factor. It shows that the male members are suffering from STDs related diseases transferred to their women whose majority is also suffering from gynaecological diseases. Many of these respondents have themselves admitted to have high sex drive. The high sex drive leads men very often to red light areas (red-light districts). In such cases, when they return home, the probability of

Table 6 : Factor 4: Physical (Physiology) disorders		
Sr. No.	Variables	Factor loading
1.	Incoherent Speech Disorder	0.387
2.	Distraction	0.236
3.	Speech Disorder (Stammer)	0.746
4.	Poor Family Communication (Adjustment Reaction)	0.266
5.	Forgetfulness (Scattered Memory)	0.203
6.	Distrust (Low Self-Esteem)	-0.305
7.	High Sex Drive	0.717
8.	Improper Environment for Study	-0.546
9.	Insecurity	-0.402
10.	Family Behaviour Dissatisfaction	-0.015
11.	Quarrelsome Family	0.217
12.	Lack of Complacency	0.203
13.	Health Problem	0.881
14.	Suffocation	0.933
15.	Respiratory Problems	0.973
16.	Hypertension	0.878
17.	Gynaecological Disorders	0.962
18.	STDs	0.942
19.	Cantankerousness	0.209
20.	Irritation	-0.068
21.	Quarrelsomeness	0.207
22.	Offensive Behaviour (Foul Language)	-0.243
23.	Troublesome Married Life	0.175
24.	Child Delinquency	0.255
25.	Respect to Women in Locality	-0.154
26.	Crime against Women (Decadence)	0.305
27.	Incest Behaviour (Pervasive Depravity)	0.349
28.	Child Immorality	-0.179
	Per cent of total variance explained	27.58

suffering from STDs becomes very high. The same disease is transmitted among some women through them.

Gynaecologic disorders are the result of malnutrition and under-nutrition. Psychological distress may also be one of the reasons. Women due to poverty often suffer from under or malnutrition and this harms their reproductive system. They also do not get proper sunlight (natural and free source vitamin D) because the sunlight does not reach to the surface of lanes (*galis*) due to congested houses with almost entire covered area. Therefore, natural availability of vitamin D is lacking in the locality. It weakens their bones and lowers the quantity of calcium.

All these health problems such as feeling of suffocation, respiratory problems, hypertension and other complaints, real or imaginary, and dissatisfaction with life clearly indicate that these are due to stress generated by various degrees of perception of crowding, high density and congestion as well as noise in the locality.

Factor 5: Ethical and Behavioural Degeneration :

The loadings of different variables on this third dimension of ethical and behavioural degeneration are given in Table 7. This dimension (Factor 3) explains 18.91 per cent of the total variance of all variables in the locality.

The lead variable on this dimension of consequences with a high and positive loading of (0.922) is distrust (low self-esteem). It is followed by improper environment for study (0.832). The third important variable on this factor with a loading of (0.812) is insecurity related complaints or feelings in the descriptions of lived experience of respondents. The last two variables which load significantly high and positive are quarrelsome family (0.765) and family behaviour dissatisfaction (0.725).

It shows that stress of crowding and fatigue together with troublesome family experience makes people quarrelsome. Sometimes they indulge in fight while walking through street. Obviously, all these conditions are not encouraging for a proper study environment of children. They are unable to concentrate due to noise inside and outside the house.

Table 7 : Factor 5: Ethical and Behavioural Degeneration

Sr. No.	Variables	Factor Loadings
1.	Incoherent Speech Disorder	0.243
2.	Distraction	-0.367
3.	Speech Disorder (Stammer)	0.081
4.	Poor Family Communication	-0.333
5.	Forgetfulness (Scattered Memory)	0.291
6.	Distrust (Low Self-Esteem)	0.922
7.	High Sex Drive	0.374
8.	Improper Environment for Study	0.832
9.	Insecurity	0.812
10.	Family Behaviour Dissatisfaction	0.725
11.	Quarrelsome Family	0.765
12.	Lack of Complacency	0.212
13.	Health Problem	-0.278
14.	Suffocation	-0.311
15.	Respiratory Problems	-0.289
16.	Hypertension	0.354
17.	Gynaecological Disorders	-0.355
18.	STDs	-0.287
19.	Cantankerousness	-0.176
20.	Irritation	0.199
21.	Quarrelsomeness	-0.194
22.	Offensive Behaviour (Foul Language)	0.275
23.	Troublesome Married Life	-0.192
24.	Child Delinquency	-0.333
25.	Respect to Women in Locality	0.154
26.	Crime against Women (Decadence)	-0.365
27.	Incest Behaviour (Pervasive Depravity)	-0.497
28.	Child Immorality	0.273
	Per cent total variance explained	18.91

The children do not get separate space for study. Consequently, children perform badly in schools and a high number of dropouts are observed in locality. The improper household environment and absence of sympathetic behaviour in schools make them indulge in petty crimes like shop lifting and snatching from children and youngsters and bullying in school or in the neighbourhood which with age gradually may develop a criminal behaviour among them.

Insecurity with second highest factor loading of (0.812) is highly associated with Factor 3. It shows that the people living in crowded area do not feel secure themselves. They are exposed to face the incidence of theft inside or outside the house. Since people are very poor but they (youth) have their desires of sex, booze and gambling in an environment wherein they have learnt. This encourages them to be involved in criminal activities like theft, robbery, snatching, murder, rape, etc. The variable quarrelsome family on this dimension shows that stress of crowding makes people quarrelsome. The quarrelsome families pick up quarrel with any family from neighbourhood on any pretext. As they described in their narration of experience, it makes them stress less. Ethical and behavioural degeneration in terms of distrust (low self-esteem), improper environment for study, feeling of insecurity, family behaviour dissatisfaction and quarrelsome family clearly indicate that it is due to stress generated by various degrees of perception of crowding and congestion as well as other factors in the locality.

Conclusion :

The study area is highly crowded in terms of housing congestion and population density. It is homogenous in its respondents and their lived experiences. There are two principal measures of crowding in the study area among others. The first one is 'surrounding affected crowding' that acts as a stressor on the mind of residents and generates a sense of crowding. The second one is 'crowding proper' means that the respondents do not perceive even high room occupancy as crowding or they do not mind it. High density in the study area generates stress in the minds of the populace, which is reflected in the pattern of inter-personal communication. Residents feel uneasy in communicating not only with family members but also with others. As a consequence, high density of crowding in the Govindpuri locality has resulted into criminality, child delinquency, physical disorder as well as ethical and behavioural degeneration. In addition, quarrel behaviour among siblings and use of abusive language are some of the outcome of crowded living conditions.

REFERENCES

- Baron, R. A. and Richardson, D. R. (1994). *Human Aggression* (2nd edn). New York: Plenum Press.
- Bradley *et al.* (1998). *Sense and Respond*. Harvard Business School Press, Boston, Massachusetts.
- Bradley *et al.* (1992). *A Review of Environmental Health Impacts in Developing Country Cities* The World Bank, p. 6.
- Blackman *et al.* (1989). Housing and health: A case study of two areas in west Belfast. *J. Soc. Policy*, **18** : 1-26
- Calhoun, J.B. (1962). Population density and social pathology Scientific. *American*, **206** : 139-148.
- Dean *et al.* (1975). Spatial and perceptual components of crowding effects on health and satisfaction. *Environ. & Behaviour*, **07** (02) : 225-236.
- Epstein (1981). Crowding stress and human behaviour. *J. Soc. Issues*, **37** : 126-144.

- Goeckner *et al.* (1973). Deficits in learning tasks following chronic overcrowding in rats. *J. Pers. Soc. Psychol.*, **28** : 256–261.
- Hall (1966). *The Hidden Dimension* (Garden City, N.Y.: Doubleday)
- Kempson (1999). *Overcrowding in Bangladeshi Households: A Case Study of Tower Hamlets*, Policy Studies Institute, London.
- Lepore *et al.* (1991). Dynamic role of social support in the link between chronic stress and psychological distress. *J. Personality & Soc. Psychol.*, **61** : 899 – 909.
- Levy and Herzog (1970). Effects of population density and crowding on health and social adaptation in the Netherlands. *J. Health & Soc. Behavior*, **12** : 228-240.
- Milgram (1970). The experience of living in cities. *Sci.*, **167** : 1461-1468
- Miller, S. and Nardini, K.M. (1977). Individual differences in the perception of crowding. *J. Nonverbal Behavior*, **2** (1) : 3-13
- Roush (1999). Public-private venture to HELP youth in juvenile detention. *Juvenile & Family Court J.*, **50** : 57-64.
- Schmitt (1966). Density, Health and Social Disorganization. *J. American Institute Planners*, **32** (01) : 38-40
- Stokols (1972). Social-psychological model of human crowding phenomena. *J. American Institute Planners*, **38** : 72–84
- Stokols (1972). On the distinction between density and crowding: Some implications for further research. *Psychological Review*, **79** : 275-277.
- Vine (1981). “Crowding and stress: 1. Review of variables and theories. *Curr. Psychological Reviews*, **1** : 305-324.
- Wilner *et al.* (1987). Reduction of sucrose preference by chronic unpredictable mild stress and its restoration by a tricyclic antidepressant. *Psychopharmacol.*, **93** : 358–364.
