Age and Gender Dimensions of Disadvantaged Population: A Study on Selected Metro Cities of India

Anuradha Mukherjee

UGC-Junior Research Fellow, Department Of Geography, University Of Calcutta, India

ABSTRACT

Collective social attitude towards certain group of people place them in a situation of difficulty. They suffer from various socio-economic deprivations and social exclusion. Such population include elderly persons, unemployed and persons suffering from physical as well as neuro-psychological disabilities. They are also dependent population because in most of the cases they are not regularly employed and most of them depend on other's earnings. Dependency of these persons not only arises because of financial factors but also because of various social needs. The work explores dependency in three aspects i.e., due to age, physical or mental disability and unemployment. The age-gender structure in the major metropolitan cities of India, viz. Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai and Pune have been depicted in order to find the proportions of age related dependency; and to assess the comparative dependency ratio of the aged, disabled population and unemployed job seekers in these cities thereby finding their dependency status. The work is based on data provided by Census of India, 2011. Cartographic depictions have been made for better understanding of the analysis of census variables. The work is an attempt to find out the dependency factors in major cities which vary spatially within the country.

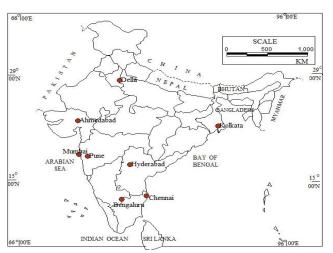
Keywords: dependent population, social exclusion, disability, age-gender structure, dependency ratio,

I. Introduction

Dependency of population is significant in demographic studies which has clear socio-economic impacts. Dependent population are usually the disadvantaged group of people who rely on others i.e., dominantly the working class for their living. The dependent population group includes-the children (population below the age of 15), the aged (population above the age of 60), the disabled persons(population with physical or mental challenges which stand as impediments for them to be included within the potential workforce) and other non-workers who may have attained adulthood and are active enough to participate in the workforce but cannot find themselves suitable enough to be engaged in gainful economic activities. In other words the latter group is the unemployed population. The entire group of such population thus have to rely on the actively working population for their living which poses as an unavoidable socio-economic load for the latter. However, although it may so appear that such disadvantage or dependency is a result of natural factors like age and physiological impediments but actually these are socially constructed (Holloway, 2005). According to Pain, rather than defining and employing old age as a chronological descriptor, it is now argued that the socially and economically constructed aspects of old age have the most influence on the condition of older people's lives (Pain et al, 2000). In a similar way, the major problems resulting from a disability can be traced to a disabling environment; and the solution may be found in laws and policies to change that milieu, rather than in unrelenting efforts to improve the capacities of the disabled individual (Hahn, 1986). The present work thus emphasizeson the demographic aspects of the dependent groups in some selected major metropolitan cities of India and relating their social status in the urban social milieu which sometimes creates a space of social exclusion.

II. Study Area

As a part of geographic inquiry, the demographic and social status of dependent population has been studied in major urban centres of India. These metropolitans include Delhi Municipal Corporation Area, Ahmedabad (Municipal Corporation and Outgrowth), Mumbai (Municipal Corporation), Pune (Municipal Corporation and Outgrowth), Bengaluru (Municipal Corporation and Outgrowth), Chennai (Municipal Corporation and Outgrowth), Hyderabad (Municipal Corporation and Outgrowth) and Kolkata Municipal Corporation.



Selected Metropolitan Cities under Study

Figure 1 *Map source:* Prepared by author from base map provided by NATMO

III. Objectives

The work aims at fulfilling the following objectives-

- To make a comparative analysis of age-sex structure in the selected cities in order to assess the percentage share of dependent population who are in a disadvantageous situation
- To study the various types of dependent population at different age and gender groups
- To assess the dependency ratio in the cities under probe

IV. Database And Methodology

The work is based on data from secondary sources which includes Census of India 2011.

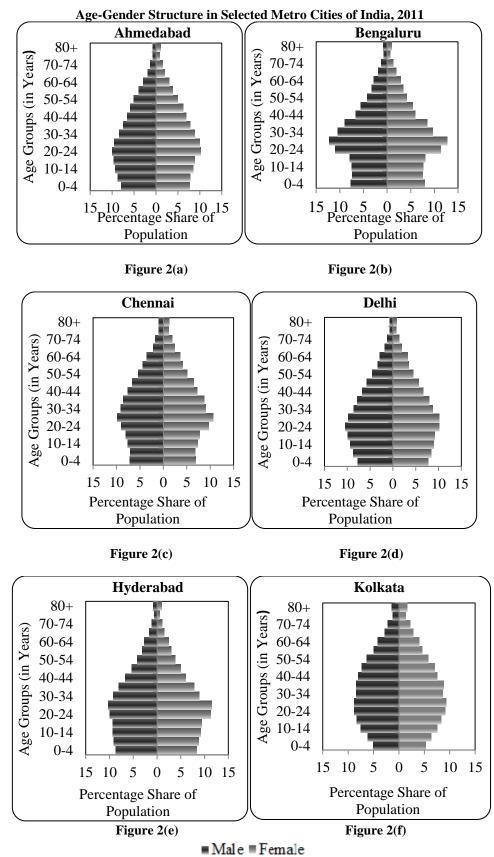
Application of quantitative methods along with cartograms has been made to represent the analytical results from secondary data. Age-sex pyramids have been constructed to find out the percentage share of dependent population in each of the above mentioned cities. Dependency ratio which is the ratio between the dependent population (children, aged, disabled and unemployed) to working population has been calculated to understand the nature of dependency in these cities.

Dependency Ratio=Category of Dependent Population Total Working Population

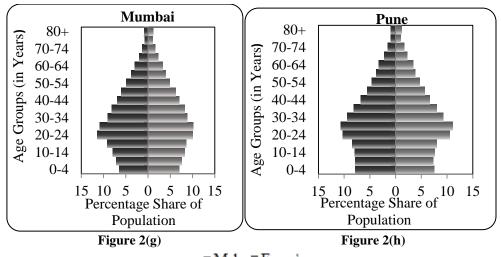
Although, child population implies persons below the age of 15 years according to the international standards but in India, dependent population in case of younger age group ranges till the age of 18 years. Actually in urban areas higher secondary standard education of a person continues till the age of 18 years and till that time one has to depend on the working population (parents/ guardian of the young person in this case) for various livelihood needs. So, for the present study, young person approximately, up to the age of 18 to 20 years have been considered as dependent population. However, the issue of child labour who are children below the age of 14 years but are working as adults are not to be ignored as they form a vulnerable group to various social challenges.

V. Demographic Aspects Of Dependent Population

Age-Gender Dimensions of Age Related Dependent Population: Age and gender aspects of population is usually studied by population pyramid. Population pyramids clearly reflect the distribution of persons in different age groups in terms of their gender identities. Such diagrams have been prepared for the cities under probe to work out the percentage share of dependent population in different age groups.



Data source: Census of India, 2011



■ Male ■ Female Data source: Census of India, 2011

From the above diagrams it is evident that most of the cities have higher percentage share of population in the age groups of 20-24 years, 25-29 years and 30-34 years; whereas, population in the age groups 0-4 years or 5-9 years i.e., child population group is lower, indicating lower fertility rate in cities on one hand and immigration of working population on the other. Although, percentage shares of higher age groups is lower compared to the working class or child population, yet it is moderate in the age groups between 60 and 64 as well as 65 and 69, indicating higher longevity. However, apart from the individual age groups, a fair idea of dependent population can be traced from Table 1, which shows the total percentage shares of dependent population summing up all age groups of child population and aged population along with working population. It is clearly evident that most of the technologically advanced cities like Bengaluru, Hyderabad, Mumbai, Chennai and Delhi have higher share of population concentration in working age group. These cities provide ample employment and higher educational opportunities for which the population in the age groups 20-24 years (mainly comprising of aspiring students of higher education) and young employees belonging to the age group 25-29 years, 30-34 years, 35-39 years and 40-44 years who show higher percentages because of emerging information technology and allied sectors. At the same time these cities show the lowest percentage share of population in the age group above 60 years. 60 years being the retirement age in most of these cities, migrant population who had resided in these cities, mostly return back to their original places, thereby the said population decreases in these cities.

Cities	Ahme	dabad	Bengaluru		Chennai		Delhi	
Age Category	Male	Female	Male	Female	Male	Female	Male	Female
Child	35.68	32.79	30.41	31.14	29.92	28.85	35.68	34.26
Working	56.76	58.76	62.20	61.07	60.55	60.95	56.99	57.45
Aged	7.56	8.45	7.39	7.18	9.52	10.19	7.33	8.29
Cities	Hyde	rabad	Kolkata		Mumbai		Pune	
Age Category	Male	Female	Male	Female	Male	Female	Male	Female
Child	36.49	35.82	27.08	27.42	30.75	31.35	32.06	30.60
Working	56.79	57.49	61.14	60.69	61.32	59.25	59.10	59.84
Aged	6.72	6.79	11.78	11.88	7.92	9.40	8.84	9.56

Table I: Percentage Share of Population in different Age Categories, 2011

Data source: Census of India, 2011

However, a striking contrast to other cities is Kolkata. Kolkata shows a higher percentage share of population in the working age group and at the same time also shows highest percentage share of population in the age groups above 60 years, indicating higher dependency of population in this age category. Although population in the working age category seem to be high in Kolkata, yet how many of such people are actually contributing to the active work force is questionable. Nevertheless, higher percentage share in the age group above 60 years, especially that above 80 years makes Kolkata a 'greying city'.

As for the child population is concerned, percentage share in most of the cities ranges between 27 per cent and 33per cent. Although this population is dependent but there are enough prospects in future for them to participate in active work force. Hence investing on the development of this population group would not be futile.

Age related Population Dependency Ratio: Dependency Ratio is worked out as the ratio of total dependent population (Child Population along with Aged Population) and total population in working age group. In these cities, as unemployment is a major issue, therefore only main and marginal workers in the working age group have been considered. The Table 2 shows the dependency ratio in the cities under study. It is evident that cities like Bengaluru which have higher percentage share of working population have lower dependency ratio. But, most of the cities, other than Kolkata, despite having lower share in aged dependent population have higher dependency ratio. This is because of higher share in child population.

Table II: Age Related Population Dependency Ratio									
Cities	Ahmedabad	Bengaluru	Chennai	Delhi	Hyderabad	Kolkata	Mumbai	Pune	
Dependency	1.46	1.05	1.23	1.42	1.60	1.26	1.14	1.21	
Ratio									
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Table II: Age Related Po	pulation Dependency Ratio
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Data source: Prepared by author from data provided by Census of India

Potential

Morbid Population

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Higher investment

in medical expenses without much economic

returns

Economically inactive population

Implications

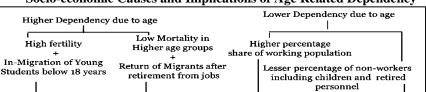
Potential work force

Higher investment in

job oriented education

Kolkata on the contrary, with low general fertility rate has lower percentage share of child population. But due to higher number of aged population, the dependency ratio is moderate. Overall, the dependency ratios of all the cities indicate that the dependent population is much higher than the main and marginal workers within the working age group.

The various socio-economic causes and implications of the age related dependency or disadvantages have been assessed in the following flow diagram:



In-migration of Young Working Population

Implications

Higher Labour Production

Capacity

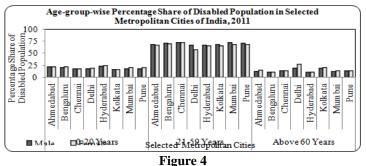
Greater economic returns from

Production of the Labours



Age-gender Dimensions of Disabled Population: According to United Nation's Convention on Rights of Persons with Disability, disabled personsare defined "as those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others"(UNCRPD, 2008). Thus, disability is a situational challenge. However, in most instances such impediments make persons with disability dependent on others. Despite government reservation in employment opportunities, work environment is not made easy for these people so that they can be dealt at par with others. Age and gender dimensions of persons with various kinds of disability in different age categories have been depicted in Fig.4 for the major cities under study.

Figure 3 Source: Prepared by author



Data source: Census of India, 2011

It is evident that higher percentage share of disabled population is in the working age category, especially for men who are considered to be the backbone of the active participation in economic activities. Thus it may be considered as a major economic set-back to have larger share of disabled men in working age group. Moderate share of disabled population in the child age also pose equal cause of worry, because they would further add to the percentage share of dependent population. The persons with disability are considered to be dependent because –i) urban physical set up or infrastructure is not adequately equipped to cater to the requirements of the physical or mental challenges faced by these persons and ii) persons facing such challenges are often stigmatised and socially or occupationally excluded. Thus their full and effective participation in the society or labour force are grossly restricted. Most often these persons are not involved in active labour force and thus become dependent on the working class for their livelihood in the society.

Disability related Population Dependency Ratio: In this case dependency ratio has been calculated on the basis of total disabled population in the cities under study and the working population inclusive of main and marginal workers. Table 3 reveals dependency ratios out of disability for major metropolitan cities of India.

Table III: Disability Related Population Dependency Ratio, 2011										
Cities	Ahmedabad	Bengaluru	Chennai	Delhi	Hyderabad	Kolkata	Mumbai	Pune		
Dependency Ratio	0.12	0.08	0.11	0.07	0.16	0.25	0.11	0.12		

Table III: Disabilit	y Related Population	Dependency Ratio	, 2011
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Data source: Prepared by author from data provided by Census of India, 2011

Evidently major work centres like Bengaluru, Delhi, and Mumbai show least dependency ratio of disabled population as they probably find no place for their sustenance in these cities. On the contrary Kolkata shows highest dependency ratio of disabled population indicating the higher socio-economic burden on the working class population. Other cities like Ahmedabad, Pune and Chennai also show lower dependency ratio for the disabled population. However, unlike age related dependency ratio, such ratio of the disabled persons is less than one implying that those dependent persons are lesser in number than main and marginal workers.

The various socio-economic causes and implications of the age related dependency or disadvantages have been assessed in the following flow diagram:



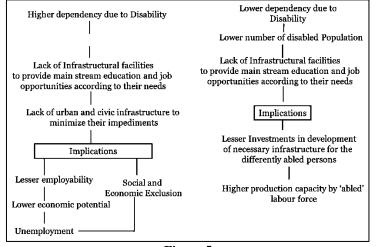
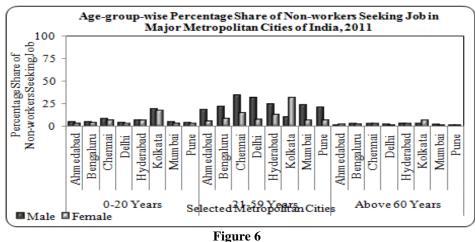


Figure 5 *Source:* Prepared by author

Age-gender Dimensions of Unemployed Population: Non-workers are those who do not find themselves suitable enough to be engaged in gainful employment. This class includes the children, elderly, disabled and those who are not employed but are seeking jobs. In the present case, the latter has been chosen for study. Unemployed persons who are seeking jobs are dependent population as they do not or cannot have their own earnings and live out of other's income. Thus the unemployed persons pose as a major threat for qualitative economic development. The Fig.6 shows percentage share of unemployed population seeking job at different age categories. It is shocking to note that even children seek employement. This is probably because in big cities a social strata of child labour is created out of socio-economic inequalities and poverty. Percentage share of such children is highest in Kolkata in comparison to other cities of India.



Data source: Census of India, 2011

It is also important to note that in comparison to men, percentage share of non-workingwomen seeking job is far less in the working age group. This indicates an awkward social-psychology that women probably have less aspiration for jobs once they get married, despite higher literacy rate in the cities. Another interesting feature emerges from the diagram above that in Kolkata, men seeking jobs are much lower than other citues and in contrast that of women is higher compared to other cities. It thus reveals again that men job aspirants are lesser in Kolkata in comparison to women. Owing to age and physical inabilities, unemployed elderly persons are lesser in number compared to other age categories.

Unemployment related Population Dependency Ratio: For this case, dependency ratio has been worked out as the ratio between unemployed persons seeking job and total workers inclusive of main and marginal workers. It is evident from Table 4, that those cities which had higher proportion of unemployed job seekers have comparatively lower dependency ratio. Kolkata, which had lowest proportion of such population, has the highest dependency ratio.

Table IV: Unemployment Related Population Dependency Ratio, 2011									
Cities	Ahmedabad	Bengaluru	Chennai	Delhi	Hyderabad	Kolkata	Mumbai	Pune	
Dependency	0.10	0.09	0.19	0.12	0.21	0.43	0.09	0.09	
Ratio									

 Table IV: Unemployment Related Population Dependency Ratio, 2011

Data source: Prepared by author from data provided by Census of India, 2011

Such is the trend because most of the cities have higher number of main and marginal workers and there are fewer number of unemployed persons. Thus dependent persons because of unemployment are less indicating a lower dependency ratio in most of the cities.

The various socio-economic causes and implications of the age related dependency or disadvantages have been assessed in the following flow diagram:

Socio-economic Causes and Implications of Unemployment Related Dependency

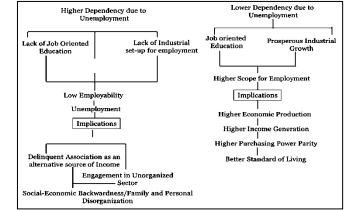


Figure 7 *Source: Prepared by author*

VI. Major Findings And Inferences

The major findings of the study can be summed up as follows:

Age-gender structure in the cities like Bengaluru, Delhi, Mumbai, Hyderabad and Pune resemble those of developed cities in the west because these cities have higher percentage share of population in the working age group, while child and elderly population are extremely low. These cities thus can also be called employment hubs of the country because of their prosperous information technology and allied industries. Hence most of the people migrate to these cities for seeking job.

Kolkata shows maximum of dependent population in the older age group. In general, Kolkata has higher dependency ratio for all the three aspects—dependency due to age, disability and unemployment. This implies that overall economic production capacity in terms of working population is lower in Kolkata compared to other metro cities under study.

The probable reasons for higher dependency in Kolkata are mainly because of lack of industrial infrastructure which hinders employment opportunities in the city. Moreover, higher educational infrastructure is also lagging behind due to fewer number of employment oriented educational institutes. Thus persons aspiring for profession oriented education as well as for jobs, often migrate to other cities at the age 19 years onwards.

Although there are immense potentials for improving the lives of the physically or mentally challenged persons to minimize their dependency on others, yet no investments are made in such pursuits in almost all these cities. There is gross lack of infrastructure which ranges from educational sectors to job sectors by which the differently abled persons can be absorbed into the mainstream which would eventually reduce their dependency.

Higher dependency indicates that greater social costs have to be borne by the actual working class i.e., the main and marginal workers for maintaining the livelihood of the dependent population for their living. Investment on child education is effective, however social costs spent on the elderly, the disabled and the unemployed are not economically beneficial in the context of developing cities like Kolkata. But investments made on developing social and urban infrastructures which enhance their lifestyle to become 'less dependent' may be beneficial for the latter groups of people.

VII. Conclusion

Dependency is not only an economic problem as for bearing the cost of living of the dependent population by the working class, but is a social issue. Attempts may be made to address the issue by making effective investments in social security benefits for the dependent persons by the government. At the same time, it is also necessary to create adequate social-environment which may be beneficial for the dependent persons to reduce their dependency and be at par with others.

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